MEMBER OF THE A. B. C.

INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

ESTABLISHED IN 1872

NEW YORK AND CHICAGO, NOVEMBER 3, 1921 Vol. LXXIII. No. 18

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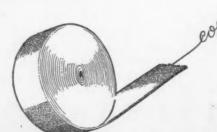
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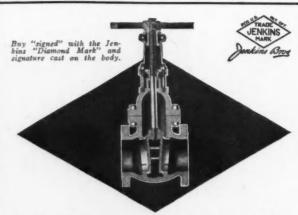


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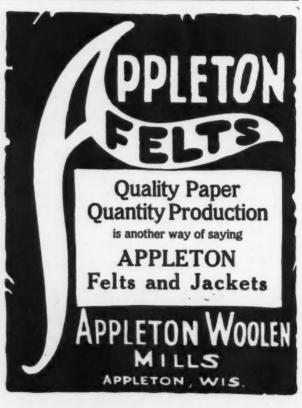
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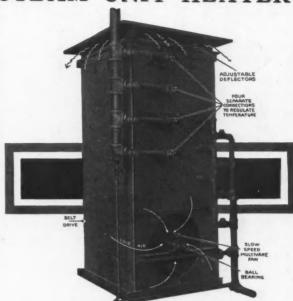
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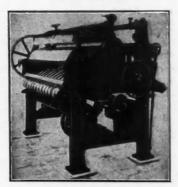
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PAPER

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

FIFTIETH YEAR

PUBLISHED EVERY THURSDAY BY THE

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LESLIE R. PALMER, President

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Vol. LXXIII. No. 18

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NEW YORK AND CHICAGO

Thursday, November 3, 1921

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PRODUCTION OF ALL PAPERS FOR THE MONTH OF SEPTEMBER

According to Statistics Just Issued by the Federal Trade Commission, Mill Stocks at the End of September of News Print Equaled Seven Days' Average Output, Mill Stocks of Book Paper Equaled Eleven Days' Average Output, Mill Stocks of Paper Board Equaled Nine Days' Average Output and Mills Stocks of Wrapping Paper Equaled Twenty-three Days' Average Output.

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., Nov. 2., 1921.—The attached tabulation is a summary of production, shipments and stocks of paper mills in the United States for the month of September, 1921, proposed by the Federal Trade Commission. This summary is compared with the month of September, 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 which causes duplication in the body of the tonnage tables 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

Tonnage Summary

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

Grade	of mills	Stock on hand 1st of month Net tons	Produc- tion Net tons	Ship- ments Net tons	Stock on hand end of month Net tons	
News Print (Standard at Special Grades of News)						
September, 1921 September, 1920 September, 1919 September, 1918 Average	81 74 63	27,128 24,711 25,584 21,673	98,898 121,005 111,434 95,670 112,925	95,785 121,123 118,687 97,020	30,241 24,593 18,331 20,323 23,763	
Standard News:						
September, 1921 September, 1920 September, 1919 September, 1918 Average	54 50	22,728 21,937 21,383 16,507	90,627 110,200 97,702 85,661 107,650	88,114 110,333 104,742 86,515	25,241 21,804 14,343 15,653 19,528	
Book (M. F., S. S. C as Coated:	nd					
September, 1921 September, 1920 September, 1919 September, 1918 Average	95 88	35,160 22,686 32,978 29,548	62,416 94,142 81,024 65,751 78,125	61,990 95,704 85,727 65,850	35,586 21,124 28,275 29,449 28,328	
Paper Board, tota, (Strate Fiber, Leather, Chip, etc.						
September, 1921 September, 1920 September, 1919 September, 1918	253 259 237	63,276 38,305 52,864 39,175	160,207 218,743 184,897 161,775 168,575	164,521 218,799 186,659 160,102	58,962 38,249 51,102 40,848 45,530	
Box Board:						
September, 1921 September, 1920 Average	152	32,160 17,368	120,898 160,044 112,600	121,271 159,952	31,787 17,460 19,303	
Wrapping (Kraft, Mani Fiber, etc.):	la,					
September, 1921. September, 1920. September, 1919. September, 1918. Average.	149	62,811 23,341 51,675 33,354	59,095 70,917 63,353 58,891 61,000	65,593 74,688 70,816 58,357	18,570 44,212	

Grade	Number of mills	Stock on hand 1st of month Net tons	Produc- tion Net tons	Ship- ments Net tons	Stock on hand end of month Net tens
Bag (All Kinds):				.,	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
September, 1921 September, 1920 September, 1919 September, 1918 Average	40 45 40	2,885 2,192 3,806 3,411	13,763 18,850 19,115 15,266 15,375	13,634 19,027 18,905 15,186	3,014 2,015 4,016 3,491 3,365
Fine (Writing, Bonds, Ledgers, etc.):					
September, 1921. September, 1920. September, 1919. September, 1918.	. 111 . 108 . 98	37,903 27,127 36,871 27,810	20,555 34,207 31,923 31,607 29,975	22,464 32,934 33,447 30,153	35,994 28,400 35,347 29,264 31,835
Tissue (Toilet, Crepe, Frui Wrappers, etc.):	it				
September, 1921 September, 1920 September, 1919. September, 1918 Average.	. 99 . 91 . 85	7,451 5,237 7,170 4,715	14,241 16,359 14,845 11,998 12,975	14,465 15,963 15,323 11,798	7,227 5,633 6,692 4,915 6,453
Hanging (No. 2 Blank, (meal, Tile, etc.)	at-				
September, 1921	. 25 . 22 . 20	9,668 1,510 6,549 2,648	5,482 10,124 7,869 5,996 7,325	4,933 10,254 8,864 6,346	10,217 1,380 5,554 2,298 3,296
Felts and Building (Roofing Sheathing, etc.):			.,		.,,
September, 1921 September, 1920 September, 1919 September, 1918 Average	. 53 . 52 . 49	8,954 11,119 6,851 8,729	27,130 31,430 31,158 22,394 25,425	28,306 31,794 30,018 22,775	7,991
Other Grades (Specialties no	ot				
Otherwise Classified):					
September, 1921 September, 1920 September, 1919 September, 1918 Average.	. 94 . 83 . 66	18,773 14,389 15,615 9,749	16,139 27,241 19,972 21,860 21,425	17,437 28,009 17,899 20,825	13,621 17,688 10,784
Total, of all Grades:					
September, 1921 September, 1920 September, 1919 September, 1918		274,009 170,617 239,963 180,812	477,926 643,018 565,590 491,208 533,125	489,128 648,295 586,345 488,412	165,340 219,208 183,608

for 1918, 1919 and 1920

The following stocks were reported on hand at terminal and delivery points on September 30 in addition to the mill stocks shown in the tabulation: News Print, 15 tons; Book Paper, 3,556 tons; Fine, 16 tons; Wrapping, 7 tons, and "Other Grades," 200

Stocks of News Print, Standard News, Book, Bag, and Hanging increased during the month. Stocks of all grades reported by manufacturers at the end of September amounted to 266,601 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 243,429 tons.

Ratio of Stocks to Average Production

Comparing the stocks on hand at the domestic mills on September 30 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 7 days' average output. Book paper mill stocks equal 11 days' average output. Paper board mill stocks equal 9 days' average output. Wrapping paper mill stock equal 23 days' average output. Bag paper mill stocks equal about 5 days' average output. Fine paper mill stocks equal 30 days' average output. Tissue paper mill stocks equal 14 days' average output. Hanging paper mill stocks equal 35 days' average output. Felts and building paper mill stocks equal 8 days' average output. Miscellaneous paper mill stocks equal 20 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 August, 1921, compared with August, 1920, as shown by the records of the Department of Commerce were as follows:

Imports:	Pounds,	1921 Value	Pounds	1920- Value
News Print. Book Paper. Wrapping Hanging All other grades (a)	148,422,772 10,971 980,620	\$6,707,612 4,782 40,187 21,493 249,403	147,026,095 182,400 541,418	\$7,236,614 34,038 58,126 31,788 270,084
Exports: News Print	2,521,145	\$144,784	8,809,248	\$688,663
Book Paper	1,991,070 2,116,299	205,838 80,471 135,968	5,770,615	911,485 404,106 523,413
Fine Tissue		44,089 146,519 88,973		157,696 492,990 214,045
All other grades (a)	*******	12,286 394,282	*******	102,773 863,212
Total Imports Total Exports		\$7,023,477 1,253,210		\$7,630,650 4,358,383

(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 \$6,707,612 for August, 1921, is imported from Canada. The value of the exports of News Print in August, 1921, amounted to \$144,784, which is about 2 per cent of the News Print imported.

Book Paper, News Print, Wrapping Paper, and Fine Paper were the principal grades exported, the combined value amounting to \$633,109 for August, 1921.

The value of the total imports of all grades was about 3 per cent more than for July, 1921. The value of the total exports for August, 1921, was \$3,105,173, less than the value of the exports for August, 1920, and \$5,770,267 less than the value of the imports for August, 1921.

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 mills which are closed down completely. The reasons tabulated for lost time are lack of orders and repairs. "Other

reasons" include lack of coal, lack of water power, etc. The time lost in September, 1920, is given by grades and reasons for purposes of comparison.

St. Regis Paper Co. Opens New York Office

[FROM OUR REGULAR CORRESPONDENT.]

Watertown, N. Y., October 31, 1921.—Raymond J. Parham, who for several years has been at the head of the sales department of the St. Regis Paper Company, has been placed in charge of the New York office of the combined St. Regis and Hanna Paper Corporation which is being opened in New York City. He expects to go to New York to reside as soon as the new office is opened in the Central Union Trust Company building at the corner of Madison Avenue and 42nd Street. President F. L. Carlisle of the new concern said that members of the two accounting departments will accompany Mr. Parham to the Metropolitan office. The office there will be opened some time next week, and the mechanical end of the sales work will also be located in the New York office.

The combining of the purchasing and the sales departments of these two large paper companies under one head through the purchase of the controlling stock of Mark A. and Carl H. Hanna by stockholders of the St. Regis Paper Company is said by President Carlisle to make necessary the opening of the New York office, heretofore this part of the work has been conducted through the offices of the two companies in this city. The combined output of the two companies makes it the third largest paper concern in the country. It involves a daily output of 400 tons of news print, 50 tons of shipping fibre containers, 100 tons of sulphite, and 40 tons of various kinds of wrapping paper.

Just what other members of the local organization will be sent to the New York office is not known as yet, nor is it announced what others may be brought into the employ of the office in New York

To Make Gummed Tape Paper

MILWAUKEE, Wis., November 1, 1921.—The Great Lakes Paper Products Company, 279 Park Street, has begun the manufacture of gummed tape paper.

*	Lack of Orders		Repairs		Other Reasons		Total	
Grade News Print:	1921	1920	1921	1920	1921	1920	1921	1920
Number of machines	2,334	0	1,111	7 344	13 2,099	919	31 5,544	16 1,263
Book Paper:								
Number of machines	155 23,836	43	351	17 450	3,369	19 714	183 27,556	1,207
Paperboard:								
Number of machines	117 25,934	4,236	31 2,664	5,895	19,825	16,002	228 48,423	158 26,133
Wrapping:								
Number of machines Total hours idle	11,455	76	2,592	4,536	3,803	7,173	113 17,850	90 11,785
Bag:								
Number of machines	1,245	0	265	159	1,489	3 186	26 2,999	345
Fine:				245	-			
Number of machines	112 21,906	18 731	863	2,815	12,492	1,725	35,261	5,271
Tissue:								
Number of machines Total hours idle	4,230	786	4,932	4,298	3,793	3,456	102 12,955	8,540
Hanging:								
Number of machines	2,337	0	. 0	581	330	601	2,667	682
Felts and Building:								
Number of machines	2,428	600	10 845	1,112	1,125	1,678	4,398	3,390
Other Grades:								
Number of machines	9,080	496	544	785	4,014	1,739	81 13,638	3,020
Total number of machines	579 104,785	6,968	132 14,167	243 20,975	280 52,339	235 34,193	991 171,291	522 62,136

CONTINENTAL PAPER MILLS PLANNING BIG EXPANSION

Issues \$2,000,000 in First Mortgage 71/2 Per Cent Sinking Fund Gold Bonds—Among Other Improvements It Is Said that the Erection of a New Paper Mill at Oconto Falls and the Installation of a New Paper Machine in the Park Mill at Marinette Are Contemplated—Swedish Minister to the United States Says America Is Wasting Timber in Middlewestern States.

[FROM OUR REGULAR CORRESPONDENT.]

APPLETON, Wis., November 1, 1921.—The Continental Paper and Bag Mills last week anounced the issuance of \$2,000,000 in first mortgage 7½ per cent sinking fund gold bonds for which the Marinette and Menominee Paper Company plant, the Falls Manufacturing Company and the Union Manufacturing Company plant will be pledged as security. It is said that the issuance of these bonds insures an immense expansion program in the western plants of the Continental Paper and Bag Mills.

It is reported that a new paper mill is to be built at Oconto Falls, the waterpower there is to be largely developed and a new paper machine is to be installed in the Park mills at Marinette. A new building is now being erected to house the new paper machine. Other extensive improvements, not yet ready for announcement, also are contemplated.

It also was announced that the Continental Paper and Bag Mills owns at least 500,000 cords of spruce and other pulp wood in the provinces of Quebec and Ontario, Canada.

After the new paper machine is installed in the Marinette and Menominee Paper Company plant that concern will have a daily capacity of 100 tons of fibre, kraft, bag, news and hanging papers. The raw material production will be 55 tons of sulphite and 40 tons of groundwood per day. Additional raw material required by the Marinette and Menominee Paper Company plant is supplied by the Falls Manufacturing Company at Oconto Falls. The Marinette and Menominee property, with the new machinery, is valued at more than \$2,000,000.

The Falls Manufacturing Company plant at Oconto Falls has a daily paper-making capacity of 30 tons and plans have been completed for the development of additional waterpower which will increase the paper capacity to 90 tons a day. The present output of raw material is 25 tons of sulphite pulp, 50 tons of sulphate pulp and 15 tons of groundwood daily. The Falls Manufacturing Company plant is appraised at approximately \$1,750,000.

Plans are perfected for increasing the hydro-electric power of the Union Manufacturing Company from 1,500 to 2,500 horsepower. The property is valued at about \$400,000.

Own Big Pulpwood Tracts

The Continental Western Realty Company, a subsidiary of the Continental Paper and Bag Mills, owns in fee 4,835 acres of pulpwood timber lands, 818 acres of cutover lands, 793 acres of timber and a half interest in fee of 1,880 acres of timber lands in Wisconsin and Michigan. The property is valued at more than \$350,000.

These properties have a total developed horsepower of in excess of 8,000 horsepower, and undeveloped waterpowers of approximately 6,000 horsepower.

The Continental Paper and Bag Mills, with a total daily output of 150 tons of paper bags and sacks, merchandise envelopes and paper specialties, over 250 tons of wrappings, specialties and tissue papers, and plants for the manufacture of sulphite, sulphate and groundwood, is one of the largest companies of its kind in the United States. The company operates mills at Rumford, Me.; Ashland, N. H.; Watertown, N. Y.; Greenwich, N. Y.; Brooklyn,

N. Y.; York Haven, Pa.; Oconto Falls, Marinette and Menominee. Through the Continental Wood Products Company, Limited, of Montreal, Canada, the Continental company owns approximately 50,000 acres of freehold timber lands in the provinces of Quebec and Ontario, estimated to contain at least 500,000 cords of spruce and other pulp woods.

The net earnings of the Continental company and subsidiaries for the 4½ years ended June 30, 1921, averaged in excess of \$825,000 a year, or five and one-half times the annual interest requirements of the bonds, and approximately three and one-quarter times the total annual interest and sinking fund requirements.

Wasting Timber Resources

Destruction of America's timber resources was decried by Axel F. Wallenberg, Swedish Minister to the United States, after a tour of Middle West states. Mr. Wallenberg spent several days in Wisconsin visiting paper mills.

"I have just completed a tour of Minnesota, Wisconsin and the upper peninsula of Michigan, and it made me ill to see the destruction of vast timber lands by fire," said Mr. Wallenberg, in Detroit recently. "Great stretches of timber land have been made barren. In Sweden we would do everything in our power to prevent that.

"We regard our lumber as money—capital and interest," Mr. Wallenberg said. "We never encroach upon the capital, but use only the interest. At all times we are making efforts to increase our capital, for if that is depleted our industry is gone."

Visit Whiting-Plover Plant

W. E. Brooks, chief papermaker, and Mr. Harrigan, production manager of the American Writing Paper Company, spent a day in the plant of the Whiting-Plover Paper Company, at Stevens Point, inspecting new equipment in the plant. It is said that some of the machinery in the Whiting-Power plant is superior to that in anyother mill of its kind.

To Manage Neenah Paper Co.

D. K. Brown, treasurer of the Neenah Paper Company since 1920, was elected general manager to succeed the late W. Z. Stuart, who died a few weeks ago. Mr. Brown became connected with the Kimberly-Clark Company in 1908, and went with the Neenah Paper Company when that company went under separate management in 1912. He was appointed assistant treasurer in 1919, treasurer in 1920, and treasurer and general manager in 1921.

Join Americanization Classes

Fifty-three employees in the Kimberly mill of the Kimberly-Clark Company have joined Americanization classes at Kimberly. The classes meet every Tuesday and Thursday mornings and evenings so that men from all the shifts can attend twice every week. The Kimberly mill council is making an effort to have all its foreign workmen take steps toward receiving American citizenship.

News Print Service Bureau Meets

The regular quarterly meeting of the News Print Service Bureau was held Friday, October 28, at the Hotel Commodore. There was a large and representative attendance both at the business meeting and at the 12.30 o'clock luncheon. After transacting the routine business of the meeting three very interesting and pertinent adresses were given. Magnus W. Alexander, managing editor of the National Industrial Conference Board, spoke on "Business and Industrial Conditions in Europe." Richard B. Gardner, assistant secretary of the Association of National Advertisers, addressed the meeting on the "Prospects for National Advertising in 1923." And last, D, C. Seitz, of the New York World, spoke on forestry and its great importance to the United States

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PAPER DEMAND IN TORONTO CONTINUES TO GROW BETTER

Jobbers State that October Has Been the Best Month this Year and They Are Looking for a Continued Improvement—Decided Improvement Also Has Been Noted in the Rag and Waste Paper Market—Considerably Better Demand for Boards With Prices Advancing—Tissue Mills Report Business Increasingly Good—Market for Wood Pulp Improving—Other News of the Trade.

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ont., November 1, 1921.—On Monday next the annual observance of Thanksgiving Day will be held in Canada and the paper trade will have a good deal to be thankful for. It has come through a period of general unsettlement with less loss and less disturbance than many other industries. The business all along the line is improving and this is particularly true in book, bond, writing and ledger papers. News print mills are also well employed. Jobbers report that October has been the best month so far this season and they are all looking for a good turnover from now until the end of the year. Price reductions seem to be a thing of the past and consumers are becoming convinced that values have touched bottom and are purchasing more freely, although big consignments are not yet to the front. The spirit of confidence is asserting itself, however, and things are on the mend although some branches of the trade such as manila wrapping and coated papers could stand a little more activity.

There has been a decided improvement in the rag and waste paper market during the past few weeks and prices have advanced on every line. Owing to renewed activity on the part of the mills there has been considerable buying and stocks of many kinds are rather scarce. The demand for new cotton cuttings and roofing rags is good with values ascending but as in waste paper, suplies seem to be low.

Board Prices Are in the Ascendancy

Paper box plants are quite busy at present and some of them are working overtime, which reminds one of the great rush over a year ago. The price of straw board, chip board and No. 3 jute board, which went up five dollars a ton last week, making the figure fifty-five dollars, is a sign of improvement in the business. Other lines of board remain at the same figure although the Canada Paper Board Company during the last few days advanced a number of the specialties from five to ten dollars.

Tissue Mills Are Kept on Move

Toilet and tissue mills are pretty busy at the present time and report orders for several weeks ahead. The new Harper-Four-drinier machine, 140-inch trim which was installed some time ago by the Interlake Tissue Mills at Merritton, is working satisfactorily and has resulted in increasing the capacity of the plant to twenty-five tons daily in tissues, light weight wrappings, white and colored drug wrap, fruit wrap, etc. Peter Rausch, who has been ten years with the company, has been appointed acting superintendent of the mill and W. J. Parks, former chief accountant, has been promoted to the post of acting mill manager.

Paper Trade Holds Weekly Luncheons

The Toronto members of the Canadian Paper Trade Association now hold luncheons every Tuesday at the Mossop hotel. There matters of general interest are talked over and the spirit of good fellowship cultivated. The meetings are proving of much profit and at the last session R. Earle Milligan, of the Seaman, Patrick Paper Company, Detroit, was the guest of honor. Mr. Milligan stated that he had never made a speech but invited the members to fire any questions at him which they liked and he

would do his best to answer. The result was one of the most instructive and pleasant gatherings yet held.

Coated Paper Industry Picks Up Slowly

Coated paper plants are getting busier although no great rush is reported as yet. P. L. Colbert, manager of the Valleyfield Coated Paper Mills, Valleyfield, Que., was in Toronto last week on a business trip and left for a visit to the Pacific Coast. It is understood that he will appoint a number of agents for the company in the western provinces where the demand for coated paper is rapidly increasing.

New Line Will Tap Pulpwood

Premier Drury turned the first sod on the extension of the Timiskaming and Northern Ontario Railway from Cochrane to James Bay and work will proceed with the addition. The new line will tap a country rich in pulpwood and water powers and will result in greater development of the timber and other resources of the North. Last year the Ontario government spent nearly six million dollars in the development of that portion of Ontario.

Finds Market for Pulp Improving

Hon. T. W. McGarry, of Toronto, President of the Whalen Pulp and Paper Mills, returned last week from Vancouver where he attended the annual meeting of the company. He says that things are going exceedingly well at the mills and he found that the market for pulp was improving.

Many Papermen Go Hunting for Game

The duck shooting and deer hunting season is at hand and many paper men are leaving this week to engage in their annual pastime. I. H. Weldon and S. F. Duncan, of the Provincial Paper Mills, Limited, Toronto, and N. L. Martin, Toronto, secretary of the Canadian Paper Trade Association are members of the Hartley Bay Hunt Club. They are on a moose hunting expedition in the French river district. Another party consisting of T. H. McDermott, of the Lincoln Paper Mills, Toronto; E. G. R. Clarke, of the Canadian Nashua Paper Company, Petersboro; Charles Martin, of National Paper Goods, Hamilton, and John T. Berhalter, of the Interlake Tissue Mills, Toronto, are duck shooting this week at Long Pointe on Lake Erie. Their headquarters are at Normandale.

Annual Revenue Shows Big Gain

It is expected that the annual revenue from the forests and Crown lands of Ontario will this year reach four million dollars which is double the amount of two years ago. The fiscal year of the government closes this week. The increase of one hundred per cent is mainly accounted for by reason of the raising of the dues on timber and pulpwood.

Plant at Dryden Is Busy

W. F. V. Atkinson, manager of the forestry and woods operation for the Dryden Pulp and Paper Company, Dryden, Ont., is spending a holiday in Toronto. He states that the company is now running nearly to capacity and has ample supply of pulpwood for the coming season. The kraft pulp mill is turning out about seventy tons daily and the paper mill about twenty tons of kraft sheathing and kraft wrapping papers. The financial statement of the operations of the company for the year ending October 1 will shortly be issued and it is stated the showing will be a most satisfactory one. The cash position of the company is reported to be very satisfactory.

