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PAPER TRADE JOURNAL

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PAGE 21!

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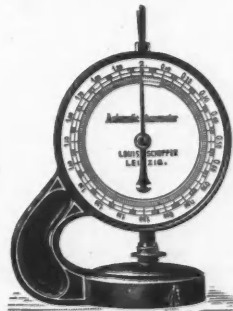
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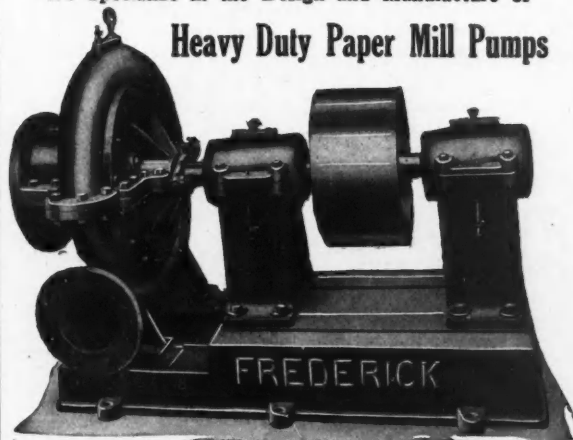
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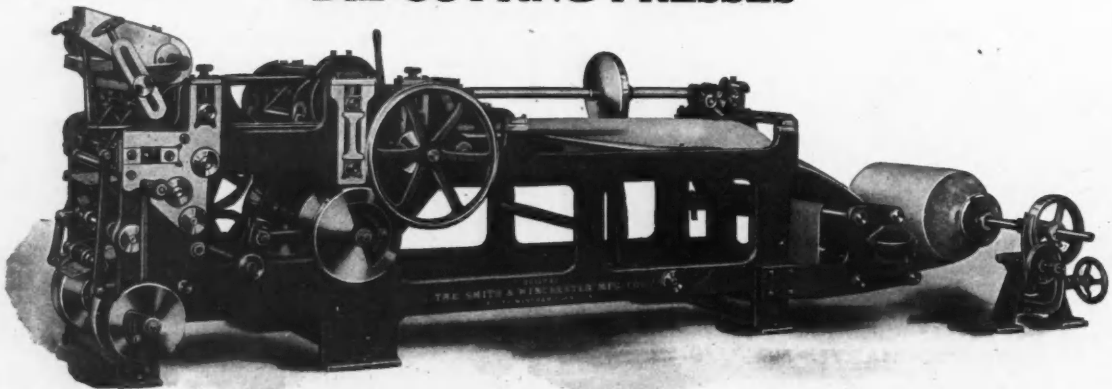
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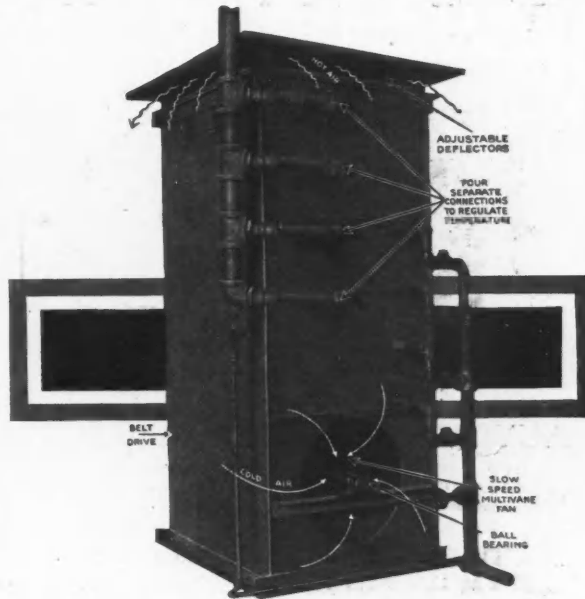
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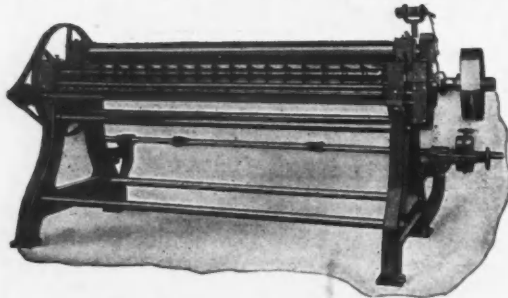
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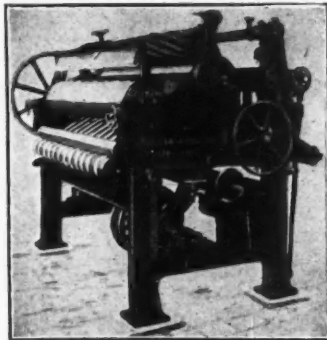
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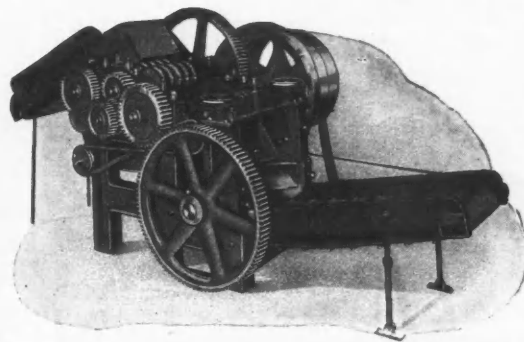


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THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

FIFTIETH YEAR

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Table of Contents

News of the Trade:	PAGE		PAGE
Production of All Paper During Month of December....	16	News of Holyoke Trade	54
Sewall S. Leighton a Papermaker for 65 Years.....	17	Beaver Brook Mills Burned	54
Course for Papermakers at Syracuse	17	Average Cost of Making News Print in 1921.....	56
More Inquiry For Paper in Philadelphia Market.....	18	Hoberg Paper & Fibre Co. Formed.....	58
Fine Paper Division Meets in Philadelphia.....	18	Bids and Awards For Paper	58
James Andrews, Inc., Organized	18	Condition of Brompton American Properties.....	60
Lancastrian Labeled	18	P. H. Glatfelter Co. Issues Handsome Brochure.....	60
General News of the Philadelphia Trade.....	19	Perfects New Process for De-Inking Newspapers.....	60
Grosvenor M. Jones New Head of Paper Division.....	19	Imports and Exports of Paper and Paper Stock.....	64
Maine Pulp & Paper Co. Sold	19	I. P. to Start Machines at Niagara Falls.....	64
New England Paper Box Men Meet in Boston.....	20		
Signs of Better Business Are Reported in Chicago.....	22	Editorial:	
Hampden Glazed Paper & Card Co. in New Quarters....	22	Paper Exports and Imports	40
Better Signs in Fox River Valley.....	24	Shipping and Transportation	41
To sell Mullin Bros. Paper Co.....	24		
Paper Trade in Toronto is Improving Slightly.....	26	Technical Section:	
Great Lakes Paper Co. May Cancel Pulp Concessions....	26	Money From Steam	43
Temiskaming Company Buying Pulpwood	26	Comment on Mr. McBain's Article	47
New Box Factory For Kalamazoo	28	The Beater in Great Britain from the Engineer's Point of View	48
Paper Displays in Kalamazoo	28	Pumps and Pumping Machinery	50
Annual Meetings of Kalamazoo Paper Mills.....	30	Current Paper Trade Literature	52
The Matter of the Long Price List.....	32		
Recent Incorporation	34	Obituary:	
Wayagamack Company's Annual Statement	34	William H. Gould	30
To Issue Report on Forestry	34	Frank E. Boston	30
A Safety Contest and Its Results.....	36	Alfred Frank	30
New York Trade Jottings	38		
Buyers Control of Beloit Box Board Co.....	38	Market Review:	
American Woodpulp Association Elects Officers.....	38	New York Market Review	62
H. S. Graves Returns to Yale Forestry School.....	41	Market Quotations	63
Waste Material Dealers Nominate Officers.....	41	Miscellaneous Markets	66
Paper Mill Improvements at Bogalusa	41		
Trade Mark Department	54		

Want and For Sale Advertisements, Pages 68, 69 and 70

PRODUCTION OF ALL PAPER DURING MONTH OF DECEMBER

According to Tabulation Compiled by the Federal Trade Commission Stocks on Hand at Domestic Mills at the End of the Month Equalled Five Days' Average Output of News Print, Twelve Days' Average Output of Book Paper, Nine Days' Average Output of Paper Board, Twenty Days' Average Output of Wrapping Paper and Five Days' Average Output of Bag Paper.

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., February 6, 1922.—The attached tabulation is a summary of production, shipments and stocks of paper mills in the United States for the month of December, 1921, compiled by the Federal Trade Commission. This summary is compared with the month of December, 1920, 1919, and 1918, and the average production and stocks based upon the production and stocks for the years 1918, 1919, and 1920. The mills have been classified for convenience into 12 groups according to the grades of paper made. Some mills making several grades appear in more than one group in the tonnage tables which causes duplication in the number of mills.

The variation in the number of mills from one period to another is due in part to the fact that some mills do not run continuously on the same grade.

The stocks of paper carried by different mills depend not only upon the condition of the market but also upon the kind of paper made, trade customs, etc.

Tonnage Summary

Production, Shipments and Stocks of Paper, by Grades, for the month of December, 1921, compared with December, 1920, 1919, and 1918, and with average production and stocks.

Grade	Number of mills	Stocks on hand 1st of month Net tons	Production Net tons	Shipments Net tons	Stocks on hand end of month Net tons
News Print (Standard and Special Grades of News):					
December, 1921.....	86	23,127	107,877	107,070	23,934
December, 1920.....	86	20,266	124,857	120,360	24,763
December, 1919.....	87	15,336	122,781	122,748	15,369
December, 1918.....	63	20,297	100,935	101,824	19,408
Average.....	.....	.....	121,959	.....	23,763
Standard News:					
December, 1921.....	67	18,895	100,834	100,122	19,607
December, 1920.....	68	16,599	111,038	108,064	19,573
December, 1919.....	55	11,790	104,262	103,714	12,338
December, 1918.....	50	16,696	87,797	88,837	15,656
Average.....	.....	.....	109,782	.....	19,528
Book (M. F., S. S. C. and Coated):					
December, 1921.....	84	37,060	70,798	69,101	38,757
December, 1920.....	95	24,563	76,093	75,651	25,005
December, 1919.....	96	27,293	88,779	92,793	23,279
December, 1918.....	86	29,493	60,525	61,587	28,431
Average.....	.....	.....	84,375	.....	28,328
Paperboard—Total—(Straw, Fibre, Leather, Chip, etc.):					
December, 1921.....	220	59,780	149,047	145,809	63,018
December, 1920.....	247	48,968	105,227	101,091	53,104
December, 1919.....	255	43,084	174,649	177,404	40,329
December, 1918.....	219	41,505	127,523	122,832	46,196
Average.....	.....	.....	182,061	.....	45,530
Boxboard:					
December, 1921.....	123	31,965	112,747	112,748	31,964
December, 1920.....	149	23,707	70,014	68,270	25,451
Average.....	.....	.....	121,608	.....	19,303
Wrapping (Kraft, Manila, Fibre, etc.):					
December, 1921.....	130	50,205	64,850	66,207	48,848
December, 1920.....	142	25,586	54,308	44,094	35,800
December, 1919.....	156	32,556	62,288	68,053	26,791
December, 1918.....	154	35,166	49,064	43,731	40,499
Average.....	.....	.....	65,880	.....	39,488

Bag (all kinds):					
December, 1921.....	35	3,750	17,200	17,865	3,085
December, 1920.....	39	2,785	6,966	6,720	3,031
December, 1919.....	48	2,432	17,621	17,966	2,087
December, 1918.....	38	3,950	13,700	14,242	3,408
Average.....	.....	.....	16,605	.....	3,365
Fine (Writing, Bonds, Ledgers, etc.):					
December, 1921.....	103	33,389	25,843	25,232	34,000
December, 1920.....	106	30,185	27,233	27,106	30,312
December, 1919.....	109	33,151	31,014	32,649	31,516
December, 1918.....	116	33,464	26,721	25,609	34,576
Average.....	.....	.....	32,373	.....	31,835
Tissue (Toilet, Crepe, Fruit Wrappers, etc.):					
December, 1921.....	82	5,811	15,835	15,461	6,185
December, 1920.....	101	8,115	8,090	7,431	8,774
December, 1919.....	84	6,217	14,727	15,247	5,697
December, 1918.....	87	5,578	10,888	11,066	5,470
Average.....	.....	.....	14,013	.....	6,453
Hanging (No. 2 Blank, Oatmeal, Tile, etc.):					
December, 1921.....	19	8,856	7,451	8,525	7,782
December, 1920.....	25	2,544	8,266	7,783	3,027
December, 1919.....	25	1,980	8,892	9,420	1,452
December, 1918.....	18	2,236	6,846	6,149	2,933
Average.....	.....	.....	7,911	.....	3,296
Felts and Building (Roofing, Sheathing, etc.):					
December, 1921.....	42	6,739	26,537	24,804	8,472
December, 1920.....	48	14,116	13,006	13,702	13,420
December, 1919.....	49	5,545	27,713	27,943	5,315
December, 1918.....	45	7,394	17,818	17,513	7,699
Average.....	.....	.....	27,459	.....	8,571
Other Grades (Specialties not otherwise classified):					
December, 1921.....	89	20,210	22,846	23,493	19,563
December, 1920.....	92	15,715	21,493	20,048	17,160
December, 1919.....	84	16,371	20,928	24,817	12,482
December, 1918.....	75	10,804	21,759	21,253	11,310
Average.....	.....	.....	23,139	.....	12,784
Total—all Grades:					
December, 1921.....	.....	248,927	508,284	503,567	253,644
December, 1920.....	.....	192,843	445,539	423,986	214,396
December, 1919.....	.....	183,965	569,392	589,040	164,317
December, 1918.....	.....	189,887	435,779	425,806	199,860
Average.....	.....	.....	575,775	.....	203,373

Note:—The average production and stocks are based upon the annual reports for 1918, 1919, and 1920.

The following stocks were reported on hand at terminal and delivery points on December 31 in addition to the mill stocks shown in the tabulation: news print, 690 tons; book, 3,414 tons; fine, 175 tons; wrapping, 120 tons; and "other grades," 253 tons.

Stocks of news print, standard news, book, paperboard, fine tissue and felts increased during the month. Stocks of all grades reported by manufacturers at the end of December amounted to 258,296 tons, including the stocks at terminal and delivery points. In addition to these stocks, jobbers and publishers reported news print in stock and in transit aggregating 203,301 tons.

Ratio of Stocks to Average Production

Comparing the stocks on hand at the domestic mills on December 31 with their average daily production based upon the combined production for 1918, 1919, and 1920, the figures show that:

News print paper mill stocks equal 5 days' average output.
 Book paper mill stocks equal 12 days' average output.
 Paper board mill stocks equal 9 days' average output.
 Wrapping paper mill stocks equal 20 days' average output.
 Bag paper mill stocks equal about 5 days' average output.
 Fine paper mill stocks equal 28 days' average output.
 Tissue paper mill stocks equal 12 days' average output.
 Hanging paper mill stock equal 27 days' average output.
 Felts and building paper mill stocks equal 8 days' average output.
 Miscellaneous paper mill stock equal 23 days' average output.
 Total paper mill stocks of all grades equal about 12 days' average output.

Imports and Exports

The imports and exports of all grades of paper for November,

1921, compared with November, 1920, as shown by the records of the Department of Commerce were as follows:

	November, 1921		November, 1920	
	Pounds	Value	Pounds	Value
Imports:				
News Print	149,088,762	\$5,858,669	122,496,960	\$6,973,419
Book Paper	16,156	1,390	1,180,362	143,840
Wrapping	1,230,403	52,671	333,890	39,754
Hanging .....	.....	31,992	.....	25,092
All other grades (a) .....	.....	148,573	.....	366,140
Exports:				
News Print	2,512,854	1182.90	11,087,342	708,095
Book Paper	1,130,205	145,273	9,288,097	1,581,487
Paper Board .....	.....	123,240	.....	667,038
Wrapping	2,226,127	132,950	5,253,347	745,679
Bag .....	.....	61,822	.....	221,310
Fine .....	.....	162,828	.....	1,020,369
Tissue .....	.....	69,405	.....	244,509
Hanging .....	.....	33,365	.....	54,200
All other grades (a) .....	.....	504,151	.....	961,081
Total Imports.....	.....	\$6,093,295	.....	\$7,548,245
Total Exports.....	.....	1,351,333	.....	6,203,768

(a) Includes some paper already converted into commercial articles.

News print is the only grade of which the United States is a heavy importer. The bulk of this tonnage, the value of which amounted to \$5,858,669 for November, 1921, is imported from Canada. The value of the exports of news print in November, 1921, amounted to \$118,299, which is about 2 per cent of the News print imported.

The value of the total imports of all grades was about 4 per cent less than for October, 1921. The value of the total exports for November, 1921, was \$4,852,435 less than the value of the exports for November, 1920, and \$4,741,962 less than the value of the imports for November, 1921.

News print, Book, Wrapping, Paperboard and Fine were the principal grades exported, as to value.

Loss of Production

The idle machine time reported to the Commission is shown by grades in the tabulation attached. This tabulation does not include the machines in 25 mills which were closed down completely. The reasons tabulated for lost time are lack of orders and repairs. "Other Reasons" include lack of material; lack of water power, etc. The time lost in December, 1920, is given by grades and reasons for purposes of comparison.

Grade	Lack of Orders		Repairs		Other Reasons		Total	
	1921	1920	1921	1920	1921	1920	1921	1920
News Print:								
Number of machines.....	12	14	36	6	69	13	117	33
Total hours idle.....	1,957	3,081	2,324	283	4,611	1,395	8,892	4,759
Book Paper:								
Number of machines.....	115	76	30	31	105	26	250	133
Total hours idle.....	20,310	9,490	1,447	2,260	6,495	1,378	28,252	13,128
Paperboard:								
Number of machines.....	210	182	58	73	117	53	385	308
Total hours idle.....	49,467	56,194	4,862	11,110	15,482	15,466	69,811	82,770
Wrapping:								
Number of machines.....	64	72	46	502	131	27	241	149
Total hours idle.....	10,517	17,107	2,758	5,980	9,875	7,272	23,150	30,359
Bag:								
Number of machines.....	8	20	7	4	20	6	35	30
Total hours idle.....	1,367	2,773	425	441	1,119	454	2,911	3,668
Fine:								
Number of machines.....	89	66	62	29	106	19	257	114
Total hours idle.....	13,707	22,280	6,984	2,326	11,184	2,146	31,875	26,752
Tissue:								
Number of machines.....	28	68	63	42	51	10	142	120
Total hours idle.....	4,232	25,647	5,388	8,782	5,315	2,180	14,935	36,609
Hanging:								
Number of machines.....	7	6	7	5	10	6	24	17
Total hours idle.....	2,426	932	198	830	682	455	3,306	2,217
Felts and Building:								
Number of machines.....	26	30	8	10	24	12	58	52
Total hours idle.....	4,864	9,472	1,260	2,020	2,112	3,561	8,236	15,053
Other Grades:								
Number of machines.....	50	40	31	22	49	12	130	74
Total hours idle.....	8,868	7,329	2,066	2,057	4,722	4,307	15,656	13,693
Total number of machines.....	609	574	348	272	682	184	1,639	1,030
Total hours idle.....	117,715	154,305	27,712	36,089	61,597	38,614	207,024	229,008

Course for Paper Makers at Syracuse

SYRACUSE, N. Y., February 6, 1922.—A short course in elementary principles of pulp and paper manufacture, designed to benefit mill men who have not had technical training but who have had sufficient experience in the industry to under-

stand practical operation of pulp and paper mills, will be given by the State College of Forestry, Syracuse university, March 1 to April 1. The course is started in response to popular demand of men engaged in pulp and paper industry in and outside of New York State.

The instruction will consist of lectures by members of the forestry college faculty, experimental work in the college laboratories, talks on the principal operations by specialists in each of these fields, and inspection trips to nearby mills. The following is a complete outline of the course as arranged by the forestry faculty.

In addition to the subjects there will be lectures, talks, and round table discussion. Prominent men in the various branches of the wood industry have accepted invitations to visit the college during the course and present informal talks, giving students opportunity of obtaining first hand information on nearly every phase of pulp and paper manufacture.

Leading men in the industry who have accepted invitations to lecture during the course are: Dr. Bjarne Johnson, chief chemist, Hammerville Paper Company, Erie, Pa.; John DeRue, forest products laboratories, Madison, Wis.; Dr. R. H. McKee, professor of chemical engineering at Columbia university; Edwin Sutermeister, chief chemist, Warren Paper Company, Cumberland mills, Maine; A. F. Richter, president of Stebbins Engineering and Manufacturing Company, Watertown, and James A. Cameron, president Cameron Machine Company, Brooklyn.

Registration for the course will take place on Wednesday, March 1. Class work will be in order until March 29, and will be followed by an inspection trip of three days. Applications for admission to the course should be addressed to Prof. C. E. Libby, New York State College of Forestry.

A Paper Maker for Sixty-five Years

[FROM OUR REGULAR CORRESPONDENT.]

WESTBROOK, Me., February 5, 1922.—A papermaker for 65 years; this is the record of Sewall S. Leighton, aged 80, the oldest employee of the S. D. Warren Company. He settled in the village of Sacarappa when there were only 11 houses there. The mill was small, of wood, and contained three machines. Rags were the

material then used. The daily product was about three tons per day and hand work was the rule.

Mr. Leighton has been employed under five agents and is on the job each night—quitting with the midnight shift. He continues active, strong and cheerful and manages to make some of his younger fellow-workers "step out" at times.

MORE INQUIRY FOR PAPER IN PHILADELPHIA MARKET

While the Volume of Business Being Transacted Is Still Below What Was Expected at This Time Representative Members of the Trade Believe That a Considerable Improvement Will Be Shown in March and April—James Andrews, Inc., Is Organized With Offices in the Ohio Bldg. to Conduct a General Paper Business—Committee Appointed to Arrange for Dinner of Paper Stock Dealers.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, February 7, 1922.—Inquiries during this first week of February which the trade had looked forward to as marking the beginning of renewed activities, were far more numerous than orders, but the volume of confidence on the part of both the fine and the coarse paper dealers is far greater than both. There are a few houses, like the Paper House of Pennsylvania, The Garrett-Buchanan Company, and the Thomas W. Price Company which report a really satisfactory amount of business done the times considered, but in the main, the houses report slightly quieter sales than they had anticipated, with orders running large in number, but small in volume. The bulk of sales during January unquestionably showed a falling off from what had been forecast even by the conservative, but running all through the trade is the conviction that what was lost in January and what may even be lost in February, certainly will be made up in March or April.

Fine Paper Division Meets

Optimism was the note that was dominant at the meeting on Thursday of last week of the fine paper division of the Philadelphia Paper Trade Association, and it was really this phase of business experience that consumed the major time of the meeting, because while discussion of the "long list" matter had been assigned for the topic of the session, there was a consensus of opinion that only the obsequies of the "long list" agitation could be discussed; that the issue itself was absolutely dead and that the subject now was more of apparent than of actual interest. While a few of the distributors have lost slightly in orders because of their refusal as loyal members of the National Paper Trade Association through the local body to depart from its attitude against the "long list," it is known positively that during January at least three of the important distributors maintaining absolutely their opposition to the "long list," enjoyed larger orders from a number of establishments owned by the leaders in the Typotheta "long list" warfare, than they previously had. Whether this was due to an oversight or to the abandonment of the fight has thus far not been made clear. For publication, Typotheta officials still insist that they are just as determined and insistent in their effort to secure the "long list" as ever they were and that the fight will continue until it is successfully concluded. Practice and preaching in this matter, as in many others, do not seem to be synonymous terms.

Prices Being Stabilized

Stabilization of prices, at least in all the well established kinds of fine paper and the higher priced classes of coarse and wrapping seems firmly to have been established. No radical revision in the next few weeks is anticipated and majority opinion seems to be that there will be few, if any even slight revisions.

Paper Stock Slightly Improved

In the paper stock market, there was evidenced during the week, the first sign of an activity which has manifested itself since the year began, and the dealers received it so delightedly, that they did not pause to decide whether it was a permanent, or merely a

transient betterment. The absolute fact is that in just one grade of paper stock, soft white did the mills show a desire to buy. Because of the quietness in the printing industry, there is not much of this stock on the market and therefore prices held firm, but did not advance, the volume of buying orders not being large enough to warrant a rise. Soft paper prices rule at about 3 cents with occasionally a slight advance where there is requirement either for exceptionally good packing or prompt shipment.

James Andrews, Inc., Organized

Announcement was made during the week of the establishment of a new business. It will be known as James Andrews, Inc., and its principal owner will be James Andrews, widely known and long experienced in the paper trade and lately connected with the Garrett-Buchanan Company. The Andrews Company has just opened offices in Suite 1108, Otis Building, 112 S. 16th street where a general paper business will be conducted, although the firm will specialize on books, coated, offset, and sulphite bonds. The firm has a Delaware Charter, Mr. Andrews being president, Wm. S. Lawson, vice-president and Arthur F. Paul, secretary and treasurer, these also constituting the board of directors. Mr. Andrews has already succeeded in making some excellent connections directly with the mills for large tonnage. His association with the paper trade began in 1886 with the old Nescochague Manufacturing Company then located at 609 Chestnut street and at the time one of the largest distributors in the city. Subsequently he was associated with Molten and Muench, precursors of the Molten Paper Company, then with Wm. H. George engaged in the paper brokerage business and after that with Megargee & Green of which company he was vice-president. He served also as vice-president of the Megargee-Hare Company until it was absorbed by the D. L. Ward, A. Hartung and Garrett-Buchanan Company, Mr. Andrews then associating himself with the last named.

Committee for Paper Stock Dealers' Dinner

President Evan G. Badger of the Paper Stock Dealers' Association during the week announced the appointment of a banquet committee consisting of chairman Thomas F. Simmons of Wm. Simmons' Sons, Frank D'Miller of P. Sullivan & Sons and Thomas A. Kenny formerly of the Paper Manufacturing Company now an importer. The committee has had merely an informal meeting at which the prevalent opinion was that the banquet should be held somewhere around April 20, it being thought that since at that time there will be held in New York several meetings likely to attract the paper mill men of the country, a larger representation of these factors in the trade with whom the stock men come into such intimate contact, could be assured than if the meeting was held at an earlier date.

C. H. Morian at Windsor Locks

C. H. Morian, vice-president and general manager of the J. L. N. Smythe Company, temporarily is taking up his residence at Windsor Locks in order to supervise the installation at as early a date as possible of the new and latest type machine which the company has ordered for the purpose of increasing the output, and approving of quality of the line of absorbent paper towels which will be produced at this plant. It is hoped to have the renovations carried out during the latter part of this month or next. The Windsor Locks Paper Mill Company is owned by the J. L. N. Smyth Company, but will be conducted as a separate business entity with, however, the same officials as those of the J. L. N. Smythe Company, these being president J. L. N. Smythe, vice-president and general manager Mr. Morian, secretary and treasurer Harvey S. Platt, assistant secretary and treasurer, Harvey S. Platt, Jr.

"Lancastrian" Libeled

Information of interest and of value to the paper trade generally and to consumers of news print and other products is

given in the formal statements filed in the United States Court here and supporting libels which had been attached to the British steamship, *Lancastrian* now in this port and awaiting disposition by a Court order. These legal documents indicate that a large Philadelphia newspaper, which has been agitating the encouragement of American industries, had imported a large quantity of foreign made news print and that a number of other firms were importers of foreign made products in which it had not generally been known that they were interested. There are conflicting stories about the *Lancastrian*, but it appears that the vessel sailed from a German port in December and apparently was not sufficiently stocked up with Bunker coal and also that prepaid freight apparently had not been applied as originally intended. At all events, the vessel which was to have sailed on the first of December did not leave port until long afterwards and then instead of sailing direct for Norfolk, first put in at Halifax for coal and then reached this port with captain and crew unpaid and with a disclaimer of financial responsibility by representatives of firms concerned in the sailing, to advance the necessary funds. The definite facts are that some 25 libels were filed by Captain R. A. Goodrich and the members of his crew and also paper dealer importers, who claimed various amounts in liquidating damage alleging breach of contracts in the manner in which the goods were brought across and their receipt here. Two Philadelphia organizations particularly were concerned. The *Evening Bulletin* newspaper, which had aboard the vessel some 69 rolls of paper valued at \$26,602.92, and the J. L. N. Smythe Company paper specializers and generally regarded as being engaged only in the coarse paper branch of the industry, who had aboard 69 cases of printing papers, weighing 26,272 kilograms which were to have been sent to Norfolk. For N. Gottesman & Co., Inc., New York exporters and importers there is aboard 1,349 bales of wood pulp valued at \$11,500 and marked "B. Black, New York." For Castle, Gottheil & Overton, New York, there had been placed aboard in Hamburg 1,625 bales of wood pulp valued at \$17,139.93 of which 625 bales were finally to be sent to Philadelphia and 1,000 bales to New York. For the last several weeks, the firms to whom this paper and pulp was to be sent have been endeavoring to secure their goods under equitable adjustments, of course making counter claims for damages sustained. One of the firms concerned explained today that it understood that the vessel had been sold subject, however, to confirmation by the Court, that had been promised immediate delivery of the paper and also had been given to understand that it might realize as much as 25 per cent of the amount of its claims.

General News of the Trade

The Keystone Paper Mills Company at Upper Darby, Pa., just outside of Philadelphia has installed machinery and complete equipment for the manufacture of No. 1 Kraft paper and will discontinue the production of water leaf paper. The capacity of the plant will be about 12 tons daily. Henceforth, exclusive attention will be given to the kraft line.

The Charles Beck Company has stocked the W. C. Hamilton & Sons Co. line of ledger papers and is extending the market for them rapidly. The Beck Company is making a special feature of the certificate bond individual cabinets in Monarch and executive sizes.

Dietrich Conradi, a veteran fine paper salesman for the D. L. Ward Company is furnishing to friends, ocular demonstration backing up his vehement declaration, that Friday, the 13, is not an unlucky day. On Friday, January the 13, Mr. Conradi was just 50 years old and he considers himself very lucky for that reason, but there came to him from Mrs. Conradi a gold Hamilton watch and this of course was the climax of his good fortune on a day which in popular opinion is unlucky.

Thomas J. Curry, head of the sales service department of the D. L. Ward Company spoke during the week to the estimating class of the Typotheta of Philadelphia on the general subject of paper and its uses.

New Head of the Paper Division

Grosvenor M. Jones who has taken charge of the new paper division of the Bureau of Foreign and Domestic Commerce has had considerable experience in the paper industry and trade both officially and unofficially. In 1913, before entering the service of the Bureau of Foreign and Domestic Commerce, he was engaged in a special investigation in Washington in behalf of American Paper and Pulp Association.

He was assistant director of the Bureau of Foreign and Domestic



GROSVENOR M. JONES

Commerce from February, 1918, to August, 1919. He has traveled in Europe and in Latin America in behalf of the Department of Commerce, studying industries, ports and shipping. Mr. Jones visited Central America in 1919 in connection with the second Pan American Financial Conference. He was then appointed assistant manager of the Mercantile Bank of the Americas, followed later by appointment as director of that bank's Peruvian branch.

Mr. Jones attended Harvard University and is a graduate of Georgetown University where he received his L.L.B.

He is author of several well known reports on shipping and associated subjects among which are "Navigation Laws," "Ports of the United States," "Government Aid to Merchant Shipping," "Pilotage in the United States," "Atlantic Intra-Coastal Canals," Etc.

Maine Pulp & Paper Co. Sold

[FROM OUR REGULAR CORRESPONDENT.]

SKOWHEGAN, Me., February 5, 1922.—Included in the list of new entries in the Supreme Judicial Court are 12 against the Maine Pulp and Paper Company, Inc., of Buffalo, which on Tuesday filed a petition in bankruptcy in the United States District Court here.

The suits are brought by Max, Harry and Abraham Goldberg, Holyoke Machine Company, Nathaniel MacQuillan, Thomas G. French, Walter Emigh, Hugh M. Grady, Thomas G. Lord and Lewis A. Caswell, Central Maine Power Company, Fred L. Pooler, Merle L. Colby, Frank B. Folsom, James L. Johnson, and Carl E. Rieffanaugh.

The company bought the plant from the Savage Manufacturing Company a year and a half ago, and ran it up to about three months ago after which E. L. Savage was put in charge for the creditors. The Savage concern began foreclosure proceedings January 16 on mortgage given by the Maine Pulp and Paper Company July 20, 1920.