Timber Dues Case Will Go to Court

The negotiations between the interests of Shevlin-Clarke, of Fort Frances, Ont., and the Ontario government looking to a

(Continued on page 22)

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BIDS AND SPECIFICATIONS FOR GOVERNMENT PAPER

Purchasing Officer of the Government Printing Office Receives
Bids for Various Lots of Paper at Interesting Prices—
Purchasing Officer of the Government Printing Office
Makes Awards for Paper on Which Bids Were Opened
Recently—Post Office Department Will Open Bids November 30 for Large Lot of Official Envelopes and Registered Package Jackets for the Postal Service.

[FROM OUR REGULAR CORRESPONDENT.]

Washington, D. C., November 2, 1921.—The Purchasing Officer of the Government Printing Office has received the following paper bids:

3,300 pounds light pink writing paper 28 x 34—No. 13; The Aetna Paper Company, \$.1625 per pound; R. P. Andrews Paper Company, \$.1865; Mathers-Lamm Paper Company, \$.2725; Dobler & Mudge, \$.195; the Whitaker Paper Company, \$.165; Rainbow Paper Corporation, \$.1365; Coy, Hunt & Co., \$.21; George W. Millar & Co., Inc., \$.176; Whiting Paper Company, \$.18; Whiting-Patterson Company, Inc., \$.21; Old Dominion Paper Company, \$.197.

3,600 pounds blue writing paper 21 x 32—No. 20: Coy, Hunt & Co., \$.134 per pound; Maurice O'Meara Company, \$.0975; D. L. Ward Company, \$.105; Virginia Paper Company, Inc., \$.109; George W. Millar & Co., Inc., \$.1195 and \$.1645; Whiting Paper Company, \$.14; Whiting-Patterson Company, Inc., \$.105; Old Dominion Paper Company, \$.1049; R. P. Andrews Paper Company \$.125; Whitaker Paper Company, \$.13; the Aetna Paper Company, \$.13; Dobler & Mudge, \$.09; Wilkinson Brothers & Co., Inc., \$.1165 and \$.1565.

620 sheets gray melton mount board 22 x 28—8 ply: National Card, Mat and Board Company, \$.0660 per pound; Whitaker Paper Company, \$.0566; Hurlock Brothers Company, Inc., \$.0625; Dobler & Mudge, \$.079; Old Dominion Paper Company \$.0679; R. P. Andrews Paper Company, \$.0725; George W. Millar & Co., Inc., \$.075; Samuel S. Alcorn, \$.08.

1,150 pounds yellow writing paper 17 x 28—No. 9: R. P. Andrews Paper Company, \$.33 per pound; Rainbow Paper Corporation, \$.1785; Whiting Paper Company, \$.18.

1,000 pounds white stereotype molding paper 19 x 24—50: Dobler & Mudge, \$.114 per pound; Old Dominion Paper Company, \$.1099; R. P. Andrews Paper Company, \$.105; Mathers-Lamm Paper Company, \$.1122; George W. Millar & Co., Inc., \$.155; Virginia Paper Company, Inc., \$.122; Whitaker Paper Company, \$.1158; Reese & Reese, \$.1075; Coy, Hunt & Co., \$.117; Wilkinson Brothers & Co., \$.111.

5,000 pounds 25 x 38—50 M. F. salmon printing paper: R. P. Andrews Paper Company, at \$.0885 per pound; Whitaker Paper Company, at \$.0889; George W. Millar & Co., Inc., at \$.8825; Dill & Collins Company, at \$.0765; Maurice O'Meara Company, at \$.079; and Wilkinson Brothers & Co., at \$.082.

3,700 pounds 24 x 38—74 rope manila paper: Dobler & Mudge, at \$.0975 per pound, and Maurice O'Meara Company, at \$.102.

The Purchasing Officer of the Government Printing Office will open bids on November 7 for 500 pounds of red stereotype moulding paper.

Printing Office Awards

The Canfield Paper Company has been awarded the contract by the Government Printing Office for furnishing 75,400 pounds (1,300 reams) of 38 x 48—58 opaque printing paper at \$.077 per pound, bids for which were opened on October 19.

Post Office Bids

The Post Office Department announces that it will open bids on by 160 feet. The paper machine is of 72-inch type.

November 30 for official envelopes and registered package jackets for the postal service. Bids will be received for the envelopes and jackets both for a six months' period beginning January 1, and for an 18 months' period beginning January 1. It is estimated that the department will need in the vicinity of 85,000,000 manila and craft envelopes for the six months, and approximately 4,000,000 registered package jackets for the six months' period. The quantity to be used in the 18 months' period is in proportion.

The Post Office Department has announced that it will open bids on November 22 for several million envelopes for the use of the Government departments for a period of six months beginning January 1.

The Dill & Collins Company has been awarded the contract by the Purchasing Officer of the Government Printing Office for furnishing 5,000 pounds (100 reams) of 25 x 38—50 of salmon M. F. printing paper at \$.0765 per pound.

The Mathers-Lamm Paper Company will furnish 3,700 pounds of 24 x 38—74 rope manila paper at \$.0975 per pound. Bids for these items were opened on October 26.

PAPER DEMAND IN TORONTO

(Continued from page 20)

settlement of the action of the government against the company for the payment of amounts claimed to be due on timber cut and not paid for in past years, have ended in failure. The matter will now be pressed in the courts as originally intended. It is said that the issue between the government and company was entirely one of amount. The company was prepared to admit that returns did not cover all the timber it had cut and was ready to pay for a certain amount, which, at the regular Crown dues, would have given the province somewhere around \$200,000, though no definite offer of settlement was made to the government. The claim of the government is much greater than this sum.

Notes and Jottings of the Trade

George H. Millen, President of the E. B. Eddy Company, Hull, Que., who last week celebrated his eighty-third birthday and has been identified with the company for some sixty years, was a recent visitor to the company's branch in Toronto and received a

Among the pulp and paper men visiting Toronto during the past week were: Percy B. Wilson, of Sault Ste. Marie, President of the Canadian Pulp and Paper Association; C. H. L. Jones, of Sault Ste. Marie, manager of the Spanish River Pulp and Paper Mills; George R. Gray, manager of woods operation for the same company; W. S. McClellan, of the Producers' Paper Company, Minneapolis; DeForest Coutts, of the Whiting Paper Company, Holyoke, Mass., and Mr. Falkenburg, Price Bros. & Company, Quebec.

Southern Cotton Paper Company To Build

[FROM OUR REGULAR CORRESPONDENT.]

CHATTANOGA, Tenn., Oct. 31, 1921.—Construction work began the last week in October on the new plant and paper mill of the Southern Cotton and Paper Company, at Chattanoga, and it is expected that the building will be completed and the machinery installed in time for the plant to start operations by the early part of next Spring. The initial capacity of the plant will be fifteen tons of paper daily.

The Southern Cotton and Paper Company was organized and incorporated recently to manufacture paper and paper pulp out of cotton linters, using a process discovered and patented by Mercer Reynolds, a well known Chattanooga business man who heads the company. The capital stock is \$200,000 and several business men of Chattanooga are reported to be financially interested in the enterprise.

The new plant will be a one-story building, occupying a site 60 by 160 feet. The paper machine is of 72-inch type.





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PAPER MILLS IN MICHIGAN **GROW INCREASINGLY BUSY**

Bryant Paper Co., Largest Book Mill in the Middle West, Starts Its Entire Plant at Maximum Capacity-Other Paper and Allied Concerns in Michigan Also Are Constantly Growing More Busy-Eddy Paper Co. to Vote on Changes in Capital and Other Important Changes at Its Annual Meeting to Be Held Nov. 9-Other News in the Michigan District.

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., October 31, 1921.—The Bryant Paper Company operating the largest book mill in the Middle West, starts its entire plant at maximum capacity this week. The tenth paper machine, one in the Bryant division, will be put in operation and the entire mill will be running 24 hours daily and giving employment to over 1.200 hands.

Two machines were started at the plant during the past two weeks. The last machine has been undergoing extensive repairs

and could not be started until this week.

The recent slack period has been improved by the Bryant company in doing a lot of work at the plant. The machine room of the Bryant division has been entirely rebuilt. Timbers put in place in 1895, when the initial unit of the plant was erected, were removed and replaced by reinforced concrete supports. A new cement floor and a new fire proof roof were added to the apartment, while the sidewalls were reinforced. This division is now

Sutherland Paper Co. Increasingly Busy

The Sutherland Paper Company has such a bulk of business on hand that it has been found necessary to operate the carton division 24 hours a day. The company is now advertising for skilled pressmen and other help in order to start at full capacity as soon as possible.

"Business is good with us," remarked L. W. Sutherland, president of the company, "in fact it has been for several months. Now it is improving rapidly. We have several very fine orders booked

and it is likely we will run steadily from now on."

When the Sutherland Paper Company abandoned its parchmentizing division it turned that building into added space for the carton plant, nearly doubling its capacity for the production of butter

Other Concerns Busy

Officials of the Cleveland-Cliffs company announce that the Munising Paper Company's plant, also the Cleveland-Cliffs saw mill, both located in Munising, started on Monday with a full force of employees. The paper mill has been down for two weeks and before that ran for months with a greatly reduced force. It is the intention now to have 350 to 400 hands working immediately. The saw mill has started to run double shifts, with a total of 160 hands. The Pioneer Chemical plant, at Marquette, employing 525 men, is also running again. It is a Cleveland-Cliffs unit.

The Escanaba Paper Company, maker of news, reports an unusually heavy trade during the past thirty days. Many customers were frightened at prospects of a railroad strike and ordered im-

mediate deliveries to stave off possible shortage.

Eddy Paper Co. To Meet

Changes in the authorized capital of the company and a change in the date of the annual meeting of stockholders and directors are matters to come at a special meeting of the stockholders of the Eddy Paper Company, called for Wednesday, November 9, at 10.30 o'clock in the morning, in the company's offices, Three Rivers.

It is desired to amend the by-laws to read so that the annual

meetings of stockholders and directors will be held on the third Wednesday in June, each year, also that special meetings can be called by the president, vice-president, or by a majority of the directors or by stockholders, holding at least one-third of the subscribed stock of this corporation.

The statement of authorized capital now reads: "The capital stock of the corporation hereby organized is the sum of \$15,000,000, of which \$12,000,000 shall be common stock, and \$3,000,000 shall be preferred stock. The number of shares into which capital stock is

divided is 1,500,000, of the par value of \$10 each."

If amended, the articles of association would read as above to the last clause, which is to be changed to: "The number of shares into which the capital stock is divided is 2,130,000 shares, of which 300,000 is preferred stock, of \$10 par value each and 1,130,000 shares of common stock, of the par value of \$10 each and 700,000 shares of no-par value stock.

"The value placed upon the no-par stock by the corporation for purpose of sale to the subscribers, shall be \$1.00 per share, provided that directors shall not have the right to sell any of said stock without first offering it pro-rata to the present common stockholders."

The notice of the meeting is signed by A. B. Thomas, secretary. If the above provisions prevail, present common stockholders will be entitled to purchase seven shares of no-par stock for each 11.3 shares on common stock now held.

In addition to the above outstanding securities, the company has also sold seven and a half per cent first mortgage bonds to the amount of \$1,250,000. Half the bonds must be retired before dividends will be available for the common stock. The Eddy Paper Company passed its last preferred stock dividend of 13/4 per cent for the third quarter of the ensuing year.

General News of the Trade

The Rex, Monarch and Bryant Paper companies united in donating the Central High School News with 1,500 pounds of paper, enough to print the 1921-22 edition complete.

Bailey Ayers Wright, of C. H. Wright & Co., has gone to Kansas City to attend conventions of the American Legion, also as delegate to the "Box Car" organization, a special division of the legion. He is an accredited "Box Car" delegate. From Kansas City he goes to Omaha to take in the National aero meetings.

Peter Roeland, employed at the King Paper Company's plant, recently uncovered a package of bond coupons, calling for interest on \$40,000 in bonds. After cashing coupons to the value of \$631.00, interest due, Mr. Roeland voluntarily handed back the money to the bank, also the uncashed coupons, the belief being expressed by officers that the bonds were stolen. Detectives are now tracing the bonds back to Lauderdale county, Miss., where they were issued.

Kalamazoo Vegetable Parchment Community workers are setting the stage for a monster Christmas party to be held in the community house now under construction in that thriving suburb. The gathering will be designed to serve a double purpose and it is the intention of the committees to make the affair one of the most elaborate and extensive of the kind ever held in Kalamazoo. None of the details are sufficiently completed to be announced as yet.

Terre Haute Paper Co. to Start New Machine

TERRE HAUTE, Ind., October 31, 1921.—Work is progressing rapidly on the erection of an additional paper machine at Mill No. 2 of the Terre Haute Paper company at Voorhees street and Prairieton avenue and when ready for service in November, the company contemplates operating the entire mill at full capacity and will employ 125 men. Mill No. 1, located at Nineteenth street and the Vandalia railroad, is already in operation and at present is employing 100 men.

J.Andersen & Co.

21 East 40th St., New York, N.Y.

A-1 Bleached Sulphite

Agents for KELLNER-PARTINGTON PAPER PULP CO. LTD. Borregaard, Norway

WAYAGAMACK

KRAFT PULP

Uniform in Quality
Essential for Strength Requirement

The Pulp and Paper Trading Company
21 East 40th St., New York, N. Y.

Sole Agents for United States for

CANADIAN KRAFT, Ltd.

Three Rivers, Canada

DEMAND IN PHILADELPHIA IS CONSTANTLY IMPROVING

While Conditions as Yet Are Not All That Could Be Desired
There Seems Every Probability That Normalcy Soon Will
Return—No Recessions in Prices Have Been Noted But
on the Other Hand There Have Been Slight Advances in
Some Varieties of Paper—Forestry Department of Pennsylvania Issues Interesting Report on the Wood Pulp Industry of the State—V. B. Schroff Enters Business.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, November 1, 1921.—In its issue of the official journal, "Business and Financial Conditions," the Federal Reserve Bank for the Philadelphia or Third District will say: "September is said to have been the last month of the year for the paper industry and substantial increases that have occurred in sales are proof of this statement. Local distributors report that October sales in all lines will equal, if not excel, those of September."

This diagnosis of conditions in the paper trade made by an authority peculiarly competent to secure inside information, particularly as these deal with finances and credits, confirms the statements made week by week in these columns regarding the experiences of both the fine and the wrapping paper distributors. It is admitted that the October business was not quite up to what the trade calls the standard of the month. October usually is the best month of the year, and although of this October the same may be said, applying, of course, to 1921, it must be remembered that this year has by no means equaled the average of its three or four immediate predecessors. But even though there has been a loss from that average, there is steady and continuous gain, and there is ahead every prospect of continued improvement and every probability that in a short time normal conditions will return.

Business Growing Better

The week's experiences were uneventful but entirely satisfying in that the promise of better things held forth by the week before was realized. Both branches of the trade reported a gain. In both prices have steadied themselves and there have been fractional advances. No recessions of any kind were reported and none are expected for this month. Some grades of No. 1 kraft were advanced a quarter cent, as also were the leading brands of drab express. A well-known book mill which, it is believed, is about to develop its business directly with the consumer and without the intervention of the jobber, declined during the week to give quotations, and it is anticipated that when they do appear, they will be advanced. Cheap writings strengthened in price during the week, and in one or two brands fractional advances were recorded. Box board prices were firmly maintained. The paper stock dealers report a slightly increased mill consumption of the better grades of stock, but not a sufficiently active market to advance prices. They tended, however, to become firmer. There continues to be a fairly good market for all kinds of commons and mixed papers and these frequently can be disposed of at the outside quotations. Out-oftown mills have sent in many inquiries and quite a few orders. This has, of course, tended to decrease the supply available for the local consumers, and since there is comparatively little waste being gathered up the market is cleaned up and the necessity for larger local supplies will mean that prices must be advanced.

Interesting Announcement to Be Made Soon

One of the largest of the local distributors shortly will make an announcement of tremendous trade interest and import. Rather sensational rumors have been put into circulation, but investigation

shows these to be unwarranted. A formal statement is in course of preparation and this will set forth the true conditions and the real reasons why one of the most interesting changes in the Philadelphia paper trade in the last decade or more is to be made. Announcement is withheld only because the final details have not been completed.

Pennsylvania Pulpwood Industry

Professor Joseph S. Illick, chief of the Research Bureau of the Pennsylvania State Department of Forestry, issued during the week a preliminary report on the wood pulp industry of the Commonwealth. He reports in the State thirteen pulp mills which last year consumed 489,211 cords of wood and thus attained the rank of fourth place in the pulp production of the United States, Maine, New York and Wisconsin exceeding. The total cord wood consumption for last year he reported as 6,114,072. He estimates that in Pennsylvania the pulp mill investment aggregates \$50,000,000, giving employment to 7,144 persons, paying salaries and wages of \$12,461,948, and producing pulp valued at more than \$60,000,000, 75 per cent of the raw materials being imported from other States. Four of the Pennsylvania mills thus imported all the cord wood used, while eight imported more than 75 per cent. Spruce, beech, birch, maple, pitch pine, poplar, gum, hemlock and sycamore were used.

Vernon B. Schroff Opens Office

Widespread interest is taken in the announcement that Vernon R. Schroff, for many years head of the book paper department of the Whiting-Patterson Company, retired during the week to enter business for himself. Mr. Schroff has taken an office at 920 Drexel building, where he will do a brokerage business in book papers, handling a number of important accounts. He is widely known in the trade. Before associating himself with the Whiting-Patterson Company he was connected with the Martin Cantine Company, the Charles H. Clinton Company and other organizations. Mr. Schroff will trade as the Read Paper Company.

Continental Paper and Bag Mills Move

In order to be more centrally located the Continental Paper and Bag Mills during the week removed their offices from the Land Title building, Broad and Chestnut streets, to room 374 The Bourse, Fifth and Market streets. Louis T. Condon is in charge. The company recently has been conducting an aggressive sales policy and has as a result been enjoying a very active business.

E. D. Epes Joins Ward Co.

E. D. Epes, until recently a member of the firm of the Epes-Fitzgerald Paper Company, Richmond, Va., during the week joined the sales service department, and as assistant to Thomas J. Cyrry, in charge, will give his undivided attention to sales promotion in the Baltimore, Washington, Richmond district, in which the Ward company has branch warehouses and offices. Mr. Epes was at headquarters during the week, developing a promotion campaign. His function will be to visit large paper consumers, pointing out the advantages of the brands which the Ward company carries and advising purchases through the regular printer or supply house. Mr. Epes's connection with the trade began a decade ago, when he entered the employ of the Richmond Paper Manufacturing Company, first as shipping clerk, but soon thereafter as salesman in the city of Richmond. After six years of service he established with T. H. Epes, a distant relative, and J. M. H. Fitzgerald the Epes-Fitzgerald Company, paper distributors, of which he was secretary and treasurer. He disposed of his interests in the firm on July 1, continuing on the sales force, however, until October 1, when he retired. During the week he entered the Ward organization. Frederick Balch, for a short period with the D. L. Ward

(Continued on page 28)

DO YOU KNOW

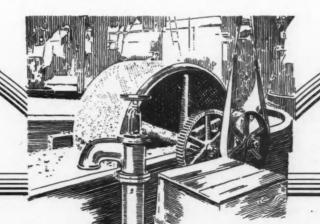
that the Bird Continuous Beater Attachment will reduce the number of beaters in operation usually by half?

BIRD MACHINE CO. South Walpole, Mass. U.S.A.

Western Representative

Canadian Builders of Bird Machinery,
Canadian Ingersoli-Rand Co., Ltd., 260 St.
Chicago, Ill.

Chicago, Ill.



CONTINUOUS BEATER ATTACHMENT

DEMAND IN PHILADELPHIA IS CONSTANTLY IMPROVING

(Continued from page 26)

Company, resigned during the week to take charge of the fine paper department of E. Latimer, Jr.

General News of the Trade

The Garrett-Buchanan Company sales organization was further increased during the past week. William Long, formerly of the Frank W. Farrell Company, Real Estate Trust Company building, joined it and was assigned to the specialty department. Preston S. Benner, better known as "Arch," left a joint sales arrangement with the Richards Company and the Whiting-Patterson Company to join the general sales force of the Garrett-Buchanan Company.

The recently organized social organization of the Whiting-Patterson Company has adopted the name The World's Cities Club, and during the week it conducted a masquerade dance in the company's headquarters, 13th and Wood streets, the desks being shoved to the side walls and a large dance floor thus provided. The room was decorated with paper festoons.

William A. Whiting, of the Sheldon School for Salesmanship, spoke of the Whiting-Patterson sales organization on Thursday morning of last week on "Business Building."

Edward Emigh, superintendent of the Amboy Paper Company plant at Bridgeport, Pa., was seriously scalded during the week while at work tightening a steam trap on a boiler when it blew out. His face and shoulder were scalded. His condition is not critical.

An award of \$5,000 damages against the Garrett-Buchanan Company was rendered during the week in the Camden Circuit Court in the suit brought by Dorothy Cline, 14 years old, for injuries received near her home at Lansdowne and Mount Ephraim avenues, by being struck on March 24, last, by a truck owned by the defendant company. An award of \$500 additional was made to the child's father. The child was walking on the sidewalk when the truck careened and struck her, causing injuries to the leg.

The new office of the New York and Pennsylvania Company, room 209 Lafayette building, 5th and Chestnut streets, formally was opened today. Quite a number of callers were entertained.

Directors of the Pennsylvania Salt Manufacturing Company were re-elected at the meeting of stockholders held during the week. At the subsequent meeting of the board of directors the officers of the company were unanimously re-elected.

Sparks from an emery wheel in the carpenter shop of the Barrett Manufacturing Company, 36th street and Gray's Ferry Road, caused a fire which threatened destruction of the plant, but which was extinguished, with loss of about \$10,000. The flames spread from the carpenter shop to an adjoining building in which roofing papers, just saturated, were stored and these burned fiercely.

W. Allen Lindsay, of Lindsay Brothers, during the week bested Harry G. Coladay in a stirring clay target duel in the clubshoot of the Quaker City Gun Club over the Maple Grove Traps. These were the stars. There were, however, thirty-four shooters.

President J. L. N. Smythe, of the company bearing his name, returned to the city last week from a visit to North Carolina, during the course of which he was guest at a "possum" hunt. Mr. Smythe didn't tree a "possum," but did come back with a scratched shin, caused by a misstep.

The Philadelphia Felt Company, Frankford, reports a decided improvement in paper mill demand for its products.

Harry G. Gaither, sales manager of the Garrett-Buchanan Company, has entered into the twenty-fifth lap of his services with the company, his twenty-fourth anniversary having been quietly celebrated on October 12. He is now the only Garrett-Buchanan Company employee at the time of his association with the company still in its employ. When he took a position with it, head-quarters were in the small buildings, 3 and 5 South Marshall street, now only a part of the company's shipping quarters. It

occupies today buildings which in the olden days successively were headquarters for the Whiting Paper Company, Irwin N. Megargee & Co., Riegel & Co., the Megargee Paper Company, Dill & Collins Company, Alexander Balfour, and the Megargee-Hare Company.

The office force of Sylvester S. Garrett, wrapping papers, 3rd and Spruce streets, have established their own cafeteria in the building. Warm lunches are served every work day noonday to the office force.

Chicago Situation Improving

[FROM OUR REGULAR CORRESPONDENT.]

CHICAGO, November 1, 1921.—The consensus of opinion in the paper trade circle during the week just past was to the effect that the month of October, has marked the begining of a new era of business for the industry. During the past month the jobbers and wholesalers say they did better business than they have done for several months. Paper buying began to shop a resumption during October, they say, and they expect that this better tendency will continue throughout November with possibly a more definite recovery and turning toward normalcy in the coming Spring.

The averting, if for only a temporary period, of the railroad strike, last week here, has added a great deal more confidence to members of the trade, and their outlook is much brighter. They are getting orders, and some of them say that their business is such that they have again returned to a place where they are forced to make rather indefinite promises concerning delivery.

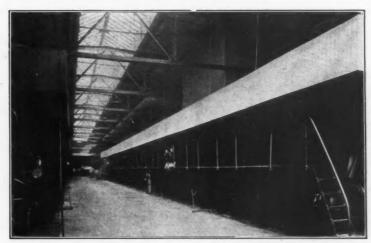
Beginning during the middle of September, the paper business' here has been showing better signs. Buying has been easier, and while orders have not been for large volumes, and the buyers are still governing purchases by their immediate requirements, there has been a greater feeling of better business and more prosperous times ahead, and this feeling has given a lot of faith in the future to the members of the Chicago trade.

Kraft wrappings showed a stiffer time during the past week. The \$10 advance in the price of this grade registered here last week by one of the larger houses, makes the second increase this paper has shown during the past two months. On September 1, an advance of \$10 a ton was made on Kraft wrappings and the recent increase like the first, is accredited to the greater demand evidenced lately, with low stocks predominating. It is said here that two houses put up their price almost simultaneously. One of these was a large dealer and the other was a smaller house. Other houses are expected to fall in line later. Kraft here now is selling from \$140 a ton up.

This is but a sign of the better market conditions which have been gradually making themselves evident during the past several weeks. Two or three weeks ago, several mill representatives here indicated that advances due to low stocks, increased raw material costs, and heavier demand, would shortly be effected. Some of the representatives were notified by their mills not to accept orders on a price before getting the latest prices from their mills. In one mill letter notifying its Chicago representative of the changing conditions prevailing, the mill said that its Chicago agent should handle orders very carefully, and at all times, until otherwise notified, confirm its price lists by wire to the mill before actually closing the sale

The dominating feeling here among members of the trade is that the late Fall and Winter months of this year will bring about a change for the better in the industry and that by next Spring the paper industry, especially in the middle western territory will again be showing some of its old time zest and vigor.

ROBERT GAIR'S LATEST



ROBERT GAIR CO., MONTVILLE, CONN.

PHOTOGRAPH SHOWS TWO MACHINE MILL FORMERLY KNOWN AS THAMES RIVER SPECIALTIES CO.

THESE TWO MACHINES WERE EQUIPPED WITH VAPOR ABSORPTION SYSTEMS. THIS YEAR THEY ADDED 14 DRYERS ON ONE MACHINE AND 26 DRYERS ON THE OTHER.

WE REMODELED THE VAPOR ABSORPTION SYSTEM TO TAKE CARE OF THE INCREASED OUTPUT. NEW DRYERS ARE IN FOREGROUND AND ADDITIONAL AIR DUCTS CAN BE SEEN IN TRUSSES. NO ADDITIONAL FANS WERE REQUIRED.

THIS MILL ALSO EQUIPPED WITH STURTEVANT SYSTEM IN BEATER ROOM.

OTHER GAIR MILLS EQUIPPED BY US AT PIERMONT, N. Y., AND HAVERHILL, MASS.

J. O. Ross Engineering Corporation

549 W. Washington St. Chicago, Ill. 30 E. 42nd St. New York City 79 Milk St. Boston, Mass.

OUTLOOK FOR PULP AND PAPER IS MUCH BRIGHTER IN CANADA

Improvement Has Been Reflected in a Marked Revival of Confidence on the Part of the Public Toward the Pulp and Paper Securities Listed on the Montreal Stock Exchange—Almost all the Pulp and Paper Shares, Led by the Laurentide, Have Advanced in Price and Many Think that a Definite Upward Movement Has Begun-Spanish River Mills Working Full Capacity.

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., October 31, 1921.—The outlook in the pulp and paper industry has been appreciably brighter during the past week and the effect has been noticed in a marked revival of confidence on the part of the public towards the pulp and paper securities listed on the Montreal Stock Exchange. Practically all the pulp and paper shares, let by Laurentide, have advanced in price and there are many who think that a definite upward movement has begun.

Spanish River Mills Working Full Capacity

Word has been received here to the effect that the plants of the Spanish River Pulp and Paper mills are now producing to their full capacity. Some weeks ago, the president, George H. Mead, in a statement made for publication, said that the mills were then operating between 80 and 90 per cent of capacity. This bears out recent reports of a notable change in the temperament of the market. Consumers are not reported to be more anxious to sign up for supplies than they were a short time ago.

The St. Maurice Paper Co.

H. W. Cressy has been appointed sales manager of the St. Maurice Paper Company, Montreal. Mr. Cressy was in charge of various departments in the Canadian Export Paper Company, Montreal, for four years, and he learned the paper business, in which he is well posted, with the Great Northern Paper Company, Millinocket. It is reported here that the reason why the St. Maurice Paper Company has signified its withdrawal from the Canadian Export Paper Company is that it has made a contract for all its output for a period of five years. This report is not authoritative and is given for what it is worth.

It is also reported that American consumers of Canadian news print are now more favorably disposed to talk contracts for the ensuing year than they were a few weeks ago. Cessation of operations by a number of mills which went into the news print line temporarily and the restriction of output by other mills have prevented a surplus and other factors have contributed to a stronger

tone in the news print market.

Mortality Among Newspapers

Some discussion is taking place in the papers here as to the number of publications which went out of existence during the period of high-priced paper. A statement has gone around the press to the effect that more than 4,000 publications went out of existence in the United States in the period and a corresponding number in Canada. Edward Beck, of the Canadian Pulp and Paper Association, in a letter to the Montreal Herald, says:

"I am curious to know just where the information to substantiate this statement can be obtained, since the best available records do not disclose any. The Canadian Newspaper Directory, issued by A. McKim, Limited, shows a total of 1,150 newspapers of all kinds published in Canada at the beginning of this year compared with 1,158 in 1920, a net loss of 8. The American Newspaper Annual and Directory, which covers both the United States and Canada,

shows a decrease of only 55 publications in both countries for the year 1920, which is a long distance from the "four thousand" stated by The Herald.

"Even if the enquiry is carried back to pre-war times it does not show anything like the figures given by The Herald as applying to a single year. Canada had 1,337 newspapers of all kinds in 1913 against 1,150 this year, or a reduction of 184, while taking the United States and Canada as a whole the figures show a net decrease of 2,495 publications, big and little. In 1920, 1,086 new publications were started in the two countries and this year has witnessed another large accession to the number, so that it is probable that within a year or two the pre-war figures will be equaled if not surpassed."

Dryden Pulp and Paper Position Improving

The annual financial report of the Dryden Pulp and Paper Company, covering the fiscal year ended October 1, last, will be in the hands of shareholders within a few weeks' time. It is understood that the report, while dealing with a period of general unsettlement in the industry, while the plants of the company were practically at a standstill, will be encouraging. The cash position of the company is said to be especially strong, while the working position will be shown as entirely satisfactory. Current assets will be well in excess of \$1,000,000. Since October 1, the company has been in receipt of some good orders for its products, which has resulted in capacity operations. The sulphate mill is now turning out 70 tons per day, while the kraft mill is producing 13 tons of paper, the board mill also being active. It is stated that orders received are sufficiently large to keep the plants running for some time to come.

Lumbering Improving

Lumbering in Northern Ontario and Quebec will be carried on during the coming Winter on a much larger scale than was india. cated two months ago. The cause of the revival is the big decrease in wages. Skilled workers are being employed for \$30.00 a month. This means that the lumbering companies will be able to cut, haul and drive logs to their mills for approximately forty per cent of the amount paid a year ago.

New Power Development

A contract for the construction work on the \$10,000,000 power. development scheme at Great Falls, on the Winnipeg River, sixty miles from Winnipeg by the Manitoba Power Company, Limited, has been awarded to Fraser, Brace & Co., contracting engineers, of Montreal. Development work is already under way, with about 200 men employed. Ultimately 1,000 to 2,500 men will be required to push work as rapidly as possible.

Standard Paper Co. Buys Seattle House

SEATTLE, Wash., October 27, 1921.—Purchase of the stock, fixtures and furnishings of the defunct Washington Paper Company at a receiver's sale is announced by officials of the Standard Paper Company of Tacoma. The former Seattle wholesale paper house will be operated as the Seattle branch of the Tacoma concern and will deal in standard paper manufactures.

The premises of the former Washington Paper Company are at 311 Occidental avenue and will be operated as in the past, the only change being in ownership and change of name. H. V. Davies, connected with the Standard Paper Company for several years in an executive capacity, will be manager of the Seattle branch. L. B. Cooper, formerly with the Washington Paper Company, will be sales manager for the Seattle house.

The Washington Paper Company was placed in the hands of Sol Friedenthal as receiver August 25 at the instance of the creditors. The Standard Paper Company had long sought an opening in the Seattle district, Manager Davies stated.

Established 1886

A Point of Honor

A CONTRACT with this company is more than a signed instrument—it is a guarantee that both the spirit and the letter of our agreements will be complied with.

IN a word, we believe that financial resources alone are not adequate; they must be backed by high moral responsibility and an intimate knowledge of all problems involved.

THIS business creed has been safeguarding the interests of our customers for more than thirty-five years.

M. GOTTESMAN & COMPANY

INCORPORATED

18 East 41st Street New York, N. Y.

BRANCHES AT

Holyoke, Mass. Kalamazoo, Mich.

MAINE SUPERINTENDENTS HOLD MEETING AT ORONO

Northeastern Division of the American Pulp and Paper Mill Superintendents' Association and Northeastern Division of the Cost Association of the Paper Industry Are Entertained at the University of Maine—Next Meet Is to Be Held at Rumford at Some Time to Be Announced Later—Resolutions Are Passed Endorsing the Snell Forestry Bill—Those Who Attended the Meeting.

[FROM BUR MEGULAR CORRESPONDENT.]

Orono, Me., October 29, 1921.—Twenty-eight superintendents and cost accountants of pulp and paper mills from various parts of New England gathered at the University of Maine Friday morning for an all-day joint meeting of the Northeastern Division of the Ameri-

passed strongly endorsing the Snell Forestry Bill, H. R. 15,327, and asking that every effort be directed towards its passage. The Snell Bill is designed to effect an adequate and continuous supply of timber for all uses.

Following is the resolution affecting the Snell Forestry Bill:

1. Whereas, the United States, during the last decade, has become more and more dependent upon foreign forests for its supply of pulp-making woods;

2. Whereas, an increased amount of our domestic wood is being used annually and no attempt, or at least, no organized effort, is at present being made to replace the growth cut:

 Whereas, the future and even the very existence of the pulp and paper industry is threatened by the rapid depletion of our forests;

4. Whereas, the Snell Forestry Bill, as introduced before the 66th Congress, provides for a definite forest policy which will effect an adequate and continuous supply of timber for our uses;

Therefore, be it resolved, that we, the Northeastern Division of the American Pulp and Paper Mill Superintendents' Association,



H. H. HACKETT, Eastern Mfg. Co.



F. P. HALL, Pejepscot Paper Co.



B. T. LARABEE, S. D. Warren Co.

ARTISTS' IMPRESSIONS OF PROMINENT MAINE MILL SUPERINTENDENTS

can Pulp and Paper Mill Superintendents' Association and the Northeastern Division of the Cost Association of the Paper Industry.

The Superintendents' Association was well represented, there being 24 of their number present, but only four cost accountants were present, one of whom was F. L. Bush, of Holyoke, Mass., president of the Cost Association. Mr. Bush gave the Cost Association address at the evening meeting in Aubert Hall.

tion address at the evening meeting in Aubert Hall.

Prof. Charles A. Brautlecht, head of the department of chemistry at the University and a member of the Superintendents' Association, was the chairman of the entertainment and program committee and acted as the host. In showing the visitors about the University campus and around the Orono and Great Works paper mills, he was assisted by members of his teaching staff and members of the association from Orono and Old Town.

Owing to the absence of many members of the Cost Association, the semi-annual business meeting of that group was omitted and the time was spent in viewing points of interest on the college campus.

Endorse Snell Forestry Bill

The business meeting of the Superintendents' Association was held, however, and a resolution was submitted and unanimously

go on record as approving the Snell Forestry Bill, H. R. 15,327, and ask that every effort be directed towards its passage.

Committees Appointed

The following served as the committee on resolutions: B. T. Larrabee, of the S. D. Warren Company Cumberland Mills; Oscar Ingalls and Fred P. Hall, of the Pejepscot Paper Company, Brunswick; C. F. True, of the Forest Paper Company, Yarmouth; William Foley, of the Nekonegan Paper Company, Old Town.

Hebron H. Hackett, of the Eastern Manufacturing Company, chairman of the Northeastern Division, appointed L. P. Parkman, of the S. D. Warren Company, Cumberland Mills; W. T. Libby, of the Dupont Company, Boston; and Oscar Ingalls, of the Pejepscot Paper Company, Brunswick, as the entertainment and program committee for the next meeting, with power to name the date and place. In short committee meeting, it was voted to hold the next meeting at Rumford Falls, in May, the time to be announced later.

Excellent Entertainment

Lunch was served in the Balentine Hall dining room at 1 o'clock, after which the visitors formed small groups and, guided by Orono(Continued on page 34)

"IMPCO" TAILING SCREENER

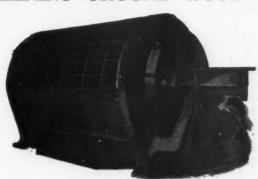
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SNOWHITE BLEACHED SULPHITE GLACIER EASY BLEACHING SULPHITE SWAN STRONG SULPHITE

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.

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

New York Trade Jottings

The National Wax and Paper Manufacturing Company, formerly located at 203 27th Street, Brooklyn, has moved its office to 140 Cedar Street, New York City.

C. P. Robinson, sales manager of The Borregaard Company, Inc., returned Monday from a western trip. Mr. Robinson reports that conditions in the west are picking up and that the feeling is decidedly optimistic.

The Ulster Tissue Mills, Inc., with offices at 45 Cedar Street and a plant at Nopanoch, Ulster County, N. Y., has assigned to Samuel C. Duberstein, of 63 Park Row. The firm was incorporated in 1916. L. L. Gilbert is President.

* * *

The Royce Paper Company formerly located at 388 Broadway, Brooklyn, has moved to larger quarters at the foot of the Williamsburg Bridge at 141 Broadway, Brooklyn. This move was made necessary by the continual increase of business handled by the company in the past two years.

H. F. Harrison, sales manager of the West Virginia Pulp and Paper Company, returned Monday from a business trip through some of the western States, bringing word that confidence reigns in that section that the next months will show a marked improvement in the paper industry.

A petition in bankruptcy was filed Monday against the Hamilton Paper Box Company, Inc., of 69 Greene Street, by these creditors—Louis Schulman, \$156; Charles W. Williams & Co., Inc., \$87; Box Board and Lining Company, \$501. It is stated that the liabilities are about \$12,000 and assets about \$3,000.

The Continental Paper and Bag Mills, 18 East 40th Street, New York, declared a quarterly dividend of one and one-half per cent. on the Common and Preferred Stock on October 26, 1921, payable November 15, 1921, to stockholders of record at the close of business on November 8, 1921.

H. H. Condit, 200 Fifth Avenue, in connection with his waxed paper products and carton accounts has recently been appointed sole selling agent in greater New York and New Jersey for the Eastern Paper Can and Tube Company, of Boston, Mass., manufacturer of plain and moisture-proof cylindrical cartons.

. . .

A protest of the Maurice O'Meara Company covering printing paper was last week sustained by the Board of United States General Appraisers. The paper was assessed at the rate of 25 per cent under Paragraph 332, while it was claimed it was entitled to free entry as provided in Paragraph 567 of the Act of 1913. As the importer proved by testimony that this paper was what is generally known as book paper, the protest is therefore sustained.

. . .

Among prominent paper men visiting New York last week are listed: Harry P. Gould, of the Gould Paper Company; Maurice Hoopes, of the Finch, Pruyn Company; C. A. Babcock, of the Wisconsin Paper Company; Percy R. Wilson, of the Spanish Pulp and Paper Mills, Ltd., Sault Saint Marie, Canada; G. B. Wardwell and E. B. Sterling, of the West End Paper Company, Carthage, N. Y.; George M. McKee and L. W. Michael, of the Donnacona Paper Company, Quebec; Louis Black, of the Crown Williamette Company, San Francisco, and A. B. Martin, president of the Pacific Mills, Ltd., San Francisco.

MAINE SUPERINTENDENTS MEET

(Continued from page 32)

residents, visited the mills of that town, Great Works and Old Town. The majority of the superintendents visited the mill of the Orono Pulp and Paper Company.

Following an excellent dinner which was served at 6.30 in Balentine Hall, entertainment was furnished by Al Johnson's student orchestra and Harry Belyea's quartet.

Sidney Osborne, a student at the University, entertained by drawing cartoons.

W. W. Cronkhite Speaks

At the evening session, W. W. Cronkhite, of Schenectady, N. Y., who is connected with the General Electric Company, gave a long and interesting lecture on Power in Pulp and Paper Mills, bringing out forcibly the part played by electrical engineers in the efficient operation of paper mills. Mr. Cronkhite illustrated his lecture with a series of stereopticon slides showing various types of electrical devices used in the paper industry. Mr. Cronkhite mentioned, in closing, the fact that many alumni of the University of Maine, who are now connected with pulp and paper mills throughout the country, are doing excellent work perfecting electrical devices used in paper plants.

F. L. Bush Speaks

F. L. Bush, representing the Coast Association, gave a short speech following Mr. Cronkhite's lengthy address in which he deplored the absence of Maine cost accountants and told in detail the work now being done by the national association in the standardizing of cost accounting. Mr. Bush emphasized the importance of efficient and accurate cost accounting, especially during the present period of depression, and urged the superintendents and the few accountants present to impress other Maine accountants with the importance of such an organization.

In formal discussion of the present industrial situation as it affects the paper industry, the consensus of opinion was that times are "looking up," and that the present depression is gradually drifting away. Most of the pulp mills have on hand at the present time an extra large supply of pulpwood, superintendents say, and consequently there will be little pulpwood cut this winter. But they believed that the usual amount will be cut next winter and that the demand will be the same.

Among Those Present

The following members of the two associations were registered: Hebron H. Hackett, of the Eastern Manufacturing Company, South Brewer; Prof. Charles A. Brautlecht and Prof. J. L. Merrill, University of Maine; G. H. Gleason, of the Nash Engineering Company, Newtonville, Mass.; Eugene Sullivan, Orono Pulp and Paper Company, Orono; J. J. Sullivan, Eastern Manufacturing Company, South Brewer; A. R. Larcher, of the Penobscot Chemical Fiber Company, Great Works; B. T. Larrabee, of the S. D. Warren Company, Cumberland Mills; W. W. Cronkhite, of the General Electric Company, Schenectady, N. Y.; F. L. Bush, of Holyoke, Mass.; L. P. Parkman, of the S. D. Warren Company, Cumberland Mills; J. A. Harlow, of the Penobscot Chemical Fiber Company, Great Works; W. V. Wentworth, Penobscot Chemical Fiber Company, Great Works; William Kane, of the Eastern Manufacturing Company, South Brewer; F. A. Sullivan, of the Orono Pulp and Paper Company, Orono; F. Kirk and Fred Shirley, of the Eastern Manufacturing Company, Lincoln; A. B. Pomeroy, R. R. Knott and J. Hobson, of the Eastern Manufacturing Company, South Brewer; P. B. Palmer, of the Orono Pulp and Paper Company, Orono; W. T. Libby, of the Dupont Company, Boston; H. H. Melcher, A. C. Cloudman and K. E. Terry, S. D. Warren Company, Cumberland Mills; E. Lucas, of the S. D. Warren Company, Gardner; K. R. Fox, of the Allan Electron Company, Portland, and William Foley, of the Nekonegan Paper Company, Old Town.





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Ohituary

Charles Cohn

[BOM OUR REGULAR CORRESPONDENT.]

CHICAGO, November 1, 1921.—Charles Cohn, president of the Lanzit Corrugated Box Company, 2039 South Morgan street, died Thursday, October 27, following an operation. Mr. Cohn had been ill only a week before his death. He had been chief executive of the Lanzit company since its inception nine years ago. He is survived by his widow and a daughter. The business of the company which he headed will be operated as it has been, with no change in the official personnel at the present time, it is said. M. Gidwitz, secretary and treasurer of the company and also one of its organizers, will assume full charge until a change is made to fill the vacancy left by the late president.

John Lauricelli

John Lauricelli, senior member of the firm of J. Lauricelli & Paino Bros., and member of the Metropolitan Bag and Paper Jobbers' Assn., Inc., with offices at 220 West 14th St., died suddenly at his residence, 1784 Stillwell Avenue, Brooklyn, early Sunday morning, October 16, from heart failure, aged 63. He had been ill and confined to his home for the past three months. He is survived by a widow, two sons and one daughter. He was born in Italy and came to this country when a boy, when he started in the paper and paper bag business on the lower East Side. The business will still be continued under the same name.

George E. Dudley [FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., October 31, 1921.—Word has been received in this city of the death at Dayton, Ohio, of George E. Dudley, formerly of this city. Mr. Dudley for 16 years was treasurer of the former Syms & Dudley Paper Company of this city, and at one time was paymaster for the Crocker Paper Company. When the local Syms & Dudley plant was sold another plant under the same name was built at Watervliet, Mich. Mr. Dudley was considered as one of the foremost men in the paper manufacturing industry and a keen financier.

Paper Makers Re-elect J. T. Carey as President

ALBANY, N. Y., November 1, 1921.—Jeremiah T. Carey of Albany, president of the International Brotherhood of Paper Makers for the last sixteen years, was re-elected for a two-year term, it was announced at brotherhood headquarters. Mr. Carey took a leading part in the recent strike of the brotherhood against the International Paper Company.

Other officers elected are: First vice-president, M. H. Parker, Richmond, Va.; second vice-president, Frank Barry, Albany; third vice-president, Frank McLeod, Espanola, Ont.; fourth vice-president, George J. Schneider, Appleton, Wis.; secretary, Matthew Burns, Kaukauna, Wis.; treasurer, Dominic McDermott, Bellows Falls, Vt.; auditor, Clinton Gagnon, Livermore Falls. Me.

No candidate for fifth and sixth vice-president received a majority vote, and a special election to fill these offices will be conducted between November 12 and November 28.

Two hundred and sixteen locals participated in the voting.

Buffalo Paper Stock Men Organize

Buffalo, N. Y., Oct. 31, 1921.—Buffalo dealers in Rags and Paper stock have formed an association as a part of the Buffalo Chamber of Commerce. The principal object of the association is to maintain a high standard of packing in rags and paper stock.

A booklet has been issued containing specifications for packing, also trade customs. This publication follows substantially the specifications and trade customs of the National Association of Waste Material Dealers, The Felt Makers' Association and the National Association of Writing Paper Manufacturers, besides providing rules to meet local conditions.

The association has also issued a circular to printers, stores, etc., asking for co-operation in the packing and handling of waste paper for the interest of all concerned.

The membership comprises the following: American Mill supply Company, Bison Waste Paper Company, Buffalo Waste Paper Company, M. Fox & Sons, Great Lakes Paper Stock Company, Nathan Kultz, Lavin & Rosenberg, S. Lichtman & Sons, The W. L. Loeser Company, Shapiro Sorenson Company, Mirza D. Short, Inc., D. Ullman Sons.

Business in Boston Less Active

[FROM OUR REGULAR CORRESPONDENT.]

BOSTON, Mass., November 3, 1921.—Trading in the Boston market took a decided slump this week—rather general in all lines. Once again the trade is "marking time," waiting for the last spurt of orders before the actual holiday season sets in.

The box business is especially quiet, prices remaining about the same, but very few orders being placed. Future business in the line, howevr, appears very bright.