NEW ENGLAND PAPER BOX MEN HOLD CONVENTION IN BOSTON

More Than 200 Members of the Trade Attend Two Days' Meeting at Young's Hotel—New England Paper Merchants' Association Holds Annual Frolic at the Hotel Westminster—Demands for All Lines of Paper Continue Comparatively Quiet—Paper Stock Trade Also Is Inactive—Estimates Are that Less than One-Half the Usual Amount of Pulpwood Will Come Down the Penobscot.

[FROM OUR REGULAR CORRESPONDENT.]

BOSTON, Mass., February 8, 1922.—Members of the New England Division of the National Association of Paper Box Manufacturers, together with several men prominent in the industry outside New England, convened here this week for a two-day business and social session.

More than 200 men of the trade were present, headquarters being established at Young's Hotel. It was one of the most successful affairs of its kind held in this city in many years.

C. M. Coover, president of the National Association and W. W. Baird, secretary of the organization were principal guests. They were given a splendid reception by the New England delegates. President Joseph H. Perry of the New England division acted as "all-round" host and as toastmaster at the banquet Wednesday night, which was a real funfest with plenty of features and novelties.

On Wednesday W. A. Dillman, of Ernst & Ernst, Philadelphia, Accountants, gave an interesting and enlightening detailed story of the new cost system, recently adopted by the national association. Thursday, Alfred E. Lunt, well known Boston attorney, who is acting as counsel for the State committee which seeks the repeal of the present minimum wage law, spoke on that subject. This particular matter created much discussion at the conference and a bitter campaign is expected by members in connection with it.

A motion picture along "Safety First" lines was presented by an official of the Liberty Mutual Insurance Company. Alfred J. White, Frank C. Babcock and Merton O. Hill with President Perry comprised the general committee. Thursday night, the Boston Carton Club and the local supply houses entertained the visitors with a luncheon at the Hotel Lenox and an athletic Carnival at the Boston Athletic Association.

Paper Merchants Have Frolic

The New England Paper Merchants' Association also held a gala event this week, the affair being the association's annual frolic, held at the Hotel Westminster. Eight vaudeville acts from a downtown theatre and a host of other well known entertainers provided an evening of choice entertainment following a dinner. There were no speeches—just a reg'lar time with Arthur Ham, of the Arthur Ham Paper Company, Frank H. Merrill, of Arnold Roberts Company, and Charles A. Young, of Carter Rice & Co., at the helm.

Paper Market Continues Quiet

The general business tone in the Hub this past week has been listless. The one bright spot is in the fine grades, one of the largest houses showing 11 per cent increase in tonnage in January over December. This same official looks for an increase in lower grades within a short time. An official of this house feels that direct-by-mail advertising, now being used by many of the houses here, has a tendency to stimulate business and believes this to be responsible for increase in business with his particular concern.

The board business is at a low ebb, prices showing a tendency to slump. Chip remains at \$37.50 with little prospect of a change either way. Salesmen claim that customers are not "stocked up"

but they simply are not in the market at this time. Orders are lacking at all ends. The paper trade remains inactive little demand being made for any particular grade.

Poor Winter in Maine for Pulpwood

Reports reaching this city from large lumber dealers, woodsmen and managers of employment agencies for the woods, indicate that this winter in the Maine woods has been the "poorest" in 40 years. It is estimated by those in authority that less than one-half the usual amount of pulp wood, and only a few million feet of logs will come down the Penobscot this spring. For the first time in 80 years, when the great, Bangor boom was established, there will be no rafting this spring, say experts.

This condition exists in all parts of the State, it is said. There have been but few small operators in the woods this winter and reports show that pulp concerns are heavily overstocked with last year's wood. In some instances these mills have curtailed operations 50 per cent—in some instances closed altogether—and in other cases gone into bankruptcy.

Surveyors claim that less than 10,000,000 feet of long logs will come down to Bangor this year. In the old days Bangor would send away anything from 180,000,000 to 240,000,000 annually, thus employing hundreds of men sorting and rafting the "big fellers". This condition, however, has declined gradually until this year, it is said, only one mill will have any logs to raft.

Pulpwood is actually a drug. When the boom was on every farmer in Maine had a wood lot and large numbers of small operators went to work cutting four foot stuff for the mills in the hope of getting fancy prices. These people, however, still have that wood on hand and the season out-of-doors naturally makes the wood more or less unfit for pulp material, and they are likely to keep it for some time. The whole Eastern section of Maine, it is reported, is dotted with piles of wood, for which there is no demand, the big manufacturers having huge piles of the same stuff piled high at their mills.

The question has been asked—and apparently has not been answered—"Why did the pulp concerns load up with high priced stuff during the war when they must have known that the prices were due for a crash within a year or two?"

Frank H. Merrill Surprised

Frank H. Merrill, vice president of the Andrews Paper Company, of Boston, was very agreeably surprised Saturday, February 4, in receiving from his associates, a floral tribute and a solid gold fountain pen, the occasion being the twenty-fifth anniversary of his connection with the firm.

Now the Troy Paper Corp.

[FROM OUR REGULAR CORRESPONDENT.]

TROY, N. Y., February 6, 1922.—The Troy Paper Corporation has purchased stock and good will of the Troy Paper Company and will conduct the business established in 1877 by Richard B. Van Alstyne, and conducted since 1884 by George W. and William L. Van Alstyne. Officers of the Corporation are, president and treasurer, Geo. W. Van Alstyne; vice-president, Arthur H. Phillips; secretary, Ogden Stevens; directors, Geo. W. Van Alstyne, Arthur H. Phillips, James D. Keating, Ogden Stevens.

New Pulp Plant in Japan

A press dispatch states that "a new 10,000-ton paper-pulp plant at Nodasamu, Japan, which will commence operations about the first of the year, brings the number of such plants in Karafuto to five, which will be increased to six with the reconstruction during the year of one of the plants of the Karafuto Industrial Company, which was destroyed by fire some time ago. The capacity of these six plants will be 55,000 tons a year. Plants in Chosen and Hokkaido have a combined capacity of 35,000 tons of pulp annually."

MO och DOMSJÖ AKTIEBOLAG

STOCKHOLM, SWEDEN

We have for immediate shipment from dock at Boston and Baltimore limited quantities of the Mo and Domsjö



1st QUALITY
STRONG
CLEAN

UNBLEACHED SULPHITE

For Samples and Quotations
Write or Telegraph

A. J. PAGEL & CO., Inc.

347 Madison Avenue

New York City

SIGNS OF BETTER BUSINESS ARE REPORTED IN CHICAGO

Jobbers Are Carrying Low Stocks and Should Be in the Market Soon—Need for Co-operation Between Manufacturers and Jobbers—Hampden Glazed Paper & Card Co. in New Quarters—Walter A. Rapp Co. Now Exclusive Representatives of the Trinity Bag and Paper Co.—American Cover Paper Co. Recently Incorporated—Reliable Paper Box Co. Incorporates.

[FROM OUR REGULAR CORRESPONDENT.]

CHICAGO, February 6, 1922.—Concrete signs of better business are beginning to make their appearance according to some of the mill representatives in Chicago. Business has not been what they would call "remarkably good" they say, but it is picking up in a manner which is indicative of some improvement in the near future.

The jobbers in Chicago are said to be carrying low stocks, and while none of them have as yet asserted themselves in favor of carrying more paper on hand, orders from this source are looked for and expected.

A rumor went the rounds in Chicago last week that there was quite a little "undermining" going on here among the jobbing trade. In an effort to verify this rumor, a reporter for the PAPER TRADE JOURNAL made several inquiries but with no definite results. One mill representative said that the jobbers were continually underselling each other, and it wouldn't surprise him at all if, in the face of slow orders this practice had become a little more severe than ordinarily.

Another mill representative said that he had not heard or noticed anything out of the ordinary regarding the activities among the jobbers, but he expected that competition was "a little rife."

According to two or three of the mill representatives, what is needed more than anything else to help conditions just now, is more sincere co-operation between the jobbers and the mill men. These members of the trade said that it seems to be a common belief among the jobbers that the mills are "bucking them" instead of making an attempt to please. As the jobber is the mill's customer, these representatives can not see what else they can do but strive to please.

Hampden Glazed Paper Co. in New Quarters

The Chicago offices of the Hampden Glazed Paper and Card Company have been removed from 634 Federal street to 730-2 West Monroe street where this company has engaged larger quarters which will permit of carrying an increased stock of fancy papers, and glazed and plated papers. The new location offers much better facilities for service to customers and the move was directly in line with the company's general policy of advancement. An announcement of the removal has been sent out to the trade by Frederick B. Hazen and James E. Truedel, Chicago representatives of the firm, in a very attractive folder, of four pages, the cover of which is a sample of "Golden Glow Folder No. 33," and the inner pages a sample of "White Rainbow Sateen, Style 73."

L. G. Williams Goes with Berkshire Co.

Lewis G. Williams, who for the past seventeen years has been identified with the West Virginia Pulp and Paper Company in Chicago, is now associated with the Berkshire Company, 445 Plymouth Court, as manager of its mill department. This department was formerly in charge of James Lemon. Under the management of Mr. Williams the Berkshire Company is enlarging the scope of the mill department which it is now operating in full force and in which it has put in a stock of book papers and others, in line with the general policy of the company to effect better facilities for serving

its trade. The enlarging of the mill department of this firm which has been made to offer better service to mill shipment buyers was made effective February 1.

General News of the Chicago Trade

George K. Gibson, of the Warsaw Sulphite Fibre Co., Chicago, office, has just returned from a business trip covering western territory. Mr. Gibson said that his company had done a good business during January, "in fact it was the best January we've ever had, and it looks like it is going to be a good February."

Alex Gilman, general manager of the Paper Mills Company, Kalamazoo, Mich., spent a few days in Chicago visiting the trade last week.

F. A. Green has identified himself with the Ideal Stitcher and Manufacturing Company, to take the place of R. A. Weatherly, resigned. This company manufactures box manufacturing machinery.

The Walter A. Rapp Company, mill agents, recently took over the exclusive representation of the Trinity Bag and Paper Company, New York City, in western territory, which has been defined as being bounded on the east by the Ohio, Pennsylvania State line, on the north by the Canadian line and on the south by the Gulf. The Trinity Bag and Paper Company manufactures bags and so forth and its full line will be handled by the Walter A. Rapp Company which also handle tissues, kraft, sulphite bonds, toilets, news, novelty news, towels, napkins, wrappings, twenty pound screening, etc., as well as waxed paper of all descriptions, being the sales and distribution agent for one of the largest mills in the country manufacturing this latter line.

The National Paper Products Company, 212 West Randolph street, Chicago, recently leased from the Sherwin Williams Paint Company, the fourth floor in a building at 2355 South La Salle street. This lease gives the paper company more than 8,500 square feet of floor space on the south side of the city which will be used for factory and ware room purposes. The reported annual rental for this space is \$2,400 annually.

The American Cover Paper Company, 848 Noble street, Chicago, was recently incorporated and capitalized at 150 shares of no par value, for the purpose of manufacturing and printing paper and paper products, etc. This company, while it is just starting, is now showing samples of some very attractive cover papers, which have already been shown favor by the paper box manufacturers. These cover papers are of a high grade, something rather new, and produced in various colors and tints. The incorporators are: Frederick M. Byerly, Paul Date, Wolcott Winchenbauch.

The Reliable Paper Box Company of Chicago, Inc., 2015 Emmerston avenue, Chicago, has been incorporated to manufacture and deal in paper boxes, articles, etc. This company has a capital stock of \$10,000. Principals of the company are: I. B. Goodman, Isadore Isanberg, and Samuel Mason.

Consolidated Paper Co.'s Good Record

[FROM OUR REGULAR CORRESPONDENT.]

APPLETON, Wis., February 6, 1922.—The Wisconsin Rapids plant of the Consolidated Water Power and Paper Company are running full time and business is good. The mill is operating largely on Canadian pulp.

Not one fatality occurred in the four plants of the Consolidated company during the last year, safety records compiled by the company show. There has been a most noticeable decrease in the number of lost time accidents in the last twelve months because of the systematic safety campaign that has been carried on. This splendid record was established while the company was employing the largest crew in its history.

Not one man in the company's employ was seriously maimed during the year. The most serious accident at the Wisconsin Rapids plant was the loss of one finger.



"NATIONAL" NEWS



Of interest to Dyers and the Color Using Industries in General
Prepared by the National Aniline & Chemical Company, Inc.

WHAT SERVICE DO YOU DESIRE MOST IN DYESTUFFS?

Prompt Deliveries?

"National" Facilities Take Care of That

One of the things that the textile manufacturer demands from dyestuff manufacturers is prompt delivery of his requirements.

This can be guaranteed only when an extensive study has been made by the dyestuff manufacturer of the needs of the textile trades, and when he has balanced his manufacturing processes so that he has on hand, at all times, a sufficient supply of stock to meet all probable requirements.

The National Aniline & Chemical Company, Inc., has made this study and carries a supply of dyes in its warehouses and branch offices which enables it to promptly fulfill all requirements.

BASIC DYES FOR PAPER MAKING

To Meet the Requirements of the Trade in Every Phase of Paper Dyeing and Staining

"National" basic dyes possess unusual brilliancy, excellent tinctorial strength, and good solubility. In addition, their great affinity for unbleached fibers insures good absorption. These combined properties make for lower production cost in the coloring of papers, where special fastness is not essential.

The highest manufacturing standards have been maintained by the Company and paper dyers can use these products with full confidence that they are equal, and in many instances superior, to any employed heretofore.

Special attention is directed to the following:

- National Auramine O P
- National Chrysoïdines Y P & R P
- National Bismarck Browns, Y P & R P
- National Safranines A P & B P
- National Rhodamine B P
- National Fuchsin N B P
- National Basic Kraftbrown N A C
- National Methyl Violets B B P & B B P Conc.
- National News Blues
- National Victoria Blue B P
- National Methylene Blue B B P
- National Brilliant Green B P
- National Basic Black N A C
- National Victoria Green W B P Crystals

DYES FOR WALL PAPER

"National" Specializes in Service to Mills

"National" Dyes for paper fulfill the most exacting requirements of the wall paper manufacturer. This applies to beater dyeing, to the production of special effects like oat meal paper and to the manufacture of lakes for printed wall papers.

"National" Dyes are so standardized that they can be duplicated at any time. This assures uniformity in shipment after shipment and makes it possible for the wall paper maker to employ fixed formulae in his processes with full confidence that his quantities will not have to be varied with each run.

Solving coloring problems in paper mills has always been a part of the service rendered to the trade. We maintain for this purpose a paper dyeing laboratory and a technically trained staff.

A NEW YELLOW DYE

National Quinoline Yellow for Quality Papers

National Quinoline Yellow is ready for delivery to the paper mill.

With it, the manufacturer of fine papers may produce a shade of lemon with fastness properties superior to those which have been generally obtainable.

This latest "National" contribution to the list of acid dyes produces a bright lemon shade identical with Chinoline Yellow so well known in years past.

No line of bond papers is complete without a bright yellow shade. National Quinoline Yellow is particularly adapted for use in high grade bond and writing papers. Its exceptional properties will be found to correspond fully to the high quality of the stock in which it is employed.

National Aniline & Chemical Company, Inc.

MAIN OFFICE

21 Burling Slip, New York City

- Boston 113 High St.
- Charlotte 236 W. First St.
- Chicago 111 W. Washington St.
- Hartford 209 State St.
- Montreal 8 Place Youville
- Philadelphia 653 N. Broad St.
- Providence 28 N. Main St.
- San Francisco 120 Second St.
- Toronto 14 Front St., East



SIGNS OF BETTER BUSINESS IN THE FOX RIVER VALLEY

First Carload of Paper Shipped by Express From the Valley in Several Years Sent From Appleton Last Week—This Is Taken to Mean That Jobbers Stocks Are Low and That More and Larger Orders Are in Immediate prospect—Sulphite Department of the Marinette and Menominee Paper Co. Makes an Unusual Safety Record—First Train Load of Pulpwood of Season Arrives

[FROM OUR REGULAR CORRESPONDENT.]

APPLETON, Wis., February 6, 1922.—One little indication of improvement in business in the Fox river valley paper industry is the fact that the first carload of paper shipped by express from this valley in several years left Appleton last week for the East. It was the first car lot express shipment of paper out of Appleton in several years and is taken here as an indication that jobbers' stocks are low and that more and larger orders are in the immediate prospect.

Several paper manufacturers in the last week said that the prospects for business are becoming brighter almost every day. Right now there is a little slump because of the inventory season, but there has been little or no curtailment in manufacture, it is said.

A survey recently made at Nekoosa and Port Edwards, where the Nekoosa-Edwards Paper Company mills are located, showed that there is practically no unemployment in those communities—a condition which probably does not exist in many towns in the United States. Officials of the paper company said they have not laid off any married men for several months and in cases where temporary unemployment was necessary married men were given jobs in other departments in order to keep them working.

A unique situation which has developed in the two villages is that when lay-offs have been necessary unmarried men have volunteered to accept the period of enforced idleness in order to permit married men to stay on the jobs. This spirit of co-operation and goodwill is very noticeable in the company's plants and is making for harmony and increased production, it is said.

There is less unemployment in the Fox river valley now than earlier in the winter, although there still are many men out of work. The American Legion is endeavoring to place war veterans in jobs and is meeting with fair degree of success. Paper mill owners are co-operating as much as possible in this work.

First Trainload of Pulpwood Arrives

The first trainload of pulpwood to arrive in the Fox river valley this season reached Appleton last week. Railroad men say that shipments will arrive regularly hereafter but they are not expecting nearly as much wood as last year. The fact is that some of the yards still are comfortably filled. More wood arrived in the valley last winter and spring than ever before in history and decreased production has resulted in a much larger surplus than usual. Wood arriving now is from northern Wisconsin, Minnesota and Michigan. Canadian wood will not arrive until in the spring, when it can be rafted across the lake, it is explained.

An Unusual Safety Record

An unusual safety record has been made by the sulphite department of the Marinette and Menominee Paper Company, which operated 387 days without an accident which lost more time than the day of the injury. The last accident which required an employee to lose more time than the day of injury occurred in December of 1920, when a man ran a sliver into his finger and infection set in.

The department employs 46 men and it was computed that the mill operated 19,252 man-days without an accident. This record is said to compare very favorably with the best in any industry.

All the plants in the state are putting great stress on safety and some very splendid records have been made. The Kimberly-Clark Company mill at Kimberly recently established a safety record, described a few weeks ago, which probably is the best ever made in the paper industry in its history.

Consolidated Paper Co. Elects Officers

All directors of the Consolidated Water Power and Paper Company were re-elected at the annual meeting last week. They are George W. Mead, I. P. Witter, R. L. Krause, George P. Berkey and Theodore Brazeau.

Stockholders were taken through the company's big plant at Wisconsin Rapids and were given an opportunity of inspecting the large amount of construction work carried on during the year.

General News of the Trade

Two Wisconsin paper mill men, George A. Whiting, and Earl A. Oberweiser, president and secretary of the Whiting-Plover Paper Company, met President Harding while they were in Washington a few days ago. The two Badgers were guests of Vice President and Mrs. Calvin Coolidge at dinner in the New Willard and a day or two later were guests of Senator Irvine L. Lenroot of Wisconsin. They met the President, by appointment at the White House, on Tuesday.

D. C. Everest of the Ewing-Everest Pulp Company of Merrill, is recovering from an operation for appendicitis, to which he recently submitted. M. C. Ewing of the same company was at the Mayor Brothers hospital at Rochester, Minn., a few weeks ago and is reported to be recovering his health.

Edward Johnson, employed by the Dells Pulp and Paper Company at Eau Claire for many years, was fatally injured when he was buried under a huge pile of pulpwood which fell from a stack on which he was working. He was warned by fellow workmen when the stack started to fall but was unable to get out of the way.

Dr. Otto Kress, papermaking expert for the Consolidated Water Power and Paper Company, Wisconsin Rapids, formerly head of the Forest Products laboratory at Madison, has purchased a new home at Wisconsin Rapids.

Sale of stock in the Northern Peshtigo Pulp Company, which had contemplated construction of a pulp mill and possibly a paper mill on the Peshtigo river, is being investigated by the securities division of the Wisconsin Railroad commission. It is understood that the site for the proposed plant has been surveyed but little if anything else has been done. The investigation is being made at the instigation of Joseph Krautkramer, who is said to be a stock subscriber. Two days have been devoted to examining witnesses in the transactions and the hearing has been adjourned to February 28.

Karl Mathie, Wausau paper manufacturer, is president of the Menominee Piston Ring Company, of Menominee, Mich., a new concern which manufactures piston rings of a new design. The company now has a capacity of 1,000 rings a day but hopes to be able to employ as many as 100 men in a few months.

C. W. Dickinson to Head Wrapping Department

[FROM OUR REGULAR CORRESPONDENT.]

PITTSBURGH, Pa., February 6, 1922.—Carl W. Dickinson will assume complete charge of the wrapping paper and twine department of the Chatfield and Wood Company. The new eight-story warehouse and office building is complete in every respect and is gradually being stocked with high grade papers to meet every demand of the buying public.

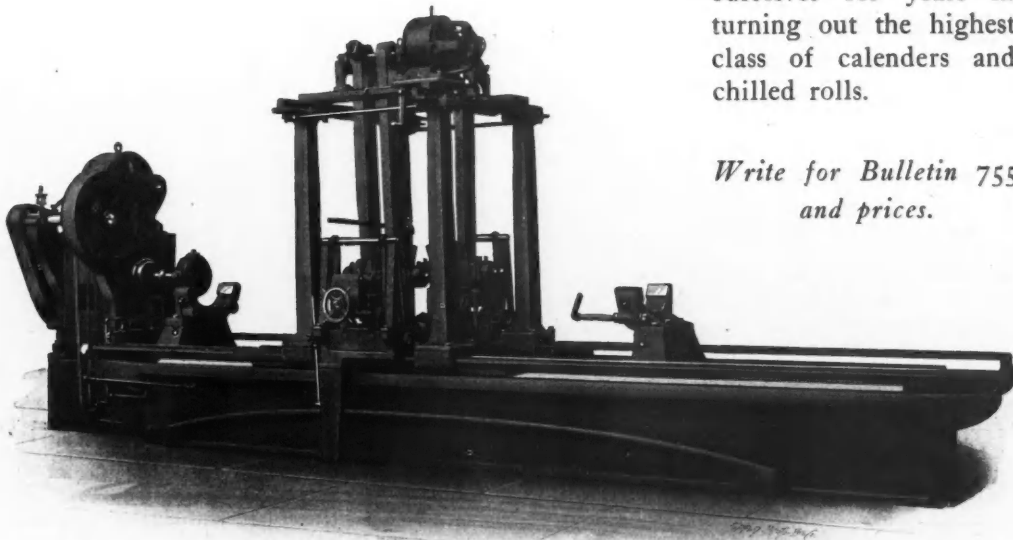
To Sell Mullin Bros. Paper Co.

ST. JOSEPH, Mo., February 6, 1922.—A committee of five has been appointed to sell the Mullin Bros. Paper Company, known for the last twenty-five years as makers of butter dishes, red rosin sized sheathing, light weight chip, light straw chip, chip and felt saturating. The company went into the hands of the receivers last April.

Roll Grinders

For the sake of your product regrind your old Farrel rolls, or any others, on this heavy, sturdy instrument of precision—a roll grinder we have made and used ourselves for years in turning out the highest class of calenders and chilled rolls.

*Write for Bulletin 755
and prices.*



Farrel Foundry & Machine Company

Established 1848

Ansonia, Conn.

**Branch Plant:
BUFFALO, N. Y.**

PAPER TRADE IN TORONTO IS IMPROVING SLIGHTLY

**Conditions Generally, However, Are Still Reported as Spotty—
Prices Continue About the Same for Rags, but the Outlook Is Said to Be Growing Brighter—Ontario Government Asks Great Lakes Paper Co. of Fort William to Show Reasons Why It Should Not Have Cancelled Its Valuable Pulpwood Concessions in Thunder Bay District—To Sell Kaministiquia Pulp Co. Plant.**

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ont., February 27, 1922.—The demand is still improving in many lines of paper but conditions, which govern the trade generally, are reported spotty by several wholesalers and manufacturers. Some plants are running full and book and writing mills to about eighty per cent capacity. The jobbers have completed their inventories and are pushing hard for business. The demand for kraft is particularly good and the sales of one large concern are the largest in January for any month during the past five years. The price remains at eight and three-quarter cents to wholesalers, in car lots, and there is no indication of any change. The figure was cut one and one-quarter cent last July and the quotations have remained intact since then. Prices on all kinds of book papers and wrappings have been unaltered for several months and this will likely be the prevailing condition for some time to come. There is a desire on the part of manufacturers and jobbers to stabilize the market and a good deal has already been achieved in this direction, which is regarded as a long step in the restoration of confidence and of equalizing supply and demand. The pulp market continues quiet and is slow in picking up. Paper box factories are getting busier and board manufacturers are doing a good trade.

In domestic rags, prices are the same but the outlook is brighter. Mills are beginning to inquire for new cotton cuttings and dealers look for better quotations and more business during the remainder of the present month. Manila rope is about the weakest thing on the list having declined about one-half a cent per pound recently. In shavings, book and ledger stock, folded news and mixed papers there have been slight advances owing to an improvement in trade.

Company Spent Double Sum Required

In the Ontario Timber probe, counsel for the Ontario Government strongly opposed the granting of an additional area of 5,500 square miles of pulpwood limits to the Spanish River Pulp and Paper Mills. Col. Thomas Gibson, of Toronto, vice-president of the company, stated that it was very difficult to understand the reason why the documents put out for the purpose of selling securities should have been used to damage the credit of the company and the officers responsible for it. He refuted the statement that the granting of the area in question would not benefit the people of Ontario and said the company had agreed to spend \$1,750,000 on new plant and had in reality spent \$3,000,000.

The company had been cutting pulpwood continuously at Sault Ste. Marie since 1894, at Espanola since 1899 and at Sturgeon Falls since 1898.

Pulp Concessions May Be Cancelled

The Ontario government has asked the Great Lakes Paper Company, of Fort William, Ont., to show reasons why it should not have cancelled its valuable pulpwood concessions on the Pic and Black Sturgeon Rivers in the Thunder Bay district, the former consisting of fourteen hundred square miles and the latter of one thousand square miles. The request is said to be the result of a legal tangle caused by the fact that it can be read to mean one thing or the other. The contract was originally made between the Hearst government of Ontario and the Great Lakes Paper Com-

pany on the understanding that its mills be erected within a certain time. It is now contended that this period has long since expired and that nothing has been done by the company. Lawsuits ensued on the question as to whether the company was bound to take Hydro-Electric power, resulting in a verdict for the company. The Drury government, which succeeded the Hearst administration, contends that the company is already in default in its construction work inasmuch as power is available in some quantity now and can be made available in greater quantities. The company, on the other hand, argues that its contract does not call for the construction of the mills until one year after the power is available on the Nipigon system. By the terms of the contract the company is required to spend a million dollars in the erection and equipment of a pulp plant on the property, with a daily output of not less than one hundred tons and employ, at least, two hundred men for ten months in the year.

Record Week in News Print Production

The week ending January 27 was a record one so far as production of news print goes in the plant of the Abitibi Power and Paper Company, Ltd., at Iroquois Falls, Ont. The seven machines of the company turned out an average of 449 tons per day, which was an increase over the previous record for the week ending January 14, of thirteen tons. The plant efficiency showing was equally satisfactory, with four of the departments over ninety and one of them only half a point under it. The wood room and the wet room each scored 99.7 for the week ending January 14.

Temiskaming Company Buying Pulpwood

Word received from the pulpwood camps in Northern Ontario is to the effect that the pulpwood situation has not changed much during the past few weeks. Prices remain about the same for dry and peeled wood but are strengthening for rough, unpeeled spruce. The reason is that the Temiskaming Pulp and Paper Company which is completing a forty ton groundwood plant near Haileybury, has entered the market for ten thousand cords of rough wood. Recent heavy falls of snow, the greatest ever known so early in the winter, have materially retarded the hauling of wood and logs in Northern Ontario and it has been necessary to plough out the roads several times. There will be very little more pulpwood cut in the Haileybury district during the rest of the season owing to the deep snow.

Pulp Plant to Be Sold at Auction

In pursuance of a recent judgment given by the courts, the plant of the Kaministiquia Pulp and Paper Company at Port Arthur, Ont., which has been idle for some months, will be sold at auction on February 20 to satisfy certain claims. The Kaministiquia mill has a capacity of forty tons a day of groundwood pulp. It is built of reinforced concrete and is electrically driven. The land in connection with the industry includes a ninety-nine year leasehold of twelve acres, with a harbor frontage of over four hundred feet. Several pulp and paper men have been examining the property with a view to purchase.

Blotting Paper Production Increasing

The Howard Smith Paper Mills are meeting with encouragement in the production of blotting paper at their plant at Cornwall, Ont., and are now turning out three grades. The paper is largely handled by the trade in Toronto, and is being well received. The company also is making a duplex blotting on which it has done considerable business.

Loss of Pulpwood Through Sinkage

It has been brought out in the inquiry by the Timber Commission in Ontario that lumber and pulpwood companies lose heavily on logs which are sunk in the streams on their way to the mill. While a certain proportion of the "sinkers" are recovered in low water there are many thousand logs which are never regained. In

(Continued on page 54)

DUPONT



DYESTUFFS

A Vat Blue for Paper Tinting

Ponsol Blue RP Paste is the result of nearly three years of experimenting, which latter has had as its goal the production of a pure, sun-fast vat blue in such a fine state of division that its suspension in water produces a colloidal solution.

The exceptional fastness to light of Ponsol Blue RP Paste makes it one of the few permanent blues for paper tinting.

E. I. du Pont de Nemours & Co., Inc.

Dyestuffs Department

WILMINGTON, DELAWARE

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New York

Boston

Providence

Philadelphia

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Charlotte, N. C.



BIG MODEL PAPER BOX PLANT TO BE ERECTED IN KALAMAZOO

When Completed New Factory of the Kalamazoo Paper Box Co. Will Be One of the Largest and Most Complete of Its Kind in America—Oscar Gumbinsky of Oscar Gumbinsky & Bros., Expects Improved Demand for Paper and Paper Stock by Spring—Paper Mills Hold Annual Meetings and Elect Officers and Directors for the Ensuing Year—Other News of Kalamazoo Valley.

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., February 4, 1922.—A new box factory, which when completed will be one of the largest and most complete of its type in America, is to be erected this year by the Kalamazoo Paper Box Company. Announcement of the expansion is made by Robert E. Staebler, secretary and general manager of the company.

The first step has been the acquisition of an admirably located site, immediately adjacent to the Michigan Central railroad line and affording adequate side track facilities, so that all unloading of material and loading of finished product can be accomplished under cover.

The new plant will be unique in many ways. A new method of construction will be adopted, in that the initial work will consist in the purchasing and placing on plans all the new machinery required. As soon as the equipment is fully determined and located to insure maximum production, the planning of the building will proceed.

"Instead of fitting our equipment into a building, we will build our new factory around the machinery", said Mr. Staebler.

It is estimated now that the contemplated factory will have a maximum floor space of about 200,000 square feet and will cost from \$175,000 to \$200,000. The Kalamazoo Paper Box Company



DISPLAY OF KALAMAZOO VEGETABLE PARCHMENT CO.

will retain its present plant at Kalamazoo avenue and Pitcher street, but will abandon the branch purchased several years ago. This latter structure has already been leased to a concern that is planning to move from Chicago to Kalamazoo.

The Kalamazoo Paper Box Company is steadily improving its equipment. Within the past few months it has installed an automatic label machine, also a debossing machine which takes gold off

the roll perfectly. Both appliances insure the highest grade of work for which they are designed, at the same time eliminating waste of materials.

A new type of box, amply protected by patents, is one of the latest additions to the company's line and is being enthusiastically received. It is built in the form of two trays, designed for small articles in quantities and unique in the fact that both trays are opened and displayed with the removal of the cover.

The annual election resulted in renaming the present officers and directors as follows: President, S. E. Giffert, Grand Rapids, vice-president, E. H. Distin, Comstock, secretary-treasurer and general manager, Robert E. Staebler, Kalamazoo, directors, the above and A. H. Huelster, Oak Park, Ill. and W. W. Huelster, Grand Rapids. Mr. Staebler announced that certain of the company's employees



DISPLAY OF STANDARD PAPER COMPANY

have expressed a desire to become more closely associated with the concern and are going to be given the opportunity to secure stock in the company.

Paper Displays in Kalamazoo

Industrial exhibits of "things that Kalamazoo makes and things that help make Kalamazoo" are to be made throughout 1922 in the spacious lobby of the First National Bank. Two of the displays during January were showings of the products of the Kalamazoo Vegetable Parchment Company and the Standard Paper Company. In each instance the exhibition was very complete and comprehensive and was a revelation to the home town folks, who had little idea of the real scope of either industry.

The Standard Paper Company put in a line of cartons, over 75 sizes and varieties made for some of the best known concerns in America. They were designed for packing meats, groceries, drugs, fruits, breakfast foods and many other products.

The Kalamazoo Vegetable Parchment Company showed bread wrappers, wax paper wrappers and all grades of sulphite bond and onion skin. In addition to these was a display of raw stock, with right in the foreground a small beater in operation.

The First National Bank has installed special gas, water and electric connections providing power facilities for any display that wants to add motion to its show.

Looks for Improvement by Spring

"Not much paper stock nor paper in sight in America. "Not much demand for either commodity, with the range of prices ruling reasonable.

(Continued on page 30)

Announcement

WE beg to announce that in the interest of economy and service to our patrons we have joined our respective organizations into one corporation which will be known as

McLaurin-Jones Co.

The policy of the new Company will be to supply a wider range of Gummed and Coated Papers than those carried by us in the past and to continue the bond of Goodwill that has always existed between our customers and ourselves.

(Signed) Ideal Coated Paper Company
 Samuel Jones & Company
 Ware Coated Paper Company



McLAURIN-JONES CO.

BROOKFIELD, MASS.

NEWARK, N. J.

WARE, MASS.

Obituary

William J. Gould

[FROM OUR REGULAR CORRESPONDENT.]

HOBOKEN, N. J., February 4, 1922.—Following an illness of many months, William H. Gould, president of the Hoboken Paper Mill Company, died on Saturday, February 4. Mr. Gould, who was in his sixty-eighth year suffered a stroke of paralysis last August and had been ill ever since.

Mr. Gould was born in Buck Run, Chester County, Pa., in 1854. His early life was full of struggles and hardships, but before he died he was able to see gratified his ambition to put his business on a sound footing. He recently completed a new mill at Rossman, near Albany, N. Y.

The entire career of Mr. Gould was centered in the business of manufacturing paper. He was widely known in the industry and many men prominent in the paper business sought his counsel.

Mr. Gould started in the paper business at the age of 13 as a helper in the paper mill at Buck Run. His rise in the industry was rapid and his services were eagerly sought after. He worked in a number of mills in the west and then migrated east, finally taking a position with the Hoboken Paper Mill Company. From a menial employment in the mill he rose to be its president. In all, Mr. Gould had been connected for 28 years with the company.

Frank E. Boston

[FROM OUR REGULAR CORRESPONDENT.]

GARDINER, Me., February 4, 1922.—Death this week claimed one of the most successful and widely known leaders in the paper industry in New England—Frank E. Boston, executive manager of the Hollingsworth & Whitney mills at Waterville and this city.

He was 67 years of age and an acknowledged captain of industry in the State of Maine where he has long been identified with civic and industrial affairs. Mr. Boston had been ill for several months.

Mr. Boston was a native of this city, the son of Calvin and Sarah T. Boston. He was educated in the public schools here and entered the paper business when a boy. He worked himself up to various positions of trust and great responsibility and at the time of his death was a director in the big concern. He amassed a large fortune.

He was trustee in the Universalist Church and was generous in his benevolence of many kinds. Many times he was sought as a candidate for public office but always declined. Besides his wife, Mrs. Florence Boston, he leaves one son, Fred M. Boston, also prominent in this city, and a grandson, Calvin Boston. Services were held Sunday at his late home, one of the show places of the city.

Alfred Frank

Alfred Frank, vice-president of the Ancram Paper Mills, with offices at 150-154 West 22nd street, and mill at Ancram, N. Y., died suddenly February 2, at Los Angeles, Calif., aged 63 years.

Mr. Frank has been connected with the paper industry for many years and was widely known and universally beloved for his rugged uprightness and honesty.

He was president of the Harmonie Club for two terms, was a director of the North Shore Country Club and the Fairview Country Club.

He was president of the Rose & Frank Co., and a director of the Merchants' and Shippers' Insurance Co., and the Peckham Seamless Ring Company. He took a great interest in, and was closely associated with many charitable organizations.

NEW BOX FACTORY FOR KALAMAZOO

(Continued from page 28)

"Business very spotted and uncertain, but a change for the better is certain to come this year."

That is the way Herman Gumbinsky, treasurer and general manager of Oscar Gumbinsky & Bros., sizes up the status of the paper trade.

"I expect a decided change for the better by spring months," said Mr. Gumbinsky. "It is certain to come this year. The law of supply and demand will warrant it. There is very little paper stock in sight at this time, but the lack of a market keeps the prices on all kinds down. We are buying very little stock.

"Mill, warehouse and jobbers' stocks of manufactured paper are also light. Mills are running from hand to mouth and buying is along the same lines. This condition cannot much longer prevail."

Paper Mill Annual Meetings

Paper Mill annual meetings throughout the valley the past week were featured almost wholly by re-election of officers and directors. The results follow:

Bryant Paper Company: President, Felix Pagenstecher; vice-president, Noah Bryant; secretary-treasurer, C. A. Fox; directors, Felix Pagenstecher, Noah Bryant, C. A. Fox, W. B. Milham, Joseph E. Brown, H. P. Kauffer, Charles Clarage, E. M. Irish, G. S. Allen, Kalamazoo; E. L. Brooks, Cleveland.

Standard Paper Company: President, B. C. Dickinson; vice-president, J. H. Dewing; secretary-treasurer, A. L. Clark; general manager, J. F. Byrne; directors, B. C. Dickinson, J. H. Dewing, J. E. Byrne, A. L. Clark, H. S. Humphrey, E. A. Dunwell, J. A. Wheeler, C. H. Stearns.

Birmingham & Proesser Company: President, A. T. Birmingham, Chicago; vice-president, W. P. Birmingham, New York; secretary, L. P. Simon, Kalamazoo; treasurer, H. G. Proesser, Chicago; directors, the above and W. J. O'Donahue, Kalamazoo.

Central Manufacturing Company: President, Albert C. McDonald, Kalamazoo; vice-president, Joseph J. Plank, Appleton, Wis.; secretary-treasurer, Adams A. Ruschel, Kalamazoo. These three constitute the board of directors.

The Dudley Paper Company, Lansing, Mich., reported a fair year for 1921 and authorized the payment of its annual 6 per cent dividend. This company, capitalized at \$100,000 and organized in 1908, has paid dividends regularly. Officers were re-elected as follows: President and manager, W. C. Dudley; vice-presidents, C. C. Woodruff, R. Guy Brownson; treasurer, C. M. Howland; secretary, F. J. Weissinger.

An Interesting Romance

An interesting romance culminated in Kalamazoo recently by the marriage of Frank Tuttle, president of the Ashland Paper Company, Ashland, Wis., to Nellie E. Longyear. They were childhood sweethearts, then were separated when Mr. Tuttle went to northern Wisconsin. In the interim they have both married. It was something over a year ago that Mr. Tuttle returned to Kalamazoo and the schoolday romance was quickly revived. Mr. and Mrs. Tuttle have gone to California for an extended trip and on their return will reside at Appleton, Wis.

Paper Makers Plan Big Musicale

Kalamazoo local International Papermakers of the World is planning a big musicale for Thursday evening, February 16, at the Pythian temple. An elaborate program will be offered and the advance ticket sale is heavy.

Paper Man To Be Postmaster

[FROM OUR REGULAR CORRESPONDENT.]

WCRONCCO, Mass., February 6, 1922.—R. M. Mudgett, who for a number of years has been head of the cost department of the No. 1 mill of the Strathmore Paper Company at Warren has been appointed post master of this town. He will hold both positions.

Automatic Micrometer

\$25.00 each, f. o. b. Chicago



BETTER TAKE ADVANTAGE OF THIS PRICE WHILE THEY LAST

E. J. CADY & COMPANY

326 West Madison Street

Chicago, Ill.

THE MATTER OF THE LONG PRICE LIST

In a bulletin just sent to members of the National Paper Trade Association by Secretary William C. Ridgway, the following pledge card sent to members of the New York Employing Printers' Association Inc., is reprinted:

"WHEREAS, The New York Employing Printers' Association, Inc., on May 23, 1921, endorsed the Long Price List as the proper method of listing and selling papers in the printing industry; now, therefore,

"We, The undersigned, do hereby serve notice to the trade that on and after January 1, 1922, we will confine our purchases of papers (insofar as it is possible to secure the necessary supplies) to the paper merchants listing and selling, in the City of New York, exclusively on the Detroit Standard Long Price List basis."

This is followed by a letter accompanying the pledge card from Joseph Fleming, chairman of the Trade Relations' Bureau:

"Since issuing our Retail Mill Brand Price List, we have found that there are many phases to this situation that are even more important to our membership and customers than just the mere getting of a long list from the jobber.

"At a meeting last week, at which representatives from about twenty cities were present, we thoroughly discussed the economic advantages of the retail mill brand list, and we are sure that if you could have sat in on this discussion, there would be no hesitancy on your part in giving us your co-operation as a brother printer.

"The present high cost of paper and printing is seriously curtailing, in our opinion, the volume of printing. Our customers have gotten to the point where they are hesitating in buying until lower prices come about. Therefore, we find that this retail mill brand list is a step in the direction of bringing about a stabilization and lowering of prices in paper.

"It is estimated that 75 to 80 per cent of the fine paper bought by the printers are private watermark lines of the jobber. This situation brings about considerable waste in the paper you buy and use. If you would endorse and specify the mill brand lines in this retail price list, we are positive that you will help us to better the conditions in the paper business.

"We wish you would give your careful thought to the advantages of the printers working closer together. We want you to agree to stand with the large majority of the printers who have signed up for the long list. A large percentage of our membership is now solidly behind this movement for better papers at lower prices and they represent a great percentage of the buying capacity of local printers. This Retail List has been adopted and put into use in ten cities during January, and our February list will be issued in about five or six additional cities. This surely is evidence that you, too, should throw your lot with the majority of your brother printers.

"Please sign the pledge card attached and return at once—the pledge of every member is needed."

Times Demand Cooperation

In the bulletin Secretary Ridgway discusses this letter in part as follows:

"Now that you have read this wonderful effusion, we leave it to the reader to decide whether it is a creation of a most fertile imagination born of an over-enthusiasm in a lost cause that at best was conceived in ignorance, if not in inequity.

"A healthy imagination is a wholesome thing but when allowed to run rampant, under no control, it becomes a very dangerous element.

"The argument presented by Mr. Fleming supplies in nimbleness of expression whatever it lacks in reason and logic.

"We shall expect that there will shortly issue from Mr. Fleming's facile pen a somewhat more elaborate and detailed statement

of how he proposes to make this Retail Mill Brand Price List of his, with its elevation of price levels, a medium for producing lower prices in the printing industry, which the world at large stands on tip toe ready to welcome.

"It must be patent to any one interested that this controversy has gone far enough and altogether too far for the good of the paper and printing industry.

"This is a time that demands co-operation and perfect accord in all branches of business and not contentious argument.

"The paper merchant understands full well that he has obligations to meet in the protection of the printer, and the thinking printers of this country also know that they have their responsibilities in the same direction.

"As an indication of the fact that co-operation can exist where this or kindred questions arise we reproduce a brief covering this question of protection, which outlines an understanding and arrangement existing today between paper merchants and commercial printers in one of the largest cities in the United States.

What Can the Paper Merchant Do to Protect the Interests of the Commercial Printer?

"This, after all, is the big outstanding question at issue between the commercial printer and the paper merchant. Before proceeding to outline some of the important angles of the question, it will be well to determine the true significance of his word, "Protection" and just what it involves.

"Obviously the printer wants and needs protection. He wants protection from the paper merchant. He needs protection against the buyer of printing whose methods and practices may be both unfair and unethical, but most of all, he must be protected against himself. Some printers seem to entertain the very mistaken idea that the paper merchant holds the key to the protection reservoir, from which, if he will but unlock it, copious streams of protection will pour forth. We do not believe that the printing industry considers itself an infant industry that must be nourished and coddled and led by the hand through the swamps and over the hills of business progress. It cannot be that it seeks a subsidy.

"It seems to us that if the paper merchant and commercial printer, as associates in the same industry, will thoughtfully approach the consideration of this important question, certain conclusions may be reached which will result in definite and permanent good to all interests concerned.

"The paper merchants carry an assorted stock of miscellaneous merchandise for general distribution, and they serve many and diverse needs. As a body, however, they subscribe fully to the principle that the commercial printer should, in every reasonable and practical way, be protected on paper which ultimately reaches a commercial printing press.

"The paper merchant, in his analysis of this whole problem divides his business activities into three classes:

"FIRST: The business conducted only with the commercial printer.

"SECOND: The business on paper which does not reach a commercial printing press.

"THIRD: Business with the consumer on paper destined to reach a commercial printing press.

"Class No. 3 represents the business in controversy and constitutes the debatable ground. This debatable ground may well be subdivided that we may get closer to the heart of the whole matter.

"There is a certain department of the printing paper business in which sales will probably always be made by the paper merchant direct to the consumer, if we choose to call such buyers consumers. In such a class would be found the daily newspapers,

(Continued on page 34)



It's a great relief-

To get a continuous flow of clean stock to your paper machine wire.

It means:

1. More production, because there are no exasperating shut-downs to wash up screens, and because there are fewer breaks in the paper caused by lumps or slime.
2. Uniformly high quality throughout the run.

The Bird Rotary Screen is built to meet these requirements.

A letter from you will bring detailed information about the Bird Rotary Screen.

BIRD MACHINE COMPANY

South Walpole,

Mass.

Western Representative
T. H. Savery, Jr., 1718 Republic Bldg.
Chicago, Ill.

Canadian Builders of Bird Machinery
Canadian Ingersoll-Rand Co., Ltd.
260 St. James St., Montreal, Canada

BIRD SCREENS

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BIRD SCREENS

Recent Incorporations

THE CANADIAN PULP-PROCESS COMPANY, Ltd., Spokane, Washington. Capital, \$250,000.

RICHMOND ENVELOPE COMPANY, Richmond, Virginia. Capital, \$100,000.

B. & B. PAPER COMPANY, Manhattan. Bags and twine. Capital, \$10,000. Incorporators: H. and L. Bendes, J. Biller. (Attorney, J. Lerner, 255 Broadway.)

LA SALLE PAPER COMPANY, South Bend, Indiana. Capital stock, \$250,000. Claude E. Nicely, president and general manager; John G. Yeagley, vice-president; Elva O. Nicely, secretary-treasurer.

VALELLY-SCHUYLER PAPER COMPANY, Manhattan, New York. Capital, \$10,000. Incorporators: H. C. and W. F. Valelly, G. W. Schuyler. Attorneys, Larkin, Rathbone & Perry, 80 Broadway.

AMERICAN PAPER STOCK COMPANY OF TEXAS, Dallas, Texas. Capital, \$50,000. Incorporators: A. A. Kaplan, M. J. Kaplan and A. B. Letellier.

PLYMOUTH PAPER PRODUCTS CORPORATION, Mount Vernon, New York. Capital, \$100,000. Incorporators: H. Moak, L. C. Smith, M. J. White. Attorneys, Holden & Cavanaugh, Mount Vernon.

INTERNATIONAL CELLULOSE CORPORATION, Manhattan, New York. Capital, \$40,000. Incorporators: V. B. and I. I. Kremer. Attorney, J. G. Kremer, 233 Broadway.

MATTER OF LONG PRICE LIST

(Continued from page 32)

metropolitan magazines, big book publishers, mail order houses, private printing plants and other acknowledged direct buyers, which class is accepted by both paper merchant and commercial printer as legitimate buyers of printing papers.

"There is also the class of consumer business made up largely of the smaller units, which every thoughtful paper merchant will frankly admit belongs to the commercial printer and the paper merchant should not stand on the order of his ceasing, but should cease at once the sale of paper for commercial printing purposes to such consumers.

"It is the ground between these two classes in which the real difficulty lies, involving, as it does, an order of business that has always appeared to be beyond control of either paper merchant or printer.

"Now to the question—How far can the paper merchant go in extending protection to the commercial printer on this class of business? The answer is—Just so far as the paper merchant and printer, in co-operation, can each contribute their share of the protection required to solve the problem. By this we mean that the paper merchant will go just so far in refusing to make direct sales on such disputed ground, as the printer will go in refusing to print such papers, unless he, the printer, buys them. Certainly the printer does not propose to stand in the position of legislating the paper merchant out of such business and still continue to do the printing when the customer succeeds in getting the paper elsewhere.

"In conclusion, we beg permission to suggest that any measures for protection will depend for success on the strength of our own convictions, and our knowledge of what is right, and our determination to do the right."

"What a great work the U. T. A. could perform for the printing industry, if, with their wonderful organization, they would undertake an intensive educational campaign to the end that the printers of this country, large and small, thoroughly understand this paper problem, and have before them a simple formula outlining the proper charge for handling paper. This would be the altogether natural method and will bring results impossible by other and artificial means. With the establishment of such a uniform charge for handling paper, we believe that in a comparatively short

time, many direct buyers of paper, including the large ones, would recognize the many advantages of letting the printer buy everything, build everything and back everything connected with the completed job. This is what the printer wants, and the dawn of the day, when it comes, will be as welcome to the paper man as to the printer."

Wayagamack Company's Annual Statement

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., February 6, 1922.—The annual statement of the Wayagamack Pulp and Paper Company, Ltd., just made public here, reveals the fact that the company has not had a prosperous year as a loss on the year's business of \$156,712 is shown.

In connection with the report C. R. Whitehead issues the following statement:

"Your directors submit the ninth annual report of the company together with balance sheet as at November 30, 1921, and profit and loss account for the year ended that date.

"New machinery and plant improvements under order at the opening of the year were completed at an expenditure of \$1,008,905.53, which has been added to capital assets. The principal items covered by the above expenditure are: two new paper machines, alterations to increase the capacity of the two original machines, necessary additions to steam plant and new electrical equipment.

"The altered conditions of the market since these additions were authorized has not allowed the company to reap the benefit anticipated from their installation, but your directors are confident that when normal conditions are restored the expenditure will be found to be fully justified by the capacity for increased production and by lower costs.

"The inventories of stocks of material for manufacture have been taken at prices not higher than those for which they can now be replaced. Owing to the general market conditions, it was impossible to run our mill to anything like full capacity, leaving us, as a consequence, with a much larger stock of pulpwood on hand than ever before.

"The demand for the company's products has been limited and prices very low, and these factors, combined with the depreciated value of raw materials, have resulted in a loss in operations of \$156,712.54."

To Issue Report on Forestry

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., February 8, 1922.—After a year's work, including hearings in various parts of the United States, the special National Forestry Policy Committee of the Chamber of Commerce of the United States has reached conclusions and will submit a report to the Board of Directors of the National Chamber.

While members of the committee refuse to discuss the report, it is generally understood that the committee has endorsed a national forestry policy without having endorsed any particular legislation.

When the committee's report is submitted to the Board of Directors, the board will then decide whether or not a referendum should be taken by the National Chamber.

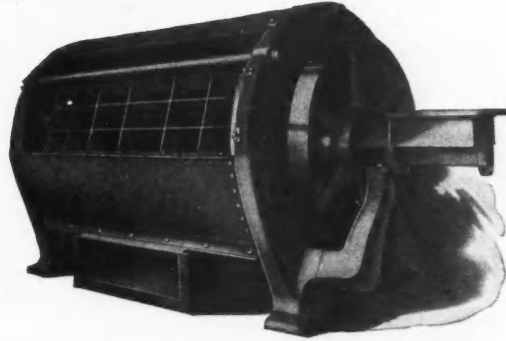
The general impression seems to be that such a referendum will be ordered.

Among those who attended the final meetings of the committee in Washington last week were D. L. Goodwillie, chairman, of the Union League Club, Chicago; Hugh P. Baker, secretary of the American Paper & Pulp Association; Harvey N. Shepard, of the Massachusetts Forestry Association; Fred M. Knapp, of Portland, Ore.; Charles J. Quincy, of New York; and W. B. Brookings, of the Chamber of Commerce of the United States, secretary of the committee.

"IMPCO" TAILING SCREENER

FOR SCREENING GROUND WOOD TAILINGS

Very Low
Power
and
Upkeep Expense



Delivers
Rejections Free
from Good
Stock

ANOTHER UNIT OF OUR CLOSED SYSTEM FOR PULP SCREENING
WRITE FOR FULL DETAILS *CORRESPONDENCE A PLEASURE*

IMPROVED PAPER MACHINERY CO. **Nashua, N. H.**
SHERBROOKE MACHINERY CO., LIMITED, SHERBROOKE, CANADA

WHALEN SULPHITE PULPS

Made from the SITKA SPRUCE of BRITISH COLUMBIA
Noted for Fibre, Color and Strength

**SNOWWHITE
BLEACHED
SULPHITE**

**GLACIER
EASY BLEACHING
SULPHITE**

**SWAN
STRONG
SULPHITE**

As exclusive Sales Agents for all of the products of the WHALEN PULP & PAPER MILLS, LTD., in addition to stocks at the mills, we will carry large stocks of the above well-known brands in New York, thus insuring prompt deliveries.

Your inquiries addressed to any of our offices will bring prompt quotations by wire.

CANADIAN ROBERT DOLLAR CO., Limited
VANCOUVER, B. C.

U. S. ADDRESSES

Robert Dollar Co., Robert Dollar Bldg., San Francisco.
Robert Dollar Co., 15 Moore Street, New York, N. Y.
Robert Dollar Co., Harris Trust Bldg., Chicago, Ill.
Robert Dollar Co., L. C. Smith Bldg., Seattle, Wash.

FOREIGN OFFICES

Robert Dollar Co.,
Shanghai, Hong Kong,
Hankow, Tientsin,
Ichang, Chungking, and
Pekin, China; Kobe,
Japan; Calcutta, India;
Manila, P. I.; Singapore,
S. S.

A SAFETY CONTEST AND ITS RESULTS

By M. G. HOYMAN, SAFETY DIRECTOR OF THE KIMBERLY-CLARK COMPANY, NEENAH, WIS.

The big Safety Contest staged by two of the large mills of the Kimberly-Clark Company came to an end January 1, 1922. This contest came about through the challenge from the superintendents of one mill to the superintendents of the other to a three months' contest, which was promptly accepted.

On the heels of the challenge to a contest came the second proposition as follows:

"We, the undersigned superintendents of the Niagara Mill, wish to go on record as believing that some prize should be put up for the men to work for in the big Safety Contest which runs from October 10 to January 1.

"With the above idea in view we hereby challenge the Kimberly superintendents to the following proposition:

"That the superintendents of the mill losing the contest agree to



KIMBERLY-CLARK SAFETY CHAMPIONS

buy Ni-Lola cigars for all the men and chewing gum for all the girls of the mill winning the contest."

This was also accepted, and then the company stepped in and offered a large championship flag to the winner. This flag was purchased at the beginning of the contest and was on display at first one mill then the other during the progress of the contest.

We are glad to reproduce a likeness of the flag and also the Superintendents who finally won out in the contest. But at the time the picture was taken they were just demonstrating for the benefit of the other mill their confidence in the ultimate outcome.

The rules of the contest were as follows:

What Constitutes an Accident

- 1st. An accident shall be counted when a man injured fails to return to work at the beginning of his next regular tour or shift.
- 2nd. An accident shall be counted when the injured party cannot do his or her regular work.

Method of Scoring

Each mill will be credited with 10 points per day or 60 a week. For each accident at Kimberly 6 points will be deducted. For each accident at Niagara 7 points will be deducted. The difference in deduction being from the fact that Kimberly has 100 more employees than Niagara.

The mill having the largest number of points at the end of the contest will be declared the winner.

It should be understood that the challenge, both as to the contest and the cigars were entirely voluntary on the part of the superintendents, and it is safe to say that the results achieved were due to a great extent to the wonderful interest shown throughout the entire contest by the superintendents of both mills.

Boards were erected at both mills showing the daily standings and, although the mills are situated 150 miles apart, they were in touch daily by telephone.

Consultations between superintendents and their foremen were of daily occurrence, bulletins and circular letters were used persistently, and while a great number of N. S. C. bulletins were used, there was some very catchy home made ones blue printed also.

The writer in his experience has never seen such intense and whole-hearted interest in any contest anywhere, and we believe that the sporting element injected into this contest, through the medium of the cigars, can claim a very large share of the credit for the interest making propaganda. I make the claim without reservation that there are few men, if any, that cannot be interested in some kind of a proposition that contains an element of chance.

This very fact is borne by the figures that show a large portion of industrial accidents happen to the chancetaker.

By utilizing this chance-taking instinct in the right direction, we get an interest in safety that has no parallel. Take the cigar proposition, the men of course had nothing to lose but they did have something tangible to gain over the other fellow. That put it on a sporting basis.

Then the superintendents were keenly interested, not because of the amount of money involved, but because each wanted to make the other fellow buy the cigars for his men.

The safety records made during this contest present concrete evidence of the interest taken.

Result of Safety Contest

These two mills are large and complete units. By that I mean each has its own wood yard, sulphite, groundwood and everything that goes to turn out the finished product.

They have a force of 800 and 700 respectively or a total of 1,500 employees.

During the period of this contest from October 10 to January 1, or 12 weeks the total number of lost time accidents was 4, and none of them were hardly more than bruises.

The Niagara Mill with 700 employees had 3 accidents and the Kimberly Mill with 800 employees had 1.

Although the Niagara Mill lost the big contest it has a wonderful record when the entire year of 1921 is considered.

At the Niagara plant with an employed force of 700 men, and handling during 1921 approximately 120,000 cords of wood, the safety record is marred by only eleven minor accidents, causing 320 days of lost time.

Kimberly with 800 employees established a record of 70 consecutive days for the entire mill without an accident during the progress of the contest.

I have been asked a number of times how we are able to make such wonderful safety runs in an industry that has its full share of natural hazards. Just a few words on that score. I shall give but two reasons:

1st. The unlimited backing and honest-to-goodness interest taken in safety by the firm members. The Kimberly-Clark Company is one of the large paper companies, and I have no doubt but that the members of this company are as busy as any in the country, but I have yet to recall the instance when any one of them did not have the time to talk of matters pertaining to the safety or the general welfare of their employees.

As an instance of the interest taken, on the extreme right of the flag picture are two of the directors of the company.

2nd. The methods used to interest the men are, I believe, somewhat original, but carefully thought out and based on the psychological effect, and are too extensive to go into here. The results show, however, that the methods employed are right.

**GROUND WOOD
CHEMICAL PULPS**

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NEW YORK

PAPER

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New York Trade Jottings

It is rumored that D. H. Newell is to open an office in New York City representing many prominent paper mills.

John E. Boland, president of the Marcellus Paper Company, Syracuse, N. Y., was in New York on business last week.

The New York Forestry Club will meet Tuesday, February 14, at the City Club. Luncheon will be served at 1 o'clock.

Charles Meirs, formerly manager of Clement & Stockwell, is now connected with White Burbank Paper Company, Walker street, N. Y.

Paper Utilities Corporation, maker of Tulip Cups, are now located in their larger executive offices at 220 Fifth avenue. Telephone, Madison Square 1851 and 1852.

The Central Paper Company, Menasha, Wis., manufacturers and convertors of paper for special purposes, has transferred its New York office to 425 Broadway. Telephone, Canal 3254.

George E. Crafts, treasurer of the Orono Pulp and Paper Company, Bangor, Me., was in New York a few days last week. He left Saturday, February 4, for Baltimore and Philadelphia.

L. B. Steward, formerly of Warren & Steward, and at one time secretary of the American Paper and Pulp Association is now connected with Clement & Stockwell, wholesale paper dealers.

W. P. Lynch, general manager of the Seaman Paper Company, has been indisposed for several days with an attack of the grippe and may be unable to assume his business duties until the first of next week.

Mathieson Alkali Works, manufacturers of bleaching and other chemicals used in the paper and other trades, will resume the payment of its preferred dividends within the next few months, it is understood. Operations for 1921 show a minor deficit of \$200,000 after allowing for generous depreciation charges although operation for the last quarter of the year were at a profit.

Elaborate arrangements are being made for the convention of the American Paper and Pulp Association, to be held April 10 to 13, and if present interest is any indication of success the affair will far outdo any assemblage of like nature held heretofore. The dates for the first two auxiliary meetings to be decided upon are as follows: The Book Paper Manufacturers' Association at 10 o'clock, Tuesday, April 11, and the Cover Paper Manufacturers' Association at 2.30 o'clock on the same day in the east room of the Waldorf-Astoria Hotel.

Philip T. Dodge, president of the International Paper Company, is a member of the Committee of Business Men who have organized in the interests of sound taxation. In accepting membership, Mr. Dodge wrote: "In many industries today, the government exacts taxes to an amount several times greater than the return to the shareholders. The nation will soon realize that capital is driven out and kept out of business, that the development of the country will be greatly curtailed and that thousands, if not millions, of willing workmen will be out of employment."

Buys Control of Beloit Box Board Co.

BELOIT, Wis., February 6, 1922.—One of the most important industrial transactions of recent years in this city was completed January 30 in the purchase by J. A. Fisher and his sons, Ralph M. and Ernest R., of the one-half interest in the Beloit Box Board company hitherto owned by Fred M. Coons.

The consideration, which was cash, was not made public but it is known to involve a very large sum of money.

Under its new ownership the company will be directed by the following officers: President, J. A. Fisher; vice-president and secretary, Ernest R. Fisher; treasurer, Ralph M. Fisher.

J. A. Fisher, president of the company under its new ownership and organization, has been engaged in the paper-making industry for more than 40 years. He was associated with several of the biggest plants in northern New York and New England and later with Indiana paper-making concerns. He came to Beloit about 1907, and with Henry Weiss, of Waterloo, Ia., purchased the Barrett paper mill, each holding a half interest in the concern. About two years later Mr. Coons bought out Mr. Weiss' interest and his partnership with J. A. Fisher continued until yesterday. Both Mr. Fisher and Mr. Coons are veterans in the paper-making industry and are among the most widely known manufacturers in the middle-west.

The product of the pioneer Beloit plant is building paper and box boards. Its output ranges from 18 to 40 tons per day, depending upon the grade and quality of paper produced.

American Woodpulp Association Elects Officers

The Association of American Wood Pulp Importers held its annual meeting at the Uptown Club, 17 East 42nd street, February 2, at 12.30 o'clock. The meeting was preceded by the usual luncheon. Applications of admission to the association from the Borregaard Company, Inc., and N. R. Johaneson & Co. were voted upon and both companies admitted to membership.

The election of officers followed. The nominating committee composed of James Rosenburg, chairman, Norris Gintzler, and Alexander J. Pagel proposed the following members for office: President, Sigmund Goldman; vice-president, Frank C. Overton; secretary, Lee Bowmall; treasurer, Alton Faunce; directors, the above mentioned and Ira L. Beebe, Jr.; national counsellor, Horris Gintzler; substitute counsellor, Alton Faunce.

A special effort was made to effect an attendance of 100 per cent and the efforts of the acting secretary were largely successful as a banner meeting was held with some 26 members represented. Plans for the ensuing months were discussed at length with regard to improving the present more or less disordered status of the pulp business. It is expected that further additions to the membership list will be made in the near future.

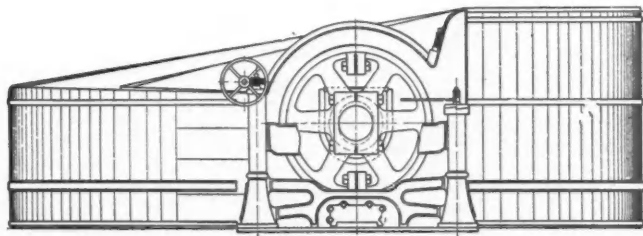
Maine Pulp & Paper Co. Bankrupt

[FROM OUR REGULAR CORRESPONDENT.]

NIAGARA FALLS, N. Y., February 6, 1922.—A petition in bankruptcy was filed in United States Court in Buffalo, on Tuesday of last week, by the Maine Paper and Pulp Company, Inc. The company has its main offices in Buffalo and plants in Maine. The liabilities of the company are fixed by President Andrew Krieger at \$420,000. Secured claims total \$125,000, unsecured claims \$232,000. The other liabilities consist of notes, nearly all of which are held by National Bank of Geneva.

President Krieger lists the assets of the company at \$454,021, but it is said, that many are not quickly liquidated. There is \$102,577 worth of stock on hand. Machinery and tools reach a total of \$219,691. The plant at Shawhegan, Me., is mortgaged for \$125,000, according to the petition filed.

Only essentials are purchased when business experiences a depression, such as 1921 has featured. The fact that twenty-eight mills throughout the country bought Niagara Beaters during the year, varying in number from one to six, proves their merit and need, in the Paper Industry. 1922 will, indeed, be a happy and prosperous New Year for you if Niagara Beaters are added to your equipment.