One veteran buyer in the Hub expressed himself on the general situation as follows: "Once more we have a dull period with us—quite a change from the last of September, but this present quiet spell is a forerunner of another spurt. Things, however, will not be themselves again until some of the nation's weighty matters are decided. For instance, the settlement of the proposed railroad strike was a great load off our minds. Now if the disarmament conference is concluded amicably and the question of taxes is adjusted after the first of the year, the whole situation will take on a brighter aspect. All these things play a vital part. The business man wants to see many of these matters settled and until they are his mind will not be fully at rest."

Fine papers, including announcements, invitations and holiday material are in demand, also typewriting paper. Printers, however, are buying in small lots but more frequently.

News of the Holyoke Trade

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., October 31, 1921.—George A. Galliver, president of the American Writing Paper Company, has been elected one of the three vice-presidents of the Associated Industries of Massachusetts.

E. A. Carl, for the past four and one-half years head of the finance department of the Chemical Paper Manufacturing Company, has resigned, to take up similar work outside of the city.

John J. White, of the Whitmore Manufacturing Company, and J. B. Weis, of the Perfect Safety Paper Company, both of this city, have been appointed members of the emergency committee of this city by the Massachusetts Emergency committee.

Lawrence A. Dudley, advertising manager of the Hampshire Paper Company, of South Hadley Falls, was awarded first prize of the Direct Mail Advertising Association convention held in Springfield during the past week, for drafting the most unique program booklet.

About 75 delegates to the Direct Mail Advertising Association convention inspected the Linden and Gill divisions mills of the American Writing Paper Company here on Friday. Luncheon was served at the Nonotuck hotel and the laboratory of the company was then inspected.

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Roll Printing—1 and 2 Colors Sheeting and Rewinding.

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White Confectionery Bags, Glassine Bags

DRAGON PAPER MFG. CO., INC. 484 Van Alst Ave., Long Island City, N. Y.

GLASSINE BAGS

Editorial

Vol. LXXIII New York, November 3, 1921 No. 18
FIFTIETH YEAR

Conference Number Next Week

The annual fall conference of the American Paper and Pulp associations and the meetings of the affiliated organizations in the pulp and paper industry as well as the fall meeting of the National Paper Trade Association are taking place in Chicago as this edition of the Paper Trade Journal is being put to press. Because of the distance from the office of publication to the meetings it has been impossible to report the conference in this issue, but a full report will be printed in the Paper Trade Journal next week. Owing to the fact that timely notice was had that the railroad strike, scheduled for the early part of this month, was averted, a large attendance was expected to be present in Chicago during paper week and all of the meetings promised to be of unusual importance.

Outlook for Kirmer News Print

The Canadian Pulp and Paper Association has just sent an interesting statement to Mr. L. B. Palmer, manager of the American Newspaper Publishers' Association in reply to a statement regarding news print recently sent out by the chairmen of the Paper Committee of the A. N. P. A. The statement which follows in part should be carefully considered by the publishers as it may prevent them from repeating some serious mistakes in providing for their supplies of news print in the near future:

In discussing the reasonableness or otherwise of the present price of news print (other than that dependent for its cheapness on debased European exchange), Mr. E. P. Adler, chairman of the American Newspaper Publishers' Association Paper Committee, in Bulletin No. 4487, intimates that the paper manufacturers should themselves be willing to suffer whatever loss may be involved in writing off their inventories in order to conform to the current cost of raw materials and to bring news print down to the price at which, in Mr. Adler's opinion, it ought to be sold.

"It is true that some mills have on hand a large supply of highpriced wood and under contract some high-priced coal," he says, It seems to him, he adds, that "they must take their losses on those high-priced materials the same as other business institutions have had to do, in order to get back to normal."

Conceivably there might be some reason in Mr. Adler's contention if the news print manufacturers, or the great majority of them, had been permitted to conduct their business in their own way throughout the period of abnormal prices the same as the manufacturers of other commodities. Unhappily such was not the case. For the greater part of this period the price of news print in the United States and in Canada was under control—in the former country through the Federal Trade Commission and in the latter through the Government Paper Controller. In both countries price-fixing was prefaced by prolonged proceedings. In both the principal bone of contention was as to whether manufacturing costs and rate of return should be predicated upon the current cost of

investments and of raw materials or upon their actual cost at the time of purchase. It was in evidence that pulpwood had to be harvested from one to three years prior to its absorption in the manufacture of paper. It was shown that wood costs had advanced very materially since the wood under consideration had been gathered. The manufacturers contended for the right to take in their inventories at current market prices or replacement value. The newspaper publishers as strenuously opposed this view in favor of charging them in at their actual cost. The records are filled with page after page of evidence and arguments on this point.

The publishers introduced in both proceedings numerous "expert" witnesses in support of their views. "These witnesses," says Mr. Guthrie B. Plante, the American publishers' chief counsel, in summing up in his brief, "each and all repudiated the basing of returns upon inflated values obtained through appraisals upon the basis of replacement costs in periods of war or other great financial disturbance."

Mr. W. N. Tilley, K. C., the Canadian publishers' lawyer, in his brief, summarizes the manufacturers' contention thus: "The main argument advanced in support of the replacement theory was that if effect were not given to it the manufacturers would be left with large stocks of high cost wood at a time when the selling price of paper might be falling," whereupon he proceeds to show the "absurdity," as he characterizes it, of any such claim.

The publishers' views prevailed. The manufacturers, who foresaw the time when their position would be reversed, were denied the right to protect themselves against it. They were not allowed to increase their selling price with the rise in the cost of their raw materials or to prepare for the inevitable fall in prices which they knew must follow. They find themselves with high-cost inventories on hand which the publishers now coolly say should be liquidated at the manufacturers' sole expense. Naturally the manufacturers can't see it that way. The circumstances afford an additional illustration of the folly of interfering with the laws of trade. Had the publishers been willing to allow the paper manufacturers to adjust their selling price to the rising value of their raw materials, the manufacturers would now be in a position to adjust their selling price downward, to meet the publishers' demands. They didn't do it and no blame can now be attached to the manufacturers for seeking to incorporate the actual cost of their wood in the selling price of their paper as they were forced to do when it was to the consumers' interest.

It is also pertinent to point out that in assuming to advise newspaper publishers against entering into contracts for their next year's requirements of news print in the expectation of much lower prices the American Newspaper Publishers' Association Paper Committee is taking on a grave responsibility, since it is quite possible that their advice may turn out just as disastrously for the publishers as did similar advice tendered by the Paper Committee in 1917-18. That committee, it will be recalled, began in August, 1917, to instruct the publishers not to contract for the following year's paper at the then prevailing prices, arguing that lower prices were inevitable. In November, 1917, the Committee then, as now, reported an excess of news print in sight for the next year with greatly increased production certain. In a bulletin issued November 22 of that year they urged publishers to refrain from making contracts, and on December 13, repeated the advice still more in-

sistently and predicted that the "enormous surplus" then available "will operate to make a slump market in 1918." All through the early months of 1918 this advice was repeated and repeated until the early part of June when the Committee, suddenly reversing itself, issued a bulletin telling publishers to "buy paper heavily" and to maintain a six months' reserve supply whenever possible—advice that came too late to benefit those publishers who had heeded that given during the preceding six months' period.

Publishers would do well to read their old files of American Newspaper Publishers' Association "B" bulletins and to check up the predictions made therein with their own subsequent experience in buying paper. With no desire to cast discredit upon the judgment or good faith of the Paper Committee, it is doubtful if their advice in the present instance is any more sound than that given by the Committee in 1917-18. Publishers who follow it, without looking into conditions for themselves, may have as much cause for regret as did those who followed the old committee's advice three years ago. There were numerous newspaper publishers who disregarded the advice of their committee at that time and entered upon firm contracts at the then prevailing prices, very much to their subsequent peace of mind and financial profit. It is quite possible that their experience, too, may be repeated. The indications, despite all that is said to the contrary, are for a firmer news print market in the near future.

Empire State Forest Products Ass'n To Meet

Plans are maturing for the sixteenth annual meeting of the Empire State Forest Products' Association at the Hotel Utica, Utica, N. Y., on Thursday, November 10. The forenoon will be devoted to a business meeting which will include the customary reports of officers and standing committees and the election of a president, vice-president and six directors. The president has appointed the following to constitute a nominating committee. Nominations should be sent to the chairman of this Committee: Geo. W. Sisson, Chairman, Potsdam, N. Y.; W. C. Hull, Tipper Lake, N. Y.; Dr. J. E. Campbell, Dexter, N. Y.

The present Board of Directors consist of Ernest A. Sterling, chairman, W. L. Sykes, T. J. Wilber (deceased), W. C. Hull, E. J. West and Clarence L. Fisher.

The afternoon will be given over to a program of addresses and discussions. The general 'topic of "Forest Fire Protection" will be presented by Mr. Howard, the Assistant Superintendent of State Forests and Ferris J. Meigs will speak on "Standing Timber Insurance." There will be an exhibit of the Fairbanks, Morse gasoline fire pump; also various charts and other material bearing on fire protection.

Professor Spring, of Cornell University, will present some original data on "How the Forest comes Back after Cutting," and Professor Nelson Brown, who has recently returned to the College of Forestry at Syracuse, will speak on "Use of Tractors in Logging" presenting data which he has collected on the subject. This will be followed by a discussion in which prominent lumbermen will participate, including Messrs. Sisson, Sykes, Jacobs and Hull. There will be an exhibition in connection with this part of the program, of tractors, trucks and trailers, together with literature bearing on this subject. By special arrangement there will be exhibited also a new type of direct connected saw mill manufactured by the Richardson Scale Company, of Passaic, N. J.

The usual banquet will come at 7 o'clock in the evening and President Ostrander will be the toastmaster. The speaker of the evening is Ellis J. Staley, Conservation Commissioner of the State

of New York, who will speak on "Regulation of Cutting on Private Lands."

A large attendance is expected, as the meeting promises to be one of unusual interest to all concerned in the forests of New York State.

Buying Paper for Government Printing Office

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., November 2.-A conflict of authority has grown up between the Public Printer and General Dawes, director of the budget, in connection with the purchase of paper and other commodities by the Government Printing Office. General Dawes a short time ago issued a circular to the Government Departments in which he asked that their purchasing officers should co-ordinate with the officials of the budget office, in the purchase of Government supplies. On the other hand, the Public Printer purchases his supplies under the direct supervision of the Joint Congressional Committee on Printing. While the Joint Committee has taken no official action in the matter, it has inserted in the resolution which was passed at its meeting on Friday for the organization of the Paper Specifications Committee, a clause calling upon the Public Printer to purchase paper "as required by Section 2 of the Printing Act approved January 12, 1895." This males it virtually impossible for the Public Printer to purchase in conjunction with the Director of the Budget. The resolution which was passed by the Joint Committee on Friday calling for the appointment of the Paper Specifications Committee is as follows:

"Resolved, That a committee of one representative each of the Bureau of Chemistry, and the Bureau of Standards, two representatives of the Government Printing Office, of whom one shall be a paper expert, and the clerk and inspector of the Joint Committee be requested to prepare standard specifications and samples of paper which it deems suitable for the public printing and binding, having due regard for economy, and submit same, together with a proposal form and recommendations as to the standardizing, testing, and use of paper by the Government, to the Joint Committee on Printing on or before December 6, 1921, for its consideration in fixing upon standards of paper for the different descriptions of the public printing and binding for the term of six months or one year beginning March 1, 1922, as required by Section 3 of the Printing Act approved January 12, 1895."

New Members of T. A. P. P. I

New members of the Technical Association of the Pulp and Paper Industry, include the following whose applications have been approved by the Executive Committee since the last meeting: James G. Bullard, chemist, Crocker-McElwain Company, Hol-

yoke, Mass.

C. E. Curran, chemist, Forest Products Laboratory, Madison, Wis.

Gosta P. Genberg, chemist, Nekoosa-Edwards Paper Company, Fort Edwards, Wis.

Chester L. Higgins, engineer, Finch, Pruyn & Co., Glen Falls, N. Y.

John Kepke, Jr., sales engineer, S. K. F. Industries, New York, N. Y.

Alfred F. McCoy, chemist, Tidewater Paper Mills, Brooklyn, N. Y.

Newspapers Show Big Gain

Chicago, October, 31, 1921.—American newspapers have gained 100 per cent in circulation and the volume of advertising has increased proportionately within the last seven years, Stanley Claque, managing director of the Audit Bureau of Circulation, said today at the annual convention of the organization.

UTILIZATION OF OAT HULLS FOR STRAWBOARD AND PAPER PULP

By S. D. Wells, Engineer in Forest Products, Forest Products Laboratory, Madison, Wis.

In the preparation of oats for oat meal, rolled oats, and other cereal products it is necessary to remove the outer shell or hull. The meat or groat of the oat is then carried on to the next step. but the hull is largely a waste product, and it has only been found posible to utilize but a small part of the quantity available as roughage in prepared feeds and similar products. Large amounts have been used for fuel with rather unsatisfactory results. The tonnage of oat hulls that must be disposed of is considerable and has been estimated by persons acquainted with the situation to amount to over 1,500 tons daily. Of this amount certain mills contribute a very large portion, amounting in certain instances to over 200 tons daily. In considering means for the utilization of this material the paper industry offers a most promising outlet, especially when it is considered that the problem of collection has already been taken care of by the miller, and the Forest Products Laboratory undertook a series of paper-making studies on the material early in the year with the financial assistance of the Quaker Oats Company.

Raw Materials

The material worked on consisted of the oat hulls removed from the groat by a special milling process which has practically no grinding action. Some were obtained without any additional treatment, while a portion of the material was screened to remove dust, particles of the fine filaments from the groat, and other material obtained in the process. Screening the material is advisable on account of the food value of the fine material removed, its utter worthlessness for paper-making purposes, and the trouble occasioned in washing the cooked hulls later on in the process if much fine material is present.

Ground oat hulls were also tried, but found to be entirely unsuitable on account of the difficulty of obtaining uniform circulation of the cooking liquors during digestion and in the subsequent washing of the pulp.

Cooking Tests

Rotary autoclaves heated with burners were used in the preliminary cooks. The larger cooks, however, were made in the tumbling digester used for alkaline cooks, which has a capacity of

from 75 pounds to 100 pounds of oat hulls. The following cooking processes or liquors were used:

Lime-(60 per cent CaO-40 per cent MgO).

Lime-(over 95 per cent CaO).

Lime-sulphur.

"Sulphate"—(caustic soda and sodium sulphide).

Local Wisconsin lime was used for the first series of lime cooks, comprising cooks 1, 2, 4, 5, 6, 7, 8, 9, 10 and 11. This lime is "dolomitic" in character and contained two parts of magnesium oxide for every three parts of calcium oxide. The magnesium oxide present was believed to be inert, and a high calcium chemical lime, such as is used in causticizing and cooking rags or straw, was used for cooks 12, 13, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25 and 26. This lime tested over 98 per cent CaO and was found to be from 20 to 30 per cent more active than the Wisconsin lime.

The lime sulphur cook was suggested by the Drewsen patents and was made by using a mixture of quick lime and sulphur. The results were very unsatisfactory and the work was confined to one autoclave cook.

The sulphate process was tried in making cooks 3, 14, 17, 24 and 27, in which a total of 12 per cent of caustic soda and sodium sulphide per 100 pounds of hulls was found to be sufficient to reduce the material to a bleachable pulp. The fibers were extremely fine and short and great difficulty was experienced in washing the pulp on account of its slimy, water-holding qualities. After the alkali was washed out, however, it resembled the imported straw pulps and could be used for the same purposes.

Cook 17 was tried to determine the character of the pulp obtained under mild cooking conditions. A high yield of 55 per cent was obtained, but the pulp was unevenly cooked and unsuitable for bleaching. Difficulty was also experienced in washing. Two cooks were made in which the straw was mixed with cotton linters with the object of counteracting the extreme softness and fluffiness of cotton linters with the hard dense nature of the straw pulp. Cook 24 was made using 46 pounds of oat hulls and 31.9 pounds of second cut cotton linters, and a yield of 63 per cent was obtained.

(Continued on page 42)

TABLE I-COOKING DATA.

	Cha	brous Materia	al V.)	Used 1	Chemical Per 100 Lbs. 1	Material	Volume Cooking Liquor	Alkali Consumed Ratio		Maximum	Pressure	Maximum	
Cook No.	Oat Hulls. Lbs.		Cotton Linters. Lbs.	Lime.	NaOH. Lbs.	Na2S. Lbs.	Per 100 Lbs. Gals.	of Combined to Total %	ature.	Steam Pressure. #/Sq. In.	Attainment Period. Minutes	Pressure Maintained Minutes	55
3 14 17 24 27	2.4 75.0 76.0 46.0 74.0	****	31.9 27.5		9.2 11.25 8.9 9.0 9.0	10.9 3.75 2.96 3.0 3.0	40 50 50 50 30	83.5 81.4 86.7	160 144 135 135 140	74 44 31 31 38	120 90 120 105 300	145 300 300 390 1,035	25 55.3 63.0 58.3
2	2.35	****		16.0	{ CaO 60% MgO 40%	Sulphur	48,8	* ***	150	54	210	210	53.6
1	2.63		* ***	15.0	6 MISO 40 10	* ****	47.5	****	150	54	195	240	53.7
4	2.00	* ***	* * * *	15.0	44	* * * *	53.4	* ***	135	31 29	120 135	135 120	65.7
2	2,00 84.0	****	****	15.0 15.0	46		53.4 50.0	* * * *	134 136	32	120	225	* ***
7	81.5	2.555		15.0	44	* * * *	50	* * * *	135	31	90	315	* * * * *
8	86.2	Ground h	ulls	15.0	64	* * * * *	50	****	135	31	120	330	****
0	79.0			15.0	44		50		136	32	90	360	* * * *
10	80.0			12.8	64	* * * * *	50		- 135	31	60	360	
11	77.5	* ***	****	10.0	6.6		50		135	31	90	420	*****
12	82.5	* * * *	* ***	10.5	High calc	ium lime	50	* * * *	135	31	60	420	Yields not deter-
13	79.0	* * * *	****	7.5	44	16 " 66	50	* ***	135	31	45	420	mined on account
15	75.3	****	1745	12.5			50.3	4.848	136	32	70 45	480 480	of presence of con- siderable lime resi-
16	76.0	Screened	hulls	12.5		14 15	50	* * * *	138	35 31		480	due in pulp from
18	67.4	* ***	* * * * *	12.5		15 15	50	* * * *	135	31	120 120	480	blow pit. Indica-
19	75.0	4 5 5 5		10.6		16 . 16	50		135 135	31	120	480	tions point to 70
20	47.0	* * * *	* * * *	10.6 12.5		44 44	50	* * * *		75	105	240	per cent as a fair
21	64.0	****	* * * * *			44 44	50	2.545	160		120	144	
22	70.0	* ***	5.0	12.5		66 64	50	* * * *	118	12	120	480	average.
23	69.0	127	5.0	12.5		46 66	50	* * * *	135	31	120	480	* * * * *
25 26	15.4 78.4	15.4	6.3	11.8		66 66	50	****	135 136	31	150	480	* * * * *

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UTILIZATION OF OAT HULLS FOR PAPER PULP

(Continued from page 40)

The grade of cotton linters used would give a yield of about 80 per cent under the cooking conditions, leaving a yield of 51 per cent for the oat hulls. Cook 27 was made using 74 pounds of oat hulls, and 27.5 pounds of cotton hull fiber obtained by the Segundo process of delinting the cotton seed. A yield of 58.3 per cent was obtained. Segundo fiber cooked under the conditions would give a yield of 75 per cent, leaving a yield of 52 per cent for the oat hulls. The products obtained bleached very readily. Eight per cent of bleaching powder was used to bleach cook 24 and 5 per cent with cook 27. The softness of the cotton fiber in the mixture made it possible to wash without difficulty, and it seems probable that an outlet for the material might be found in the manufacture of book, magazine and similar papers. The cooking conditions in greater detail are given in Table I.

Paper Making Tests

The material obtained from the various cooks was washed and beaten to what was thought to be the proper amount and then run over the combination cylinder-fourdrinier paper machine. The furnishes of the various runs are indicated in Table II. In general the lime cooks were washed one hour in the beaters and then brushed lightly for a second hour. When run over the paper machine the stock was passed through a Jordan, which gave it a stiff brushing, and by varying the degree to which the plug was screwed a considerable variation in the fineness of the stock was obtained. In the runs in which the cylinder machine was used it was found that the stock tended to settle in the bottom of the cylinder vat. This trouble was remedied, however, by placing a small shower pipe in the vat, and with a small amount of water sufficient agitation was secured to prevent settling. Cooks 6 to 22 were run over the cylinder portion of the paper machine, while cooks 23 to 26, inclusive, were run over the Fourdrinier portion. Considerable difficulty was experienced in running the sheet on account of the fact that the machine was not equipped to run straw board, and it was found necessary to add 10 per cent of sulphate or kraft pulp to the furnish to be able to run over the machine. Cooks 7, 8, 9, 10, 11, 12, 13, 15, 16 and 21 were run with 10 per cent kraft pulp. In cook 20 old newspapers were used instead of kraft and in the same proportion. The sheet, however, was unsatisfactory. In cooks 18, 19 and 22. 10 per cent raw second cut cotton linters were used with promising results, and in cooks 23, 25 and 26, 7 per cent second cut cotton linters were mixed with the hulls before cooking and given the same

treatment, with the result that the linters were hardened and a stronger sheet was obtained than with the raw linters. The appearance of the sheets obtained are indicated in Table II, in the column headed "Condition of Sheet."

Strength Tests

Strength tests on the more promising sheets obtained are given in Table III. The results obtained indicate that the greatest factor to be considered in utilizing oat hulls for board is the beater treatment. The optimum cooking conditions seem to be between 11.6 and 12.5 per cent of CaO, with a temperature of not over 136 degrees C. for at least six hours. There were numerous cooks made under these conditions, however, which were weak and unsatisfactory on account of unfavorable beater treatment.

The run made from cooks 25 and 26 showed the maximum strength. The furnish of this run when analyzed consisted of 65 per cent oat hull pulp, 25 rye straw pulp and 10 per cent cotton linter pulp. The straw blended well with the oat hulls and seemed to give results superior to what can be obtained from either alone.

Corrugating Tests

The sheets obtained in the trial runs indicated that satisfactory results could be expected in using oat hulls to replace straw, either partially or wholly, in the manufacture of straw board. Samples were corrugated by the Mid-West Box Company and the American Can Company, and while they did not possess all the stiffness of the regular stock the conditions under which they were run through the corrugating machines was not equally advantageous, and the opinion seemed to be general that it was only a matter of adjusting a few details in the manufacture of the material to give satisfactory results. Samples were also lined with sulphite paper and tried for cap stock at the Cedar Rapids plant of the Quaker Oats Company with very satisfactory results as to strength and grip on shrinking on to the tubular fiber containers.

Mill Runs

In view of the results of the laboratory runs it was decided to make a trial of oat hulls at the straw board mill of the Quaker Oats Company at Pekin, Ill., and about 30 tons were run into boards of various types during the week of June 15 to 18, 1921.

The mill is equipped with several spherical rotary boilers 14 feet (Continued on page 44)

TABLE	TT-	FII	RN	ISH

27 65 35 Free Slightly shiv 7 90 10 Coarse—full of lime Foam marks 8 90 10 Very coarse Foam marks 9 90 10 Fine Fram spots 10 90 10 Medium Foam marks	
17 90 . 10 Slow Shivey. 24 48 52 Free Slightly shiv 27 65 35 Free Slightly shiv 7 90 10 Coarse—full of lime. Foam marks 8 90 10 Yery coarse From marks 9 90 10 Fene Fram spots. 10 90 Medium Foam marks 10 Medium Foam marks	of Sheet
24 48 52 Free Slightly shir 27 65 35 Free Slightly shir 7 90 10 Coarse—full of lime Slightly shir 8 90 10 Very coarse Foam marks 9 90 10 Fine Fcam spots 10 90 10 Medium Foam marks 11 90 10 Medium Foam marks	
27 65 35 Free Slightly shi 7 90 10 Coarse—full of lime Foam marks 8 90 10 Very coarse Foam marks 9 10 Fine Fam spots 10 90 10 Medium Foam marks 10 Medium Foam marks	y-good color.
7 90 10 Coarse—full of lime	y-good color.
8 90 10 Very coarse Foam marks 9 90 10 Fine Fam spots. 10 90 10 Medium Foam marks	, 8000 00000
9 90	
10 90 10 Medium Foam marks	
11 00 Form marks	crushing
	crushing.
11 90 Coarse Foam marks	wild.
12 90 10 Fine Crushing. 13 90 10 Fine Slightly crus	
13 90	
15 90 10 Fine Slightly cru 16 90 10 Medium Slightly cru 18 90 10 Fine Crushing	
16 90 Medium	ling.
18 90	-
19 90 Crushing.	
20 90 Foam spots.	
21 90 10 Foam marks	
16 90 10 Medium Slightly cru 18 90 10 Fine Crushing. 19 90 10 Fine Crushing. 20 90 10 Very coarse Foam spots. 21 90 10 Coarse Foam marks. 22 90 10 Very fine Crushing. 23 92 8 Fine Good format	
23 92 8 Fine Good format	D.
25 and 26 66 25 9	
26 91.5	



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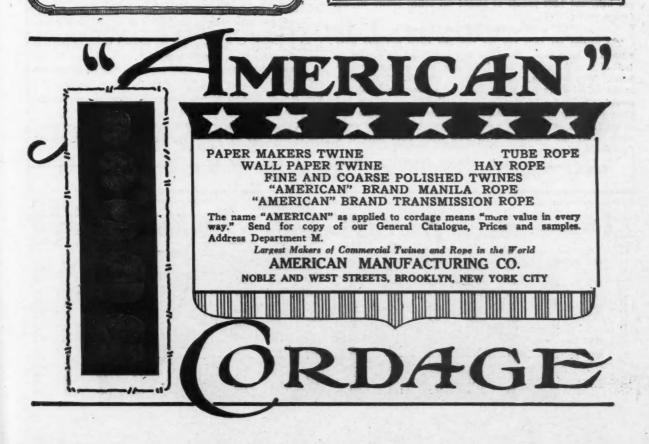
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UTILIZATION OF OAT HULLS FOR PAPER PULP

(Continued from page 42)

in diameter, Hollander type beating engines with drum washers, Jordan refining engines capable of being used either in tandem or parallel, and a 68-inch four-cylinder board machine, with forty dryers fitted with a hot-air drying system.

Cooking Treatment

The hulls were given the same cooking treatment used on the straw, which was as follows:

Lime per 100 pounds bone dry hulls (testing 99 per cent CaO), 15.4 pounds.

Volume of cooking liquor at start per 100 pounds dry hulls, 24 gallons.

The rotaries were loaded in the forenoon and heated with exhaust steam, indicating 11 pounds per square inch, until 3 o'clock in the afternoon, when the exhaust steam was shut off and live steam turned on, and, by means of a regulator, a pressure at the rotaries of 21 pounds per square inch was maintained. These conditions were maintained until 6 o'clock in the morning, when the steam was shut off and the rotaries emptied as soon as space was provided for their contents some time in the forenoon.

The rotaries held a charge of 6½ tons of straw, but it was found that from 10 to 20 per cent more oat hulls could be charged, and a charge of a mixture of 6,860 pounds of air dry straw and 8,800 pounds of air dry oat hulls was charged without overloading. With straw it is necessary to rotate the boiler to pack the straw and take off the cover and recharge three or four times to make a complete charge, while with oat hulls it could all be loaded with one filling, and with oat hull straw mixtures only one refilling was necessary. Two rotaries of oat hulls, four rotaries of oat hull straw mixtures, and one rotary of 15,100 pounds of oat hulls and 1,000 pounds of second cut cotton linters air dry weight were cooked.

Washing Treatment

The cooked oat hulls and oat hull and straw mixtures were allowed to stand in a pile as long as possible, but on account of lack of time the average time in the pile was not more than 24 hours. They were then given a washing treatment of 3½ hours at the end of which period the lime residues were practically removed. During the washing the beater roll did not touch the bed plate, but, nevertheless, the stock was reduced to a considerable extent. One interesting feature was the fact that oat hull stock swells under the treatment, while with straw stock there is a decrease in volume.

Paper Machine Trials

The following runs were made on the paper machine:

- Single manila lined strawboard: 50 per cent straw—50 per cent oat hull.
- Double manila lined strawboard: 50 per cent straw—50 per cent oat hull.
- 3. Double manila lined strawboard: 100 per cent oat hull.
- 4. Egg case board: 100 per cent oat hull.
- 5. Egg case board: 50 per cent straw-50 per cent oat hull.

Run No. 1. Single Manila Lined Strawboard

In running from the straw furnish to be 50 per cent straw and 50 per cent oat hull furnish on single manila lined strawboard the only difficulty experienced was the greater ease with which the oat hull stock dried on account of the larger proportion of water removed by the presses. This change necessitated the altering of the steam pressure in the dryers, and until it was properly adjusted considerable broke was made. After running several hours it was also observed that the oat hull stock is heavier and settled to a slight extent in the cylinder vats. This trouble did not prevent the run, however, and since connections were provided in the vats for water jets it would not be difficult to equip the machine for the new stock.

On the calenders the new furnish was found to take a very satisfactory finish, and with water boxes on the calenders the appearance of the sheet was equal to the straight straw sheet usually

Run No. 2. Double Manila Lined Strawboard

The change from single manila lined to double manila lined strawboard, using 50 per cent straw and 50 per cent oat hull, in each case was made without any trouble or break. In the double lined board the finish obtained does not reflect the stock, since it is taken entirely by the liner, and the internal layers of straw and oat hull stock are not directly responsible. The product, however, was quite satisfactory as to finish, strength, adhesion of the layers and stiffness.

Run No. 3. Double Manila Lined Strawboard—100 Per Cent Oat Hull

In trying a furnish of 100 per cent oat hull, which followed a run of straw egg case board, trouble was experienced in adjusting (Continued on page 46)

TABLE III-STRENGTH DATA

									Schopp	er I ests					
							Bre	aking Ler	ngth		Stretch		Fo	lding Tes	its
Cook Used No.	Furnish Pulp Used	Weight Per Ream 500 Sheets, 24" x 36" Pounds	Thick- ness. Inches	Weight Per Cubic Foct. Founds	Mullen Test. #/Sq. In.	Mullen Test Divided by Ream Weight	In Machine Direc- tion. Meters	Across Machine Direc- tion. Meters	Average, Meters	In Machine Direc- tion.	Across Machine Direc- tion.	Stretch Average.	In Machine Direc- tion.	Direc-	verage.
17	10% sulphite	. 110	.0111	39.6	27.3	.249	3,020	1,550	2,285	1.5	2.2	1.8	2.8	1.8	2.3
24 24	***************************************	. 48	.0036	54.0	17.3	.360	3,240	2,170	2,705	2.4	6.1	4.2	35.4	27.0	31.2
24	**************	. 37	.0029	51.3	17.3	.467	4,140	2,400	3,270	2.3	3.5	2.9	57.6	25.6	41.6
7	10% kraft	. 108	.0100	43.2	12.3	.114	1,415	750	1,083	0.6	0.8	0.7	1.0	1.0	1.0
9	- 66	. 110	.0134	32.9	14.3	.131	1,535	854	1,195	0.9	1.2	1.1	1.8	1.0	1.4
10	66	. 147	.0154	38.2	17.7	.120	1,075	900	988	. 0.8	1.4	1.1	1.6	1.2	2.0
11	44	. 118	.0138	34.2	9.9	.084	808	466	637	0.9	1.0	1.0	2.4	1.6	2.0
12	46		.0148	35.4	11.3	.086	1,141	540	841	0.8	1.3	1.1	2.0	1.4	1.7
13	44		.0164	36.8	13.5	.089	1,262	610	938	1.1	1.5	1.3	1.2	1.0	1.1
15	96	. 117	.0144	32.5	10.0	.087	870	574	722	0.5	1.2	0.8	1.0	1.0	1.0
16 18	45	. 159	.0151	42.1	15.9	.100	902	585 598	744	1.0	1.5	1.2	3.6	1.2	2.4
18	10% linters	. 110	.0103	42.7	9.8	.090	588	598	593	1.1	1.2	1.2	1.0	1.0	1.0
19	******	. 119	.0119	40.0	11.4	.096	850	492	671	0.9	0.9	0.9	2.0	1.4	1.7
21	10% kraft	. 114	.0120	38.0	10.1	.089	1,085	472	779	0.8	1.1	1.0	1.6	1.0	1.3
22	10% linters	. 159	.0138	46.0	.15.5	.083	1,010	568	789	1.0	1.0	1.0	3.0	1.6	2.3
23	************	. 118	.0145	32.6	14.8	.125	1,335	782	1,058	1.2	1.4	1.3	2.4	2.0	2.2
25 & 26		. 82	.0039	33.2	12.7	.155	1,535	960	1,250	1.7	2.1	1.9	2.0	1.4	1.7
26	************	. 135	.0144	37.5	11.9	.088	920	660	790	1.0	1.1 -	1.1	1.0	1.0	7.8
27	*************	. 40	.0040	39.7	11.5	.284	2,440	1,370	1,905	2.4	2.2	2.3	11.6	4.0	7.8

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UTILIZATION OF OAT HULLS FOR PAPER PULP

(Continued from page 44)

the machine, and by the time the sheet was running satisfactorily crushing occurred and the run was abandoned. The crushing was caused by the liner being too slow for stock, such as oat hull, which gives up its water readily on the presses. Unfortunately, during the night a considerable proportion of parchmentized paper scrap was used in the furnish of the liner which caused it to be slower than customary. Portions of the scrap also failed to be reduced in the beaters which caused spots in the sheet. While it was not possible with the amount of stock prepared to make paper to fill orders very satisfactory, samples were obtained which are attached at the end of this report.

Run No. 4. Egg Case-100 Per Cent Oat Hull

In run No. 4, egg case strawboard was made out of oat hull stock with certain proportions of cotton linter stock which could not be determined. Only 6½ per cent was used in the rotary charge and a large proportion of the linters from the rotary was mixed with other rotary charges, so it is doubtful whether there was more than 4 per cent of linter fiber in the furnish. The same trouble experienced in run No. 1, on account of over-drying, was met, and after the dryers were adjusted it was found that running at the rate of 23 tons per day, 7 pounds of steam was sufficient without using any hot air. A larger proportion of the moisture is pressed out of the oat hull stock by the presses than from straw, and the capacity of a given set of dryers would be from ten to twenty per cent greater, an important consideration for mills with insufficient dryer capacity.

Run No. 5. Egg Case-50 Per Cent Hull, 50 Per Cent Straw

There was no trouble in running on to a 50 per cent straw furnish and the board obtained, as would be expected, showed less of the oat hull characteristics and more of the straw.

Mullen weight and thickness tests are given in Table IV. Run No. 1 was water finished and a very dense sheet was obtained with a relatively high pop test. Run No. 2 also gave a high pop test, but run No. 3 was decidedly weaker.

The egg case board run No. 4, in which 100 per cent oat hulls were used, is also much weaker than run No. 5, where equal parts of oat hulls and straw were used. The weight of the papers per cubic foot indicates that oat hull papers can be compressed by calendering and weigh about the same as the straight strawboard.

Summary

The results of the semi-commercial and mill runs on oat hulls indicate that they are capable of utilization in the manufacture of board, using digestion with lime in the same manner that straw is treated. The yields obtained and character of the stock indicate that the cost of converting oat hulls to board would not exceed the cost of converting straw, and in the yard and rotary room labor savings of approximately 50 cents per ton of product are possible. Savings in steam required for drying are also possible. The bursting strength of sheets made from oat hulls is not as high as from strawboard, but very satisfactory results may be secured, using oat hulls mixed with straw in equal proportions, and tougher sheets than are possible from either oat hulls or straw are obtained by cooking small amount of cotton linters together with the hulls in the rotaries. Raw cotton linters are a very cheap source of fiber and grades not satisfactory for fine papers on account of dirt, although possessing excellent fiber, are entirely satisfactory and can be obtained at between \$10 and \$15 per ton, f. o. b. oil mills in the South. The possibilities of using even larger proportions of linters in the manufacture of other grades of papers than were used in the lime cooks of these experiments warrant investigation, and in the opinion of the president of a large board manufacturing organization, who wit-

nessed the mill trials, seem capable of considerable application.

The facility with which straw was replaced by oat hulls in the trials herein described would indicate that paper and board manufacturers using straw as a raw material could readily try out oat hulls in their plants under their particular conditions and ascertain the feasibility of the material for their particular product.

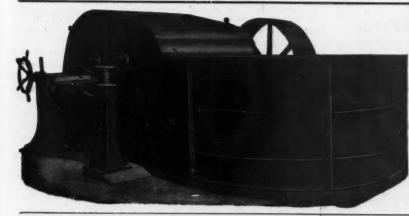
The runs on mixtures of oat hulls mixed with either cotton linters or cotton hull fiber using the sulphate process are very interesting and the excellent color of the pulps together with the high yields indicate that a promising source of pulp for the manufacture of book, high grade magazine, common writing and similar grades might be developed. The experiments indicate that a mill fitted with rotary boilers and washing and bleaching equipment could handle the stock and it is recommended that mill trials be arranged if possible.

					TAI	BLE	IV					
					10						ring Tough	
	Fur	nish		-	Ream, ts, 24x30			Mul	st		chine	
Run No.	Oat Hulls	Straw	Product	Calendered	Wgt. Per Re 500 Sheets,	Thickness	Wgt. Per Cubic Ft.	On Sheet	Per Lb. Per Ream	In Machine Direction	Across Mach Direction	Average
	%	%			Lbs.	In.	Lbs.	Sq.In.	Sq.In.	Gms.	Gms.	Gms.
1	. 50	50	Single Maniia lined	Yes	.316	.024	52.5	71.4	.226	***	•••	***
2	. 50	50	Double Manila lined	Yes	358	.033	43.6	76.4	.214	•••	***	***
3	. 100	• • •	Double Manila lined	No	316	.037	34.0	51.0	.161	***	***	***
4	. 100	***	Egg case	Yes		.035		46.4	.116	800	422	611
	100	50	Egg case	No Yes	405 374	.039		46.2 67.2	.114	896	519	707
Stock		100	Egg case Egg case	Yes		.026		71.2	.180	848	528	688

The costs for making one ton of bleached pulp would appear to be as follows:

2220	pounds	s oat hulls at \$6.00 per ton	\$6.66
1110	66	cotton linters at \$20.00 per ton	11.10
530	66	soda ash at \$1.75 per hundred	9.28
280	66	quick lime at \$10.00 per ton	1.40
165	44	sulphur at \$20.00 per ton	1.65
100	66	bleaching powder at \$2.50 per hundred	2.50
1	ton co	oal at \$5.00 per ton	5.00
Labo	or base	d on unskilled labor at \$3.00 per 8 hr. day	7.50
Con	version	***************************************	2.00
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	T-1-1		040 50

These costs are based on the cost of a 30 ton plant which is capable of turning out bleached pulp in sheets of approximately 80 per cent moisture content with no recovery of the soda, being about \$300,000. Bleached soda pulp, which the pulp in question could replace, is quoted at present at \$90 per ton, and with mounting wood costs, it seems doubtful whether it can ever be manufactured by present pulp mills for less than \$70 per ton. Most of the work of the experiments described herein was devoted to the utilization of oat hulls by the strawboard industry since it was believed that it could be utilized there with the least change from present customs and habits. The promising margin of profit, however, allowed by the estimates of the cost of manufacturing bleached pulps from oat hulls and cotton linters by the sulphate process makes the desirability of mill trials particularly strong.



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Recent Incorporations

TROJAN BAG AND FAPER COMPANY, Troy, New York, capital \$20,000; incorporators, B. and N. and D. Jaffe; attorney, J. F. Brearton, Troy.

YONKERS SUPPLY COMPANY, Yonkers, New York, paper and hardware, capital \$5,000; incorporators, M. and B. Fishman, J. Mackler; attorney, A. B. Albert, 305 Broadway.

Pul-Flap Envelope Company, Delaware, mailing devices, capital, \$90,000; attorney, Corporation Guarantee and Trust Company, Philadelphia.

PAPER TRADING CORPORATION, Manhattan, New York, make paper, capital, \$50,000; incorporators, B. Harwood, Jr., P. Schmer; attorney, M. A. Vogel, 291 Broadway.

AMERICAN BLUE PRINT & SUPPLY COMPANY., INC., 601 Mattison avenue, Asbury Park, New Jersey; deal in blue prints; capital, \$125,000.

George Paper Corporation, Albany, New York; capital \$20,-000; incorporators W. G., L. A. and F. G. George; attorneys, Tracy, Cooper, Savage & Townsend, Albany.

CAPITAL INCREASE

PHOENIX PAPER COMPANY, Battenville, Washington County, New York; \$50,000 to \$150,000.

To Buy Paper Co-Operatively [FROM OUR RESULAR CORRESPONDENT.]

CLEVELAND, Ohio, October 17, 1921.—The Mutual Paper Company, 1220 West 6th street, has sent the following invitation to representative concerns in Cleveland:

"You are invited to join us at the first meeting and smoker of the above new organization at the Hotel Statler on Monday, November 8, at 7:30 P. M.

"You have been selected as one of Cleveland's Class 'A' concerns, whom we are going to extend the opportunity of buying their paper needs, collectively and as an interested owner of a paper jobbing house.

"The Cleveland Chamber of Commerce has been working on an idea whereby our manufacturers and large buyers could get their raw material from its original source and so reduce the cost of their various products.

"There will be no additional capital required unless the buying members' want us to carry a larger stock here.

"The greater part of our orders will be bunched to obtain direct mill shipments thus obviating a 20 per cent overhead and handling cost. We are going to be instrumental in saving our manufacturers thousands of dollars in cost of Paper and will supply the kinds best adapted to their requirements.

"This is an opportunity whereby you can save 10 per cent to 20 per cent on your paper purchases.

"If you cannot attend and want us to keep in touch with you, we shall do so providing you communicate with our office.

"Associated with us will be Cleveland's Leaders of Industry and we want you to help us launch this new enterprise."

Retires From Union Paper and Twine Co. [FROM OUR REGULAR CORRESPONDENT.]

CLEVELAND, Ohio, November 1, 1921.—M. E. Battles on October 25, formally retired as Treasurer and General Manager of The Union Paper and Twine Company. His change to private life will be a very distinct source of regret to his many friends and acquaintances in the paper business. He will, however, retain his position as one of the directors of the company.

Mr. Battles started The Union Paper and Twine Company in Cleveland in 1891, having at that time associated with him Mr.

R. Roesch, now vice-president, and Mr. Wm. Richards, now secretary of the company, and to the initiative of these three men was due the prosperity enjoyed from its inception.

In 1905 the Company became affiliated with The Chatfield & Woods Company, of Cincinnati, and at that time C. N. Bicknell became vice-president, in charge of the fine paper department. Mr. Bicknell now succeeds Mr. Battles as treasurer and general manager.

The growth of the company has been very steady, from a small house selling only wrapping paper to one of its present size distributing all classes of printing, writing, wrapping, and other papers.

In 1912 the Company's large warehouse on St. Clair Avenue burned, and the present warehouse at Canal Road was acquired immediately after. This warehouse now contains not only the wrapping paper stock but also the manufacturing and converting departments of the company.

In 1920 the present offices and fine paper warehouse at 116-128 . St. Clair Avenue was completed.

For many years the Company has been very closely connected with The Union Paper and Twine Company in Detroit, and has also maintained sales offices in Akron and other surrounding cities. At the present time a warheouse is being opened in Buffalo, and a very rapid development of business is expected there.

The officers and directors of the Company at the present time are: W. H. Chatfield, president; R. Roesch, vice-president; W. M. Richards, secretary; C. N. Bicknell, treasurer and general manager; M. E. Battles, D. C. Wisner, H. F. Woods, directors.

Ogdensburg Paper Mills Closed

[FROM GUE REGULAR CORRESPONDENT.]

WATERTOWN, N. Y., October 31, 1921.—The Continental ground-wood pulp mill at Ogdensburg, which is owned by the Ogdensburg Paper Mills, Inc., of which James A. Outterson and Frank A. Augsbury are the owners, has been closed and operations suspended until a more favorable time. Over 40 men are thrown out of work for an indefinite period, only construction workmen being kept on the job.

The Continental mill represents an investment of \$375,000 and was placed in operation only a few months ago. The cause of the shut down is given as unsurmountable competition brought about by high freight rates and low prices on the imported pulp. It is explained by the owners that pulp is being shipped into New York from Norway and Sweden at a cost of \$21 on the docks while it costs \$27 a ton to make it at Ogdensburg. The freight rate from Ogdensburg to Carthage is \$12 a car load. This tells the story of the closing of the mill. This despite the low cost of wood which is brought in from Canada by boat.

The owners express a hope that some time in the future the rate of transportation may be adjusted and that the competition with foreign lands may be met with a tariff which will give the industry in America a fair chance.

A. E. Tyner & Co. to Handle Grand Lake Line

ST. LOUIS, Mo., October 31, 1921.—A. E. Tyner & Co., corner Main and Cedar streets, have just taken over the selling agency for the line of paper bags of the Grand Lake Co. for the states of Missouri, Kansas, Arkansas, Mississippi, Louisiana, Oklahoma, Texas, Nebraska, Colorado, New Mexico, Arizona, Wyoming, Idaho and Southern Illinois. A. E. Tyner, of the company was formerly connected with the Richard S. Hoffman Company of Baldwinsville, N. Y., as salesmanager, and the company at the present time is acting as their sales representative for the same territory for this concern that it is covering for the Grand Lake Company.



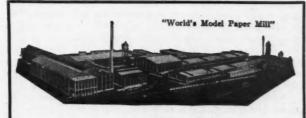
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CURRENT PAPER TRADE LITERATURE

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

Japanese Pulp and Paper Industry.—Pulp and Paper, xix, 267-9 (March 10, 1921).—An analysis of the status of the Japanese pulp and paper industry and of some of the contemplated developments, more particularly of greater utilization of the forest re-

sources of Manchuria and Korea.-A. P.-C.

Research Department for Paper Industry.—Pulp and Paper, xix, 127-30 (Feb. 3, 1921); 159-62 (Feb. 10, 1921).—Text of the report of the Joint Committee (Col. C. H. L. Jones, Spanish River Pulp and Paper Mills, chairman) appointed by the Canadian Pulp and Paper Association and the Technical Section of the C. P. & P. A. to investigate possibilities respecting the institution of a department of technical research within the activities of the C. P. & P. A., of the ensuing discussion and of the address of Dr. R. F. Ruttan on the co-operation of the Research Institute with the pulp and paper industry. Both the Technical Section and the C. P. & P. A. approved of an immediate start being made with the industrial research department, without attempting to build a central research laboratory at once, the main work to begin consisting in the co-ordination of the research work being carried on in the various mills.—A. P.-C.