Ask the Mill That Owns One

Valley Iron Works Co.

Appleton
Wis.

Editorial

Vol. LXXIV New York, February 9, 1922 No. 6
FIFTIETH YEAR

Paper Exports and Imports

The statistics just issued by the Department of Commerce at Washington, regarding the exports of paper for December, are more interesting than usual, as they cover not only the figures for the month, but for the full year. They show that the exports for 1921 as compared with 1920 were just about cut in half, the figures for the former year being only \$49,494,822 as compared with \$89,072,289 for the latter and \$86,983,063 for 1919.

The figures for December maintained just about the same average as in the past few months, being \$3,166,153 as compared with \$2,957,603 for November and \$10,637,293 for December a year ago.

The exports of news print showed some increase for December, but continued to fall far short of the figures of a year ago. For December of this year they amounted to \$144,336, as compared with \$118,290, for November and \$449,906, for December of last year. The exports of news print for the twelve months ending with December amounted to \$2,162,975, as compared with \$5,970,127 for the same period as in 1920 and \$10,091,951 in 1919.

The exports of wrapping paper also showed a slight gain in December, the figures being \$152,863 as compared with \$132,950 in November and \$706,753 in December of last year. The exports of wrapping paper for the twelve months ending with December amounted to \$2,293,892 as compared with \$6,994,381 for the same period in 1920 and \$6,664,462 in 1919.

Writing paper and envelopes also showed a slight increase in exports, the figures for December being \$172,134 as compared with \$162,828 for November and \$1,317,255 for December a year ago.

The exports of writing paper and envelopes for the twelve months ending with December amounted to \$4,355,642 as compared with \$8,908,230 for the same period in 1920 and \$13,188,165 in 1919.

The exports of paperboard and strawboard for December amounted to \$163,444 as compared with \$123,240 for November and \$732,760 for December a year ago. The exports of paperboard and strawboard for the twelve months ending with December amounted to \$2,323,949 as compared with \$5,553,094 for the same period in 1920 and \$4,604,048 in 1919.

The exports of tissue and toilet paper for December amounted to \$73,633 as compared with \$58,745 for November and \$191,308 for December of last year. The exports of tissue and toilet paper for the twelve months ending with December amounted to \$906,411 as compared with \$2,654,529 for the same period in 1920 and \$2,056,607 in 1919.

The imports of paper for the twelve months ending with December showed an increase of about twelve million dollars

as compared with the previous year, the figures for 1921 being \$92,462,472 and \$84,686,852 for 1920 and \$53,602,174 for 1919. The figures for December, while showing a slight increase over November continued to fall far below the average of about a year ago. The figures for the month were \$7,039,290 as against \$6,798,481 for November and \$9,913,954 for December of last year.

The imports of news print for December showed a fair increase, the figures for the month being \$6,078,663 as compared with \$5,858,669 for November and \$8,496,635 for December of last year. The imports of news print for the twelve month period ending with December amounted to \$79,123,368 as compared with \$68,600,950 for the same period in 1920 and \$43,674,294 in 1919.

The imports of rags showed a considerable increase for December, the figures being \$340,322 as compared with \$233,466 for November and \$364,296 for December of last year. The imports of rags for the twelve months ending with December amounted to \$2,021,141 as compared with \$9,719,968 for the same period in 1920 and \$3,180,767 in 1919.

The imports of all other kinds of paper stock for December amounted to \$397,641 as compared with \$323,958 for November and \$450,147 for December of last year. The imports of all other kinds of paper stock for the twelve months ending with December amounted to \$2,527,185 as compared with \$8,792,578 for the same period in 1920 and \$4,003,788 in 1919.

The imports of ground wood for December amounted to \$656,481 as compared with \$854,114 for November and \$1,160,176 for December of last year. The imports of ground wood for the twelve months ending with December amounted to \$5,203,718 as compared with \$13,881,596 for the same period in 1920 and \$5,117,316 in 1919.

The imports of unbleached sulphate for December were valued at \$2,031,074 as compared with \$1,582,327 for November and \$1,896,704 for December a year ago. The imports of unbleached sulphate for the twelve months ending with December were valued at \$10,863,804 as compared with \$17,025,709 for the same period in 1920 and \$9,084,537 in 1919.

The imports of unbleached sulphite for December amounted to \$2,685,986 as compared with \$1,375,808 for November and \$2,746,681 for December a year ago. The imports of unbleached sulphite for the twelve months ending with December amounted to \$14,149,454 as compared with \$37,510,435 for 1920 and \$17,979,170 for 1919.

The imports of bleached sulphate for December were valued at \$75,383 as compared with no imports at all for November and \$69,029 for December of last year. The imports of bleached sulphate for the twelve months ending with December amounted to \$231,114 as compared with \$1,954,006 for the same period in 1920 and \$394,765 in 1919.

The imports of bleached sulphite for December amounted to \$1,349,326 as compared with \$751,424 for November and \$2,439,628 for December of last year. The imports of bleached sulphite for the twelve months ending with December amounted to \$8,948,069 as compared with \$19,046,439 for the same period in 1920 and \$4,472,593 in 1919.

Shipping and Transportation

A method for bringing the public interest effectively into every railroad question is proposed in recommendations just made public by the Railroad Committee of the Chamber of Commerce of the United States.

These recommendations will be laid before the National Council of the Chamber of Commerce. For two days discussion will center upon the proposals now brought forward and at the end there will be recommendations to the Board of Directors of the Chamber regarding the procedure it should follow.

"The breadth and interest of the discussion will be understood," said a statement by the Chamber, "when it is recalled that more than fourteen hundred chambers of commerce and trade associations, all intensely concerned in transportation facilities, have been asked to send not only their national councillors but also their presidents and their secretaries. Besides, arrangements are being made for participation from the point of view of the government, the Interstate Commerce Commission, and the committees of Congress that deal with regulation of commerce."

The method that is recommended is to create a new agency whose sole business it will be to consider the whole public interest and to represent it before the Interstate Commerce Commission, the Railroad Labor Board, or any other body considering questions in the field of interstate commerce. Into controversies between shippers and railroads and between employees and railroads this agency would have a duty to bring in considerations of general public policy.

The proposal for such an agency and for such a function is consistent with the National Chamber's advocacy over a period of years that on all boards and commissions having jurisdiction with respect to questions affecting transportation in any way there should always be a predominant representation of the public, as the party that has the largest and most fundamental interest.

The agency proposed takes the form of a Commissioner General of Transportation, to be appointed by the President and confirmed by the Senate.

H. S. Graves Returns to Yale Forestry School

It has recently been announced that plans long under consideration by Dean James W. Toumey of the Yale School of Forestry are now consummated in the arrangement whereby Colonel Henry S. Graves, formerly Chief Forester of the United States, is to return to his former position as Dean of the school. Mr. Toumey desires to resume his more purely scientific work and Mr. Graves, in view of the widening opportunities afforded to the school by its recent developments, is returning enthusiastically to his old post.

Coming coincidentally with the announcement that a further substantial increase representing the income on a quarter of a million dollars has been added to the school's resources, and that three hundred thousand dollars has recently been received for the erection and maintenance of a School of Forestry building, the news that such a conspicuous forester as Mr. Graves has been called to the faculty of the Yale School will generally be regarded as significant. The fact that Mr. Graves recently declined an offer of the position of Conservation Commissioner of the State

of New York on the ground that the Yale School of Forestry offer, then under consideration, promised the greatest field for the national educational work in connection with forests and other natural resources in which he has been engaged since his resignation from Government service, will also be regarded as a significant circumstance. It is believed that the national eminence and international reputation of Mr. Graves will bring a degree of prestige which will directly influence the future growth of the Yale School.

In this connection it is announced that the trustees of the estate of John W. Sterling have decided to establish in the university a fifth Sterling Professorship, to be known as the Sterling Professorship of Forestry. The first incumbent of this Sterling Professorship will be Professor Henry S. Graves, the Dean-elect of the School of Forestry.

Waste Material Dealers Nominate Officers

The nominating committee of the National Association of Waste Material Dealers, Inc., composed of Jacob Ginsburg, Herman Weber and Isadore Glueck, with A. J. Moran, advisory member, have submitted the following nominations, which will be acted upon at the annual meeting to be held at the Hotel Astor, New York, on Wednesday, March 15, 1922, at 10 A. M.

For president, Frank C. Overton, Castle, Gottheil & Overton, New York.

For directors for two years, Louis Birkenstein, S. Birkenstein & Sons, Inc., Chicago; H. H. Cummings, William H. Cummings & Sons, New York; Robert Johnston, Jr., General Paper Stock Company, St. Louis; E. J. Keller, E. J. Keller Company, New York; Henry Lissberger, B. Lissberger & Co., New York; Alex Luria, Luria Bros. & Co., Inc., Reading, Pa.; Herman Muehlstein, H. Muehlstein & Co., New York; Daniel I. Murphy, Daniel I. Murphy, Philadelphia; Ivan Reitler, Great Western S. & R. Company, Chicago; James Rosenberg, American Woodpulp Corporation, New York; Geo. B. Smitheman, Geo. B. Smitheman, Inc., Philadelphia; Clarence B. White, White & Bro., Inc., Philadelphia.

The ninth annual banquet of the association is to be held at the Hotel Astor, New York, on the evening of Wednesday, March 15.

Paper Mill Improvements at Bogalusa

BOGALUSA, La., February 3, 1922.—The annual directors meeting of the Great Southern Lumber Company held here recently was attended by every director and official of the company. Col. A. C. Goodyear, president of the Great Southern Lumber Company, Walter P. Cooke, former president of the organization and Col. W. H. Sullivan, vice-president and general manager of the company, were optimistic over the outlook for a busy year. Expansion of the plant of the Bogalusa Paper Company was discussed at length. Improvements to the extent of about one million dollars will be made, doubling the capacity of the board department of the mill.

The advisability of operating another mill here to make a different paper from the container board met with approval but nothing definite was announced. It is known, however, that the company contemplates using the former plant of the Louisiana Fiber Board company.

Halts Three Suits Against Riordon Co.

MONTREAL, Que., February 6, 1922.—Three actions that had been entered in the Superior Court claiming an aggregate sum of \$316,516.78 from the Riordon Company, Limited, were ordered by judgment of Mr. Justice MacLennan last week suspended until after November 19, 1922, in view of the fact that an extension of the company's credit had been agreed to until that date.

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Conducted by W.G. MacNAUGHTON, Secretary

MONEY FROM STEAM*

BY R. L. WELDON, M.Sc., THREE RIVERS PULP AND PAPER COMPANY

The essential problem in the use of steam in the paper mill is one of economic utilization, for, in the final analysis, it is the dollars and cents cost per ton that is the fundamental consideration. "Dollars," because a very appreciable percentage of the conversion cost is chargeable to steam account: "cents," because profits are often made through the elimination of small wastes. This problem of steam has been becoming of increasing importance in recent years, due not only to rapidly increasing costs of fuel, but also due to greater difficulty in obtaining fuels of relatively good heating value for the money spent. While this last year has seen a distinctly downward trend in the price of fuel, it has also seen quite as distinct a trend in the price of paper; and, as a matter of fact, the percentage relationship of the cost of steam to the selling price of paper is probably higher today than it was during the period of peak prices for coal.

The most important use of steam in the paper mill is that of drying the paper. Linked intimately with the use of steam for drying is the question of power, since, in many mills, it is customary to generate a certain amount of the power required by means of steam, the exhaust being used to dry the paper. This leads us at once to the question of exhaust steam drying versus live steam drying. This is a question upon which it is not only difficult but dangerous to generalize. In order that we may make certain comparisons between these two methods, it is proposed to work about a hypothetical case of a 150-ton mill. The paper mill which we have considered is a two-machine mill making standard news. The machines are 164 inches wide, trimming a maximum of 152 inches, and they will produce 150 tons of finished news print per day, when operating at a speed of 900 feet per minute, with a machine efficiency of 85.6 per cent.

Some form of electrical sectionalized drive is assumed to drive these machines.

This merely means that the power which we may generate as a by-product from the steam used for drying is converted into electrical energy, and the question of sectionalized and mechanical drives does not enter here.

The presupposition of the availability of hydro-electrical power at a reasonable price also exists.

A mill of the above size, if a complete self-contained unit, will require about 2,500 electrical horse power on the low tension buss. This will vary slightly with the physical characteristics of the mill site, the general layout or routing of the processes, and the type of

equipment used. Of this amount some 1,750 H.P. is required for process work, such as paper machine drives, stock pumps, agitators, and other purely process machinery; the remaining amount, 750 H.P., is absorbed by the mill auxiliaries, such as the boiler house, ventilating fans, fresh water supply, etc. Subsequent comparisons are based on this requirement for power.

There are, naturally enough, numerous opinions as to the best method of drying news print. The general consensus of opinion seems to point to the use of fairly low pressure steam in the dryers, usually 5 to 10 lbs. (gauge), and that the steam should be sent to the dryers as nearly dry and saturated as possible. Obviously, practically all the heat available for drying purposes is the latent heat of the steam made available by its condensation in the dryers. Thus any moisture in the steam is useless and at the same time objectionable, since it increases the volume of condensate to be handled to no useful purpose.

The use of superheated steam has not been found satisfactory where any degree of temperature control is aimed at, since condensation of the steam cannot take place at the temperature of superheat, whereas in the case of saturated steam, condensation does take place at constant temperature, which renders feasible accurate temperature control.

The amount of steam used in drying news print still seems to be somewhat of a variable quantity. The average steam consumption per pound of paper as on the machine varies from 3 to 3½ pounds of steam, and, in rarer cases, consumptions as low as 2.8 and as high as 4 pounds have been recorded, all on relatively modern machines. The important factors affecting steam consumption for drying are:

1. The Moisture Content of the Paper entering the Dryers.—For a given dryness of the finished paper, the moisture, which must be evaporated from the paper, will vary directly as the moisture content of the sheet entering the dryers and so will the steam required for drying.

A two per cent saving here amounts to between five and ten cents per ton of paper.

2. The Efficiency of the Condensate Evacuation System.—This is an important point which can only be obtained by careful initial planning and proper care during operation. Too much emphasis cannot be laid upon the importance of good circulation of steam, constant removal of condensate from all the dryers, and proper mechanical condition of the apparatus used.

3. Ventilation.—This is a fruitful source of inefficiency in the drying of paper. Essentially the steam arising from the dryers

*Read at the annual meeting of the Technical Section of the Canadian Pulp and Paper Association.

should be conveyed from the surface of the paper as rapidly as possible. The conveying medium which is used is air, which is only efficient when it is worked to capacity but not overloaded. It should be provided in proper quantities, at proper temperatures, to the proper points where it is to be utilized. On picking up its load it should not be allowed to "stall" but should be rapidly removed to the outer atmosphere. Failure to satisfy this last particular often causes double drying to occur with its attendant increase in steam used.

4. Condition of Dryers, Both Inside and Outside.—Careless use of oil and poor oil separators on engine driven machines will cause a lowering of dryer efficiency, should the inside of the dryers become coated with oil. The accumulation of "fluff" and other foreign substances upon the surface of the dryers is not conducive to low steam requirements.

5. The Amount of Dryer Surface.—It is important that the amount of dryer surface be sufficient for the transmission of the heat necessary for drying, without the use of excessively high temperatures, which not only burn and weaken the sheet but also cause increased radiation losses. Since radiation is dependent upon the amount of surface as well as the temperature difference it is equally important not to go to the other extreme of having too much dryer surface.

6. Felt Dryers.—These are usual on most machines but are occasionally omitted, a proportional increase being made in the dryer surface. The main thing is not to attempt to dry paper with "wet" felts.

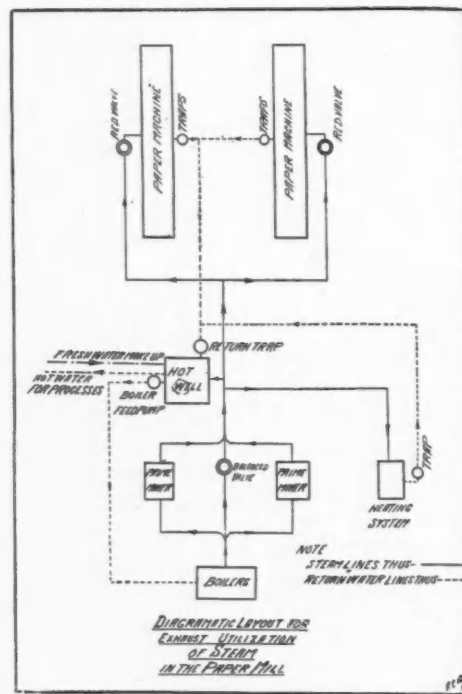


DIAGRAM I

7. Clothing.—The age, condition and weave have an appreciable effect on drying efficiency.

It will be interesting to see in a general way how the actual steam consumption compares with what we might expect as an ideal under the present method of drying paper. The following formula expresses the ideal steam consumption per pound of paper, as on the machine for a given condition.

$$S = \frac{P_2}{P_1} (32 + H_2 - t_1 + 1732.5 \frac{t_2 - t_1}{G_2 - G_1} + 0.31 (t_2 - t_1))$$

970.A

When—
S = Ideal steam consumption, lbs, from and at 212 deg. F., per lb. paper.

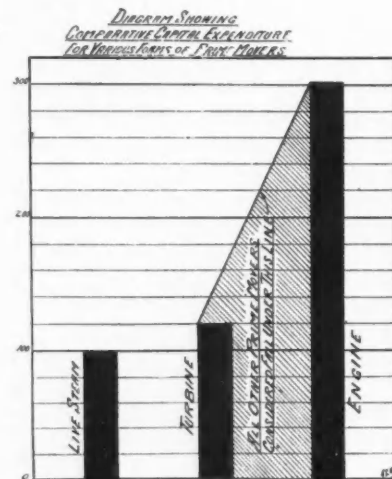


DIAGRAM II

P_1 = Percentage of bone dry stock in paper entering the dryers.
 P_2 = Percentage of bone dry stock in paper leaving the dryers.
 t_1 = Temperature deg. F. of paper entering dryers.
 t_2 = Temperature deg. F. of air leaving dryers.
 t_3 = Temperature deg. F. of air entering dryers.
 H_2 = Total heat B.T.U. per lb. in water vapor or steam (from steam tables) at t_2 .
 G_1 = Grains of moisture per lb. in air entering the dryers (from psychrometric chart).

If we assume the following data as a representative average for mill conditions, we obtain a figure which represents closely the ideal steam consumption under these conditions.

1. Paper enters the dryers 30% bone dry = P_1
2. Paper leaves the dryers 91.5% bone dry = P_2
3. Paper enters the dryers at 65 deg. F. = t_1
4. Air leaves dryers at 120 deg. F. (= t_2) and 80% relative humidity.
5. Air enters dryers at 70 deg. F. (= t_3) and 60% relative humidity.

Then S, the ideal steam consumption, will be 2.75 lbs. of steam per lb. of paper. The conditions assumed are not ideal and might possibly be bettered slightly, with very careful control. Referring back to the figures mentioned for actual steam consumption, we see that the probable drying efficiencies vary from a maximum of 98 per cent to a minimum of 69 per cent. This is given in order to show what probabilities exist for savings in this direction.

The steam flow lines are shown in the accompanying diagram I. There is nothing peculiarly different to this flow diagram. We have shown an exhaust steam connection to the hot-well. The hot-well is of the closed pressure type, exhaust steam being used to maintain the pressure and temperature. The advantages of doing this are:

First—A high boiler feed water temperature is maintained, the feed being at 250 deg. F. instead of 180 deg. F. such as given by the average open hot-well.

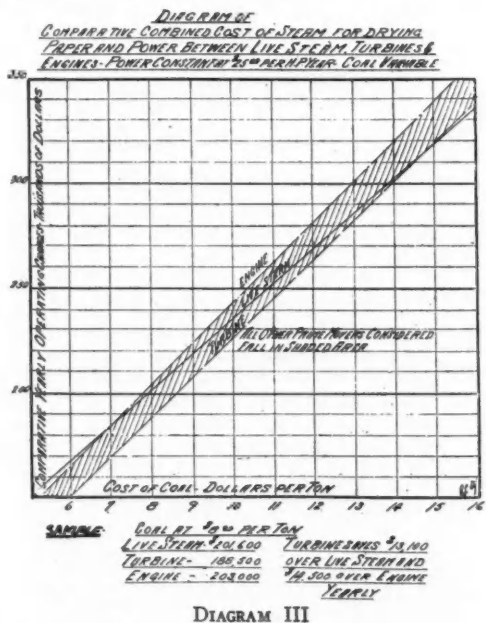
Second—An increase of steam flow through the prime mover is effected, with its consequent increase in power available without serious effect on the heat balance.

Third—The usual evaporation losses attendant on the use of an open hot-well are done away with, together with a distinct saving in the percentage of makeup water required.

The appended table shows in some detail typical heat balances for a live steam, a turbine exhaust, and an engine exhaust drying system. A large number of these heat balances were worked out, based on data supplied by reliable manufacturers of practically all the various types of engines and turbines suitable for operating at the back pressure required. The heat balances given represent the two extremes, and practically all the other results fall between these two balances. The turbine which is a simple impulse wheel was found to be the cheapest prime mover in first cost and in coal used, the lightest in weight and smallest in space requirements and had the highest steam rate producing the least amount of power. The engine, which is of the uniflow type, was found to be the most expensive in first cost and in coal used, the heaviest in weight and largest in space requirements, and had the lowest steam rate, producing the greatest amount of power. All prime movers considered are compared on delivery of the same amount of heat in the exhaust steam.

It is to be noted that the assumption of a steam flow of 40,000 lbs. of steam at 5 lbs. (gauge) corresponds to 2.71 lbs. of steam from and at 212 deg. F. per pound of paper as on the machine. This figure was purposely made less than the theoretical figure to ensure the fact that we were working with the minimum flow of steam and thus we could depend on the availability of the power from the prime mover at all times. It is also assumed that all power made available under this minimum condition is utilized by the paper machines and their auxiliaries, for in no case is the minimum power developed less than that required to drive the

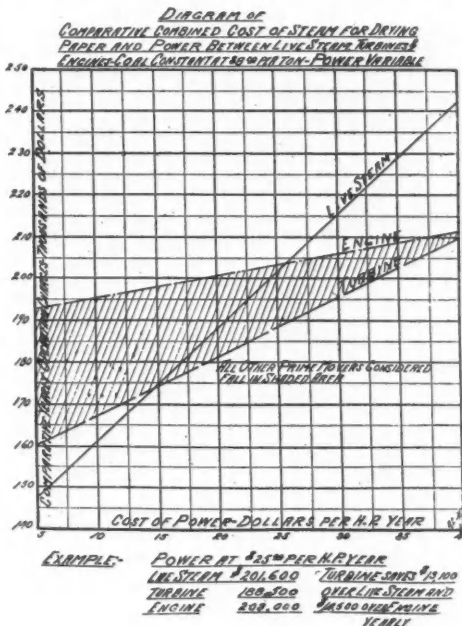
The comparative capital charges necessary for the equipment installed are shown in Diagram II. Diagram III shows the comparative annual charges when the cost of coal varies from \$5.00 to \$16.00 per ton, with power constant at \$25.00 per horse power year, while Diagram IV shows a similar curve when the cost of power varies from \$5.00 to \$40.00 per horse power, with coal constant at \$8.00 per ton. From Diagram III we see that, when power remains



machines. Thus it is held that comparative cost figures based on these heat balances will show minimum differences and that in practical operation they would be somewhat bettered.

In order to make a proper comparison of these three heat balances in regard to annual operating charges, it is necessary to consider.

1. Capital charges; 2. Interest; 3. Depreciation; 4. Repairs;
5. Labor; 6. Fuel.



constant at \$25.00 per H. P., coal must cost at least \$14.75 per ton before the live steam method commences to become cheaper than the use of exhaust steam from the turbine, and also from Diagram IV with coal constant at \$8.00 per ton power must not exceed \$14.90 per H.P. to make the live steam competitive with the turbine and exhaust steam.

In connection with this, it was thought that Diagram V would prove of interest, in that it forms a simple means of determining the cost per ton of paper for drying. All that it is necessary to know is the cost of steam per 1,000 lbs. for the previous month. The explanation of the method of using it is to be found on the diagram. It may be used, particularly in the enlarged form, to create interest, possibly rivalry, among the operators, for by its means it is a very simple matter to keep either a daily or tour log of cost for drying paper on each machine. Again it shows the Sales Department, in a concrete manner, the cost of narrow trim. Needless to say, the diagram can be developed for other ranges of the variables than those given, to suit any machine and paper.

Second in importance to the use of steam for drying is the use of steam for heating. Due to the large quantities of air required to act as a vapor conveyor, the steam required for heating is an important item. During cold weather in order to make the use of our air conveyor possible, it is necessary to raise it often through a range of 90 degrees F. and occasionally even higher. This makes quite a hole in the coal pile. While it is not proposed to go into the details of heating and ventilating a paper-machine room, the greatest of care should be taken in laying out a heating and ventilating system, not only from the point of view of its efficiency in removing vapor, but also from the point of view of its possible heat economy. At present heat reclaiming devices are rarely

resorted to, perhaps due to the fact that their success is still somewhat questionable. The best possibility seems to be in control. Careful operating control, adapting the system from period to period and even day to day to suit the variables which affect it, as they change, will help to make a smaller hole in that coal pile.

Referring to control, all the care in the world applied to the previous features will not make up for lack of control in the general use and abuse of steam by men in the mill. Leaky joints and valves in steam lines, careless use of the steam hose, and the hundred and one small uses around a mill soon throw away potential profits.

Three general suppositions have been made from a broad,

practical view-point of the Engineer's value in the operating organization.

1st.—Sectionalized paper machine drive controls but one condition. Without control of stock going on to the wire, without control of the amount of moisture in the paper entering the dryers, without control of the steam in the dryers, and without control of the amount of moisture in the finished paper, the drive in itself is only partially efficient from the mill point of view. In order to bring the drive to its ultimate efficiency, these questions of stock, moisture in the paper, and steam in the dryers must be held in constant control. This is the practical province of the Mill Engineer.

2nd.—The Cost Department, from the point of view of the

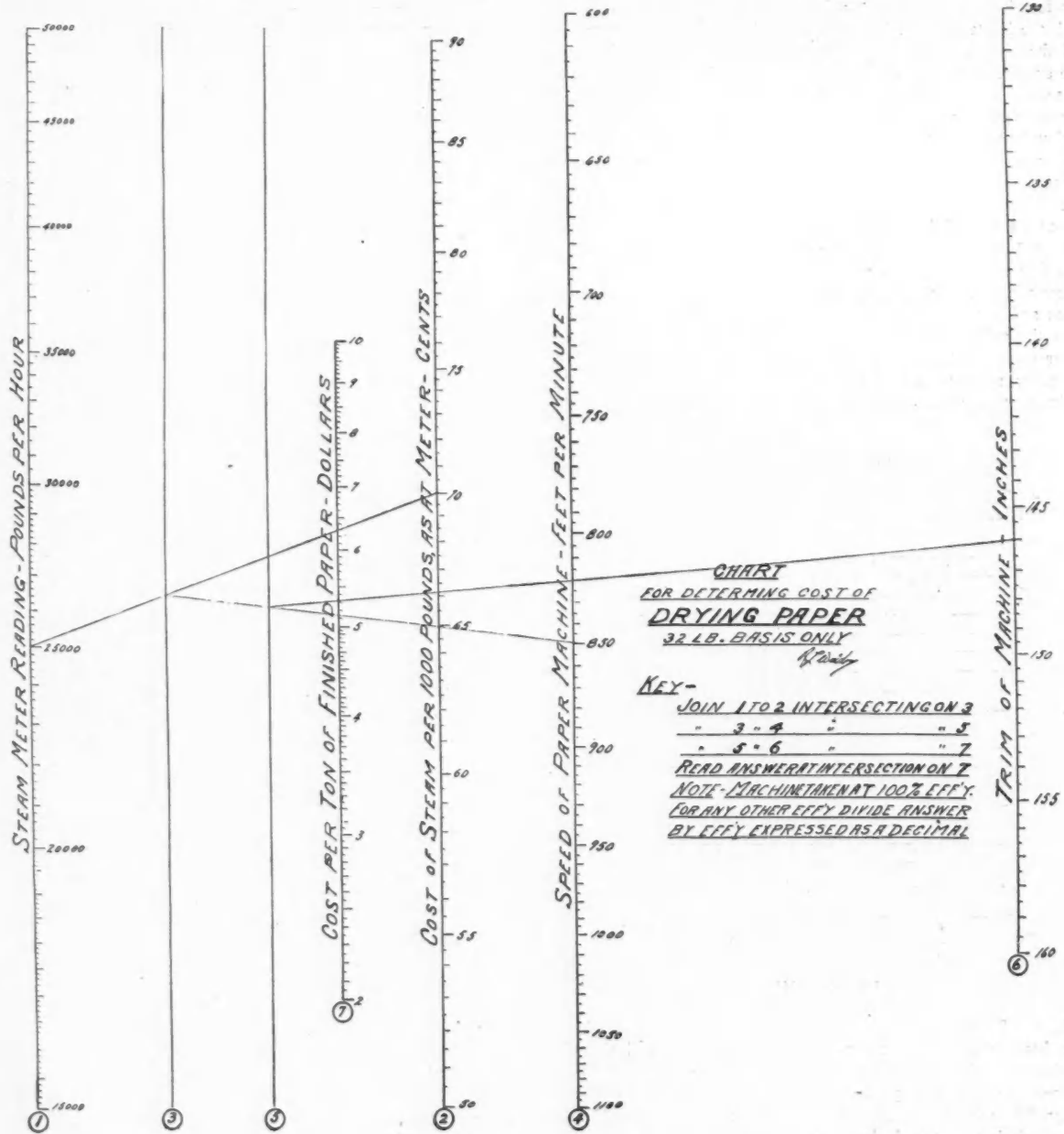


DIAGRAM V

Mill Superintendent, is always fifteen days late. How to bring about a cordial feeling of a desire for co-operation by the mill men with the Cost Department is also the province of the Mill Engineer.

By reducing his formulas from a technical basis to a practical picture, he is making an effort to interest the layman in his own department, but in layman's language. For that reason, the chart (Diagram V) shown has been developed, and no engineering formulas are shown definitely to muddle the operating man's mind who has got to keep in constant touch with the actual costs.

3rd.—The other consideration given this problem, and on which any work in connection with this is predicated, lies in the fact that there is only one real efficiency.—Dollar and a Quarter Results from a Dollar Investment.

And the best help any one in the mill can give the Sales Department is Low Cost Production.

COMPARATIVE TABLE OF HEAT AND POWER DATA
PRIMARY CONSIDERATIONS OR ASSUMPTIONS NECESSARY TO FORM A BASIS FOR THE COMPARISONS

Note: All pressures given are gauge.

Drying	
(1) Amount of paper 14 in. wide, passing over the dryers at 900 ft. per min., for 2 machines, lbs. per hour.....	14,800
(2) Minimum steam flow required to dry paper, steam at 5 lbs. dry and saturated, lbs. per hour.....	40,000
(3) From (2 & 1), minimum steam from and at 212 deg. F. lbs. per lb. of paper as on the machine.....	2.71
Power	
(4) Total electrical H.P. required on low tension buss to operate mill	2,500
Pressures	
(5) Line drop between boilers and prime mover or reducing valve, lbs.	5
(6) Final pressure of prime mover, lbs.....	15
(7) Initial pressure on dryers, lbs.....	5
(8) Final pressure on dryers, lbs.....	0
Radiation Losses from Piping, etc. These, with properly proportioned thicknesses of pipe coverings, will be practically the same for all cases. The losses given are based on fair average lengths and sizes of pipe.	
(9) Loss in boiler house lines, B.T.U. per hour.....	30,000
(10) Loss in line to red. valve, B.T.U. per hour.....	50,000
(11) Loss on closed hot-well, B.T.U. per hour.....	45,000
(12) Loss in L.P. line to dryers, B.T.U. per hour.....	40,000
(13) Loss in hot water return to hot-well, B.T.U. per hour.....	30,000
(14) Loss in boiler feed line, B.T.U. per hour.....	30,000
Boiler House	
(15) Average year round efficiency.....	0.70
(16) Average heating value of coal, B.T.U. per lb.....	12,500
(17) From (15 and 16), Equiv. evap. from and at 212 deg. F., lbs....	9.02
(18) Coal required per B.H.P. hour, lbs.....	3.83
(19) Coal required per B.H.P. year (310 days of 24 hours), tons....	14.26
Miscellaneous	
(20) The effect of make-up water is similar for all cases and may therefore be neglected.	
(21) All the steam is condensed in the dryers; this is usually not quite true, but since the condition would be similar for all cases the results remain comparative.	