Transactions of the Technical Section of the C. P. & P. A .-Pulp and Paper, xix, 73-82 (Jan. 20, 1921); 127-30 (Feb. 3, 1921); 159-62 (Feb. 10, 1921); 189-91 (Feb. 17, 1921); 217-9 (Feb. 24, 1921); 245-6 (March 3, 1921); 271-4 (March 10, 1921); 299-300 (March 17, 1921); 323-4 (March 24, 1921); 347-9 (March 31, 1921); 375-7 (April 7, 1921).—Texts of the reports of the committees on mechanical standards, chemical standards, education, testing moisture in pulp, abstracts and publications, technical research; together with discussion of reports, of the revision of membership qualifications so as to admit superintendents and practical men as full members, and of the following papers presented at the convention: "Insurance of Pulpwood" (Pulp and Paper, xix, 323-4, March 24, 1921); "Protection of Log Piles by Artificial Fog" (Pulp and Paper, xix, 5-7, Jan. 6, 1921; 37-9, Jan. 13, 1921); "Speed Inter-Lock as Applied to Paper Machine Drives" (Pulp and Paper, xix, 59-64, Jan. 20, 1921); "The Ventilation of Paper Machine Rooms" (Pulp and Paper, xix, 183-8, Feb. 17, 1921); "Strength Testing of Sulphate Pulp" (Pulp and Paper, xix, 68-72, Jan. 2, 1921); and also paper presented by I. L. Gartland on "The Microscope and Its Relation to the Pulp and Paper Mill" (Pulp and Paper, xix, 347-9, March 31, 1921; 375-7, April 7, 1921). -A. P.-C.

Use of Microscope in Pulp and Paper Mill.—I. L. Gartland Paper, xxvii, 26 (March 2, 1921); Pulp and Paper, xix (March 31 and April 7, 1921).—General description of the construction and uses of the compound microscope (lenses, accessories, types of instruments, etc.), followed by a few comments by H. N. Lee, Hammermill Paper Company, Erie, Pa., on specific uses of the micro-

scope in the pulp and paper industry.-A. P.-C.

Water Purification by Continuous Blow-off.—G. Paris. Chimie et Industrie, iv, (December, 1920); Pulp and Paper, xix, (April 7, 1921).—Description of the continuous blow-off method of boiler water purification and of its merits and advantages over other processes. The method consists essentially in allowing a certain proportion of the water in the boiler to blow off into a steam separator. The separated steam is made to bubble up through the raw make-up water which has been mixed with sufficient soda ash to precipitate the non-carbonate-incrusting solids in the water, while the separated blow-off water travels slowly enough to allow the sludge to settle out, and then mixes with the raw water which also travels slowly enough to allow the precipitated incrusting

solids to separate out. The principal advantages are low consumption of purifying chemical, high temperature for the feed water, and small and compact equipment which can easily be made practically self-regulating.—A. P.-C.

Papers Used in China.—J. W. Ross, Canadian Trade Commissioner. *Paper*, xxviii, 3 (March 23, 1921).—Brief description of the various kinds of papers required by the Chinese trade.—

A. P.-C.

Calcium Analysis of Fresh Sulphite Liquors.-Rudolph Sieber, Zellstoffchemische Abhandlungen, i, 7 (June 15, 1920); Paper, xxviii, 3 (March 23, 1921).-Translation by Clarence Jay West. The results of a comparative investigation of the well-known methods of analysis of the sulphite liquor and the Sander's method as used by Dieckman are given. Sander's method is briefly as follows: The original solution is diluted tenfold and 10 Cc of the diluted solution are titrated in the usual manner with tenth normal iodine and starch to a blue color; then 5 Cc of 3 per cent potassium iodate (KIO_s) solution (an excess must be present) is added, and the iodine which is liberated is titrated with tenth normal thiosulphate solution. The method has proven entirely suitable for practical use and will give correct values for the lime content of the liquors. It appears to be indepedennt of those factors which influence the results obtained by Winkler's and Hohn's methods, and it is believed the method will prove suitable for general introduction in the industry.-A. P.-C.

Phragmites Reed for Pulp.—Cellulosechemie, i, 7 (November 12, 1920), 8 (Dec. 10, 1920), 9 (Dec. 24, 1920); Paper, xxviii, 1 (March 9, 1921), 2 (March 16, 1921), 3 (March 23, 1921).—Abridged translation by Clarence Jay West. Detailed report of a complete laboratory scale and semi-commercial scale study of the use of reed for the manufacture of paper pulp. The soda process of cooking was used, and the pulp could be bleached to a good white; but the process is as yet too complicated for practical purposes. Handmade sheets prepared from the pulp indicated a satisfactory strength. Further investigations are under way relating to the botanical properties and it is hoped to systematically solve

the many problems which have arisen during the course of the present work.--A. P.-C.

Estimation of Cellulose in Wood.-J. Ind. & Eng. Chem., xiii (April, 1921).-Johnson asserts that Dore's statement to the effect that "all processes involving preliminary hydrolysis result in a diminished yield of cellulose as well as total cellulose processes" (J. Ind. & Eng. Chem., xii, 264, 1920), and Mahood's statement to the effect that "the modification of the Cross and Bevan method proposed by Johnson and Hovey appears to be of doubtful value since the cellulose, as well as the hemicelluloses and furfuralyielding constituents, are attacked" (J. Ind. & Eng. Chem., xii, 873, 1920), are not backed by convincing experimental data, are based upon insufficient analytical data and upon statements which are misleading and partly incorrect. Mahood retorts that "Johnson offers no new experimental data in support of this rather sweeping statement," and proceeds to prove that his results and conclusions are in agreement with those of most other investigators with the exception of Sieber and Walter and of Johnson and Hovey. Dore maintains his original contention that "all processes (for the determination of cellulose in woods) involving preliminary hydrolysis result in a diminished yield of alpha-cellulose as well as total cellulose," that the total cellulose and alpha-cellulose are destroyed in the same proportion, that at most only a trifling reduction in furfural yield of the cellulose obtained is accomplished by the

(Continued on page 52)

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CURRENT PAPER TRADE LITERATURE

(Continued from page 50)

scientific investigations on the chemical nature of woods or other cellulosic materials .- A. P.-C.

Wood Pulp Manufacture in Sweden.-L. Pierron, Rev. Chim. Ind., xxix (Oct., 1920); Papier, xxiv (Feb., 1921).-Brief review of the production of sulfite, sulfate, and mechanical woodpulp in Sweden, and of the utilization of sulfite waste liquors for the production of binders, adhesives, tanning extracts, ethyl alcohol, fuel,

cattle food, fertilizers, dyes and mordants .-- A. P.-C.

Responsibility for High News Print Prices.-W. J. Pape, president of the Publishers' Buying Corporation, Paper, xxviii, 3 (March 23, 1921).-Analysis of the causes which made the price of news print go so high in 1919 and 1920, showing that production was greater than it had ever been before, that manufacturers were doing all in their power to turn out as much paper as they could, and that the excessive prices were due to panic, speculation and hoarding on the part of the news print consumers.-A. P.-C.

Tarred Roofing Paper .- A. Lambrette. Papeterie, xliii (March 10, 1921).-Brief description of the equipment and process used

industrially.-A. P.-C.

Ball Bearings in Paper Machines.—Papeterie, xliii (March 10, 1921).-Brief outline of the advantages of using ball bearings on

paper machines .- A. P.-C.

Hypochlorite Solutions by Electrolysis.-Fr. patent No. 505,874, Pestalozza, Nov. 8, 1919. L'Industrie Chimique, viii, 59 (Feb., 1921).-The conditions under which the electrolysis is conducted (circulation, temperature, concentration) are such that the products which are set free at the anode and at the cathode combine to form hypochlorites. The apparatus in which the electrolysis is carried out is divided into several cells by means of graphite plates arranged transversely which constitute the electrodes. Each of these electrodes acts on one side as an anode and cathode respectively. The cells communicate by means of openings in the graphite electrodes. The electrolyte is thus forced to follow a zig-zag path through the cells and issues as a hypochlorite solution .-- A. P.-C.

Manufacture of Sodium Hypochlorite Solutions.-Fr. patent No. 509,666, Société L'Air Liquide, April 19, 1919. L'Industrie Chimique, viii, 59 (Feb., 1921).—The chlorine and the caustic soda which come from electrolytic cells are recombined to form hypohchlorite. The liquor can very easily be cooled to prevent the formation of chlorates. To obtain a perfectly stable product in which the soda has been perfectly neutralized by the chlorine, a constant proportion of the chlorine formed, say 1/15, must be continually removed .- A. P.-C.

Use for Sulphite Waste Liquor.-Fr. patent No. 505,264, Strehlenert, April 17, 1917. L'Industrie Chimique, viii, 26 (Jan., 1921).-According to U. S. patent No. 1,149,420 the SO2 of the waste liquor is converted into SOs, and the calcium lignosulfonate is decomposed and precipitated by introducing air into the receptacle to raise the pressure and insure oxidation In certain cases there is but very little free SO2 and for the manufacture of alcohol it is necessary to add 0.1 to 0.5 per cent of sulfuric acid. This patent covers a special manner of adding this acid. When the digester is relieved to lower the pressure, the relieved gases, which are acid, are led into an autoclave used for the decomposition of the waste liquor at a pressure of one atmosphere. The liquor is then heated, and the pressure rapidly rises above the boiling pressure at the prevailing temperature. At about 200° Cent. the SO₂ is immediately transformed into SO₂, and free sulphur is deposited. Sulphurous acid does not act alone to decompose the calcium lignosulphonate; for formic and acetic acids, and other

Johnson and Hovey method, and that the method is unsuitable for organic compounds present in the gases also take part in the reaction. Atmospheric oxygen, or other oxidizing agent, may be introduced if it is desired to obtain a stronger acid mixture .-A. P.-C.

> Nitrocellulose from Baobab.-Fr. patent No. 594,614. Thomson, Severn and Twycross, April 2, 1918. L'Industrie Chimique, vii, 361 (Oct. 1920).-Baobab wood possesses the same properties as cotton for the purpose of nitration, for it is composed of almost pure cellulose and is highly fibrous. The fibers when examined under the microscope are quite similar to those of cotton and behave similarly when nitrated.-A. P.-C.

> Cellulose Acetates.-Fr. patent No. 505,608, J. O. Zdanowitch, October 31, 1919. L'Industrie Chimique, vii, 398 (Nov., 1920). Same as Br. patent No. 139,232, September 18, 1919; U.S.

Patent No. 1,347,891, July 27, 1920.-A. P.-C.

Deacidification of Sulphite Waste Liquors.-Fr. patent No. 506,234, B. Gratz, November 18, 1919. L'Industrie Chimique, vii, 400 (November, 1920). Same as Br. patent No. 150,571, November 26, 1919. See Pulp and Paper, xix, 42 (Jan. 15, 1921).-A. P.-C.

Reinforced, Waterproof and Translucent Paper.-Fr. patent No. 513,139, Marie Louis Paul Neuette-Delorme (Seine), France. Monit. Papeterie, lii, 129 (March 1, 1921).-The paper is reinforced by means of a more or less closely woven fabric or suitable material (vegetable or otherwise), or by means of a wire gauze, which is incorporated into the pulp during its transformation into paper before it goes through the presses. It is rendered waterproof and transparent by sizing with rosin, linseed oil, manganese resinate, and spirits of turpentine (in the proportions of 100 parts to 80, to 15, to 25, respectively). This sizing process may also be used with non-reinforced papers .- A. F.-C.

Corrugated Cardboard.-Fr. patent No. 509,319, W. C. Diske, England. Monit. Papeterie, lii, 100-1 (Feb. 15, 1921). Same as

Br. patent No. 145,854, June 29, 1920.-A. P.-C.

Eliminating Bad Odors from Soda Pulp Mills.-Fr. patent No. 506,629, Erik Sixten Sandberg and Gumar Sundblad, Sweden, November 26, 1919. Papeterie xliii, 109-10 (Feb. 10, 1921) .-Malodorous substances in soda pulp mills are formed in the following manners: (1) In the digesters during cooking, whence they escape with the vapors from time to time; (2) during evaporation of the liquor, the CO2 and SO2 contained in the hot gases of combustion reacting with the liquor to form various malodorous substances, mainly hydrogen sulphide and methyl mercaptan; (3) when treating the condensates obtained from (1) and (2) and when purifying the by-products obtained from the condensates. According to the present invention these substances are all collected in the one place and burned either in the recovery or the smelting furnace as follows: (a) malodorous substances formed as indicated under (1) and (3) are introduced into the smelting furnace mixed with the air that is supplied to the furnace; (b) the production of the malodorous substances formed as indicated under (2) is prevented as far as possible by concentrating the liquor in indirectly heated evaporators (i. e., without direct contact of the hot gases with the liquor) as far as possible, and then introducing the concentrated liquors directly into the furnace to finish the evaporation and burn the residue. This makes it possible to maintain a higher temperature in the furnace, which in turn makes it possible to burn the malodorous substances. As the gases coming from the digesters, difusers, evaporators, etc., contain a large amount of water vapor, which makes them very difficult to burn, they are first passed through a condenser which condenses a large part of the water vapor, (Continued on page 54)

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CURRENT PAPER TRADE LITERATURE

(Continued from page 52)

and the remaining gases are then washed thoroughly with cold water, and the malodorous substances are condensed.—A. P.-C.

Improvement in Manufacture of Bleaching Powder.—Fr. patent No. 488,594, Castner-Kellner Alkali Co., Ltd., and J. W. Moore, January 24, 1918. L'Industrie Chimique vii, 88 (March, 1919).—Slaked lime is treated with chlorine gas in a long slightly inclined cylindrical chamber, which is given a rotary motion. The inside of the reaction chamber is provided with bars which serve to raise the powdered lime and allow it to fell through the chlorine-laden atmosphere, so that the contact of the powder with the gas is much more thorough. The counter-current principle of absorption is utilized, and the chlorine is prevented from going through too rapidly by the inclination of the chamber. The chlorine is kept under a slight vacuum to prevent escape through the leaks which are almost sure to be present.—A. P.-C.

Manufacture of Insulating Plastic Composition.—Fr. patent No. 501,038, Motta, Riga and Villain, March 31, 1920. Technique Moderne, xii, 544 (Dec., 1920); Papeterie, xliii, 113 (Feb. 10, 1921).—Composition obtained by mixing a given quantity of unsized paper pulp with an equal weight of a mixture of equal volumes of calcium carbonate and magnesium silicate; or else by applying the carbonate and silicate to a suitable elastic base such as paper, cardboard, etc., instead of incorporating them into the mass of the

pulp.-A. P.-C.

Extensible Wrapping Paper.—Fr. patent No. 508,293, Arlell Safety Bag Co., U. S. A., Jan. 10, 1920. Papeterie, xliii, 160-2 (Feb. 25, 1921).—The paper is made from one or more thicknesses of paper, creped in two directions and glued together with some waterproofing adhesive substance, such as asphalt, which remains soft and pliable.—A. P.-C.

Instrument for Testing Tearing Resistance of Paper.—Fr. patent No. 509,276, Sidney D. Wells and Robert J. Marx, England, Aug. 12, 1920. Papier, xxiv, 66-7 (Feb., 1921); also Papeterie, xliii, 110 (Feb. 10, 1921).—The patent covers a device for measuring the resistance of paper to continuation of a tear that has already been started. The paper is firmly clamped in a suitable device and is pressed down against a dulled blade which has a sharp projecting point to start the tear. The blade is rigidly connected to a spring, and the pressure is transmitted to a suitable indicating or registering device.—A. P.-C.

Tray for Spindles for Spinning Paper.—Fr. patent No. 509,-854, Fernand Jean Pierre Stoffel (Seine), France, Aug. 26, 1920. Papier, xxix, 68-9 (Feb., 1921).—A. P.-C.

Isolating the Fibers of Seaweed ("Sugamo," Phyllospadix Scouleri Hook). Fr. patent No. 510,373 Yohachiro Hashimoto, Japan, Sept. 4, 1920. Papier, xxiv, 69 (Feb., 1921).—The "sugamo" is harvested, dried if necessary, cut into pieces of suitable length, boiled for half to one hour in a 10 per cent milk of lime (keeping it completely immersed by suitable means), removing from the lime, washed, and boiled for 20 to 50 minutes in a 1° Bé sodium bisulphite solution. This treatment softens the peel, which can then be very easily separated from the fibrous portions of the stalk.—A. P.-C.

Machine for Dehydrating Paper Pulp.—Fr. patent No. 511,-007, Jacob Lengenhager, Austria, Sept. 17, 1921. Papier, xxiv, 69-72 (Feb., 1921); Monit. Papeterie, lii, 130 (March 1, 1921).—A. P.-C.

Extraction of Fibrous Material from Plants.—Fr. patent No. 504,036, J. Boudon, France, March 31, 1920. Chimie et Industrie, vi, 206 (Feb., 1921).—The material is treated with caustic soda in its nascent state (produced by means of carbonate of soda and lime, electrolysis, etc.). The action is quicker than with ordinary caustic soda, the consumption of soda is reduced by 30 per cent, the strength of the cellulose is not impaired, and the loss of cellu-

lose is reduced 20 per cent. The treatment of the plants varies with their nature and moisture content.—A, P,-C,

Process for Sizing Paper.—Fr. patent No. 512,124, Rudolf Lender, Germany. Monit. Papeterie, lii, 129-30 (March 1, 1921).—Artificial resins obtained by the polymerization of coumarone (C₆H₆O) and of indene (C₆H₈) are mixed with various saponifiable resins, such as colophony rosin, etc., or with various saponifiable vegetable, animal, or mineral oils or fats and are then emulsified with alkalis, ammonia, or potassium silicate solution, the proportion of alkali determining the consistency of the resulting soap.—A. P.-C.

Screen for Rag Stock.—Fr. patent No. 511,518, Joseph Henry Charvet (Isere), France, Papeterie, xliii, 210-3 (March 10, 1921).—The unbeaten half-stuff at a consistence of 0.2 per cent is sent through suitably arranged blades or rods which stop the longer fibers, but allow the shorter ones to go through along with any dirt or impurities. These shorter fibers are then screened through one of the usual screens, thus eliminating the impurities.—A. P.-C.

Improved Beater.—Fr. patent No. 512,767, Griley-Unkle Engineering Co., U. S. A. Monit. Papeterie, lii, 160-2 (March 15, 1921).—The hood, back of the cylinder, is perforated to allow of the continuous removal of part of the stuff as soon as it is sufficiently beaten, without waiting for all the stuff to be completely beaten, which would result in some of it being overheated. The perforations in the hood are kept clear by means of a spray and also of blades slowly moving back and forth against the hood. A tag catcher is also provided.—A. P.-C.

Slitting and Rewinding Machine.—Fr. patent No. 463,449, Papeterie de Nanterre, Papeterie, xli, 7 (May 25, 1919), Paper, xxvii, 26 (March 2, 1921).—Translation by A. Papineau-Couture. See Pulp and Paper, xvii 826, K-14 (Sept. 25, 1919).—A. F.-C.

Manufacture of Mottled Paper.—Fr. patent No. 506,632, Charles Clark Orcutt, U. S. A. Papeterie, xliii, 205-9 (March 10, 1921).—A. P.-C.

Pulp Process.—Can. patent No. 209,927, Gonzalo Jose Bustamanta, South Hadley, Mass., U. S. A., March 1, 1921.—The vegetable is dried, immersed in cold water, separated into coarse fibers which are deposited in a receptacle containing quicklime, and treated successively with a cold alkaline solution, a bleaching agent, and a solution of volatile alkali. The bath thus formed is acidulated with hydrochloric and sulphuric acids, and the fibers are washed and comminuted. Claims allowed 4.—A. P.-C.

Evaporator Feed and Overflow Regulator.—Can. patent No. 209,100, The Griscom Russell Co., assignee of Joseph Price, both of New York City, N. Y. U. S. A., March 1, 1921.—The inlet valve of the evaporator is controlled so as to maintain a constant water level in the evaporator; and the discharge valve is automatically regulated in such a manner as to maintain the dischrge at a uniform concentration, notwithstanding variation in the rate

of evaporation. Claims allowed 17.-A. P.-C.

Sheet Rubber Liner.—Can. patent No. 209,322, The Diamond State Fiber Co., Bridgeport, assignee of August Martin Edwin Strijffert, Morristown, Pa., U. S. A., March 8, 1921.—The patent covers as a new article of manufacture a laminated structure consisting of alternate layers of rubber and a separable covering of relatively tough, pliable, glycerin-treated, chemically parchmentized vegetable fiber, the latter adhering more strongly to one face of each layer of rubber than to the fact of the second rubber layer with which it is engaged. Claims allowed 3.—A. P.-C.

Suction Drying Roll.—Can. patent No. 209,323, The Dominion Bridge Co., Ltd., Lachine, assignee of Henry H. Vaughan, Montreal, Quebec, Canada, March 8, 1921. Claims allowed 4.—A. P.-C.

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Canadian Paper Exports

Canadian pulp and paper exports for September reached a value of \$9,457,027, a decline of \$7,033,665 as compared with September, 1920, and an increase of \$51,636 over the preceding month of August. Exports of news print for the month amounted to 1,224,136 cwts., compared with 1,212,225 in the corresponding month last year, an increase of 11,911 cwts. (595 tons) over last year, showing that, contrary to some reports, Canadian news print is not losing its foreign markets to European competition, although increased Canadian productive capacity should also be taken into consideration in comparing this year's exports with last. The month's figures indicate a continuance of the steady upward movement which has followed the drastic decline in April, with the exception of the month of June, as follows: March, \$12,407,476; April, \$6,946,236; May, \$7,931,525; June, \$6,788,932; July, \$8,666,556; August, \$9,395,391; September, \$9,457,027.

The month exports were made up as follows:

Book paper, 3,291 cwts	\$ 32,609
News print, 1,212,225 cwts	6,542,179
Other paper	1,280,705
	\$7,855,493
September, 1921	
Book paper, 810 cwts	
News print, 1,224,136 cwts	5,503,368
Other paper	261 807

September, 1920

	\$5,765,607
September, 1920	
Volume	Value
Sulphate 274,190	\$1,398,092
Sulphite, bleached 222,306	1,999,016
Sulphite, unbleached 513,526	3,361,048
Groundwood 424,689	1,877,053
1,434,711	\$8,635,209
September, 1921	
Sulphate 225,192	753,418

_	658,027	762,489 1,674,042
1	,239,820	\$3,682,420

Countries of destination were: Paper—United Kingdom, \$116,-591; United States, \$5,249,548; other countries, \$408,468. Pulp—United Kingdom, \$1,221,245; United States, \$2,175,937; other countries, \$285,238.

Comparative figures for the first six months of the current fiscal year show:

	Pag	per Pulp	Total
1921	\$33,379	9,508 \$15,804,159	\$49,183,667
1920	43,025	5,764 44,217,712	87,243,476
1919	27,119	9,246 16,626,726	43,745,972

Shuler & Benninghofen Enlarge Plant [FROM OUR BEGULAR CORRESPONDENT.]

DAYTON, Ohio, November 1, 1921.—Shuler & Benninghofen, proprietors of the Miami Valley Woolen mills at Hamilton, who do a large business with paper manufacturers throughout the United States, are preparing for an extensive enlargement of the plant by the construction of an addition.

The improvement is one of the most important undertaken during the present depression and reflects the confidence the firm holds in the future of the country. Business has been improving, the

proprietors state, for some time and they anticipate a continuance of improved conditions or they would not proceed with the erection of a plant which means the expenditure of \$200,000.

The building will be three stories in height, of modern and fireproof construction throughout, and will face 300 feet on Benninghofen avenue and will have a depth of eighty feet. It is planned to use the addition for the carding and spinning rooms and it is expected the addition will increase the capacity of the plant 60 per cent.

The company also is erecting an addition to the office. For some time more room has been needed by the officials and clerical forces.

The factory addition consists of two separate buildings, one 84 by 92 feet in dimensions and the other 24 by 34 feet. The buildings will have brick walls and stone trimmings.

C. N. Makepeace, of Providence, R. I., is the architect and Andrew Benzing, of Hamilton, the contractor.

Investigating Dumping of Paper

[FROM OUR REGULAR CORRESPONDENT.]

Washington, D. C., November 2, 1921.—The investigation of the dumping of news print on the American market is still under way by the Customs Service of the Treasury Department. No action on this will be taken at all until the Customs Service receives a report from its representative in the Scandinavian countries. Officials of the Customs Service here state that that will be at least a month. Following the receipt of this report, the Customs Service has promised to hold a hearing before any decision is reached in the matter.

To Transfer Miami Paper Suit to U. S. Court

DAYTON, O., October 31, 1921.—Judge Edward T. Snediker of the Common Pleas Court has approved the transfer of the damage suit recently instituted by the Miami Paper Company, of West Carrollton, against the American Wood Pulp Corporation of New York, to the United States District Court.

This suit asks damages in the sum of \$63,327.33 for the alleged misrepresentation as to the kind of wood pulp to be supplied the Miami Valley firm. A contract is said to have been made for a certain kind of pulp which is said not to have met specifications.

W. W. Sunderland Honored

COLUMBUS, Ohio, October 31, 1921.—W. W. Sunderland, president of the Miami Paper Company of West Carrollton, has been named a member of the state library board, according to an announcement made by Governor Harry L. Davis.

Mr. Sunderland is expected to confer with the governor in the near future regarding the work. There are five persons on the board and Mr. Sunderland heads the list.

F. L. McClellan Heads Jobbers Section

MINNEAPOLIS, Minn., October 31, 1921.—F. L. McClellan, at the annual meeting of the executive committee of the wholesalers and jobbers section of the Minneapolis Civic & Commerce Association on Thursday of last week, was elected chairman of the committee to succeed Sewall D. Andrews, who declined to be a candidate for re-election.

Boston Paper Trade to Meet November 16

[FROM OUR REGULAR CORRESPONDENT.]

Boston, Mass., November 1, 1921.—Wednesday, November 16, is the date and the Exchange Club, Boston, the place for the Fall meeting of the Boston Paper Trade Association. An attractive program for the entertainment features has been arranged, including moving pictures, vocal artists, etc.

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New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,

The situation in the New York paper market presented a favorable front during the last seven days although no marked advances or retrogressions were recorded. These days are unsteady and unusual ones in the paper industry as well as in all other lines of business. A feeling of uncertainty exists as to just what the outcome will be, but back of all is the faith that everything is working out for the best in the field of economics. This feeling is attested to by those who have recently traveled in the South and West, while in the East as well paper men are well assured that the country in general is steadily striving to attain its normal condition again. All conditions are working to build up a strong paper market. The increase in activity to be expected during the Fall and Winter months is at hand and the manufacturers are only too glad to meet fresh demands with increased production. Many paper mills are running at or close to capacity at present although they were practically shut down during the Summer. All things contribute to a good feeling through the trade.

News print has been firm during the week. The demand has slightly improved if any change at all may be noted. Prices have not fluctuated greatly for several weeks, news print contract rolls still being quoted at 4.00 cents a pound, transit rolls at from 4.00 to 4.25, and sheets at from 4.00 to 4.50. Production of news print will undoubtedly increase noticeably within a few weeks, because during the summer the drought permitted only limited quantities of wood to be ground thus keeping the supply of pulp

far below normal.

The market in book paper has been quiet on the whole for several days. Prices are apparently in equilibrium. Optimism is rife, however, in this department since the book paper market will not lag when other business is again normal. That normalcy is near at hand is clearly indicated by the increased activity of the retail business and by the very quick turnover in the marketing of agricultural products during the month of October.

Trading operations in the fine paper market have been nominal in the past week. Fine paper also awaits better times in order to advance in activity although sales slightly larger than the previous week indicate that already better days are anticipated.

Tissue is in very good demand and small lots find ready buyers. The market has strengthened appreciably and bids fair to continue strong for some time. Prices show little change. No. 1 white is quoted at from 75 cents to \$1.00, colored \$1.10 to \$2.25, antitarnish 80 cents to \$1.00, and silver tissue at from \$1.50 to \$2.70.

The kraft market is among the leaders in improvement. Both large and small lots are in good demand and a generous supply from the mills tends to keep the market active and the feeling excellent. At present some kraft mills are several days behind in their orders manifesting that the edge of the revival movement at least is here.

The board market shows very little activity although the tendency is toward a better demand as indicated by slightly larger sales the last two weeks. News board continues to be the most active of the group now selling at \$45 to \$55 a ton.

Mechanical Pulp

The mechanical pulp market is just beginning to feel a reaction from the lassitude forced upon it by low water during the Summer. Wood is being ground now in several localities that were of necessity quiet last dry season, and in all mills the production has been quickened to meet the increased seasonal demand. Importations of mechanical pulp have shown a decided increase during the past week and the outlook is distinctly encouraging. Prices are firm.

Chemical Pulp

Kraft, easy bleaching, and bleached sulphite pulp are strong

while bleached and No. 1 strong unbleached are less active. Prices have advanced a little all along the line. Importations are improving but still subnormal and domestic mills are more active than for a considerable period. Small job lots have been cleared away and orders are for larger quantities than formerly. Bleached sulphite imported is quoted at 4.25 to 4.50 cents a pound, easy bleaching at 3.00 to 3.75, No. 1 strong unbleached at 3.00 to 3.50, No. 1 kraft at 2.75 to 3.00, and bleached sulphate at 3.50 to 4.00.

Old Rope and Bagging

The old rope and bagging market is more active. Orders have increased materially and prices are higher in most cases. An improvement long awaited in this department appears to be at hand and although the situation presents a mixed appearance increased activity and strength are dominating.

Rags

The rag market is strong, and roofing stock retains first place for activity. The demand is constant and satisfactory in the light of present day uncertainty while a good quantity is on hand for disposal at prices slightly higher than last week.

Waste Paper

The waste paper market is weak as opposed to the rag and bagging department but doing better on the whole than for some weeks. The market prices present a mottled appearance some lower and a few higher than those last quoted. Hard white shavings are in demand and selling at a constant price of 4.25 to 4.50 cents a pound.

Twine

Business in twine is slow although no backward movement has been reported. In fact optimism prevails in this market. It is confidently expected that things will boom within the next few weeks and so for the present dealers and jobbers are contented to sit back and take the rather inactive demand for granted. Prices are about the same with nominal fluctuation.

Scores Illegal Associations

CHICAGO, October 26, 1921.—"First among the standards of the Trade Executive should, I believe, be absolute open co-operation on the part of our respective associations with the United States Government and with the public at large, and personally I approve Mr. Hoover's suggestion of open information," said President Emmet Hay Naylor of the American Trade Association Executives in opening the annual convention today. Mr. Naylor, who is secretary of the associations of fine paper manufacturers and one of the best known secretaries whose organizations are federated in the American Paper and Pulp Association, continued:

"By reporting definite representative information to the Government the association will be strengthened and benefit will come not orly to the industry but to our national industrial stability through a clear, frank understanding of facts. If the reports of an association are carefully and accurately compiled they can only benefit the industry and the members of the Association by being made public. If they misrepresent and hurt the industry it is because the Trade Association has not accurately compiled and presented the facts. The elimination of mushroom, illegal trade associations is absolutely necessary not only for the good of the public, but for

the good of our profession as trade association.

"I cannot resist very forcefully suggesting that if the general facts about business conditions in an industry are to be made public through a Government agency that the Government Agency use the Trade Association which represents that industry as the source of correct information. Otherwise there would have to be a board of experts at Washington for practically every industry to do the work in which the existing trade association is a specialist."

Daner

Market Quotations

-	_	
Paper	Company	Securities

New	York	Stock	Exchange,	closing	quotation	s Nov	ember 1	9
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Because of the unusual conditions prevailing in the various markets quotations are more or less nominal.

F. o. b. Mill.	
Ledgers	
P . C . C . 12 0 05	
Extra Supernie. 13 @ 25 Superfine . 13 @ 20 Tub Sized . 13 @ 16 Engine Sized . 9.00 @ 15.00 News—f. o. b. Mill— Rolls, contract . 4.00 @ 4.25 Charter 4.00 @ 4.25	
Engine Sized 9.00 @15.00	
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Colored 1.10 @ 2.25 Anti-Tarnish 80 @ 1.00	
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Frank f a h Mill-	
No. 1 Domestic., 0.50 @ 7.25	
No. 2 Domestic. 5.75 @ 6.50 Imported 6.00 @ 6.50	
Sulphite Screenings. 2.00 @ 3.00	1
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No. 1 Jute	1
No. 1 Wood 5.00 @ 6.00 No. 2 Wood 4.50 @ 5.00	
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Fiber Papers-	
No. 1 Fiber 6.00 @ 7.00 No. 2 Fiber 5.00 @ 6.00 Common Bogus 1.80 @ 2.10	1
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News45.00 @55.00	
Chip35.00 @40.00	
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Mechanical Help (Ex-Dock) No. 1 Imported 30.00 @ 35.00 F. o. b. Pulp Mills.) No. 1 Domestic 30.00 @ 35.00 Chemical Pulp (Ex-Dock, Atlantic Ports.) Sulphite (Imported) Bleached 4.25 @ 4.50 Easy Bleaching. 3.00 @ 3.75 No. 1 Strong un- bleached 2.75 @ 3.00 Sulphate Bleached 3.50 @ 4.00 (F. o. b. Pulp Mill.) Sulphite (Domestic) Bleached 4.00 @ 4.50 Strong unbl'chd 3.00 @ 3.25 E a s y Bleaching Sulphite 3.00 @ 3.50 News Sulphite 3.75 Kraft (Domestic) 2.75 @ 3.00 Soda bleached 4.00 @ 4.25 Domestic Rags	
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Mechanical Help (Ex-Dock) No. 1 Imported	
Mechanical Help (Ex-Dock) No. 1 Imported 30.00 @ 35.00 F. o. b. Pulp Mills.) No. 1 Domestic 30.00 @ 35.00 Chemical Pulp (Ex-Dock, Atlantic Ports.) Sulphite (Imported) Bleached 4.25 @ 4.50 Easy Bleaching 300 @ 3.75 No. 1 Strong un- bleached 3.00 @ 3.75 No. 1 Strong un- bleached 3.00 @ 3.50 No. 1 Kraft 2.75 @ 3.00 Sulphate Bleached 4.00 @ 4.50 Strong unbl'chd 3.00 @ 3.55 Strong unbl'chd 3.00 @ 3.50 News Sulphite 3.50 @ 3.05 Strong unbl'chd 3.50 @ 3.05 Kraft (Domestic) 275 @ 3.00 Mitscherlich 3.15 @ 3.75 Kraft (Domestic) 275 @ 3.00 Soda bleached 4.00 @ 4.25 Domestic Rags Prices to Mill, f. o. b. N. Y. Shirt Cuttings New White,No. 1.10.25 @ 11.00 New White,No. 2. 6.25 @ 6.75 Silesias, No. 1 6.50 @ 7.00 New Unbleached 8.75 @ 9.50 Washables 4.50 @ 5.00 Cattons according to Grades	
Mechanical Help (Ex-Dock) No. 1 Imported	

s prevailing in the various mar-
Allinai.
New Blue 5.25 @ 6.00 New Black Soft., 3.75 @ 4.00 New Light Sec-
onds 2.75 @ 3.00
O. D. Khaki Cut-
tings 3.75 @ 4.00 Corduroy 3.00 @ 3.25 New Canvas 7.00 @ 7.50
New Black Mixed 2.75 @ 3.25
Old
White, No. 1— Repacked 6.75 @ 7.25
Miscellaneous 5.50 @ 6.00 White No. 2— Repacked 3.50 @ 3.75
Miscellaneous 3.00 @ 3.25
St. Soiled White 1.50 @ 1.65
St. Soiled White 1.50 @ 1.65 Thirds and Blues— Repacked 2.00 @ 2.25 Miscellaneous 1.50 @ 1.75
Black stockings 1.75 @ 2.00
Cloth Strippings 1.15 @ 1.25 No. 1 1.25 @ 1.30
No. 2 1.05 @ 1.10 No. 3 95 @ 1.00
No. 4
Foreign Rags
New Light Silesias 6.00 @ 6.25
Light Flannelettes. 6.75 @ 7.00 Unbl'chd Cottons. 7.50 @ 8.50 New White Cut
tings 9.50 @10.50 New Light Oxfords 6.00 @ 6.50
New Light Oxfords 6.00 @ 6.50 New Light Prints. 4.50 @ 5.00 New Mixed Cut-
tings nominal
New Dock Cuttings 250 @ 300
No. 1 White Linens 8.75 # 9.75
No. 2 White Linens 6.50 @ 7.50 No. 3 White Linens 5.00 @ 5.25
No. 4 White Linens 3.50 @ 4.00
Old Extra Light
Prints 2.25 @ 2.75 Ord. Light Prints 1.75 @ 2.00
German Blue Cot-
tons
Checks and Blues. 1.50 @ 1.60
Dark Cottons 1.15 @ 1.25 Shoppery 1.05 @ 1.15
French Blues 2.00 @ 2.15
Bagging
Prices to Mill f. c. b. N. Y. Gunny No. 1—
Guilly No. 1—
Foreign 1.00 @ 1.10
Gunny No. 1— Foreign 1.00 @ 1.10 Domestic 1.10 @ 1.20 Wool, Tares, light . 1.20 @ 1.30 Wool, Tares, heavy 1.25 @ 1.40

Jute Wrapping, 2-6				Hard White, No. 2 3.25 Soft White, No. 1 3.00		3.50 3.25
No. 1	25	0	26		9	
No. 2	23	0	24	Flat Stock-		
Tube Rope		-		Stitchless 1.60	0	1.65
5-ply and larger.	17		18	Over Issue Mag., 1.65		1.70
Fine Tube Yarn-	-	-	-	Solid Flat Book, 1.40	0	1.50
5-ply and larger.	30	0	32	Crumpled No. 1. 1.00	0	1.15
4-ply	31	@	33	Solid Book Ledger. 2.00	@	2.50
Unfinished India—	32	0	34	No. 1 White News 2.00	@	2.00
	16	-	17		@	2.10
3-ply and larger. Paper Makers Twine	10	0	17	New B. B. Chips .60	@	.65
Balls	101	40	1234	Manilas-		
Box Twine, 2-4 ply	14	@	16	New Env. Cut 3.00	0	3.15
Jute Rope	20	6	24	New Cut No. 1 2.15	a	2.25
Amer. Hemp, 6	32	@	34	Extra No. 1, Old 1.60	0	1.70
Sisal Hay Rope-	92	45	94	Print90	0	1.00
No. 1 Basis	19	0	22	Container Board85	a	.90
No. 2 Basis	18	6	20	Bogus Wrapper65	8	.75
Sisal Lath Yarn-		452	20	Old Krafts, ma-	-	
No. 1	18		19	chine compressed		
No. 2	17	ě	19	Bales 2.25	. @	2,50
Manila Rope	26	ä	28		65	5.00
	_	-		News-		
Old Waste	Par	ers		Strictly Overissue .80	. @	.85
(F. o. b. Ne	wY	ork)		Strictly Folded65		.75
Shavings-	-			No. 1 Mixed Paper .50		
Hard White, No. 1	4 25	@	4.50	Common Paper35		.40

CHICAGO

[1	ROM BUR	REGULAR	CORRESPONDENT.]	
Paper			100 Test70.00	@72.50
F. o. b. 1			Binders' Board 80.00	0
All Rag Bond	40 @	-	Solid Wood Pulp. 80.00 Straw Board 35.00	@90.00
No. 1 Rag Bond	30 00	40	Filled Pulp Board.60.00	@65.00
No. 2 Rag Bond	18 @	20		600.00
Water Marked Sul-	11 0		Old Papers	
phite Sulphite Bond	9 0	15	Shavings—	
Sulphite Ledger	9 @	15	No. 1 Hard White 3.00 No. 1 Soft Shav. 2.25	@ 3.25 @ 2.50
Superfine Writing	23 @	30	No. 1 Mixed90	@ 1.00
No. 1 Fine Writing	20 @	27	No. 2 Mixed90	@ 1.00
No. 2 Fine Writing	18 @	25	White Envel. Cut-	
No. 3 Fine Writing	11 @	14	ings 3.00	@ 3.25
No. 1 M. F. Book.	534 @	7	Ledgers and Writ-	
No. 1 S. & S. C. Book	6140	714	ings 1.50	@ 1.75
Coated Book	834@	1034	Solid Books 1.25	@ 1.50
Coated Label	834 @	1034	No. 1 Books, light90	@ 1.00
News-Rolls, mill	4 @	5	Blanks 1.65	@ 1.75
News-Sheets, mill.	41/2 @	51/2	Ex. No. 1 Manila. 2,25 Manila Envelope	€ 2.50
No. 1 Manila	51/2@	-	Manila Envelope Cuttings 2.50	₽ 2.75
No. 1 Fiber No. 2 Manila	5%@	=	No. 1 Manilas 1.20	@ 1.30
Butchers' Manila	5 @ 434@		Folders News (over	
No. 1 Kraft	6 @		issue)	@ 1.00
No. 2 Kraft	51/2 @	-	Old Newspaper75	e .85
Wood Tag Boards.	5 @	-	Mixed Papers65	
Screenings	3 @		Straw Clippings	0
Boards, per ton-	value la		Kraft 2.00	@ 2.25
Plain Chip		47.50	New Kraft Cuts 2.50	@
Solid News	50.00 @	55.00	Roofing Stock, f.o.b.	
25 and heavier 18 to 24	57.50 @	57.50 60.00	Chicago, Net	
Manila Lined		00.00	Cash—	-
Chip		65.00	No. 125.00	

PHILADELPHIA

Container Line— 85 Test65.00 @67.50

FILLAD	ELITIA		
[FROM OUR REGULAR			
Paper	Best Tarred, 1-ply	_	
Bonds	(per roll) 2.00		2.10
Ledgers	Best Tarred, 2-ply (per roll) 1.50		1.60
Writings-	Best Tarred, 3-ply. 2.00	3	2.10
Superfine15 .20	Bagging	-	
Extra fine			
Fine. No. 220 @ .30	F. o. b. Phila.		
Fine, No. 315 @ .20	Gunny No. 1— Foreign 2.25	(3)	2.50
Book, M. F06 @ .09	Domestic 1.00		
Book, S. S. & C08 @ .15 Book, Coated08 @ .15	Manila Rope 4.00		4.50
Book, Coated08 @ .15 Coated Lithograph .10 @ .15	Sisal Rope 75		80
Label	Mixed Rope 75 Scrap Burlaps 1.00	0	1.25
News	Wool Tares, heavy. 2.50	ě	2.75
No. 1 Jute Manila .18 @ .181/2	Mixed Strings 75	ĕ	80
Manila Sul., No. 1 .09%@ .10 Manila No. 208%@ .09	No. 1, New Lt. Bur-		-
No. 2 Kraft @ .07	New Burlap Cut-		80
No. 1 Kraft @ 08	tings 1.75		2.10
Common Bogus02 @ .031/2	Old Papers	-	
Straw Board35.00 @45.00 News Board40,00 @45.00	The second secon		
Chip Board30,00 @35.00	Shavings-F. o. b. Phila.		
Wood Pulp Board90.00 @100.00	No. 1, Hard		
(Carload Lots)	White 3.50	-00	3.75
Binder Boards—	No. 2, Hard	-	
Per ton\$65.00 @75.00	White 3.00		3.25
Carload lots60.00 @65.00	No. 1 Soft White. 2.75 No. 2 Soft White. 1.75	9	
Regular75.00 @80.00	No. 1 Mixed 1.50		1.75
Slaters80.00 @85.00	No. 2 Mixed 1.00	ě	
(Continued	on page 62)	10	

Imports and Exports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING OCTOBER 29, 1921

SUMMARY

News print	s
Printing paper92 cs. 11 rolls, 94 bls	ú.
Writing paper30 cs	
Cigarette paper54 cs	
Packing paper917 bls., 2,857 rolls, 272 pkgs	
Surface coated paper73 cs	
Drawing paper3 cs	
Filter paper14 cs	
Wall paper2 cs	
Miscellaneous paper, 287 cs., 1,121 rolls, 4,071 bls., 1,253 pkgs	
287 cs., 1,121 rolls, 4,071 bis., 1,253 pkgs	ė.

CIGARETTE PAPER

American Tobacco Co., Paris, Havre, 54 cs. WRITING PAPER Whiting & Patterson, La Lorraine, Havre, 3 cs. E. Dietzgen, Providence, Marseilles, 27 cs.

PRINTING PAPER

B. T. Drakenfeld, Albania, Liverpool, 10 cs. Neuschafer, Chickasaw, Hamburg, 7 rolls. Sherwin Bros., same, 4 rolls. H. Reene Angel & Co., Plow City, Helsingfors, 94 bla L. A. Consmiller, Westerdyk, Rotterdam, 82 cs.

NEWS PRINT

H. Reene Angel & Co., Plow City, Kotka, 87 rolls.
H. Reene Angel & Co., Plow City, Helsingfors, 400 rolls. Sun Herald Corp., same, 79 rolls.

PACKING PAPER

Republic Bag & Paper Co., Chickasaw, Ham-burg, 550 bales. Republic Bag & Paper Co., same, 68 pkgs. Republic Bag & Paper Co., same, 1,904 rolls. Republic Bag & Paper Co., Tordenskjold, Ham-

burg, 900 rolls.
Republic Bag & Paper Co., same, 367 bales.
Republic Bag & Paper Co., same, 204 pkgs.
Wilkinson Bros. & Co., Westerdyk, Rotterdam,

SURFACE COATED PAPER

L. A. Consmiller, Westerdyk, Rotterdam, 73 cs.

H. Reene Angel & Co., Westerdyk, Rotterdam, FILTER PAPER

H. Reene Angel & Co., Westerdyk, Rotterdam,

WALL PAPER G. W. Shelden & Co., Montauk, Lendon, 2 cs.

PAPER

G. W. Sheldon & Co., La Lorraine, Havre, 6 cs. Japan Paper Co., Arabic, Naples, 225 cs. A. T. A. Merchandising Co., Chickasaw, Hamburg, 79 rolls.
A. T. A. Merchandising Co., same, 74 bales.
Natl. Park Bank, Ossincke, Gothenburg, 1,253

Druggists' Supply Co., Adriatic, Liverpool, 46 cs. Henle Max Paper Co., Paris, Havre, 10 cs. D. S. Walton Co., Tordenskjold, Hamburg,

D. S. Walton Co., Tordenskjold, Hamburg, 3,880 bls. C. K. MacAlpine, Asabeth, Gothenburg, 117 bls. C. K. MacAlpine, same, 664 rolls. American Transoccanic Traders, Inc., Asabeth, Helsingfors, 378 rolls.

RAGS, BAGGINGS, ETC.

Wilkinson Bros. & Co., Inc., America, Bremen, to bales rags. Ladenburg Thalman & Co., Assyria, Glasgow.

320 bales rags.

Ladenburg Thalman & Co., Assyria, Glasgow.

11 bales rags.
Equitable Trust Co., Eastern Sea, Rotterdam,
497 bales rags.
J. R. Walker, Hindoo, Hull. 27 bales rags.
State Bank, Chickasaw, Hamburg, 56 bales rags.
Parsons & Whittemore, same, 40 bales rags.
Ladenburg, Thalman & Co., same, 27 bales rags.
E. J. Keelar Co., Hafters, Naples, 60 bls. cotton

Dallas Waste Mills, Hufters, Naples, 40 bales cotton waste. Irving National Bank, Archmiede, Manchester, 86 bales paper stock, E. Butterworth & Co., same, 40 bales news cuttings. E. Butterworth & Co., same, 170 bags hide cut-

tings.
R. F. Downing & Co., same, 128 bales news-Guaranty Trust Co., same, 104 bales bagging. P. Berlowitz, Geo. Washington, Bremen, 233

bales rags.
Ladenburg, Thalman & Co., Tordenskjold, Ham-Ladenburg, I manuan to Co.
burg, 103 bales rags.
Castle, Gottheil & Overton, Princess Matorka,
Bremen, 139 bales rags.
Castle, Gottheil & Overton, Lapland, Antwerp,
412 bales bagging.
E. J. Keller Co., Archimedes, Manchester, 165
hales bagging.