HEAT BALANCE

Prime Mover Consideration	Live Steam	Turbine	Engine
(22) Steam required per el. h.p. at L.T. buss, lbs.....		28	21
(23) Initial pressure, lbs.....		200	225
(24) Back pressure, lbs.....		15	15
(25) Initial superheat, deg. F.....		100	150
(26) Dryness factor of exhaust as specified by the manufacturer.....		10	0.98
Auxiliary Considerations			
(27) Boiler pressure, lbs.....	100	205	230
(28) Dryness factor leaving boilers.....	0.98	superheated	
Deductions from Previous Considerations			
(29) Initial superheat required at boiler to give that required by prime mover for line drop of 5 lbs., deg. F.....		98.8	148.8
(30) Radiation loss to prime mover or reduced valve, B.T.U. per lb.....	2	2	2
(31) Additional superheat required at boiler to make up for (30), deg. F.....		3.8	4.0
(32) Total superheat at boiler, deg. F.....		102.6	152.8
(33) Heat per lb. at boiler, B.T.U.....	1171.2	1261.0	1289.6
(34) Heat per lb. at prime mover or reduced valve, B.T.U.....	1169.2	1259.0	1287.6
(35) Latent heat per lb. exhaust, B.T.U.....		945.1	826.2
(36) Additional steam required to supply radiation from closed hot-well, lbs.....		47.6	48.6
(37) Additional steam required to supply radiation from L.P. line, lbs.....		42.4	43.4
(38) Radiation loss per lb. L.P. line, B.T.U.....	1.0		
(39) Heat per lb. entering dryers, B.T.U.....	1168.9	1163.9	1145.0
(40) Actual steam required to dry paper, total heat at 5 lbs. pressure, divided by (39) multiplied by (2), lbs.....	39,600	39,735	40,400
(41) Radiation loss per lb. returns, B.T.U.....	1.5	0.75	0.75
(42) Temperature leaving dryers, deg. F.....	212	212	212

(43) Temperature returns entering closed hot-well, deg. F.....	211.25	211.25	
(44) Heat per lb. returned to closed hotwell, B. T. U.....	179.25	179.25	
(45) Total heat returned to closed hotwell, B. T. U.....	7,122,500	7,241,700	
(46) Heat per lb. in water of closed hotwell if maintained at exh. press., B. T. U.....	218.8	218.8	
(47) Total heat req't in returns, B. T. U.....	8,694,000	8,839,500	
(48) Add'l heat req'd, B. T. U.....	1,571,500	1,597,800	
(49) Add'l exhaust steam req'd, lbs.....	1,660	1,725	
(50) Total steam flow from boilers, lbs.....	39,600	41,485	42,217
(51) Heat per lb. leaving closed hot-well, B. T. U.....	218.8	218.8	
(52) Radiation loss per lb. returns, B. T. U.....	1.5	0.75	0.75
(53) Heat per lb. returns entering boiler, B. T. U.....	178.5	218	218
(54) Total heat delivered by boiler, B. T. U.....	46,380,000	52,313,000	54,443,000
(55) Total heat ret. to boiler, B. T. U.....	7,069,000	9,044,000	9,184,000
(56) Total heat developed by boiler, B. T. U.....	39,311,000	43,269,000	45,229,000
(57) Factor of equiv. evap. from and at 212 deg. F.....	1.023	1.075	1.105
(58) Total equiv. flow. from and at 212 deg. F., lbs.....	40,500	44,600	46,650
Boiler House	Live Steam	Turbine	Engine
(59) Boiler horse power developed.....	1,173	1,292	1,350
(60) Coal per hour, lbs.....	4,493	4,950	5,170
(61) Coal per year, tons.....	16,730	18,425	19,250
(62) Total horse power available from steam at L. T. buss.....		1,090	2,010
(63) Total horse power to buy at L. T. buss.....	2,500	1,410	490
(64) Transformer loss.....	70	35	10
(65) Motor generator loss.....	140		
(66) Total horse power to buy.....	2,710	1,445	500

Comment on Mr. McBain's Article

The following letter on the design of the wet end of a Four-drinier is by a paper maker of long and successful experience in the middle west and on the Pacific Coast—The past few years Mr. Goodenough operated a plant at Astoria, Ore., and at present he is on his fruit ranch at Hood river, Ore.

HOOD RIVER, Ore., January 12, 1922.

Editor PAPER TRADE JOURNAL:

I read with much interest the article by B. T. McBain. I wrote an article on the same subject to another publication but the editor did not use it. When Rice Barton & Fales built the News Machine for the Inland Empire Paper Company, Spokane I suggested the following:—Put in a high head box, regulated by overflow gate. In front of head box, put a brass covered spout, the full width, between decks. This spout to be planed, and to reach over the breast roll. In this spout place a tight gate slice, this slice to be built with regulating screws, the same as for any slice.

With this system you have your slice, but moved back and can use an apron if needed. The wire could be level and flow of stock to wire any speed desired.

W. H. GOODENOUGH.

Crisis in Italian Paper Industry

WASHINGTON, D. C., February 6, 1922.—The Commercial Attache at Rome, H. C. MacLean, has made the following report to the Department of Commerce on the crisis in the Italian paper industry:

"The crisis in the Italian paper industry, largely due to the shortage of electrical energy caused by the drought, has resulted in a 50 per cent reduction in the output of 20 of the leading paper manufacturers. Another contributing factor is the recent introduction of paper from abroad, especially from Germany and other countries with a depreciated currency, where facilities for the manufacture of paper are greater than in Italy.

"Too large a quantity of paper has been left on the market, and stocks which in normal times are calculated at 42,000 quintals, today amount to 95,000 quintals. A turn for the better is in sight, however, as the demand has somewhat increased and the market is firmer."

THE BEATER IN GREAT BRITAIN FROM THE ENGINEERING POINT OF VIEW*

The original Hollander, which was invented some 200 years ago, is still, with improvements, the machine most used for beating paper pulp. In the first engines, the rag rolls were made of wood, and being very light, could be let down at once on the stuff and left to gradually separate and triturate the fibers. The time of the operation was long, and the stuff produced was very wet and made a strong sheet. As the necessity for greater production arose, heavy iron rolls were adopted, and the beater man was compelled to exercise greater care in letting down the roll.

Experience gradually taught the papermaker that it was not possible to equip a beater with knives that were suited equally well for teasing out the fibers and for cutting them to length, and the system of top and bottom engines was adopted, the top engine being equipped with blunt knives for teasing out, and the bottom engines with sharp tackle for cutting to length. This system is in very general use today on good rag papers, and the size of beater used on such papers carries 300 to 400 lbs. of paper.

Density of stock.....4 per cent to 5 per cent.
Rolls3' 0" to 3' 6" in diameter.
Weight of rolls.....2 tons.
Peripheral speed1,800 to 2,000 ft. per minute.
Power about 12 h.p. per footlength of bedplate.

Time of beating up to 18 or 20 hours in the case of beating for the finest papers, such as tissues.

The length of time necessary to properly prepare the fibers had a tendency to make the stuff very wet and difficult to work on the machine, and much thought was given to the question of constructing the beater so as to minimize this tendency. The Umpherston beater was designed with this object. In it the stuff is lifted over a low backfall and returns to the roll by an underground channel passing under the roll in a fairly thin stream. By reason of the fact that the roll does not lie deeply in the stuff, the beating can be carried on a longer time without excessive hydration.

Wood Pulp a New Factor

The advent of wood pulp introduced new factors in the problem. It was found that many of the results required by the papermaker could not be obtained unless it were made possible to beat the pulp at a much greater density than had previously been the case, and the Hollander in its original form would not satisfactorily circulate pulp at a sufficiently high density. In addition, there was an idea prevalent that the Hollander was wasteful in power.

Inventors set to work with the idea of providing separate means other than the roll for circulating the pulp, and leaving the beater roll only the duty of triturating and cutting the fibers, and beaters such as the Taylor, Reed, Milne, etc., were gradually evolved. Experience showed that these appliances were an unnecessary complication, and that the ordinary Hollander could be adapted to suit the new conditions—moreover, that it was not so wasteful in power as had been imagined.

As the roll is set down on the bedplate, the journal pressure is correspondingly relieved, and the power lost by journal friction becomes almost negligible; also the power cost of elevating the stuff over the backfall to provide the head necessary for circulation must be provided whatever means are adopted for circulation. There is a loss in friction in forcing the stuff between the roll and the weir, thrashing the stuff in front of the roll to bring its speed from practically nil to the peripheral speed of the roll. This is not wholly a loss, as there is a certain amount of work put on the stuff at this point.

Auxiliary methods of circulation have, therefore, been gradually

abandoned, and the construction of the Hollander proper has been modified to enable it to circulate the stuff to a greater density and still retain the beating roll as the means of circulation. The obvious way of doing this was to raise the height of the weir to give a greater head, and this was gradually done. It was, however, found that a greater percentage of the stuff was carried round with the roll, with a corresponding loss in circulation and power. To counteract this, doctors were placed in the roll cover, and many patents have been taken out for doctors at different angles and with various adjustments. By means of these it is now possible to circulate pulp in an ordinary Hollander at densities of 10 per cent to 12 per cent, and with a special form of trough even up to 15 per cent and a speed up to 50 ft. per minute.

Necessary Changes

The practice of carrying thick stuff in the Hollander necessitated changes in the form of the trough. There is a tendency for the stuff to lodge on that part of the backfall which is farthest from the midfeather, and the backfall must be carefully shaped so that its curve is such that the propelling force due to gravity is the same at all points.

The raising of the weir re-arranged the level of the stuff in the engine, and it was found that the roll shaft became immersed in the stuff, thus impeding the circulation. To obviate this, rolls have been increased in diameter, and the low part of the engine has been further reduced, with a greater rise from the shallow end up to the roll itself, and engines are now made in the new proportions, with the roll shaft clear of the stuff.

The distance between the end of the midfeather and the side of the engine has an important influence on the circulation and efficient mixing of the stuff. With increasing production, beating engines have been made larger and usual sizes for printings carry 800 to 1,000 pounds and for news up to 2,000 pounds.

The modern Hollander is now built in such a way that the papermaker can work his pulp at greatly varying densities without impairing the circulation and produce results within very wide limits. On the one hand we have the beating of grease-proof papers with the greatest amount of hydration, and on the other the beating of pulp for "news," where the fibers must be separated in the shortest time and with the minimum of hydration, so that they may lose water on the machine in the quickest possible time, to enable the paper machine to run at the high speeds that are prevalent today.

Beating engines for news are now constructed with 12 or 18 bars only, leaving large pockets of ample lifting capacity, the object being to break up the sheets of pulp as quickly as possible and reduce them to such a consistency that they will pass the refiner when the pulp is rapidly cleaned and passed on to the machine.

These latter remarks refer only to those countries, such as England, which use imported pulp. In Canada and the U. S. A. beating engines are abolished in many news mills, the pulp coming direct from the pulp mill, thickened to the required density, blended in the required proportions and cleaned in a refiner only, preparatory to its being passed to the papermaking machine.

What Are the Advantages of a Good Circulating Hollander?

More efficient mixing is obtained and the stuff receives more uniform treatment. This ensures that all fibers arrive at complete trituration as nearly as possible simultaneously, thus saving time and power, as the operation is not needlessly prolonged in order to complete the trituration of fibers which have escaped their due share of the cutting effect owing to bad circulation.

It must always be borne in mind that the roll is continuously working against, or in close proximity to the plate, and is putting

*Paper read by T. D. Nuttall before the Manchester Division, Technical Section, Papermakers' Association of Great Britain and Ireland.

work on the stuff all the time, and that the quick circulating engine simply ensures a better mixing and more uniform treatment. The output of a beater, therefore, is measured by its cutting capacity, and it is convenient for the sake of comparison to measure this in inch cuts per minute, carried out under different pressures, due to the different weights of rolls and the different fillings used.

Heavy rolls, high contact pressures, thin knives, many cutting edges and high speeds, give high cutting effects such as are necessary in the case of esparto papers, while low contact pressures, thick knives and fewer cutting edges, tend to give less cutting effect and more of a rubbing action such as is necessary in strong papers, such as kraft papers, etc.

Between the two extremes many combinations are possible, and it is only by experience that the correct fillings, speed, etc., can be determined. In order, therefore, to estimate the beating capacity of a mill and compare it with others, it is necessary to work out:

- The total inch cuts per minute.
- The cutting pressure in pounds per square inch.
- The peripheral speed of the roll.
- The density of the stock in the beater.
- H. P. hours per ton of output.
- The total carrying capacity of the beaters.

The output of each beater per charge is directly proportionate to the density of the stuff. The time required for beating is proportionate to the cutting effect expressed in terms of inch cuts per minute, and inversely as the cubical capacity of the engine trough.

The number of inch cuts per revolution of the roll is found by multiplying the number of bars in the bed-plate by the length of the bars. Thus, each time a 48 inch bar in the roll passes a bar in the bedplate, 48 inch cuts have been obtained.

The actual cutting varies, of course, with the spacing of the bars in the plate and the pressure of contact, but this method of calculation is useful in that it forms a standard for purposes of comparison.

The time of beating in the thicker engine is lessened owing to the increased cutting effect obtained. There is consequent saving of power, amounting in some cases to 15 per cent and even 20 per cent, as the pulp is beaten with the circulation of a smaller volume of water.

Probably esparto requires more inch cuts and sharper tackle than any other fiber, figures from existing plants showing that when making a pure esparto sheet a good average figure is 12,000,000 inch cuts per round of paper made. These include both beaters and refiners.

On wood pulp the peripheral speeds worked vary from 2,000 to 2,300 ft. per minute, and the power required varies from 12 to 16 h.p. per ft. length of bedplate.

One ton of paper should be beaten with the following expenditure of power:

News	250 h.p. hrs.
News (with pulp direct from pulp mill)	150- 200 "
Wood printings	500- 600 "
Rag papers, such as writings and tissues	2,000-2,500 "

When figures in excess of the above are found, some waste of power must be sought. This is often to be found in the condition of the bedplates or roller bars. It should be the practice to number each beating engine and take out a bedplate at periodical intervals in proper rotation. If this is systematically carried out there will not only be a saving of power, but more uniform results in beating will be obtained.

The propelling capacity of the roll, which depends on the spaces between the bars, should be kept as constant as possible by planing down the fillets as the bars wear.

Mr. Nuttall said, following some discussion, that when members came to discuss the paper at a later date, it would be advantageous if they would collate or collect information from their own experience on the lines indicated—total inch cut per minute, cutting pressure per square inch, peripheral speed of the roll, density of

stock in the beater, horse-power hours per ton of output, and total carrying capacity of the beaters. The weight of the roll and the number of square inches on which it rested when lowered down on to the bed-plate would enable the contact pressure to be determined. The total carrying capacity of the beaters gave much valuable information which they could discuss when they got the figures. As regards temperature of beating, he said as they gradually raised the weir or backfall of the beaters to meet new conditions required, they made rather a disastrous experiment; in that they tried to do something of the sort to rag beaters and found that when they raised the backfall the long period in which the stuff was in the beater caused it to work very hot, and it interfered very much with the papermakers' operations, such as sizing, and gave a bad color to the paper, so in trying to improve the rag beater they made it worse, and they had to go to the old proportions which were still adopted today. As regards hydration, they intended to conduct some experiments in Manchester on a machine. There were no means of measuring hydration of stock while in the beater; they could only measure that by the way it worked on the paper machine.

Some experiments on beating kraft have been conducted in Canada, and it was found that when the degree of density was altered there was a big change in the hydration after passing through the refiner. A Jordan refiner was placed immediately after the stuff chest and passed the stuff through at varying densities. The stuff was let down as thick as possible, passed through the Jordan, and diluted with water at the mixing box. To vary the hydration a jet of water was placed at the small end of the Jordan, so that more or less water could be passed through it, and this produced remarkable results. The machine on which this was tried was an M. G. machine and it was possible to put the stuff on the wire so that the water was carried right up to the boxes. As more water was put in the Jordan, the stuff worked freer and freer, and one could see the water coming back from the boxes on the wire.

He had purposely omitted stone rolls, because really they were only applicable to parchment and kraft papers; but they had had a fair amount of experience with them, and they found that they took much more power than steel rolls, but did work in much shorter time. With basalt-lava rolls they started with a bedplate about 12 inches wide, but gradually increased it, and they now put in bedplates 24 inches wide for kraft. When they got rolls five tons weight on a bedplate 24 inches wide instead of 12 inches, although the contact pressure became less, the rubbing action became more, and they were able to separate the fiber and get hydration in shorter time, though with a somewhat greater amount of power. Mr. Adamson mentioned empirical formulae, but it was well-nigh impossible on beaters with all these varying conditions. The only thing one could do was to take data as outlined and make comparison. With regard to basalt-lava, they had put in a new material, a porous cast iron to imitate the stone. That had been greatly successful, and they were still putting them in. They took as much power as the basalt-lava, but were much more durable, and could be worked with the fly bar and with less danger of breaking the fly bars. The disadvantage of the helin material was that it tended to discolor the stock, and could only be used for paper such as kraft, etc.

Oregon Paper Co. Elects Officers

SALEM, Ore., February 3, 1922.—F. W. Leadbetter was elected president of the Oregon Pulp and Paper Company at a meeting of its directors here last night. Charles K. Spaulding was elected vice-president; William S. Walton, treasurer; Roy H. Mills, secretary, and Walter L. Spaulding, assistant secretary. Directors of the concern are F. W. Leadbetter, Charles K. Spaulding, E. S. Collins, E. T. Barnes, John H. McNary, William S. Walton, Walter S. Spaulding, Joseph Kaster, F. G. Andrae, Roy H. Mills, and Walter E. Keyes.

PUMPS AND PUMPING MACHINERY

(Continued from last week.)

In order to assist the Joint International Committee on Text Books both financially and in attracting criticism of certain sections, the PAPER TRADE JOURNAL has arranged to co-operate with the committee by publishing some of the material submitted to the editor of the text books. In presenting this series of articles to our readers a cordial invitation is extended to assist the committee by suggestions and criticisms of this material. It is hoped that in this way omissions and errors will be noticed and corrected.

CHAPTER VIII

Air Lift Pumps

These are so named because compressed air is used in forcing water from a low level to a higher one by displacing water in the pipe or tank with air under sufficient pressure to cause the water to flow up to and through a discharge opening located at a higher level.

The air lift is more properly called a pumping system than a pump for the reason that the only machine necessary in the operation which resembles a pump is the air compressor which is used for developing the necessary air pressure.

The other equipment required consists of a properly arranged system of piping and a tank containing the compressed air and providing a supply under steady pressure for acting on the water to be lifted.

Figure 40 shows the usual arrangement of an air lift system. In this figure "A" indicates the air pipe from compressor, V a safety valve, and Q a pressure gauge.

From the storage tank B (which is provided with pressure gauge and safety valve) the air is conducted through air pipe P, to the head of the discharge pipe at "C" from there it is continued down to a point "D" near the bottom of the discharge pipe P₂. The well shown by the illustration is of the cased type and forms the discharge pipe; it is driven or let down through the earth into the water supply below the sur-

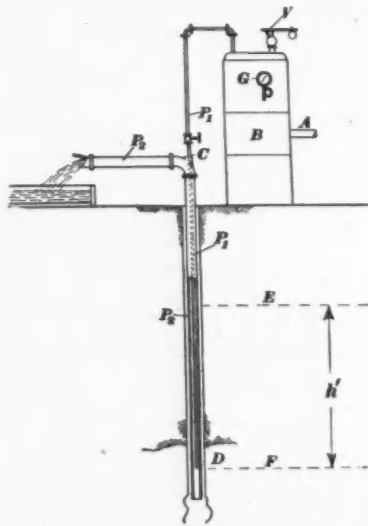


FIG. 40

face and the lower end is submerged below the normal water level so that the water in the well or discharge pipe stands at E below the point of discharge and the depth of immersion from E to F is called h' .

The figure shows the introduction of the air carried down inside of the main pipe through a smaller pipe which discharges the compressed air directly into the discharge pipe near the bottom.

Figure 40 shows the system with an open discharge pipe delivering into a flume or open canal at the ground level, when

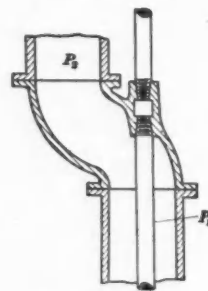


FIG. 41

conditions require, the discharge pipe P₂ may be arranged as in Fig. 41 to carry the water upward to a tank or to any point within the pumping limits of the apparatus where its delivery may be required. P₁ is the air pipe.

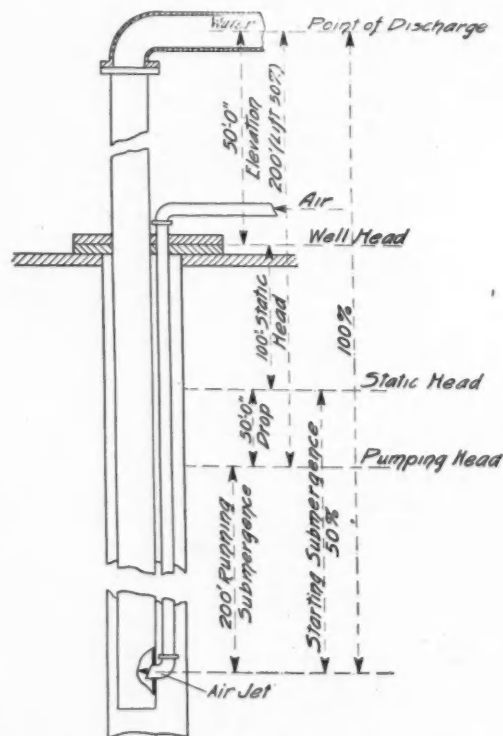


FIG. 42

Another typical arrangement of the air lift is illustrated by Figure 42 in which the air pipe is carried down alongside of the water discharging pipe and the compressed air is introduced into the latter at the proper point below the water level. The

Diagram of an Air Lift illustrated by Fig. 42 graphically describes the arrangement and proportions of an air lift system the characteristics of which are as follows:

Static Head is the distance from the surface of the ground to the standing water level in the well when not pumping.

Drop is the distance the water recedes when the well is delivering a certain quantity of water.

Elevation is the distance above the surface to which it is desired to deliver the water.

Lift consists of the static head plus the drop plus the elevation.

Submergence is the depth that the air pipe is submerged below the pumping level of the water in the well. There are two classes of submergence—starting submergence, which is temporary, and running submergence, which is the important factor in any pumping proposition. It is usually expressed in terms of the total length of the water column from the point where air is introduced to the point of discharge. Thus 50 per cent means that the total lift, or head, and the submergence are equal. The necessary percentage of submergence varies in accordance with the lift; low lifts require proportionately more submergence than high lifts. As the lift increases the necessary submergence decreases. The range of these percentages is found within the following limitations:

For a lift of 20 feet, 66 per cent.

For a lift of 500 feet, 41 per cent.

The first calculation usually leads to the size of the compressor required, and the operating pressure:

Va—Free air (actual) required to raise 1 gallon of water.

h—Total lift in feet.

H—Running submergence in feet.

C—Constant as given in table.

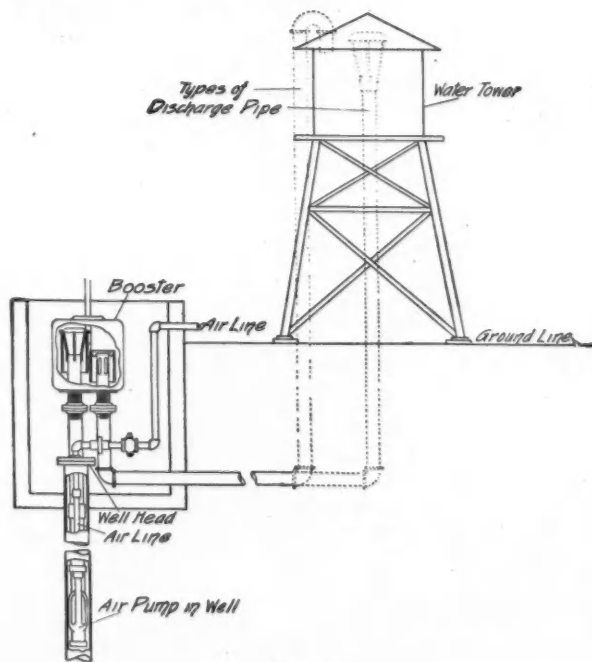


Fig. 43

Installations of Air Lift systems may be arranged with a centrally located air compressor plant and the wells at a distance from it when necessary; one compressor station being used to furnish compressed air for any number of wells.

In general practice the air pipe lines are arranged so that the air travels through them at a velocity of from 2000 to 4000 feet per minute and the area of the compressed air pipe is usually 17 per cent or one sixth the area of the discharge pipe.

The usual limit of head for an air lift system is placed at 200 feet; greater lifts may be obtained although the efficiency is usually reduced and the consequent cost of operation is increased and for this reason when it is necessary to raise water to higher heads and when the best efficiency is to be maintained it is advisable to divide the total lift into two or more stages or as this is commonly called the employment of the "Booster System" of compressed air pumping.

A typical arrangement of Air Lift Pump and Booster is shown by Figure 43. This system provides for handling the water from stage to stage with a pumping equipment and air pressure at each stage and a deep well pipe reservoir in the main well. With this arrangement of pumping for high lift conditions, the efficiencies secured at lower lifts may be obtained. In considering the efficiency of an air lift system it should be understood that the efficiency is the ratio of the work done; that is, the weight of the water lifted against the total head, to the work done, or power required to compress the air used in operating the system.

Efficiencies of air lift systems will vary generally all the way from 20 to 50 per cent, in some cases higher efficiencies are obtained but in general an average of 35 per cent will be a safe estimate. These efficiencies will be considered low by comparison with those which may be obtained with other types of pumps but the advantages of being able to raise the water from sources of supply far below the ground level without the use of moving parts within the well and the simplicity of the air lift system will compensate for the lower efficiency in a great many installations and for these reasons the air lift has been quite generally adopted as standard for several important classes of service which include private, municipal and factory water supplied where the water is obtained from wells.

To calculate the air volume required, the following formula, in part suggested by Mr. Edward A. Rix, A. S. M. E., may be used, which closely approximates average practice. The annexed table also shows the value of "C" under various heads with the proper submergence:

Formula:

$$V_a = .8 \left\{ \frac{h}{C \log \frac{H + 34}{34}} \right\}$$

Table for value of "C" with proper submergence.

Lift in feet (h)	Constant.
10 ft. to 60 ft., inclusive.....	245
61 ft. to 200 ft., inclusive.....	233
201 ft. to 500 ft.....	216
501 ft. to 650 ft.....	185
651 ft. to 750 ft.....	156

The next calculation in order would be to find the starting and working pressure.

Starting Pressure = depth of foot piece in well less the static head \times .434.

Working Pressure = depth of foot piece in well less the pumping head \times .434 + friction in air pipe + 2 pounds back pressure in nozzle or foot piece.

The amount of free air required to deliver the water varies somewhat according to several authorities. An average of these ratios is 4 cubic feet of free air to each cubic foot of water lifted; the air being compressed to the proper pressure

(Continued on page 52)

CURRENT PAPER TRADE LITERATURE

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts of Literature of the Technical Association of the Pulp and Paper Industry

Ventilating Sleeve for Sulphur Burners.—Can. patent No. 212,692, Fred B. Chappell and Glens Falls Machine Works, assignee of one-half of the interest, both of Glens Falls, N. Y., U. S. A., July 26, 1921. Claims allowed 7.—A. P.-C.

Baling Machine.—Can. patent No. 212,756.—The Galland Henning Mfg. Co., assignee of Karl O. Nelson and Otto Albert, all of Milwaukee, Wis., U. S. A., Aug. 2, 1921. Claims allowed 5.—A. P.-C.

Window Envelope Making Machine.—Can. patent No. 212,859, John Paterson Ramage, Liberton, Midlothian, Scotland, Aug. 9, 1921. Claims allowed 6.—A. P.-C.

Filling for Towers.—Can. patent No. 213,013, Andrew Miller Fairlie, Atlanta, Georgia, U. S. A., Aug. 23, 1921. The filling consists of blocks, each block being open at both ends and provided with a helical vane or flange of a sufficient width to substantially fill the interior cross-section of the block, so that no straight-line passage is left through the block. Claims allowed 21.—A. P.-C.

Removal of Magnesium and Calcium from Rock Salt Brine (for Making Electrolytic Bleach).—Can. patent No. 213,100, Francis Arthur Sandiway and Leslie Alexander Munro, Northwick, both of Chester, England, co-investors, Aug. 30, 1921. After the addition of soda-ash and slaked lime to the brine, the latter is subjected to gentle agitation so as to change the physical condition of the precipitate and increase the rate of sedimentation. Claims allowed 5.—A. P.-C.

Pulp Separator.—Can. patent No. 213,124, Carroll Edward Carpenter, Hawkesbury, Ont., Canada, Aug. 30, 1921. Claim allowed 1.—A. P.-C.

Production of Bisulphite Cooking Liquor.—Can. patent No. 213,360, The Brown Co., assignee of George Alvin Richter, both in Berlin, N. H., U. S. A., Sept. 13, 1921. Limestone is pulverized to pass through a 150 or 200 mesh sieve, and suspended in water. The limestone suspension is then treated either with sulphur dioxide gas or with sulphurous acid solution in excess of the amount required to form bisulphite. Claims allowed 4.—A. P.-C.

Production of Bisulphite Cooking Liquor.—Can. patent No. 213,361, The Brown Co., assignee of George Alvin Richter, both in Berlin, N. H., U. S. A., Sept. 13, 1921. Water and sulphur dioxide are passed through a series of towers in opposite directions, and at a given point in the system (neither at the beginning nor at the end) a lime bearing material is placed, so that the acidulated water reacts with it to form calcium bisulphite solution, and the resulting solution is then still further acidulated. Claims allowed 6.—A. P.-C.

Stable Bleaching Powder.—Can. patent No. 213,573, Chemische Fabrik Criesheim Elketron, Frankfurt on the Main, assignee of Heinrich Reitz, Bitterfeld, both in Germany, Sept. 27, 1921. The dry powder is mixed with dry kitchen salt free from impurities such as magnesium chloride. Claims allowed 4.—A. P.-C.

Continuous Beating Engine.—Can. patent No. 213,588, James T. Murphy and Edward J. Raney and James L. Carey, assignee of one-third of the interest, all of Chicago, Ill., U. S. A., Sept. 27, 1921. Claims allowed 18.—A. P.-C.

Logging Car.—Can. patent No. 213,608, Haydn Oswald Williams, Sperling, and William Joseph Miller, Vancouver, both of British Columbia, Canada, co-inventors, Oct. 4, 1921. Claims allowed 12.—A. P.-C.

Clip for Strengthening Cardboard Boxes.—Can. patent No. 213,682, The Eaton, Crane and Pike Co., assignee of William Allen Pike, both of Pittsfield, Mass., U. S. A., Oct. 4, 1921. Claims allowed 3.—A. P.-C.

Method of Felting Fibers on the Paper Machines.—Can. patent No. 213,968, The Bagley and Sewell Co., assignee of Frank W. Monaghan, both of Watertown, N. Y., U. S. A., Oct. 25, 1921. The water and stock mixture is fed to the machine under sufficient pressure to cause them to form and maintain a reservoir or pool above the wire after the slice, in which pool the water and stock are agitated and move at a velocity approximately equal to that of the wire; and the wire takes water and stock from this pool to form the web. Claims allowed 13.—A. P.-C.

Paper Machine.—Device for Felting the Fibers on the Wire.—Can. patent No. 213,969, The Bagley and Sewell Co., assignee of Frank W. Monaghan, both of Watertown, N. Y., U. S. A., Oct. 25, 1921. In a Fourdrinier paper machine, the combination with a slice or other controlling device and the making wire, of means for delivering the stock and water past the slice under pressure, and a resistance surface below the slice on to which the water and stock flow and form a pool from which the wire takes the water and stock to form the web. Claims allowed 10.—A. P.-C.

Defibering Rags.—*Papier-Markt*, Nos. 34 and 35, (Aug. 23 and 30, 1921). The fibers should be divided into their cellular elements, in which state they are of suitable dimensions for felting. This was formerly accomplished, and with excellent results, by the stamper, and its re-introduction into mill operations is not unlikely. Another method is described, a modification of the stamper, in which the rag fibers are suitably resolved into their elements by means of a hollander roll fitted with knives.—P. B.

The Construction of Turbine Engines.—*Pappen u. Holzstoff Ztg.*, No. 14, 1921. The turbine engine of modern construction means a gain in power transmission in mills where water power is available, provided the turbines are built of the rapid, high pressure type.—P. B.

Ventilation in Paper Mills.—*Zentr. Papierind.*, No. 4, 1921. The older ventilators with "propeller and blades" working noiselessly have been made cheaper and more effective by new devices. The improvements consist in the use of a large number of electrically driven vertical fans of the Keith type.—P. B.

PUMPS AND PUMPING MACHINERY

(Continued from page 51)

or density to raise or force the water against the pumping head or lift.

The air lift is a displacement pumping system and the discharge of water is intermittent due to the presence of the compressed air in the discharge pipe. In some systems the air does not mix with the water while flowing through the pipe line but acts on it like a piston of the same diameter as the internal diameter of the pipe, the discharge consisting alternately of a shot of water and a shot of compressed air released to the atmosphere. This is the so-called "slug system" of air pumping; with the Saunders system we have a combination of the slug system and also a mixing of the air and water which is within the discharge pipe; with the latter system the solid water surrounding the discharge pipe assists in raising the water within the discharge pipe; as due to the presence of the air the rising column is lighter in weight. By this method somewhat higher than above stated efficiencies are obtained.

The flow is usually sufficiently rapid with either system so that when discharged into the atmosphere it has the appearance of a solid stream of water flowing from the discharge pipe.

(To be continued.)

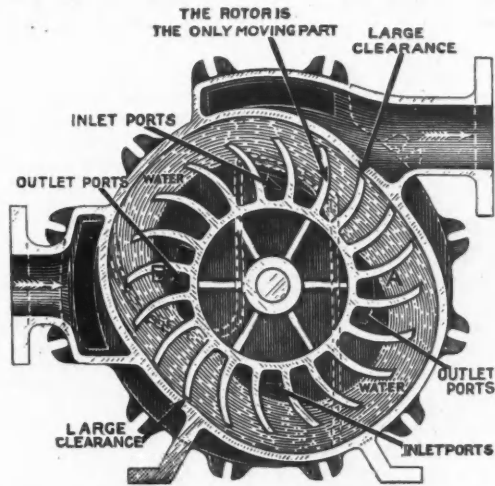
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The following are trade-mark applications pertinent to paper and pulp filed pending in the United States Patent Office which have been passed for publication and are in line for early registration unless opposition is filed promptly. For further information address National Trade-Mark Company, Barrister building, Washington, D. C., or Bush building, 130 West Forty-second street, New York, trade-mark specialists.

As an additional service feature to its readers, PAPER TRADE JOURNAL gladly offers to them an advance search free of charge, on any mark they may contemplate adopting or registering.

AUTO-WET—No. 154,279. Minnesota Mining and Manufacturing Company, St. Paul, Minn. For abrasive paper.

PORTRAYA—No. 153,457. The Haloid Company, Rochester, N. Y. for Photographic Developing Papers.

TEXTA—No. 156,222. The Haloid Company, Rochester, N. Y. For Photographic Developing Papers.

SLIGHT IMPROVEMENT IN TORONTO

(Continued from page 26)

one year recently the Spanish River Pulp and Paper mills lost 30,000 cords of pulpwood on which it had paid crown dues, by reason of sinkage.

Increasing Capacity of Wood Room

The plant of the Mattagami Pulp and Paper Company at Smooth Rock Falls, Ont., which has a daily capacity of 150 tons of sulphite fiber, has been closed since the first of the year but will resume operation as soon as the conditions of the market warrant it. The company has just completed the erection of a large addition to its wood room, the extension being 150 x 75 ft., one-story high, of steel, tile and concrete construction. Two American drum barkers have been added, each being 28 feet long and of 10 feet diameter. There is ample space for two more barkers which may be installed later. The company has a large supply of pulpwood on hand. Duncan Chisholm, of Toronto, president of the company, who has been confined to his home by illness for several weeks, is able to be at his desk again.

Notes and Personals of the Trade

Among the callers on the Toronto trade during the past week were: DeForest Coutts, representing the Whiting Paper Company, of Holyoke, Mass., and Daniel Nicholson, of Chicago, representing the Kimberly-Clark Company, Neenah, Wis.

James E. Moir, who has represented Brown Brothers', paper dealers and wholesale stationers, Toronto, on the road for a long period, in the Montreal and Ottawa district, has been appointed manager of the stationery department of the firm, succeeding G. E. Roden, who recently resigned after forty years' faithful service.

The Don Valley Paper Mills, Toronto, report that they are busy in all departments and running to full capacity. There has lately been an increased demand for cover papers, tag manila and all kinds of bristols turned out by the firm.

Representatives of the Provincial and Federal Departments of Labor have gone to Cochrane, Ont., to inquire into the conditions of settlers in the sections east and west on the Canadian National Railway, who are reported to be facing a great hardship owing to the lack of a market for their pulpwood.

News of the Holyoke Trade

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., February 6, 1922.—The Gill division of the American Writing Paper Company has resumed operations. About 60 tons of paper are turned out at this mill daily.

Joseph A. Borden, director of general service of the American Writing Paper Company, will be the speaker at the meeting of the Connecticut Valley branch of the Cost Association of the Paper Industry, which will be held at the Nonotuck hotel in this city Monday evening February 20.

Low water again handicapped manufacturing operations here

during the past week. It was necessary to enforce water restrictions on the first and second level canals. These restrictions were lifted the latter part of the week.

The American Writing Paper Company of this city will conduct a paper making exposition at Newark, N. J., the week of February 6, under the auspices of the Newark members of the United Typothetae and the Newark Printing House Craftsmen.

Monarch Tag Concern Has Prosperous Year

[FROM OUR REGULAR CORRESPONDENT.]

DAYTON, Ohio, February 6, 1922.—The Monarch Marking Systems company has concluded one of the busiest and most prosperous years in its history. The plant, which is located at East Dayton, has been greatly enlarged during the past year and is one of the most complete in the country devoted to the manufacture of tags. Fred Kohnle is president of the concern, having acquired the majority of stock during the year. Several Dayton business men who had been identified with the firm, disposed of their holdings.

The Monarch tag works were among the few manufactories which continued to run without interruption during the entire period of depression. Mr. Kohnle reports a renewed interest in inquiries among mercantile concerns and other establishments using the marking system which has grown in favor so rapidly in the past few years that a heretofore moderately active business has grown into one of the really big industries of the Miami Valley.

Paper Man Killed in Washington Accident

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., February 8, 1922.—Louis F. Valentine, secretary and treasurer of the R. P. Andrews Paper Company, of this city and his wife were both instantly killed here last week when the roof of the Knickerbocker moving picture theatre fell killing more than 100 persons.

The bodies of Mr. and Mrs. Valentine were taken to Warren, Pa., for interment. Mr. Andrews and several personal friends of the couple accompanied the bodies to Warren. The couple had no children.

To Manage Hagar Strawboard Co.

XENIA, Ohio, February 6, 1922.—Wilson W. Galloway will become general manager of the Hagar Strawboard and Paper company of Xenia and Cedarville February 15, and will make his home in Cedarville.

The appointment is announced by Dr. Charles Galloway, president of the company, who has been acting as general manager since November, but who will return to Evanston, Ill., soon, to resume his practice of medicine.

Resigns from Bayless Mfg. Co.

AUSTIN, Pa., February 6, 1922.—Edward Clapp, paper superintendent of the Bayless Manufacturing Corporation, resigned February 1, 1922. Mr. Clapp has been with this company for the past twenty-one years and during this time he has made many friends. When Mr. Clapp came to the Bayless company its production amounted to about fifty tons per twenty-four hours and after he made a few important changes he was able to bring the production up to eighty tons.

Beaver Brook Paper Mills Burned

DANBURY, Conn., February 6, 1922.—Friday morning, 2 A. M., fire started in beater room of Beaver Brook Paper Mills and before the Danbury fire department arrived the mill was entirely destroyed. The loss is \$125,000—partly covered by insurance. J. E. Gallagher, president, states the company will rebuild. The company made textile wrappers and colored specialties, etc.



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Perkins-Goodwin Co. Reorganizes

As announced in the *PAPER TRADE JOURNAL* last week, the old and well known house of Perkins-Goodwin Company has quietly effected a reorganization within its ranks which, from every indication, should not only continue the policies and traditions of this house along the lines which have made it great, but should further increase its business and, if possible, its prestige.

Since the retirement and withdrawal of John H. Duffy some three or four years ago, and the death of Mr. Crowe in August of last year, Mr. Crowe having, through illness, practically withdrawn from active participation in the business for over a year prior to his death, the business has been under



LOUIS CALDER

the active management of its newly elected officers, who have been able to make satisfactory arrangements with the heirs of Mr. Crowe for the purchase of his share in the business.

Louis Calder was elected president on the twenty-fifth anniversary of his entering the service of the company. He has served as vice-president and as a director for many years and has devoted his time largely to the successful building up of the paper sales end of the business, and together with the secretary, Mr. Atkins, has been in entire charge of the policy of that part of the business for the last fifteen years.

John Atkins, formerly the representative in this country of the great house of John Dickinson & Co., Ltd., London, England, entered into an arrangement with Perkins-Goodwin Company about eighteen years ago whereby, with the consent of John Dickinson & Co., Ltd., the American branch of its business was taken over by Perkins-Goodwin Company.

Frederick W. Westlake, the newly elected vice-president, entered the then firm over fifteen years ago. He continues as treasurer and in the active control of the financial policy of the company as heretofore.

William H. Anders, the only newly elected director, has been associated with the company for nearly ten years and during that period has devoted his entire time and energies to the pulp end of the business which was directed by Mr. Crowe up to the time, some two years ago, when he contracted his serious illness.

Mr. Anders, with Charles W. Rentoul, Jr., who has been closely associated with Perkins-Goodwin Company for nearly

twenty years and is a director of the company, will continue to have active charge of the pulp department.

James A. Brady, who was personal counsel to Mr. Crowe for over twenty years and general counsel of Perkins-Goodwin Company for the past fifteen years, will continue on the directorate.

The active management of the company will continue as above set forth and as the best method of continuing the prosperity of the company, the time and energies of the officers and directors will be directed to the departments of the business to which their abilities have indicated that they are especially adapted. All their friends in the trade at home and abroad wish them success of the highest order and they have been in receipt of many personal tributes to their successful conduct of the company's affairs and flattering expressions of confidence in the continued prosperity of the company.

Average Cost of Making News Print in 1921

C. K. Blandin, president of the Dispatch Printing Company, St. Paul, sent the following interesting letter under date of January, 20, to E. P. Adler, chairman of the Paper Committee of the American Newspaper Publishers Association:

"I have not replied to your letter of December 26 because I desired to wait until the close of the year and obtain the cost figures of the Itasca Paper Company for making print paper for 1921.

"Below you will find what it cost the Itasca Paper Company during the last year to manufacture news print paper, and also approximately what it will cost during the month of January, 1922:

Average Cost for 1921	
Material for ton of paper.....	35.68
Labor for ton of paper.....	17.71
Power bought for ton of paper.....	5.07
Supplies for ton of paper.....	12.45
Repairs for ton of paper.....	1.27
Overhead for ton of paper.....	9.40

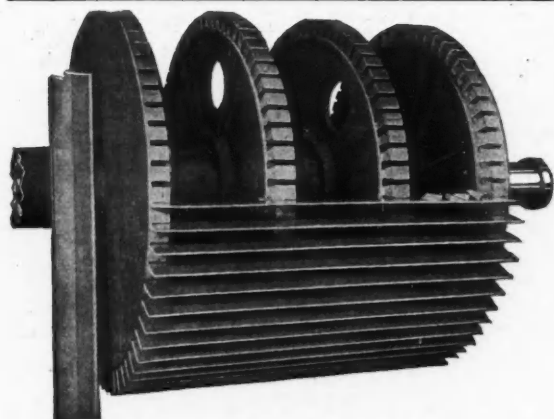
Total cost per ton..... 81.58
Estimated cost for January, 1922, \$77.20 per ton, after allowing for depreciation of pulpwood in stock December 31, to market price.

"In quoting the above figures, please understand that we have no authority to speak for other mill manufacturers, but I believe our costs are as conservative as almost any mill in the northwest, and I have every reason to believe that they will agree in general with mills throughout the United States.

"It will easily be recognized by the above that mills cannot manufacture print paper excepting at a loss for \$65 per ton, and it will be a matter of good business on the part of publishers to recognize this fact and to accord to manufacturers a profit that will enable them to stay in business and give them a fair return upon the capital invested.

"Furthermore, the news print industry as a whole should not be blamed for an occasional manufacturer who has sought to profiteer, or be held accountable for the action of brokers who have profited against publishers and conversion plant owners who are in and out of the print making business as they think the market will justify.

"If the paper committee of the A. N. P. A. would seek to co-operate with a similar committee of manufacturers, concerning the manufacture of news print paper, in which a frank discussion of costs and service would be taken up instead of both parties pursuing a guerilla warfare against each other, I am confident it would be for the best interests of all concerned."



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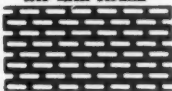
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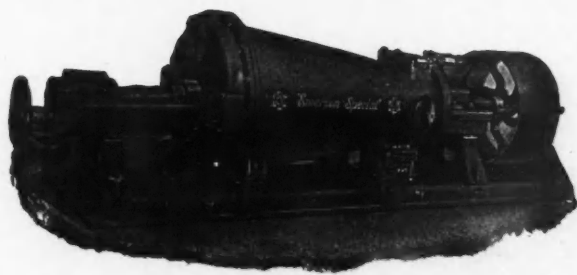
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Hoberg Paper & Fibre Co. Formed

[FROM OUR REGULAR CORRESPONDENT.]

APPLETON, Wis., February 7, 1922.—Consolidation or merger of the Green Bay Fibre and Paper Company and the John Hoberg Co., both of Green Bay, was effected last week and a new corporation known as the Hoberg Paper and Fibre Company was formed to take over the properties. The transaction was one of the largest in the history of the paper industry in the Fox river valley, involving properties worth about \$3,000,000.

The new corporation was organized by Green Bay men, associated with several men from Milwaukee and Chicago. Incorporators are Frank H. Hoberg, John Welsh and George D. Nau, of Green Bay, and Thomas J. Dee, of Chicago. The officers are Frank H. Hoberg, president; Thomas J. Dee, vice-president; George D. Nau, treasurer; John Welsh, secretary and general manager. The new corporation will begin functioning about February 20.

Negotiations looking toward the merger were started last October when Mr. Welsh, acting for himself and his associates, secured options on the two properties. These options later were transferred to the new corporation. Many of the stockholders in the two companies, including the Hoberg family, are heavily interested in the new concern.

Expansion is contemplated by the new owners but probably not in the immediate future. It is understood that a paper bag factory, bleaching plant and increased power facilities are among the plans for the future.

"In this consolidation there will be great economy of administration and operation," a statement by Mr. Welsh said. "The policy of the concern will be to operate extensively in wrapping paper, tissue paper, paper bags and other paper goods, thereby enabling more widespread distribution of product than now.

"The consolidation also will greatly strengthen the already strong financial position of both these properties and insure stability through any business crisis that may yet have to be met.

"The interests of Green Bay will be constantly kept in mind in the operation of these properties and we feel that the foundation now laid is only the beginning of a great development of the paper industry which will ultimately make Green Bay one of the very large paper centers of America.

"The new company will have a total output of about 200 tons a day of paper, chemical and mechanical pulp and paper products."

The John Hoberg company was organized by John Hoberg at Kaukauna in 1885 and the plant was moved to Green Bay in 1898. It had only one small tissue machine when it went to Green Bay but now ranks among the state's largest plants.

The Green Bay Paper and Fibre Company was organized in 1902 by Peter Reuter of Kaukauna and his associates, as a sulphite pulp company, but in 1908 a one machine plant was erected. The second machine was installed in 1910. In more recent years the sulphite plant was enlarged and a mechanical pulpmill added.

Bids and Awards For Paper

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., January 25, 1922.—The purchasing officer of the Government Printing Office has received the following bids for 2,300 pounds 17x28—11½. No. 9, Yellow Bond Paper: Whitaker Paper Company, \$.267 per pound; Rainbow Paper Corporation, \$.1729; Old Dominion Paper Company, \$.2049, Esleek Manufacturing Company, \$.31; and Dobler & Mudge, \$.199.

The Republic Bag and Paper Company has been awarded the

contract by the Bureau of Supplies and Accounts, Navy Department, for furnishing 153,000 rolls of toilet paper at \$13,196, bids for which were opened on December 27.

Dobler and Mudge have been awarded the contract by the Purchasing Officer of the Government Printing Office for furnishing 1,750 pounds of 22½x28½—175 fawn index bristol board at 19 cents per pound, bids for which were opened on January 6.

The purchasing officer of the Government Printing Office has received the following bids:

29,000 pounds 38 x 48—58, Opaque Printing Paper; Maurice O'Meara Company, at \$.0825 per pound; Dobler & Mudge, \$.0788; Bryant Paper Company, \$.0776; Old Dominion Paper Company, \$.0949 and \$.0929; D. L. Ward Company, \$.085; Allied Paper Mills, \$.0752; Whitaker Paper Company, \$.092; and Canfield Paper Co., \$.0775.

Filimore & Slade have been awarded the contract by the Bureau of Supplies and Accounts, Navy Department, for furnishing the Mare Island and Puget Sound Navy Yards with 250,000 rolls of toilet paper at \$31,830, bids for which were opened on December 27.

The Rainbow Paper Company has been awarded the contract by the purchasing officer of the Government Printing Office for furnishing 2,300 pounds (300 reams) of 17 x 28, 11½ No. 9 Yellow Bond Paper at \$.1729 per pound, bids for which were opened on January 20.

The Mathers-Lamm Paper Company will furnish 1,000 sheets of 20 x 31—brown paperoid at \$34.

The Purchasing Officer of the Government Printing Office has received the following bids for 20,000 17x11½x5½ fiber containers and 10,000 17x11½x11½ same; American Paper Products Company, at \$84.00 and \$115.00 per 1,000; A. G. Schulz Company, at \$85.50 and \$110.00; Consolidated Paper Company, at \$75.40 and \$89.20; American Paper and W. W. Company, at \$105.98 and \$135.13; Kieckhefer Container Company, at \$85.25 and \$109.00; The Pa Pro Company, at \$85.20 and \$109.50; and the Ohio Boxboard Company, at \$77.40 and \$93.65.

The Consolidated Paper Company was awarded the contract for the above at \$75.40 and \$89.20.

Industrial Paper Co. vs. Paper Service Co.

Our attention has been called to the fact that in reporting the above case in our issue of January 19, 1922, we were led into serious error resulting in an injustice being done to J. M. Rubinstein, the secretary and treasurer of the Industrial Paper Company, and also New York City sales agent for the Grand Lake Company, who has for many years past been in the paper business and is highly regarded throughout the trade.

We received our information from a source which we considered reliable, but it turns out that it led to the publication of a garbled report of the trial. It is our custom not to publish any such report without verification, but it so happened that the report came to us too late for verification at the time.

We regret the incident very much and desire to assure our readers that there was no intention on our part to in any way reflect on the integrity of the Industrial Paper Company or Mr. Rubinstein personally who, as we have said, is highly regarded in the trade, and we are glad herewith to retract anything contained in that notice which might reflect unfavorably upon him.

Goes With Dexter Sulphite Pulp & Paper Co.

NEWTON FALLS, N. Y., February 6, 1922.—William Livingston, superintendent of the Newton Falls Paper Company, has resigned to accept a similar position with the Dexter Sulphite Pulp and Paper Company at Dexter, N. Y.

Howard Bond



Howard Ledger

"The Paper of Many Uses"

Manufactured by

THE HOWARD PAPER COMPANY,

Urbana, Ohio

FORGE LAP-WELDED

SOFT STEEL

DIGESTERS

ALL SEAMS LAP-WELDED

AMERICAN WELDING COMPANY

CARBONDALE, PA.

**VERTICAL
SEAMS
HEATED WITH
FURNACES
AND WELDED
WITH
HYDRAULIC
POWER**

**CIRCUMFEREN-
TIAL SEAMS
HEATED WITH
FURNACES
AND HAMMER
WELDED**

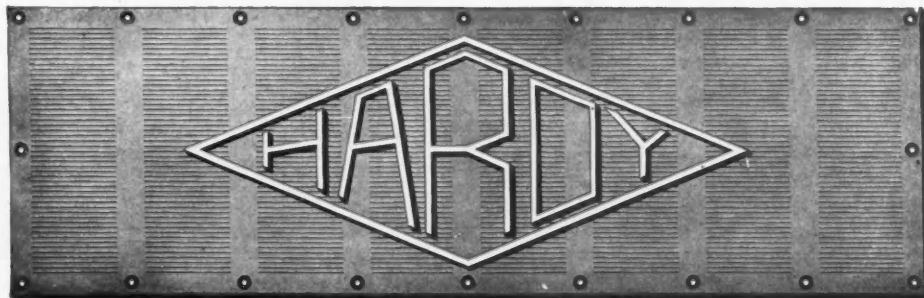
Felt Test—Lowest Cost per Ton

If you judge felt values, not by what you put into the equipment, but what you get out of it—then you will specify ORR 3 stripe Endless Felts, for ORR felts will produce the lowest cost per ton. They "stand up" under severe usage. Orr durability is acknowledged everywhere. Their strength and long life are as dependable as their reliability and quality.

In the 32 grades of Felts and Jackets we can match your most exacting demands. Tell us the kind of paper you desire to make, and we will send you samples of felts that will economically serve you and help you to produce paper at lowest cost per ton.

THE ORR FELT & BLANKET COMPANY, Piqua, Ohio

WILLIAM A. HARDY & SONS COMPANY, Fitchburg, Mass., U.S.A.



Condition of Brompton American Properties

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., February 6, 1922.—F. N. McCrea, M. P., president of the Brompton Pulp and Paper Company, Limited, at the annual meeting of shareholders here, supplied details concerning the two American mills of the company. Much of the information coming out was in reply to shareholders' inquiries. Mr. McCrea, replying to a question regarding the possibility of these plants contributing to Brompton's dividend in the near future stated that he did not think so. There is still certain indebtedness against the plants which must first be taken care of.

Earnings on the Claremont property had already taken care of indebtedness of \$250,000 in preferred stock on the plant, and as much more remained to be liquidated. Estimated value of the property was \$2,500,000. The Groveton plant originally had a bond issue against it of \$1,250,000. Part of this had been retired, and it was desired to reduce this still further. These plants it was pointed out were valuable additions to the company's Canadian plants as they used a very large percentage of the company's pulp which entered that country duty free, and was turned by these mills into kraft paper which, if made at Brompton, would have been subject to a duty of 25 per cent.

As to the outlook for future earnings, Mr. McCrea stated that he hoped the worst was passed and conditions would improve although it was not possible to make a definite prophecy as to the immediate future. He drew attention to the generous cut in inventories shown by the statement, and added that the company was well situated to take all advantage of future improvement in trade.

P. H. Glatfelter Co. Issues Handsome Brochure

The P. H. Glatfelter Company has just published a handsome brochure giving the history of its paper mills which are among the oldest in the country. The founder of the institution was P. H. Glatfelter. His ancestors migrated from Switzerland to America and he was born in 1837 and died in 1907, after building up one of America's best known and most substantial organizations for the manufacture and distribution of paper. His first mill was that at Spring Forge, purchased by him in 1863. The production of this plant was gradually increased from 1,500 pounds a day to 4,000 pounds under the effective administration of Mr. Glatfelter.

The present mill begun in 1874 developed steadily until in 1880 it was equipped with the world's largest and fastest Fourdrinier machine built by Pusey & Jones to manufacture news print paper 102 inches in width. At that date George W. Childs, of the Philadelphia Public Ledger, found that the Spring Grove Mills were the only ones equipped to provide his new Hoe presses which were the largest in the world with news print 94 inches in width.

The manufacture of news paper was discontinued in 1895, and since that time book papers, bonds and writings, have been the products of the mills. Continued improvements have brought the production up to 90,000 pounds of pulp and 100,000 pounds of pulp daily.

During the current year a new Fourdrinier paper machine will be installed capable of producing paper 156 inches wide at a speed of 600 feet a minute. Black & Clawson Company, of Hamilton, Ohio, has been awarded the contract while the drive of the latest sectional type will be furnished by the General Electric Company. These additions when completed will double the capacity of the mill and prospects for the future of the company appear brilliant.

Cost Association to Meet at Holyoke

The next meeting of the Connecticut Valley Local of the Cost Association of the Paper Industry, will be held in Holyoke at the Hotel Nonotuck, February 20, 1922. The speaker of the evening will be Joseph A. Borden, Director of General Service, American Writing Paper Company.

Mr. Borden was the speaker at the dinner held in connection with the fall meeting of the Cost Association of the Paper Industry at Chicago, and those present at that meeting were very much pleased with the address given by him. Those who have not had the opportunity of listening to Mr. Borden's previous talks will no doubt avail themselves of this occasion.

Mr. Borden is an enthusiastic speaker, and he talks from a practical experience which he has had in the printing business. It was he who sold the standard cost system to the U. T. A. Practically every printer today is running his business on his cost system which has been established and endorsed by the U. T. A.

Mr. Borden thoroughly realized the value of a standardized cost system and how it benefits an industry, and now he is willing to come here from Chicago and address this local on the same subject.

His talk will be equally interesting to executives, superintendents, cost men, and all, whether manufacturers or converters.

Perfects New Process for De-Inking Newspapers

[FROM OUR REGULAR CORRESPONDENT.]

TONAWANDA, N. Y., February 6, 1922.—A chemical process, whereby a combination of 50 per cent old newspapers and 50 per cent of a by-product of flax can be converted into pulp suitable for the manufacture of news print, has been discovered by W. J. Herrbold, papermill engineer, who is associated with the Economy Pulp Company, of Tonawanda.

Less than a year ago, Mr. Herrbold started to experiment with the flax-news print combination. A series of tests conducted over the summer and fall has resulted in the creation of a satisfactory formula. No sulphite is used in the flax process. Chemicals de-ink the old newspapers and solidify the flax with the pulp.

Mr. Herrbold has also perfected a beater roll for the flax product, which produces a high grade of pulp.

The by-product of flax that is used is a part of the flax that was formerly regarded as useless; and destroyed.

Mr. Herrbold, who resides at 225 Niagara street, Tonawanda, plans to open an engineering office and laboratory at the Economy plant for experimental work about the first of the year.

The Economy Pulp Company is installing machinery to produce news print pulp through a de-inking process, perfected by Mr. Herrbold.

H. J. Skinner To Be Technical Advisor

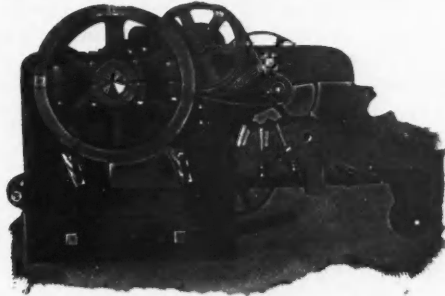
[FROM OUR REGULAR CORRESPONDENT.]

BOSTON Mass., February 6, 1922.—After long and careful consideration, and consultation with a large number of members, the Executive Committee of the Associated Industries of Massachusetts voted at its last monthly meeting to establish in the organization a Technical Information Service along similar lines to those of our Legal, Taxation, Accounting, Insurance, and Banking services, and Hervey J. Skinner, of the firm of Skinner, Sherman & Esselen, Inc., chemists, biologists and engineers, of Boston, has been selected as Technical Adviser to conduct the department.

The service is equipped to answer inquiries on the fundamental processes employed in manufacturing operations, such as steam generation, water softening, lubrication, heating, drying of materials, filtration, distillation, evaporation, dyeing, etc., and to supply members with knowledge which will be of material aid in solving problems of construction, the properties of building materials, the selection of the more important types of equipment for certain operations, the erection of machinery and the like. It is also in a position to direct members to sources of information on technical subjects and to places where materials or equipment can be obtained to the best advantage.

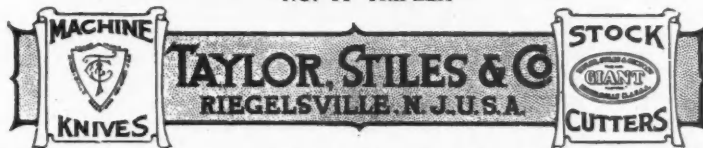
Don't Use Your Beaters For Rag Cutters

Put in a
GIANT
and cut your stock
thoroughly and evenly



Capacity 2 Tons per
hour
Weight 8500 lbs.
For Roofing and Felt
Stock

NO. 11 TRIPLEX



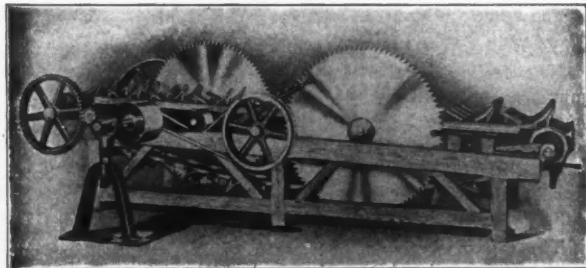
Canadian Manufacturers Under Patents: WATEROUS ENGINE WORKS CO., Brantford, Ont., Can.
I. MARX & CO., London, E. C., sole agents for the United Kingdom

Increased Capacity Lower Cost Per Cord

THE

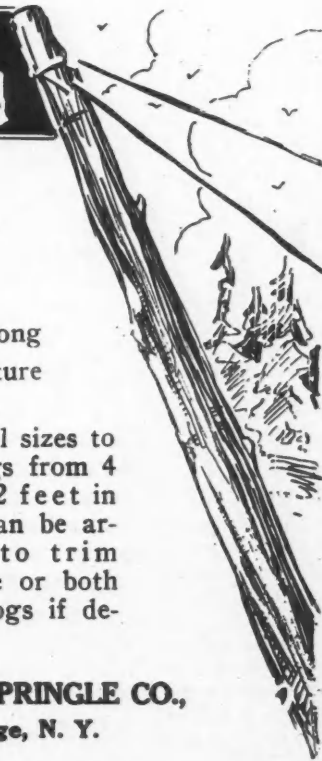
Ryther Slasher

is the most efficient and the lowest cost method of reducing long logs to uniform short lengths suitable for further manufacture into pulp and paper.



Built in all sizes to handle logs from 4 feet to 32 feet in length. Can be arranged to trim either one or both ends of logs if desired.

RYTHER & PRINGLE CO.,
Carthage, N. Y.



New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, FEBRUARY 8, 1922.

The New York paper market is following the general trend of the times in moving slowly and steadily toward better days. It is well, if possible, to forget the tortuous days of 1921 when the paper industry just barely managed to exist and to think only of applying energetic measures to present convalescent business that it may the sooner be enabled to break forth in renewed strength and vigor. Economic barometers indicate constant progress. Production in some lines is showing improvement. The cost of living is somewhat less than for some time, while unemployment in the United States decreased slightly more than four per cent during the month of January. Banks are accumulating reserves that will adequately supply credit necessities when the demand arises with the advent of normal business. The rise of the pound sterling to the highest peak in two years, although accompanied with the fall on the price of domestic English commodities and therefore not wholly beneficial to English merchants, is a distinct advantage to American interests which can now deal on more equal terms with those of a common tongue across the sea. Prices of paper and paper-making materials remain uncertain for the most part because of the weakened buying power of those interested and because of the stubbornness of labor which resists every attempt at those reductions absolutely necessary in the course of liquidation and the return of national economics to a pre-war status. Not only does labor refuse to co-operate but it also threatens additional trouble in April in the form of a coal strike. Those paper mills dependent upon coal brought from distant points will be injured by the threatened strike if it matures. The advance already made toward normalcy will be lost while paper and pulp prices will rise and the general public will again be the loser. The time has arrived when labor should think, if it never has thought before, and resist the temptation to fly like a gnat into an appealing flame only to come out singed. Agitation is on foot for a 20 per cent reduction in freight rates to take effect February 20. If the hopes of paper men are realized such a reduction will go a long way toward releasing those supplies of paper commodities for a long time locked up behind freight rate barriers. Production of paper is increasing but not at a rate to outdistance the demand. Lessons in economy lately learned will prevent overproduction for some time and while the task of supplying the hand to mouth demand is distasteful to manufacturers none of them care to venture into any business that savors of speculation. To summarize the paper trade has reason to maintain its optimistic undertone in the light of numerous fundamental economic improvements.

The news print situation is improving. Manufacturers are not yet in as comfortable a position as they would wish, for between the severe foreign competition and the animosity of domestic publishers profit-taking is at lowest ebb. The consumption of news print is steady and the production gaining and although there is little danger of any great over-supply the amount in the market is sufficient to keep the level of prices at rock bottom. While the volume of advertising is not an index of the demand for news print yet the fact that January, 1922, shows an increase in advertising of 4 per cent over January, 1921, is one that indicates considerable improvement in the industry. The consumption of 1,920,000 tons of standard news print in the United States in 1921 was 41,000 tons less than in 1920, or a decrease of 2 per cent but 52,000 tons or nearly 3 per cent more than in 1919.

The demand for small quantities of book paper continues steady and the mills are somewhat more active. Since supplies of book paper are not held in large volume dealers and manufacturers anticipate a more active demand in the near future. The price of both coated and enamel and lithograph has fallen slightly which indicates that all possible is being done to stimulate trade. No great price fluctuation is expected in this market throughout the year.

The fine paper market remains quiet with most business done on the cheaper grades of sulphite bonds. Several of the larger mills are more active and few of them operating at capacity. It requires a considerable effort to contract sales for any time in advance but inquiries for immediate shipment of small lots are received with some regularity.

The undertone in the tissue market is firmer and the trade is confident that the next few weeks will show a decided improvement in business transacted. Production is on the increase but not yet at a point where manufacturers do not have to worry about their overhead absorbing their small profits. No. 1 white tissue is the best seller now being quoted at 80 to 90 cents a pound.

The kraft market is strong. The demand is improving and kraft mills working at capacity are providing sufficient supplies to maintain a healthy situation. Proposed reductions in freight rates will prove a blessing to the kraft dealers who have been compelled to pay an exorbitant figure for transportation for a long time.

The demand for board is slight and the general situation in the market not an imposing one. With a poor year behind and an inauspicious beginning for 1922 at hand there apparently is little for board manufacturers to be optimistic about.

Mechanical Pulp

A quiet situation is found in the mechanical pulp market. Buyers are asking for small lots only for immediate shipment and as a rule find fault with the prices quoted. Lower transportation costs will assist greatly in stimulating traffic in mechanical pulp. The production is increasing slowly and it is expected that paper mills will soon be demanding a normal volume of pulp.

Chemical Pulp

Little change is to be noted in the moderate demand prevailing in the chemical pulp market. Slowly and surely a firming up is taking place and those in a position to know believe that prices will go higher before long. Some German pulp continues to arrive but it is thought that the late embargo upon her paper pulps will have the desired effect in the long run and will eliminate to a large extent the destructive competition from that source.

Old Rope and Bagging

Roofing bagging alone is in demand in this department which remains unusually quiet in spite of some inquiries from the consumers. Paper mills are running better in most cases and dealers in old rope and bagging anticipate a better demand from that source in the very near future.

Waste Paper

The feeling in the waste paper market improves as the number of inquiries increases. The demand from the paper mills appears to be reawakening and some business is being done with them in spot transactions. Prices in several instances are a little higher than last quoted, proving that the bottom has been reached in truth.

Rags

The rag market continues weak. Although the fine paper mills are operating better the amount of improvement already registered is not sufficient to cause any great demand.

Market Quotations

Paper Company Securities

Table with columns: Company Name, Bid, Asked. Includes American Writing Paper Company, International Paper Company, Union Bag & Paper Corporation.

New York Stock Exchange closing quotations February 10, 1922: Because of the unusual conditions prevailing in the various markets quotations are more or less nominal.

Paper

Table of paper products including Ledgers, Bonds, Writings, Extra Superfine, Superfine, Tub Sized, Engine Sized, News, Rolls, Sheets, Side Runs, Book, S. & S. C., M. F., Coated and Enamel, Lithograph, Tissues, Colored, Anti-Tarnish, Silver Tissue, Manila, Kraft, Imported, Screenings, Manila, Fiber Papers, Card Middies, Boards, News, Straw, Chip, Binders Board, Sgl. Mla., Wood Pulp, Container, Wax Paper, Self Sealing White, Waxed Tissue, Glassine, Mechanical Pulp, Chemical Pulp, Sulphite, Easy Bleaching, No. 1 Strong unbleached, No. 2 Strong unbleached, No. 1 Kraft, Sulphate, Sulphite (Domestic), Strong unbleached, Easy Bleaching, Sulphite, News Sulphite, Mitscherlich, Kraft, Soda Bleached.

Domestic Rags

Table of domestic rags including Prices to Mill, New White, Silesias, New Unbleached, Washables, Fancy, Cottons, Blue Overall, New Blue, New Black Soft, New Light Sec, O. D. Khaki Cuttings, Corduroy, New Canvas, New Black Mixed, White, Repacked, Miscellaneous, White No. 2, St. Soiled White, Thirds and Blues, Black stockings, Cloth Strippings, No. 1, No. 2, No. 3, No. 4, No. 5A.

Foreign Rags

Table of foreign rags including New Light Silesias, Light Flannelettes, Unbleached Cottons, New White Cuttings, New Light Oxfords, New Light Prints, New Mixed Cuttings, New Dark Cuttings, No. 1 White Linens, No. 2 White Linens, No. 3 White Linens, No. 4 White Linens, Old Extra Light Prints, Ord. Light Prints, Med. Light Prints, Dutch Blue Cottons, German Blue Cottons, Ger. Blue Linens, Checks and Blues, Dark Cottons, Shoppery, French Blues.

Bagging

Table of bagging products including Prices to Mill, Gunny No. 1, Foreign, Domestic, Wool, Tares, heavy, Pright Bagging, No. 1 Scrap, Sound Bagging, Manila Rope, Foreign, Domestic, New Bu Cut, Hessian Jute Threads, Foreign, Domestic, Mixed Strings.

Twines

Table of twines including Cotton, No. 1, No. 2, No. 3.

Table of various paper products including India, Dark, B. C., A. B. Italian, Basis, Finished Jute, Light, Dark, Jute Wrapping, Fly, No. 1, No. 2, Tube Rope, 4-ply and larger, Fine Tube Yarn, 5-ply and larger, 4-ply, 3-ply, Unfinished India, Basis, Paper Makers Twine, Balls, Box Twine, Jute Rope, Amer. Hemp, Sisal Hay Rope, No. 1 Basis, No. 2 Basis, Manila Rope.

Old Waste Papers (F. o. b. New York)

Table of old waste papers including Shavings, Hard White, Soft White, Flat Stock, Stitchless, Over Issue Mag., Solid Flat Book, Crumpled No. 1, Solid Book Ledger, Ledger Stock, No. 1 White News, New B. B. Chips, Manila, New Env. Cut, New Cut No. 1, Extra No. 1, Old, Print, Container Board, Bogus Wrapper, Old Krafts, Bales compressed, News, Strictly Overissue, Strictly Folded, No. 1 Mixed Paper, Common Paper.

CHICAGO

[FROM OUR REGULAR CORRESPONDENT.]

Paper

Table of paper products in Chicago including All Rag Bond, No. 1 Rag Bond, No. 2 Rag Bond, Water Marked Sulphite, Sulphite Bond, Sulphite Ledger, Superfine Writing, No. 1 Fine Writing, No. 2 Fine Writing, No. 3 Fine Writing, No. 1 M. F. Book, No. 1 S. & S. C. Book, Coated Book, Coated Label, News-Rolls, mill, News-Sheets, mill, No. 1 Fiber, No. 2 Manila, Butchers' Manila, No. 1 Kraft, No. 2 Kraft, Wood Tag Boards, Screenings, Boards, per ton, Plain Chip, Solid News, Manila Lined, Chip, Continer Line, 85 Test, 100 Test.

Old Papers

Table of old papers in Chicago including Binders Board, Solid Wood Pulp, Straw Board, Filled Pulp Board, Shavings, No. 1 Hard White, No. 1 Soft Shav., No. 1 Mixed, No. 2 Mixed, White Envel. Cuttings, Ledgers and Writings, Solid Books, No. 1 Books, light, Ranks, Ex. No. 1 Manila, Manila Envelope, Cuttings, No. 1 Manilas, Folders News, Old Newspaper, Mixed Papers, Straw Clippings, Binders Clippings, Kraft, New Kraft Cuts, Roofing Stock, Chicago, Net, No. 1, No. 2, No. 3, No. 4.

PHILADELPHIA

[FROM OUR REGULAR CORRESPONDENT.]

Paper

Table of paper products in Philadelphia including Bonds, Ledgers, Writings, Superfine, Extra fine, Fine, No. 2, Fine, No. 3, Book, M. F., Book, S. S. & C., Book, Coated, Coated Lithograph, Label, No. 1 Jute Manila, Manila Sul., No. 1, Manila No. 2, No. 2 Kraft, No. 1 Kraft, Common Bogus, Straw Board, News Board, Chip Board, Wood Pulp Board, Binder Boards, Per ton, Carload lots, Tarrd Felts, Regular, Slaters.

Bagging

Table of bagging products in Philadelphia including Best Tarred, 1-ply, Best Tarred, 2-ply, Best Tarred, 3-ply, Foreign, Domestic, Manila Rope, Sisal Rope, Mixed Rope, Scrap Burlaps, Wool Tares, heavy, Mixed Strings, No. 1, New Lt., Burlap, New Burlap Cuttings.

Old Papers

Table of old papers in Philadelphia including Shavings, No. 1, Hard White, No. 2, Hard White, No. 1 Soft White, No. 2 Soft White, No. 1 Mixed, No. 2 Mixed.

(Continued on page 66)

Imports and Exports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING FEBRUARY 4, 1922

SUMMARY

News Print.....	6,890	rolls.
Printing Paper.....	204	cs.
Tissue.....	13	cs.
Hangings.....	14	bls., 9cs.
Wall Paper.....	3,172	rolls, 17 bls.
Copy Paper.....	15	cs.
Filter Paper.....	111	bls., 58 cs.
Cigarette Paper.....	561	cs.
Drawing Paper.....	4	cs.
Colored Paper.....	10	cs.
Crepe Paper.....	1	cs.
Blue Print Paper.....	116	rolls.
Surface Coated Paper.....	102	cs.
Transfer Paper.....	4	cs.
Packing Paper.....	1,789	rolls, 160 cs., 962 bls.
Miscellaneous Paper.....	224	cs., 159 bls. 3,519 rolls.

CIGARETTE PAPER.

British American Tobacco Co., Nessian, Liverpool, 22 cs.
The Surburg Co., La Lorraine, Havre, 26 cs.
American Tobacco Co., California, Havre, 504 cs.
H. H. Strauss, by same, 3 cs.
Gluckman & Strauch, by same, 4 cs.
S. Alexander, by same, 2 cs.

FILTER PAPER.

E. Fougere & Co., California, Havre, 58 cs.
J. Manheimer, by same, 111 bls.

COPY PAPER.

Japan Paper Co., Del Maru, Yokohama, 15 cs.

WALL PAPER.

A. Murphy & Co., Nessian, Liverpool, 16 bls.
C. Grimmer & Sons, Lapland, Antwerp, 1 bl.
The Prager Co., by same, 3,172 rolls.

PAPER HANGINGS.

Happel & MacAvoy, Bradford City, Hamburg, 2 cs.
W. H. S. Lloyd & Co., Menominee, London, 14 bls. and 7 cs.

TISSUE PAPER.

M. Snedeker Corp., Nessian, Liverpool, 13 cs.

PRINTING PAPER.

Tamm & Co., Ryndam, Rotterdam, 10 cs.
F. B. Vandegrift & Co., Hansa, Hamburg, 112 cs.
J. L. N. Smythe, by same, 57 cs.
H. Lindenmeyr & Sons, Ebro, Callao, 25 cs.

NEWS PRINT.

Chemical Nat'l Bank, Hansa, Hamburg, 131 rolls.
N. Y. American, Idejford, Hallstank, 4,124 rolls.
Equitable Trust Co., by same, 1,716 rolls.
C. L. Robinson, Bradford City, Hamburg, 39 rolls.
Agar, Berrusson Corp., by same, 80 rolls.
Chemical Nat'l Bank, America, Bremen, 87 rolls.
New York Tribune, H. Olav, Copenhagen, 180 rolls.
E. C. Melby, by same, 147 rolls.
Corn Exchange Bank, by same, 255 rolls.
Hudson Trading Co., Hansa, Hamburg, 131 rolls.

DRAWING PAPER.

H. Reeve Angel & Co., Ryndam, Rotterdam, 4 cs.

COLORED PAPER.

E. Daiber, Lapland, Antwerp, 10 cs.

CREPE PAPER.

Irving Nat'l Bank, Hansa, Hamburg, 1 cs.

BLUE PRINT PAPER.

Keuffel & Esser, Hansa, Hamburg, 166 rolls.

SURFACE COATED PAPER.

W. Heusermann, Lapland, Antwerp, 2 cs.
Defender Photo Supply Co., America, Bremen, 100 cs.

TRANSFER PAPER.

Martin & Bechtold, America, Bremen, 4 cs.

PACKING PAPER.

Republic Bag & Paper Co., Bradford City, Hamburg, 1,789 rolls.
Japan Paper Co., by same, 160 cs.
Equitable Trust Co., by same, 449 bls.
Ladenburg, Thalman & Co., by same, 513 bls.

PAPER.

E. Dietzgen & Co., Hanesford, Hamburg, 10 cs.
F. H. Lunning, by same, 71 cs.
Wilkinson Bros. & Co., by same, 18 cs.
Japan Paper Co., by same, 59 cs.
Equitable Trust Co., Hansa, Hamburg, 10 cs.
Perkins, Goodwin & Co., Grace Dollar, Genoa, 6 cs.
F. L. Kraemar & Co., Menominee, London, 16 cs.
Nat'l Bank of Commerce, Bradford City, Hamburg, 159 bls.
Nat'l Bank of Commerce, by same, 1,146 rolls.
D. S. Walton & Co., by same, 775 rolls.
Louis Frey, Ryndam, Rotterdam, 2 cs.
H. Reeve Angel & Co., by same, 6 cs.
Guaranty Trust Co., America, Bremen, 26 cs.
C. H. Young Publishing Co., by same, 191 rolls.
Nat'l Bank of Commerce, H. Olav, Copenhagen, 1,387 rolls.

RAGS, BAGGING, ETC.

P. Berlowitz, California, Havre, 192 bls. rags.
Equitable Trust Co., by same, 602 bls. rags.
Ladenburg, Thalman & Co., Assyria, Glasgow, 82 bls. paper stock.
N. S. Lines, Inc., America, Bremen, 971 bls. rags.
F. P. Gaskell & Co., by same, 324 bls. rags.
Chemical Nat'l Bank, by same, 727 bls. rags.
A. Solomon, Inc., Bradford City, Hamburg, 56 bls. paper stock.
Parsons & Whittemore, by same, 1,221 bls. rags.
Reiss & Co., by same, 13 bls. thread waste.
International Acceptance Bank, by same, 30 bls. rags.
Ladenburg, Thalman & Co., by same, 89 bls. rags.
P. Berlowitz, La Lorraine, Havre, 117 bls. rags.
W. Hughes & Co., by same, 459 bls. rags.
Atlantic Nat'l Bank, Eglantin, Antwerp, 42 bls.
Albion Trading Co., Nessian, Liverpool, 60 bls. rags.
J. B. Morris & Co., by same, 430 bls. hide cuttings.
B. D. Kaplan & Co., by same, 132 bls. paper stock.
Albion Trading Co., Menominee, London, 6 bls. rags.
E. J. Keller Co., California, Havre, 151 bls. rags.
E. J. Keller Co., California, Rouen, 58 bls. bagging.
E. J. Keller Co., Bradford City, Hamburg, 99 bls. bagging.
E. J. Keller Co., by same, 71 bls. rags.
E. J. Keller Co., Bradford City, Stockholm, 34 bls. rags.
E. J. Keller Co., Clan McBride, Algiers, 66 bls. rags.
Castle, Gottheil & Overton, Chicago, Havre, 74 bls. bagging.
Castle, Gottheil & Overton, California, Rouen, 273 bls. rags, 161 bls. bagging, 51 bls. new cuttings.
Castle, Gottheil & Overton, America, Bremen, 10 bls. rags.

OLD ROPE.

International Purchasing Co., Lapland, Antwerp, 174 bales.
International Purchasing Co., by same, 146 coils.
First Nat'l Bank of Boston, Bradford City, Hamburg, 142 coils.
Brown Bros. & Co., Boston City, Bristol, 277 coils.
E. J. Keller Co., Ryndam, Rotterdam, 88 coils.

WOOD PULP.

American Wood Pulp Corp., America, Bremen, 352 bales.
Castle, Gottheil & Overton, by same, 1,000 bales.
M. Gottesman & Co., Bradford City, Hamburg, 1,071 bales.
Brown Bros. & Co., by same, 960 bales, 133 tons.
Brown Bros. & Co., Hanerford, Hamburg, 900 bales.
E. J. Keller Co., Berit, Kopmanholmen, 5,645 bales, 940 tons.
American Wood Pulp Corp., Manitowoc, Herno-sand, 9,000 bales.
Hudson Trading Co., Hansa, Hamburg, 555 bales.

CHINA CLAY.

Bryce, Roberts Co., Boston City, Bristol, 250 bags.

PHILADELPHIA IMPORTS

WEEK ENDING FEBRUARY 4, 1922

Moore & Munger, Boston City, Bristol, 100 tons china clay.
Paper Makers Importing Co., by same, 150 tons china clay.
E. J. Keller Co., Westbrook, Hamburg, 753 bls. rags.
E. J. Keller Co., by same, 450 bls. wood pulp.
E. J. Keller Co., by same, 583 bls. rags.
E. J. Keller Co., California, Havre, 351 bls. rags.
Castle, Gottheil & Overton, Mississippi, Bremen, 2,005 bls. rags.
Castle, Gottheil & Overton Soestdyk, Amsterdam, 395 bls. rags.
Castle, Gottheil & Overton, Westbrook, Hamburg, 1,750 bls. wood pulp.

BALTIMORE IMPORTS

WEEK ENDING FEBRUARY 4, 1922

E. J. Keller Co., Berit, Kopmanholmen, 10,668 bls. wood pulp.
Hudson Trading Co., City of Flint, 260 bls. wood pulp.

NORFOLK IMPORTS

WEEK ENDING FEBRUARY 4, 1922

American Wood Pulp Corp., Manitowoc, Hernaland, 21,660 bls. wool pulp.
Hudson Trading Co., City of Flint, 203 rolls news print.

CHARLESTON IMPORTS

WEEK ENDING FEBRUARY 4, 1922

Castle, Gottheil & Overton, Nacata, Antwerp, 1,526 bls. bagging.

BOSTON IMPORTS

WEEK ENDING FEBRUARY 4, 1922

M. Gottesman & Co., America, Gothenburg, 2,130 bls. wood pulp.

GALVESTON IMPORTS

WEEK ENDING FEBRUARY 4, 1922

M. Gottesman & Co., America, Gothenburg, 967 rolls news print.

NEW ORLEANS IMPORTS

WEEK ENDING FEBRUARY 4, 1922

M. Gottesman & Co., America, Gothenburg, 1,422 rolls news print.

I. P. to Start Machines at Niagara Falls

[FROM OUR REGULAR CORRESPONDENT.]

NIAGARA FALLS, N. Y., February 6, 1922.—Two more big paper-making machines in the local plant of the International Paper company in Buffalo avenue are being made ready to start soon. This will make eight machines to be put in operation. Superintendent James McGinley says that the International Papermakers'

Union strike, inaugurated last summer, is practically over, so far as the local International mill is concerned. He says that the six machines now in operation are not only manned by skilled mechanics, but that he has on hand sufficient applications from skilled paper-makers to man the other two machines just as soon as they are thoroughly overhauled and ready for operation. At present 500 men are employed in the local International mill. This force will be increased gradually.



Merit tempts imitation

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Valves in types and sizes for all requirements of plumbing, heating, and power plant and industrial use. At supply houses everywhere.

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SINCE 1864

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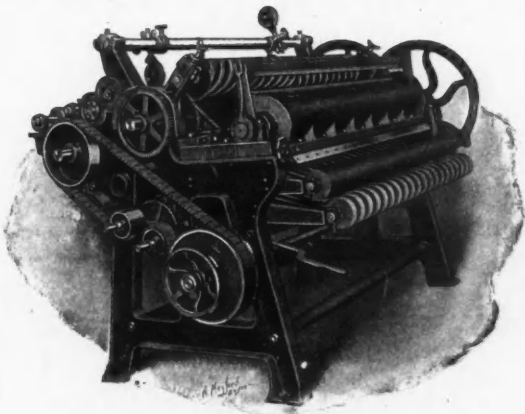
HALF a million dollars worth of well-selected stock, constantly maintained, and an organization keyed up to the theory that plant efficiency is measured by the number of orders shipped on the day of receipt, accounts for Caldwell service. Let us figure on your requirements.

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LINK-BELT COMPANY, OWNER
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NEW YORK, 299 Broadway



Paper Cutters

Single, Duplex and Diagonal



Cutter Knives Patent Top Slitters

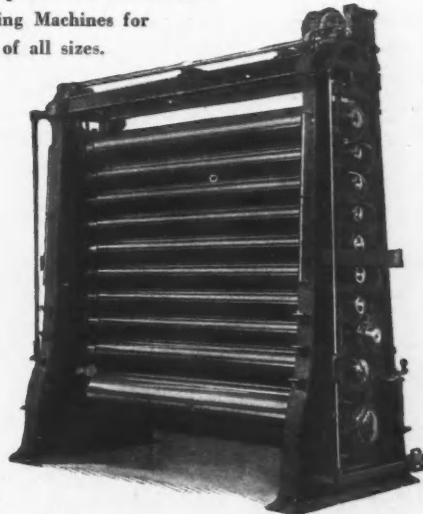
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Lawrence, Mass.

CALENDERS

Furnished Complete with Electric Motor Lift, Hydraulic Lift or Ratchet Lift.

All Operated from Floor.

Grinding Machines for
Rolls of all sizes.



LOBDELL CAR WHEEL CO.
Wilmington, Del., U. S. A.

Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, FEBRUARY 8, 1922.

ALUM.—The demand for alum is slightly better if any change at all may be observed due to the general bettering of the fundamental conditions making for good business. Prices are firm with ammonia alum quoted at from 3.65 to 3.75 cents a pound for the lump, 3.75 to 4.00 for the ground, and 4.15 to 5.25 cents for the powdered.

BLEACHING POWDER.—The demand for bleach is still light although orders for the month of February are being placed regularly. Imported bleach sells at 1.90 cents a pound and domestic at from 2.00 to 2.25 cents a pound.

BLANC FIXE.—Hand to mouth buying continues in the blanc fixe market and interests handling the commodity look forward to a greatly increased demand as soon as the paper mills get on their feet again. Blanc fixe pulp is quoted at from \$40 to \$50 a ton depending upon the grade required and powdered blanc fixe is quoted at from 3.50 to 3.75 cents a pound.

BRIMSTONE.—New developments are lacking in the sulphur market. The demand is steady although orders are not for long periods in advance on account of the prevailing uncertainty in prices and conditions in general. Domestic brimstone is quoted at from \$18 to \$20 a ton f.o.b. New York, and \$16 to \$18 a long ton at the mines.

CASEIN.—The casein market is firm with a moderate supply caused by small importations from Argentina about balancing the steady although somewhat reduced demand. The price is at 9.00 cents a pound.

CAUSTIC SODA.—Much difficulty is found in inducing buyers of caustic soda to place orders for any sizable quantity for any considerable period in the future. Spot business is fairly good while very few contracts are engaged in. The contract price is 3.65 cents a pound on the basis of 76 to 78 per cent white spot caustic sells at a slightly lower figure.

ROSIN.—The rosin market is fairly firm but quiet at present. Domestic inquiry has been very light and no new contracts have been closed with foreign buyers. Grades E, F, and G, most used in the paper industry, are quoted at 5.45 cents a pound, per barrel of 280 pounds net.

CHINA CLAY.—The demand for china clay is improving slowly and the feeling throughout the trade is markedly better. Domestic unwashed sells at \$6 to \$8 a net ton, washed at \$8 to \$10, and imported at \$13 to \$18.

SALTCAKE.—Because the production of muriatic acid is still small the quantity of saltcake on the market is barely sufficient to fill the slow demand. Chrome saltcake sells at \$18 a ton and acid white at \$20.

STARCH.—The demand for starch is improving and a good volume of business promises to be done in the current year. The price is \$2.12 a bag and \$2.40 a barrel, carload quantities.

SATIN WHITE.—Dealing in the satin white market is very light although the trade is more optimistic. A normal demand from the paper industry is all that is awaited. Satin white is quoted at 2.10 cents a pound.

SULPHATE OF ALUMINA.—This department is quiet but promises to become stronger as soon as promised reductions in freight rate schedules are brought about. The commercial grade sells at 1.50 to 1.60 cents a pound and the iron free grade at 2.60 to 3.00 cents depending on the location of the supply.

SODA ASH.—More interest is being taken in soda ash although buying promises to be of the hand to mouth variety for some time to come. Foreign soda ash sells at 1.75 to 1.85 cents a pound and domestic at 1.75 to 1.90 cents.

TALC.—Buyers will not contract for talc but for a few weeks in advance and while the demand is well supplied for the current month inquiries are not received for much farther in advance.

Market Quotations

(Continued from page 63)

Solid Ledger Stock. 2.00 @ 2.25	New Black Soft. .03 @ .03 1/2
Writing Paper. .80 @ 2.00	New Light Sec-
No. 1 Books, heavy. 1.50 @ 1.75	onds02 1/2 @ .02 1/2
No. 2 Books, light. 1.25 @ 1.50	Khaki Cuttings. .02 1/2 @ .03 1/2
No. 1 New Manila. 2.75 @ 3.00	Corduroy02 @ .02 1/2
No. 1 Old Manila. 1.50 @ 1.75	New Canvas.07 1/2 @ .08
Container Manila. 1.00 @ 1.10	New Black Mixed 3.00 @ 3.25
Old Kraft.1.90 @ 2.00	Old
Overissue News.75 @ .80	White, No. 1—
Old Newspaper.50 @ .60	Repacked06 @ .06 1/2
No. 1 Mixed Paper. .45 @ .50	Miscellaneous04 1/2 @ .04 1/2
Common Paper.40 @ .50	White, No. 2—
Straw Board, Chip. .40 @ .45	Repacked03 @ .03 1/2
Binders' Bd. Chip. .40 @ .45	Miscellaneous02 1/2 @ .03 1/2
Domestic Rags—New.	Thirds and Blues—
Price to Mill, f. o. b. Phila.	Repacked1.85 @ 2.00
Shirt Cuttings—	Miscellaneous1.55 @ 1.75
New White, No. 1 .09 1/2 @ .09 3/4	Black stockings. .175 @ 2.25
New White, No. 2 .05 @ .06	Roofing Stock—
Silesias, No. 1. .05 @ .06	No. 1.90 @ 1.00
New unbleached. .08 1/2 @ .09	No. 2.80 @ .90
Washables03 1/2 @ .03 3/4	No. 3.70 @ .80
Fancy05 @ .05 1/2	No. 4.75 @ .85
Cottons—according to grades—	No. 5A.nominal
Blue Overall.05 @ .05 1/2	B.nominal
New Blue.02 1/2 @ .02 3/4	C.nominal

BOSTON

[FROM OUR REGULAR CORRESPONDENT.]


Paper	Wood, Vat Lined. .47.50 @ 50.00
Bonds07 1/2 @	Filled News Board. 40.00 @
Ledgers09 @	Solid News Board. 42.50 @ 45.00
Writings07 @	S. Manila Chip.55.00 @
Superfine15 @	Pat. Coated.70.00 @ 75.00
Fine12 @	
Books, S. & S. C. .06 1/2 @	Old Papers
Books, M. F.05 1/2 @	Shavings—
Books, coated09 @	No. 1 Hard White .03 1/2 @
Label09 1/2 @	No. 1 Soft White .03 @ .03 1/2
News, sheets. \$3.75 @	No. 1 Mixed.07 1/2 @ \$8.00
News, rolls05 1/2 @	Ledgers & Writings .02 @ .02 1/2
Manila—	Solid Books01 1/2 @ \$1.35
No. 1 Manila. \$6.75 @	Blanks \$1.30 @ \$1.40
No. 1 Fibre. 8.00 @	No. 2 Books Light. .60 @ .70
No. 1 Jute. 8.00 @	Folded News, over
Kraft Wrapping. 7.00 @	issues \$11.50 @ 12.00
Common Bogus. 3.00 @	Mixed paper.05 @
	Gunny Bagging80 @
Boards	Manila Rope04 @ .04 1/2
(Per Ton Destination)	Comm'n Paper. 8.00 @
Chip \$37.50 @—	Old News.80 @
News, Vat Lined. 39.00 @ 40.00	Old Kraft.1.70 @

TORONTO

[FROM OUR REGULAR CORRESPONDENT.]

Paper	Sulphite bleached. 95.00 @ 105.00
(Mill Prices to Jobbers f. o. b. Mill)	Sulphate 75.00 @
Bond—	Old Waste Papers
Sulphite 12 1/2 @ 14	(In carload lots, f. o. b. Toronto)
Lights 13 1/2 @ 15	Shavings—
Dark tinted. 15 @ 16 1/2	White Env. Cut. 3.75 @ —
Ledgers (sulphite) @ 14 1/2	Soft White Book
Writing 11 1/2 @ 15	Shavings 3.15 @ —
News, f. o. b. Mills—	White Bl'k News 2.00 @ —
Rolls (carloads). 3.50 @	Book and Ledger—
Sheets (carloads) @ 4.25	Flat Magazine and
Sheets (2 tons or over) @ 4.50	Book Stock
Books—	(old) 1.45 @ —
No. 1 M. F. (car-	Light and Crum-
loads) 10.00 @ —	pled Book Stock 1.30 @ —
No. 2 M. F. (car-	Ledgers and
loads) 9.00 @ —	Writings 1.80 @ —
No. 3 M. F. (car-	Solid Ledgers. 1.80 @ —
loads) 8.50 @ —	Manila—
No. 1 S. C. (car-	New Manila Cut. 1.95 @ —
loads) 10.50 @ —	Printed Manilas. 1.00 @ —
No. 2 S. C. (car-	Kraft 2.25 @ —
loads) 9.50 @ —	News and Scrap—
No. 1 Coated and	Strictly Overissue .90 @ —
litho. 15.00 @ —	Folded News.80 @ —
No. 2 Coated and	No. 1 Mixed Pa-
litho. 14.00 @ —	pers70 @ —
No. 3 Coated and	Domestic Rags—
litho. 13.25 @ —	Price to mills, f.o.b. Toronto
Coated and litho.,	Per lb.
colored 15.25 @ —	No. 1 White shirt
Wrapping—	cuttings09 1/2 @ .10
Grey 4.75 @ —	No. 2 White shirt
White Wrap. 5.25 @ —	cuttings05 1/2 @ .05 3/4
"B" Manila. 5.75 @ —	Fancy shirt cut-
No. 1 Manila. 7.50 @ —	tings05 1/2 @ .05 3/4
Fibre 7.25 @ —	No. 1 Old whites .04 @ —
Kraft, M. F. or	Thirds and blues .02 @ .02 1/2
M. G. 8.75 @ —	Per cwt.
Pulp	Black stockings. 2.00 @ —
(F. o. b. Mill)	Roofing stock
Ground Wood. \$25.00 @ \$32.50	No. 1. 1.25 @ —
Sulphite easy bleach-	No. 2. 1.15 @ —
ing 70.00 @ 75.00	Roofing stock
Sulphite, news grade. 60.00 @ 65.00	Manila rope.04 1/2 @ .04 3/4
	No. 2.01 1/2 @ —
	Gunny bagging.02 1/2 @ —

The Home of Quality



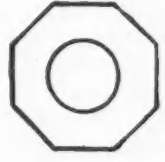
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All sizes and shapes of Holes

All kinds and thicknesses of Metal

For Centrifugal and Rotary Screens, Drainer Bottoms, Filter Plates, Pulp Washers, etc.

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WANTED—Practical Paper Mill Color Man fully experienced in coloring High Class Special Papers. Give references and state experience. Address, Box 4751, care Paper Trade Journal. F-9

WANTED—Machine Help and Beaterman. Mill in good location. Address, Box 4753, care Paper Trade Journal. F-9

WANTED—Graduate Engineer or Draftsman for Paper Mill in Middle West. Work to be Designing and drafting. Paper Mill and Power House experience preferred. Please give age, experience and salary expected. Address, Box 4754, care Paper Trade Journal. F-9

WANTED—Paper Bag and Envelope Salesmen. A Specialty House having recently enlarged its Manufacturing Equipment desires the services of young aggressive salesmen. A broad field and excellent future. Experience and knowledge essential. Write in detail. Address, Box 4638, care Paper Trade Journal. tf

WANTED—A Fourdrinier Wire Salesman to cover Mills in this Country and Canada. One who has had several years of experience in a Paper Mill preferred. Submit reference and full information. Address, Box 4772, care Paper Trade Journal. F-9

WANTED—An experienced Salesman on Printing Papers. Cover New York City and vicinity. Drawing account and commission. Address, Box 4729, care Paper Trade Journal. tf

WANTED—Superintendent for One Machine Tissue Mill in New England, making Cylinder Tissues. Address, Box 4783, care Paper Trade Journal. F-9

EXPERIENCED MILL AGENTS in paper line, who can represent manufacturer of Waxed Papers, Paper Bags, Lunch Rolls and Confectioner Paper Specialties on a commission basis in large cities. Advise experience and give references. Address, Box 4781, care Paper Trade Journal. F-9

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The Vacuum Oil Company intends to add to its Technical Department staff several high grade, experienced Mechanical Engineers.

The new positions call for men having the qualifications listed under one of the following heads:

Mechanical Engineers with executive ability and several years of practical experience in plant operation.

Experienced Engineers, thoroughly familiar with the operation and maintenance of Paper Mill Machinery.

Experienced Engineers, thoroughly familiar with the operation and maintenance of Power Plant and Mill Machinery.

We want men who are above the average. Men who will accept responsibilities. Men of good address.

DO NOT CALL. Write us, giving a complete outline of your experience and qualifications, age and salary desired.

VACUUM OIL COMPANY
Technical Employment Committee,
61 Broadway, NEW YORK CITY

F-9

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WANTED: COMBINER MAN—To make lay-outs and take charge of operating one 80" and 120" machine for pasting solid fibre container board. Pressman: Must be experienced in High-class solid fibre container work to assume direct charge of Printing Department, consisting of various makes of fibre-Board Presses, both flat beds and cylinder types. General Foreman: Man who is experienced in all the finishing processes of solid Fibre Container Work. Must be able to take full charge of Slitting, Cutting, Creasing and Stitching Departments. Full particulars as to experience, references, and salary expected to be covered in first letter of application. All correspondence treated confidentially. Address, Box 4708, care Paper Trade Journal. tf

PAPER SALESMAN—Experienced salesman with an acquaintance among Printers and a knowledge of City Trade wanted by a large and progressive Paper House. Liberal salary and exceptional opportunities. All communications will be held strictly confidential. Address, Box 4792, care Paper Trade Journal. F-9

WANTED—First class Cylinder Machine Tender for 72" Cylinder Machine making colored specialties. Give references and previous employment. District of Columbia Paper Mfg. Co., Washington, D. C. F-9

WANTED—Superintendent or Foreman for Waxing Plant. Must have ability and character. References. Address, Box 4793, care Paper Trade Journal. F-9

WANTED—An assistant Chemist for laboratory of a large Pulp and Paper Company located in the Middle West. A young college graduate with a year or two Paper Mill experience preferred. Must be wide awake. Address, Box 4796, care Paper Trade Journal. F-23

WANTED—First class Machine tender for Box Board Mill making 35 to 40 tons of high grade folding boards. Good opportunity for the right man. Address, Box 4805, care Paper Trade Journal. F-16

WANTED—Trimmer Man on Bond, also all around finisher on Bond. Address, Box 4809, care Paper Trade Journal. F-16

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A CAREER NOT A JOB

Wanted: A high class man as General Manager of modern Waxed Paper Plant. Must be fully experienced in this line and not be afraid to shoulder responsibility as to quality and production. Only those who have earned \$5,000 or more can be considered. All answers, which should contain details as to experience and references will be kept in strictest confidence. Address, Box 4794, care Paper Trade Journal. F-23.

HELP WANTED

WANTED—Superintendent for 2-machine Mill making Book and Bond Paper. Practical experienced man wanted. In reply, enclose references, state experience. Must have ability and character. Address, Box 4808, care Paper Trade Journal. F-23

EXPERIENCED PAPER SALESMAN to take charge of Sales or Mill making Coated Boards, Paper and Specialties. Mill located in Chicago. Exceptional opportunity to right party. State experience and reference. Address, Box 4810, care Paper Trade Journal. F-9

WANTED—Machine Tender for back tender 86" Machine. Kraft, two Tours, 57 cents and 43 cents. References required. Address, Box 4811, care Paper Trade Journal. F-16

WANTED—First Class Binders Board Finisher, one who can handle help and take care of fifteen to eighteen tons of Binders Board per twenty-four hours. Sober, married preferred. Otter River Board Company, Otter River, Massachusetts. F-9

MILLWRIGHT WANTED—Must be capable to do all repairing in Paper Mills and Roofing Plant. There is a good future for a man who is willing to work. Address, Box 4814, care Paper Trade Journal. F-9

PULP SALESMAN

Wood pulp importers have opening for high grade salesman. Must have thorough knowledge of foreign and domestic pulps and understand the requirements of the paper manufacturers. Previous pulp sales experience of utmost importance. This is a real opportunity for a live wire. Write fully stating qualifications. Replies in strictest confidence. Address, Box 4812, care Paper Trade Journal. F-9

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EXPERIENCED, LIVE SALESPERSON SELLING COARSE AND FINE PAPERS. UNUSUAL OPPORTUNITY, ESPECIALLY TO THE MAN OR WOMAN WHO NOW HAS A GOOD CONNECTION. CALL OR WRITE AT ONCE. LOEB, ALLMAYER & REDLICH, 83 CROSBY ST., NEW YORK. F-9

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SUPERINTENDENT—Open for position; 20 years experience. Practical paper maker on Bonds, Writings, Ledgers, Waxing and book. Will go to Canada or any Foreign Country. Address, Box 4737, care Paper Trade Journal. M-2

SULPHITE SUPERINTENDENT, 20 years' practical and some technical training, wishes to get in touch with managers of mills who want the best and are not getting it. Address, Box 4744, care Paper Trade Journal. F-24

SITUATION WANTED—Sulphite Superintendent with twenty years of experience. Five years as Wright Superintendent. Have specialized in Cooking and Acid making. Best of references. Address, Box 4773, care Paper Trade Journal. F-9

SITUATIONS WANTED

A-1 ALL AROUND MECHANIC—Wishes to make change. Twenty years' experience in Pulp and Paper Mills. Satisfactory work guaranteed. Employers interested in mine. References. Address, Box 4760, care Paper Trade Journal. M-2

BOSS MACHINE TENDER desires change. Eight years' experience large and fast machines, all grades, News, Book, Kraft, Specialties. Married. Best references. Can produce the goods. If your mill needs new blood answer this advertisement. Address, Box 4762, care Paper Trade Journal. F-9

SITUATION WANTED—Mechanical Engineer, 31 years old, who has had four years' engineering experience in Sulphite Mill, would like position with Paper and Pulp Importer or Mill. Moderate salary. Address, Box 4764, care Paper Trade Journal. F-9

MARRIED MAN desires position as Sulphite Cook. Has had several years' experience in acid making and cooking sulphite. Can give best of references. Address, Box 4822, care Paper Trade Journal. F-23

MASTER MECHANIC—Desires position. Twenty years' experience in Mills of all grades of Paper and Pulp; also on Steam, Water and Electric Power. Best references. Address, Box 4765, care Paper Trade Journal. F-9

PAPER SALESMAN in New York City who can produce a large volume of business with adequate co-operation, desires connection. Drawing account on Commission basis. Correspondence invited. Address, Box 4635, care Paper Trade Journal. tf

MILL EXECUTIVE—Now employed, is desirous of making change. Years of experience in Paper Manufacturing. Capable of taking over full management of business. Expert in Sales, Purchasing, Cost Accounting and Office Supervision. Best of References. Address, Box 4778, care Paper Trade Journal. F-9

PAPER SALESMAN—Wishing to handle a line of Book, Super and Coated Papers, is seeking connections with a concern that has a warehouse in New York City. Address, Box 4776, care Paper Trade Journal. F-9

SUPERINTENDENT—Thirty years of age and married, desires position in either Blotting or Specialty Mill. Can get results, and knows quality and production. Good references. Address, Box 4788, care Paper Trade Journal. F-16

SITUATION WANTED—By first class Machine Tender. Twenty years' experience in all grades of Box Board. Used to running Big Machines. Steady, Reliable. Address, Box 4789, care Paper Trade Journal. F-9

PLANT ENGINEER—Technically trained Mechanical Engineer with seven years' practical experience on Construction and Mill Maintenance wishes connection with parties desiring man who will show results. Thoroughly familiar with all Pulp and Paper Making Equipment. Address, Box 4782, care Paper Trade Journal. F-9

WANTED POSITION—As superintendent. Twenty-one years' experience; used to Specialties, Colors and Wrapping, all grades of Boards and Fibres. Knows how to handle help. Can keep up repairs. Used to Fourdrinier and Cylinder Machines. Address, Box 4786, care Paper Trade Journal. tf

TECHNICAL GRADUATE—Desires position of responsibility with professional concern. Fifteen years' varied experience in Pulp and Paper Industry, including Technical Control research, operating and engineering duties. Thoroughly practical and reliable man. Excellent references. Address, Box 4787, care Paper Trade Journal. F-16

NEWSPRINT MILLS—We are equipped to represent you in New York and adjacent territory. Have a well organized and aggressive sales force with practical experience. Can assure you steady volume of business. Will finance all orders. Highest references furnished. Address, Box 4797, care Paper Trade Journal. F-9

SUPERINTENDENT open for offer. Up-to-date on Greaseproof and Glassine. Colored Specialties, Book, Bond, Fibres and Manila. Address, Box 4798, care Paper Trade Journal. F-9

SITUATIONS WANTED

POSITION WANTED—By first class Boss Beaterman. An up-to-date Color man, accustomed to nearly all grades. Best of references. E. L. Davis, care Martin House, Whippany, N. J. F-16

SITUATION WANTED—Paper salesman with 15 years' experience in selling all grades of Papers both to Exporters and Jobbers. At present employed, desires a Mill Connection or with first class jobbers, can produce a large amount of business with right kind of cooperation. Can furnish best of references. Address, Box 4801, care Paper Trade Journal. F-9

SUPERINTENDENT open for position. Familiar with Tag, Card, Colored specialties and Wrapping. Best of references. Address, Box 4802, care Paper Trade Journal. F-16

YOUNG MAN—College educated, with practical experience in manufacture of sulphate, soda and sulphite pulp, wishes to connect with progressive concern. Best references. Address, Box 4803, care Paper Trade Journal. F-23

YOUNG MAN desires to represent Paper Manufacturer in New York City. Employed by prominent Paper Export House. Excellent knowledge of Paper Trade, all phases of Traffic, Accounting, Import, Export and Cable Correspondent. Salary arrangement desired. Address, Box 4804, care Paper Trade Journal. F-9

MASTER MECHANIC with 20 years experience desires position. Good record in construction and maintenance in pulp and paper mills in United States and Canada. Best of references. Address, Box 4806, care Paper Trade Journal. F-16

SITUATION WANTED—Engineering draftsman, technical graduate, 12 years' experience, Pulp and Paper Mills, Power House and Hydro-Electric Design. Thoroughly practical and reliable. Address, Box 4815, care Paper Trade Journal. TF

COTTON LINTERS—Experienced Pulp Mill man who has process of cooking Cotton Linters, whereby two-thirds of chemicals can be economically recovered, wishes to connect with reliable concern. Address, Box 4816, care Paper Trade Journal. F-16

KRAFT PULP—Experienced sulphate mill superintendent, 10 years' successful experience on all bleached and unbleached kraft wishes to connect with mill desiring maximum production. Is willing to guarantee a full output per unit. Address, Box 4818, care Paper Trade Journal. F-16

WANTED POSITION—Superintendent open for a position. Have had fifteen years' experience on all grades of Box Boards, Tests, Containers, etc. Familiar with repairs, maintenance, and knows how to handle men. Address, Box 4818, care Paper Trade Journal. F-9

SPECIALIST—In Covers and Specialties. Thirty-one years of age and married. Thirteen years' experience in manufacturing, advertising and selling above. At present, sales manager of specialty mill, wants to change at once. Address, Box 4819, care Paper Trade Journal. F-9

MANAGER OF WOODS DEPARTMENTS, desires position with Paper Firm as Wood Buyer and Woods Manager. Fourteen years' experience. Address, Box 4820, care Paper Trade Journal. F-9

WANTED POSITION as superintendent used to making all Wrapping, Chip and Box Boards and Building Papers, also Filter Paper. Used to cylinder, fourdrinier and Harper machines. Knows how to handle help. 22 years' experience. Can furnish good references. Address, Box 4821, care Paper Trade Journal. F-23

YOUNG MAN—College education with Mill and Jobbing experience in Fine Paper Trade wants selling connection with Jobbing House, Mill Agency or Sales Representative in Middle West. Address, Box 4711, care Paper Trade Journal. F-16

FOR SALE

COAL—Moshannon and "E Seam" bituminous coals, low sulphur, low ash. Lowest freight rate east and north. Prices and freight rates will be furnished on request. Halden-Kelley Coal Company, 209 Market St., Clearfield, Pa. tf.

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FOR SALE—Roofing and Saturating Machines, 72"x36" wide. Chilled steel rolls. Also Painter Mixing Machine, Grinders, etc. Address Box 4310, care Paper Trade Journal. tf

FOR SALE—14 Calender Rolls, 88" face, 8" to 14" diameter. 2 No. 1 Claffin Engines. 1 small Jordan Engine. 1 6" Horizontal Water Pump. 2 Air Fans. Complete triple-deck frames for 44 Dryers. Will arrange terms to suit. Chesapeake Paper Board Co., Baltimore, Maryland. tf

FOR SALE—70 to 100 narrow gauge industrial cars used in handling 4 ft. wood. Due to changes have no further use for this equipment. The right thing to use in handling wood from saw mills, etc. Mt. Tom Sulphite Pulp Co. Mt. Tom, Mass. F-9

BOX BOARD MILL FOR SALE—This mill is new, 50 Tons production per day. Located in central part of New York State. Can be bought right. Address, Box 4714, care Paper Trade Journal. tf

FOR SALE: DRYERS—8-60"x120" Dryers with bearings. A bargain. W. V. Sullivan, Call Bldg., San Francisco. tf

SHERIFF'S SALE—Under and by virtue of a Writ of Execution issued out of the District Court of the District of Thunder Bay under THE WOODMEN'S LIEN FOR WAGES ACT against the Kaministiquia Pulp and Paper Company, Limited, Defendant, at the suit of E. J. Bawlf and Bawlf Cartage, Limited, Plaintiffs, I have seized and will offer for sale by public auction at my office in the Court House, in the City of Port Arthur, in the Province of Ontario, on Wednesday, the 22nd day of February, A. D. 1922, at 11 o'clock in the forenoon, four thousand nine hundred and eighty-two and 12/128 (4.982 and 12/128) cords of pulpwood now on and about the Defendant's Premises in the said City of Port Arthur. The Wood will be offered en bloc for a lump sum in cash; the Purchaser to take the wood as it is and the shortage (if any) to be borne by him. Alexander W. Thompson, Sheriff, District of Thunder Bay. F-16

MACHINERY FOR SALE—One Kidder Rotary Two Color Press, 24 x 36. Never used. Address, Box 4800, care Paper Trade Journal. F-9

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Reels—Pusey & Jones two drum upright 48" to 114".
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FOR SALE—Any part of a Carload Lubricating Yarn and Fibre Grease for Dryers or Beaters, etc. Goods made by responsible Manufacturer. Address, Box 4790, care Paper Trade Journal. F-9

FOR SALE—Two beater 48" x 48" 1,000 lbs. with lighter and valve complete. Belt driven pulley, 72" diameter. 16" face in A-No. 1 working condition. National Asbestos Mfg. Co., 163-193 Henderson St., Jersey City, N. J. F-9

FOR SALE—Paper machine reel 110" Face. Heavy pattern revolving reel for 4 drums. Marinette & Menominee Paper Co., Marinette, Wisconsin. tf

FOR SALE—One rag cutter 18" x 9". Tight and loose pulley. Ventilation and fan complete. National Asbestos Mfg. Co., 163-193 Henderson St., Jersey City, N. J. F-9

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PULP WANTED—Will pay cash for any quality Foreign Pulps on spot and to arrive. Send particulars with price. Address, Box 4832, care Paper Trade Journal. tf

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SWIFT, GEORGE W., JR., Designer and Manufacturer of Special Machinery for Manufacturing and Printing Paper Goods, Bordentown, N. J. 1-1-24

WANTED—To buy all Tissue Culls for drop shipment, direct from Manufacturer. Address, P. O. Box 871, Norfolk, Va. M-2

MILL AGENCY WANTED—Established Jobber with outlet for tonnage in Bond and Book Papers desires Mill Agency for Metropolitan District. Address, Box 4780, care Paper Trade Journal. F-16

WANTED—One nine roll 72" supercalender including electric drive. If not electric driven advice type of drive. Also advise make of stack and drive and if they can be seen in operation. Address, Lakeview Paper Co., Appleton, Wisconsin. F-9

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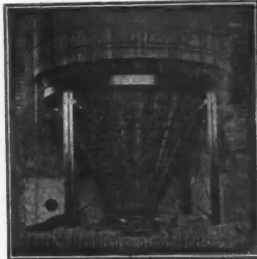
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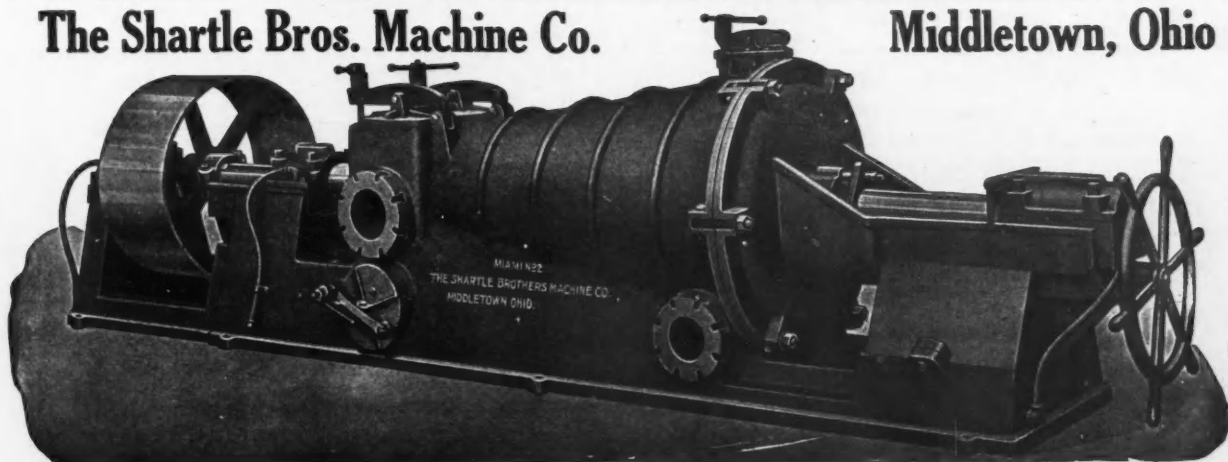
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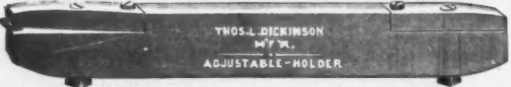
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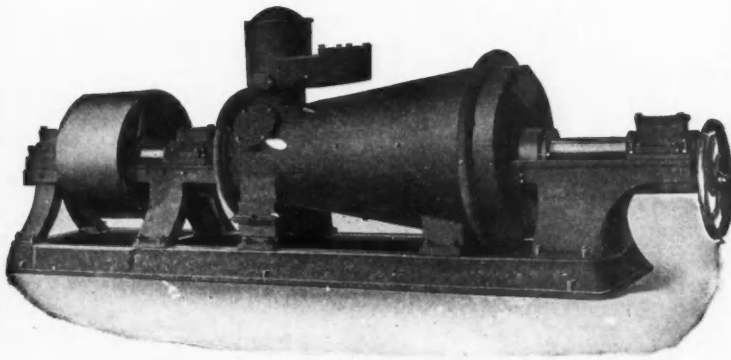
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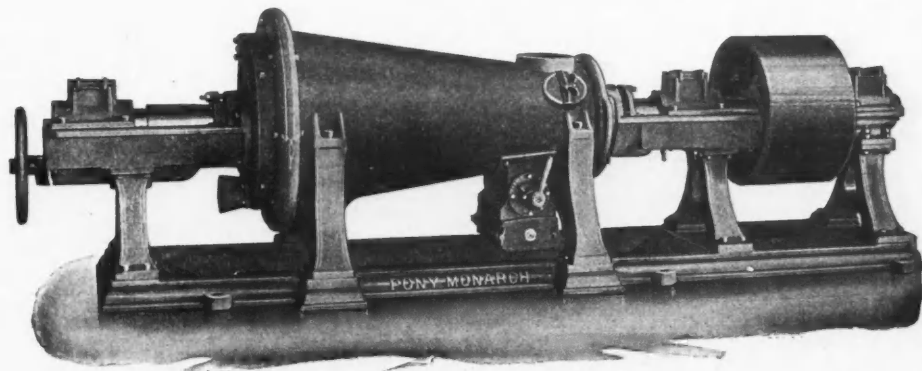
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George E. Hardy. 72	Hoggsen & Pettis Mfg. Co. 2	Bolton & Son, J. W. 9
Herbert S. Kimball. 72	Independent Die Co., Inc. —	Machinery Co. of America. 75
Management Engineering and Development Co. 73	DIGESTERS.	LUBRICANTS.
H. B. Prather. 72	American Welding Co. 59	Vacuum Oil Co. —
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Thomas L. Tomlines & Son. 72	DRIVES, SILENT CHAIN.	Foreign Paper Mills, Inc. 3
Vitale & Rothery. 72	Morse Chain Co. 72	MILL COGS.
Joseph H. Wallace & Co. 72	DRYER EXHAUSTS.	N. P. Bowsher & Co. 80
ASBESTINE PULP.	The Nash Engineering Co. 53	MOTORS.
International Pulp Co. Front Cover	DRYING SYSTEMS.	B. F. Perkins & Son, Inc. 11
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BELTING.	Zaremba Company. —	McLauthlin & Co., G. T. —
Goodyear Tire & Rubber Co. —	FELTS AND JACKETS.	PAPER DEALERS.
R. D. Skinner & Co., Inc. —	Albany Felt Co. —	M. M. Elish & Co. 12
BOILERS.	Appleton Woolen Mills. 8	R. F. Hammond. Front Cover
Heine Boiler Co. 71	Draper Bros. Co. 74	Midwest Paper Co. 73
BRONZE CASTINGS.	Fitchburg Duck Mills. —	PAPER EXPORTERS.
Hyde Windlass Co. 13	F. C. Huyck & Son. 11	Hudson Trading Co. 2
BUCKETS (Elevator).	Knox Woolen Co. 3	Parsons Trading Co. Front Cover
Hendricks Mfg. Co. 10	Lockport Felt Co. 57	PAPER MANUFACTURERS.
CALENDAR ROLLS.	Orr Felt & Blanket Co. 59	Bayless Mfg. Co. 4
Farrel Foundry & Machine Co. 25	Shuler, Benninghofen Co. —	Becker Paper Corporation. —
Lobdell Car Wheel Co. 65	Waterbury Felt Co. 4	Brown Company. 5
Norwood Engineering Co. 67	Waterbury & Sons Co., H. 73	Collins Mfg. Co. 6
Perkins & Son, Inc., B. F. 11	FELT ROLLS.	Diamond State Fibre Co. Front Cover
Textile Finishing Machinery Co. —	Hill Clutch Co. —	Eastern Mfg. Co. 75
CARBON TOOLS.	Rodney Hunt Machine Co. 2	Eaton-Dikeman Co. 67
Thomas L. Dickinson. 74	FILTERING SYSTEMS.	Fort Howard Paper Co. 5
CASEIN.	Norwood Engineering Co. 67	Franklin Paper Co. —
Cascin Mfg. Co. 3	FLOOR COVERINGS.	Hammermill Paper Co. 6
CHAINS.	L. Sonneborn & Sons. 71	Hanna Paper Corporation. 6
Jeffrey Mfg. Co. —	FLOOR HARDENER (Concrete).	Howard Paper Co. 59
CHEMICALS, COLORS, ETC.	L. Sonneborn & Sons. 71	McLaurin-Jones Co. 29
Arnold, Hoffman & Co., Inc. 27	FOURDRINIER WIRES.	Missisquoi Pulp & Paper Co. 3
Du Pont de Nemours & Co. 13	Appleton Wire Works. 80	Mountain Mill Paper Co. 12
Heller & Merz Co. 13	Buchanan Bolt & Wire Co. 76	Poland Paper Co. —
Kuttruff, Pichhardt & Co. 70	Cable Excelsior Wire Mfg. Co. 80	Royal Card & Paper Co. —
Sandoz Chemical Works, Inc. 7	Cheney, Bigelow Wire Works. 78	Saint Regis Paper Company. 6
The White Tar Aniline Corporation. 4	Eastwood Wire Mfg. Co. 80	Sherman Paper Co. 74
C. K. Williams & Co. 80	Green Bay Wire Works. —	Stratford Paper Co. 73
CLAY.	Lindsey Wire Works. 79	Wausau Sulphate Fibre Co. 55
Atterbury Bros. Front Cover	Joseph O. O'Neill Wire Works. 79	West Virginia Pulp & Paper Co. 5
John W. Higman Co. 57	The W. S. Tyler Company. 79	
Paper Makers Chemical Co. 57	FURNACES (Automatic).	
Western Paper Makers Chemical Co. 57	Murnby Iron Works. 72	
Star Clay Company. 80	GAUGES (Calliper).	
COAL MINING.	Farrel Foundry & Machine Co. 25	
Empire Coal Mining Co. —		

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CLASSIFIED INDEX TO ADVERTISEMENTS

PAPER AND PULP MACHINERY.	Page	RAG CUTTERS.	Page	SULPHUR.	Page
Bagley & Sewell Co.	78	B. F. Perkins & Sons, Inc.	11	Texas Gulf Sulphur Co.	6
Baker Mfg. Co.	14	Taylor-Stiles & Co.	61	Union Sulphur Co.	74
Beloit Iron Works	33	REAM CUTTERS.	—	TANKS.	—
Bird Machine Co.	11	Geo. T. McLaughlin Co.	—	W. E. Caldwell Co.	9
Black-Clawson Co.	69	RECORDING INSTRUMENTS.	—	New England Tank & Tower Co.	71
Clark-Aiken Co.	78	Bristol Company	—	Stearns Lumber Co.	2
Frank H. Davis	25	REGISTERS.	—	G. Woodford Wood Tank Co.	—
Downingtown Mfg. Co.	53	Standard Register Co.	—	TIMBER ESTIMATES.	—
Farrel Foundry & Machine Co.	35	ROLL GRINDERS.	—	R. R. Bradley	72
Glens Falls Machine Works	10	Farrel Foundry & Machine Co.	25	P. T. Coolidge	72
Improved Machine Co.	71	ROBIN.	—	James W. Sewall	72
Sandy Hill Iron and Brass Co.	8	Hercules Powder Co.	70	TRANSMISSION MACHINERY.	—
Sharlie Bros. Machine Co.	7	ROBIN SIZE.	—	H. W. Caldwell & Sons Co.	65
Smith & Winchester Mfg. Co.	—	Arabol Mfg. Co.	79	Hill Clutch Co.	—
Waterville Iron Works	—	Paper Makers Chemical Co.	57	Reeves Pulley Co.	—
PAPER MILL AGENTS.	—	Western Paper Makers Chemical Co.	57	TURBINES.	—
Dillon & Barnes	74	ROTARY BLEACHING BOILERS.	—	S. Morgan Smith Co.	—
Melver, Dana T.	2	Biggs Boiler Works Co.	—	TURPENTINE.	—
Melby, E. C.	70	SAVE ALL.	—	Hercules Powder Co.	70
PAPER AND PULP MILL BROKERS.	—	Bird Machine Co.	33	TWINES.	—
Gibbs-Brower Co.	70	SATIN WHITE.	—	American Manufacturing Co.	42
PAPER STOCK.	—	Kalbfleisch Corporation	42	VALVES.	—
Atterbury Bros.	Front Cover	Paper Makers Chemical Co.	57	Crane Co.	80
Butterworth & Co., Inc., E.	73	Western Paper Makers Chemical Co.	57	Jenkins Bros.	65
Castle, Gotthel & Overton	79	SCALES (Paper).	—	VAPOR ABSORPTION SYSTEMS.	—
Gumbinsky Bros.	80	Fred Baker	—	J. O. Ross Engineering Co.	—
Hicks, Daniel M.	74	E. J. Cady & Co.	31	VENTILATING FANS.	—
Mendelson Bros. Paper Stock Co.	73	Foreign Paper Mills, Inc.	3	B. F. Perkins & Sons, Inc.	11
Penn Paper & Stock Co.	74	SCREENS.	—	Ross Engineering Co.	—
Salsman Bros. & Co.	73	Bird Machine Co.	33	VEGETABLE PARCHMENT PAPERS.	—
Train-Smith Co.	Front Cover	Central Mfg. Co.	21	Kalamazoo Vegetable Parchment Co.	55
PAPER TESTERS.	—	Wm. A. Hardy & Sons Co.	59	WAXED PAPERS.	—
Foreign Paper Mills, Inc.	3	Union Screen Plate Co.	77	Dragon Paper Mfg. Co.	7
B. F. Perkins & Son, Inc.	11	SHREDDERS (Pulp and Paper).	—	WOOD FLOUR.	—
PAPER TUBE MACHINERY.	—	Gruendler Patent Crusher & Pulverizer Co.	—	Union Wood Flour Co.	73
Dietz Machine Works	10	SKYLIGHTS.	—	WOOD PULP IMPORTERS.	—
Grisinger Machine Works	67	E. Van Noorden & Co.	79	American Wood Pulp Corp.	4
PAPER WAXING MACHINERY.	—	SLASHERS.	—	J. Anderson & Co.	4
Farrel Foundry & Machine Co.	25	Ryther & Pringle Co.	61	Ira L. Beebe & Co.	74
Potdevin Machine Co.	5	SLITTERS AND REWINDERS.	—	The Booregard Co., Inc.	—
PERFORATING MACHINES.	—	C. Benninghofen & Sons	74	M. Gottesman & Co.	—
Dietz Machine Works	10	Cameron Machine Works	74	Hammond, R. F.	Front Cover
PERFORATING METAL.	—	Dietz Machine Works	10	E. J. Keller	71
Harrington & King Perforating Co.	67	Samuel M. Langston Co.	74	Lagerloef Trading Co.	12
Hendrick Mfg. Co.	10	SPLICING TISSUE.	—	Mead Sales Co., The	—
Charles Mundt & Sons	10	Sergeant Co., E. M.	79	Nilsen, Rantoul & Co., Inc.	37
Manhattan Perforated Metal Co.	57	STARCH.	—	A. J. Pagel & Co., Inc.	21
PRESS ROLLS	—	Corn Products Refining Company	6	J. F. Patton & Co., Inc.	55
Hill Clutch Co.	—	STEAM SPECIALTIES.	—	Perkins-Goodwin Co.	37
Rodney Hunt Machine Co.	2	Crane Co.	80	Scandinavian-American Trading Co.	Front Cover
PULLEYS.	—	Open Coil Heater & Purifier Co.	—	WOOD ROLLS.	—
Menasha Wood Split Pulley Co.	—	STITCHING MACHINERY.	—	Rodney Hunt Machine Co.	2
PLUGS (Wood).	—	Saranac Machine Co.	—		
O. L. Bartlett	—	STUFF BOX COVERS	—		
PULP PROCESS.	—	Menasha Wood Split Pulley Co.	—		
Castle, Gotthel & Overton	8	SULPHITE BLEACHED AND UNBLEACHED.	—		
Fitchburg Process	—	J. Anderson & Co.	4		
PULP STONES.	—	The Booregard Co., Inc.	—		
International Pulp Stone Co.	Front Cover	Brown Company	5		
Lombard & Co.	2	Butterworth & Co., Inc., E.	73		
PUMPS.	—	Canadian Robert Dollar Co.	35		
Frederick Iron & Steel Co.	7	Craig-Becker Co., Inc.	55		
Hayton Pump & Blower Co.	—	Eastern Manufacturing Co.	75		
PUMPS (Vacuum).	—	Mead Sales Co., The	—		
The Nash Engineering Company	53	Parsons Pulp & Lumber Co.	67		
PRESSURE BULKERS.	—	Price & Pierce, Ltd.	Front Cover		
B. F. Perkins & Sons, Inc.	11	Pulp & Paper Trading Co.	4		

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