OLD ROPE

Ladenburg, Thalman & Co., Westerdyk, Rotter-dam, 103 coils. Ladenburg, Thalman & Co., Tordenskjold, Ham-burg, 96 coils. Ladenburg, Thalman & Co., Saxonia, Hamburg, 100 coils. W. H. Cummings & Son, Madonna, Marseilles,

W. Schall & Co., same, 73 coils.
Brown Bros. & Co., Bloemfontein, Hull, 292 coils. J. W. Ramsay & Co., Assyria, Glasgow, 50 coils. M. O'Meara Co., United States, Copenhagen,

2 coils. Atlantic National Bank, Eastern Sea, Antwerp, 57 coils.

First National Bank of Boston, Arabic, Naples, 260 ccils. Brown Bros. & Co., Hindoo, Hull, 42 coils. E. J. Keller Co., Noordam, Rotterdam, 191 bales.

CASEIN

Kalbsleisch, Corp., Delambre, Baires, 1,666 bales.

WOOD PULP

WOOD PULP

American Woodpulp Corp., United States, Copenhagen, 919 bales wood pulp.

National City Bank, United States, Kristiania, 800 bales wood pulp.

I. Anderson & Co., same, 1,050 bales wood pulp.

E. Butterworth & Co., same, 90 bales wood pulp. National Bank of Commerce, Virginian, Hamburg, 1,366 bales wood pulp, 203 tons.

Brown Bros. & Co., same, 681 bales wood pulp, 100 tons.

National Bank of Commerce, Lestris, Lundswall, 2,500 bales sulphite, 500 tons.

American Woodpulp Corp., same, 5,000 bales sulphite, 1,000 tons.

Brown Bros. & Co., Chickasaw, Hamburg, 1,578 bales wood pulp, 165 tons.

Lagerloef Trading Co., Plow City, Katka, 112 bales wood pulp bands, Castle, Gottheil & Overton, Noordam, Rotterdam, 1,198 bales wood pulp, 101 tons.

F. Enders & Co., same, 4,800 bales wood pulp. National City Bank, Ossineke, Gothenburg, 600 bales wood pulp, 101 tons.

F. Enders & Co., same, 4,800 bales wood pulp. National City Bank, Ossineke, Stugsund, 4,830 bales wood pulp, 200 tons.

Parsons Trading Co., Asabeth, Gothenburg, 813 bales dry chemical pulp, 101 tons.

Scandinavian-American Trading Co., same, 508 bales keached sulphite, 101 tons.

Scandinavian-American Trading Co., same, 254 bales kraft sulphate, 50 tons.

C. L. Robinson, same, 3,150 bales wood pulp, 457 tons.

American Writing Paper Co., same, 175 bales

American Writing Paper Co., same, 175 bales kraft pulp, 25 tons.

BALTIMORE IMPORTS

WEEK ENDING OCTOBER 29, 1921

Parsons Trading Co., Asabeth Gethenburg, 813 bales dry chemical pulp, 101 tons.

Equitable Trust Co., same, 250 bales dry chemical pulp, 50 tons.
Wood Pulp Trading Co., Ltd., Eastern Temple, 2,700 bales wood pulp.

Guaranty Trust Co., same, 1,800 bales wood Guaranty Trust Co., same, 1,800 baies wood pulp, 361 tons.
Scandinavian-American Trading Co., same, 4,000 bales dry sulphate, 812 tons.
Scandinavian-American Trading Co., 1,524 bales kraft sulphate, 304 tons.
F. Enders & Co., Ossineke, Gothenburg, 11,935 bales wood pulp.
American Woodpulp Corp., Lestric, Lundswall, 5,000 bales sulphite, 1,000 tons.
National Bank of Commerce, same, 2,500 bales sulphite, 500 tons.
E. Butterworth & Co., Eastern Sea, Antwerp, 608 bales rags. 608 bales rags. Hudson Trading Co., Asabeth,, 260 bales sulphite.

BOSTON IMPORTS

WEEK ENDING OCTOBER 29, 1921

Lagerloaf Trading Co., Plow City, Kotka, 2,134 bales sulphite cellulose.
Lagerloef Trading Co., same, 1,298 bales dry soda pulp.

PHILADELPHIA IMPORTS

WEEK ENDING OCTOBER 29, 1921

Irving National Bank, Ossineke, Gothenburg, 1,000 bales wood pulp, 203 tons.
F. Enders & Co., same, 8,930 bales wood pulp.
A. J. Page & Co., Gustavesholm, Gelfe, 4,500 bales sulphate.
American Woodpulp Corp., Gustavesholm, skutskar, 1,000 bales dry wood pulp.
Scandinavian-American Trading Co., same, 2,000 bales dry wood pulp.
Irving National Bank, Plow City, Raumo, 2,667 bales cellulose.
Lagerloef Trading Co., same, 6,898 bales cellulose. lose.
Lagerloef Trading Co., Plow City, Kotka, 81 Lagerloaf Trading Co., same, 2,898 bales sul-phite cellulase.

H. Reene Angel & Co., same, 206 reels news print. print.
American Woodpulp Corp., Virginian, Hamburg,
154 bales rags.
M. Rice & Co., same, 32 cs. crepe paper.
E. J. Keller Co., Arkansas, Copenhagen, 660
bales wood pulp.
E. J. Keller Co., Deranof, Bremen, 416 bales

SAN PEDRO, CAL., IMPORTS

WEEK ENDING OCTOBER 15, 1921

Hudson Trading Co., Eastern Sailor, 55 rolls ews print.

NEW ORLEANS IMPORTS

WEEK ENDING OCTOBER 29, 1921

Hudson Trading Co., West Narronus, 749 rolls news print.
Wood Pulp Trading Co., Ltd., West Norranus, 1,200 bales wood pulp.

CHARLESTON IMPORTS

WEEK ENDING OCTOBER 29, 1921

Castle, Gottheil & Overton, Caldbrook, Antwerp, 833 bales bagging.

SAN FRANCISCO IMPORTS

WEEK ENDING OCTOBER 29, 1921

Castle Gottheil & Overton, Chile, Rotterdam, 500 bales wood pulp.

ALUM

FOR THE PAPER MAKER

Manufactured by

The Jarecki Chemical Co. SERVICE **QUALITY**

Sole Selling Agents

ISAAC WINKLER & BRO.

CINCINNATI **NEW YORK**

FOURDRINIER WIRES

Cylinder Moulds and Dandy Rolls Made and Repaired Lettering and Monograms for Watermarks

THOMAS E. GLEESON, Inc.

Manufacturers of Wire Cloth of All Descriptions

411-413 John Street, East Newark, N. J.

Specialty-The Finest Wires for Tissue and Fine Grade Papers

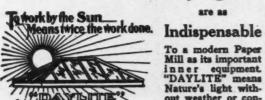
WE specialize in durable Fourdrinier Wires and Cylinder Wires in any metal desired up to and including 120 mesh in plain woven, double warp, triple chain, and twisted weaves.

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

Joseph O'Neill Wire Works

Port Chester, N. Y. Established 1906

Van Noorden Skylights



To a modern Paper Mill as its important inner equipment. "DAYLITE" means Nature's light with-out weather or con-densation drip.

E. VAN NOORDEN & CO. Boston, Mass.



Splicing Tissue

INDIAN AND STAR BRANDS

specially prepared for PAPER MILLS

E. M. Serneant Co.

15 EAST 26TH STREET New York, N. Y.



Brittle and easily soluble. Cheapest size out. Cheaper than mill made size. Also our hot and cold water sizes; standard quality. Cleaner, more uniform and economical than either mill made sizes or those offered by our competitors. Also Arabol Paper Size, Splicing Gums, Condensed Paste Powder, Paper Makers' Starches.

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FOREIGN and DOMESTIC

LE, GOTTHEIL & OVERTON

Jute Stock Sizing, Sulphite and Soda Pulps

200 FIFTH AVE.

"TYLER" Fourdrinier Wires

CYLINDER FACES WASHER WIRES In Brass, Bronze and Phosphor Bronze

The W. S. Tyler Company Cleveland, Ohio

Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,

WEDNESDAY, November 2, 1921.

ALUM.—The alum market is moderately active, but deals are entirely in the small quantities. The price of ammonia alum is 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 for the powdered.

BLEACHING POWDER.—Buyers have lately taken larger stocks of bleach powder, in part because of the threatened strike and in part on account of the depleted condition of their stocks. Domestic bleach sells at from 2.50 to 3.00 cents a pound, f. o. b. works, and foreign bleach at from 2.00 to 2.25 cents a pound, depending upon quality.

BLANC FIXE.—There is no improvement over last week manifest in this department, although sales are sufficient to maintain a good feeling. The price is at from \$40.00 to \$50.00 a ton, depending upon the grade required, and for powdered blanc fixe at from 3.50 to 3.75 cents a pound.

BRIMSTONE.—There is not much fluctuation in the sulphur market, prices remaining the same at from \$15.00 to \$16.00 a long ton at the mines.

CASEIN.—While little casein is coming from South America at present, business here is better and the demand is proportionately larger. It is hoped that the demand for this commodity will increase steadily so that the market will hold strong when large importations, occasioned by the "flush," arrive in February and March from Argentina.

CAUSTIC SODA.—The caustic soda market remains largely as last week, with small lots selling readily and orders for large quantities slightly more numerous owing to a fear of disruption in transportation schedules. It is quoted at 3.25 cents a pound on the basis of 60 per cent, f. o. b. works.

ROSIN.—The condition of things in this market is greatly improved. A firm undertone prevails through the trade and the general feeling is excellent. The prices show very little change, now being listed at \$5.50 for grade E, \$5.70 for grade F, and \$5.75 for grade G, ex-yard New York.

CHINA CLAY.—China clay is in a more imposing position than it has been for several weeks. Importations of the English product are more numerous and the demand fairly strong. The domestic is quoted at from 6.50 to 8.00 cents a pound for the unwashed, 8.00 to 10.00 for the washed, and 15.00 to 20.00 for the imported.

SALTCAKE.—Although the saltcake supply is low, the market appears to be picking up sufficient quantities to maintain a good feeling on all sides. The price ranges from \$17.00 to \$25.00, according to quality.

SATIN WHITE.—The satin white market is quiet on the whole, the price remaining at 2.10 cents a pound.

STARCH.—Globe starch is in good demand and an adequate supply appears to be on hand for the present. The price is \$1.78 a bag for the domestic and about 6.00 cents a pound for the imported.

SULPHATE OF ALUMINA.—A firm tone is apparent in the sulphate of alumina market. The commercial grade sells at from 1.75 to 2.10 cents a pound, and the iron free at from 2.75 to 3.00 cents a pound, the low limit standing for bags and the high for barrels in each case.

SODA ASH.—The demand is good for soda ash and very little is available in foreign markets at present. The domestic is quoted at 2.20 to 2.50 and the foreign at 1.85 to 1.95.

TALC.—More talc has moved in the last ten days than for a considerable period and hopes run high that the activity will hold through the next few months. Talc sells at from \$14.00 to \$18.00 a ton.

Market Quotations

(Continued from page 59)

Solid Ledger Stock. 2.00 @ 2.25 Writing Paper 1.80 @ 2.00	New Black Soft. ,03 @ .00 New Light Sec-	334
No. 1 Books, heavy. 1.50 @ 1.75 No. 2 Books, light. 1.25 @ 1.50 No. 1 New Manila. 2.75 @ 3.00	onds	2 1/4 2 1/4
No. 1 Old Manila 1.50 @ 1.75 Container Manila90 @ 1.00 Old Kraft 2.00 @ 2.25	New Canvas08 .0 .0 New Black Mixed 3.00 . 3.2	8%
Overissue News90 @ 1.00 Old Newspaper60 @ .70		636
No. 1 Mixed Paper50 60 Common Paper40 50 Straw Board, Chip40 50	White, No. 2-	434 346
Binders' Bd. Chip40 @ .50 Domestic Rags—New. Price to Mill, f. o. b. Phila.	Miscellaneous02% .0	374
Shirt Cuttings— New White, No. 1 .09 @ .091/2	Repacked 1.85 @ 2.0 Miscellaneous 1.55 @ 1.7 Black stockings 1.75 @ 2.2	5
New White, No. 2 .05½ @ .06 Silesias, No. 105½ @ .06	Roofing Stock— No. 1	10
New unbleached08 @ .09 Washables03½ @ .03¾ Fancy05 @ .05¾		10
Blue Overall05 @ .051/2	No. 5A nominal nominal	
New Blue021/2@ .023/4	C nominal	

BOSTON

FROM OUR REGULAR CORRESPONDENT

[FROM OUR REGULAN	CORRESPONDENT.]
Paper	Wood, Vat Lined 47.50 @50.00 Filled News Board .42.50 @
Bonds	Solid News Board42.50 @47.50 S. Manila Chip55.00 @ Pat. Coated75.00 @
Superfine15 @ Fine12 @ Books, S. & S. C07½@	Old Papers
Books, M. F	Shavings— No. 1 Hard White .03½ No. 1 Soft White .03 No. 1 Mixed85 @\$1.00
News, sheets\$4.50 Mews, rolls	Ledgers & Writings .02 @ .02½ Solid Books01½@ .01¾
No. 1 Manila\$7.00 @ No. 1 Fibre 8.00 @ No. 1 Jute 8.00 @ Kraft Wrapping 7.00 @	Blanks
Kraft Wrapping 7.00 @ Common Bogus 3.00 @	issues18.00 @
Boards	Manila Rope05 @
(Fer Ton Destination) Chip\$37.50 @\$40.00	Mixed paper 9.00 @ Gunny Bagging .01 @ Manila Rope05 @ Commen Paper 8.00 @ Old News 13.00 @
News, Vat Lined42.50 @	Old Kraft

TORONTO

[FROM OUR REGULAR CORRESPONDENT.]

[FROM OUR REGULAR	CORRESPONDENT.]
Paper	Sulphite bleached 90.00@ 95.00
	Old Waste Papers
(Mill Prices to Jobbers f. o. b. Mill)	Old Waste Papers
Bond—	(In carload lots, f. o. b. Toronto)
Sulphite 13 @ —	Shavings-
Dark tinted 14 @ —	White Env. Cut. 3.50 @
Ledgers 14 @ -	Soft White Book
Writing 11 0 15	Shavings 3.35 @
News, f. o. b. Mills-	White Bl'k News 1.90
Rolls (carloads). 4.00 @ -	Book and Ledger-
Sheets (2 tons or	Flat Magazine and Book Stock
over) 4.75 @ -	(old) 135 @
Book-	Light and Crum-
No. 1 M. F. (car-	pled Book Stock 1.20 @ -
loads)10.00 @ — No. 2 M. F. (car	Ledgers and
loads) 9.00 @ -	Writings 1.80 @ -
No. 3 M. F. (car-	Solid Ledgers 1.60 -
loads) 8.50 @ -	Manilas—
No. 1 S. C. (car-	New Manila Cut. 1.85
loads)10.50 @	Printed Manilas70 — — Kraft 2.25 —
No. 2 S. C. (car-	News and Scrap—
loads) 9.50 @ -	Strictly Overissue 1.00 @ -
No. 1 Coated and	Folded News 1.00 @ -
litho 15.00 @ -	No. 1 Mixed Pa-
No. 2 Coated and	pers
No. 3 Coated and	Domestic Rags-
litho13.25 @ -	Price to mills, f.o.b. Toronto.
Conted and litho.,	Per lb.
colored15.25 @ -	No. 1 White shirt
Wrapping—	No. 2 White shirt
Grey 4.75 @ — White Wrap 5.25 @ —	
White Wrap 5.25 @ -	Fancy shirt cut-
"B" Manila 5.75 @ —	tings051/2 @ .053/4
No. 1 Manila 7.50 —	No. 1 Old whites .04 @ -
Fibre 7.25 — Kraft, M. F. or	Thirds and blues .02 .0234
M. G 8.75 @ -	Per cwt.
	Black stockings, 2.00 @ -
Pulp	Roofing stock
(F. o. b. Mill)	No. 1 1.40 @
Ground Wood\$27.50@\$35.00	No. 2 1.30 @
Sulphite, easy bleach-	Manila rope0434 @ .05
ing 65.00@ 75.00	No. 2
Sulphite, news grade 60.00@ 65.00	Gunny bagging0234 -

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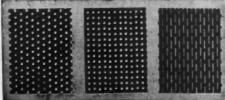
Brooklyn, N. Y.

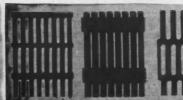
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words or less, first insertion, \$1.00.
SITUATION WANTED, 4 cents a word for first insertion and 2 cents a word for each subsequent insertion of same ad. No ad of less than 25 words accepted.
HELP AND MISCELLANEOUS WANTS,

HELP AND MISCELLANEOUS WANTS, and small For Sale Ade, 4 cents a word for each and every insertion. No ads of less than 25 words accepted.

When answering advertisements, please address the Box Number given in ad.

Answers can be forwarded care Paper Trade Journal, and will be promptly forwarded without extra charge. All should be sent to the New York office, 10 East 39th street. And all should be addressed as the advertisement directs in every case and not simply to the paper.

All classified ads for the current issue must be in hand not later than Monday preceding

date of publication.

HELP WANTED

EXPERIENCED MACHINE TENDER
WANTED on Cylinder Machine making
Box Board. State experience and salary expected. Good job. Steady work. Address,
Box 4518, care Paper Trade Journal. N-3.

WANTED-Experienced Toilet Paper Operator on a Diets or Hudson Sharp Machine; steady good position, future. Address, Box 4565, care Paper Trade Journal. O-27

POSITION will shortly be opened for first class Engineer, one familiar with Steam and Electrical Development. Must have had experience in Fulp and Paper Mill Work. Man with technical education preferred. Replies will be considered absolutely confidential. Permanent position and good salary. Address, Box 4555, care Paper Trade Journal. N-17

WANTED—An experienced General Superintendent to take entire local charge of a Modern News Mill with Sulphite and Groundwood Mills. Give full personal particulars, details of experience and operating record. Address, Box 4524, care Paper Trade Journal. N-3

WANTED-Manager for Paper Board Mill to be erected in large Eastern City. Investment \$15,000 required. Unusual opportunity. Address, Box 4568, care Paper Trade Journal.

WANTED—First class Night Superintendent for one Machine Mill in a small Country Town. Married man preferred. Four cylinder Combination 84" manufacturing Asbestos Paper and Saturating Felt. Frefer to have some knowledge of the Saturating end of the business. Good chance for the right man. Only a sober and reliable man need apply. Address, Box 4569, care Paper Trade Journal. N-10.

WANTED—Boss Finisher for High Grade
Book Mill. Address, Box 4570, care
Paper Trade Journal. N-3.

WANTED—Envelope Man as Factory Superintendent. We have an opening for an experienced and versatile man, who is well qualified to take charge of our New York Envelope and Paper Bag Factory. Mechanical man preferred. State all details, age, salary, etc. Address, Box 576, 205 Seventh Avenue, New York.

WANTED—Stenographer for New York
Office of Tissue Manufacturer. Must
have experienced in Mill or Paper Jobbing
Office, and capable of taking charge in absence of the manager. Address, Box 4571,
care Paper Trade Journal.

HELP WANTED

WANTED-Machine Tender for Small Mill in New England, making light weight Chip and Wrapping. Must be able to make repairs. Address, Box 4572, care Paper Trade Journal. N-3.

FOR AUSTRALIA—I want to secure a young, married man as Manager of my self-opening bag Plant in Australia. He must be a capable Executive, who has operated Bag Plant and thoroughly familiar with bag making machinery. A mighty good opportunity. Give full details, education, experience, etc., with photograph if possible in first letter. Letter returned. Address, Box 4573, care Paper Trade Journal. N-3.

WANTED—Cylinder Machine Tender on .009
Straw Board. Must be a steady and
competent man. Wages \$4.00 per eight hours.
Address, The Coshocton Straw Paper Company. Coshocton, Ohio.
N-3.

WANTED—One (1) Beater Boss, two (2)
Machine Tenders and two (2) Back
Tenders. Must be absolutely experienced on
high grade board, strictly sober and steady.
Good job for right man. Two Towers. Address, Box 4582, care Paper Trade Journal.
N-10.

WANTED—Chemist, Practical Paper Maker.
Experienced in Paper Mill work for a Specialty Mill. Must be able to conduct tests and analyze raw and boiler feed waters and materials entering into the manufacture of Paper. The more practical experience in Paper Making and Machinery the better. State age, experience and salary expected. Address, Box 4583, care Paper Trade Journal. N-3.

MASTER MECHANIC WANTED—An experienced Master Mechanic for a Modern News Mill with Sulphite and Groundwood Mills. Give full personal particulars, details of experience and operating record. Address, Box 4584, care Paper Trade Journal. N-17

SITUATIONS WANTED

SUPERINTENDENT desires position. 20 years' experience on all grades of Combination and Container Board familiar with repairs, maintenance and operation of every department. Knows how to get quality and production. Can furnish the very best of references. Address, Box 4347, care Paper Trade Journal.

PAPER SALESMAN, New York City, wants connection with Mill Agency Company. Can produce large amount of business, with right kind of cooperation. Drawing account on commission basis. Correspondence invited with responsible agencies. Address, Box 4503, care Paper Trade Journal.

Superintendent

An up-to-date paper maker 35 years of age. Experienced on high grade box board and test containers, rope papers for sand and sack purposes, also tissues for waxing, crepe and semi-crepe for towels, napkins and toilet. A thoroughly practical man who can step into a mill and make it run, desires a position with a progressive company. Address, Box 4579, care Paper Trade Journal.

SITUATIONS WANTED

SUPERINTENDENT wishes to make a change from his present position. Have had fifteen years' experience on all grades of Box Boards, Containers, Tests, etc. Familiar with repairs, maintenance and knows how to handle men. Middle aged. Married and can give best of references. Address, Box 4586, care Paper Trade Journal. N-3.

MASTER MECHANIC desires position. Expert Construction, Reconstruction, Installing Equipment and Economical Maintenance. Ground Wood and Sulphite from the log to finished product. Fourdriner machines making Book, Bond, News and Specialties. Cylinder Machines making Board, Bristols and Tissue Specialties, using water, steam and electric power. Address, Box 4425, care Paper Trade Journal. D-22.

THOROUGH SUPERINTENDENT desires position, experienced on tissues, all grades Crepe, Semi-Crepe, Toilet, Towels, Napkins, Fourdriner and Cylinder Machines. High grade man on Kraft and Kraft Specialties, Waxing Tissues, plain and colored, Twisting Fibres. A-1 on Colors. Thoroughly understand the conversion of Waxing Tissues and Colored Crepe Papers. Good organizer. References furnished. Address, Box 4431, cars Paper Trade Journal. N-3.

WANTED POSITION as assistant Superintendent or Tour Boss. Would consider running Machine. Have had 17 years' experience on Box Board Machines and Combination Boards, and well up on High Test Containers. Address, Box 4499, care Paper Trade Journal.

YOUNG MAN, 24 years old, desires connection with Paper House in New York City or vicinity. Possesses general knowledge of Writings, Bonds, Coarse Papers, etc., also two years' mill experience in all branches of cost accounting. Capable of filling position in Accounting or Sales Department. Address, Box 4475, care Paper Trade Journal. N-17

SUPERINTENDENT or Assistant desires position. Experienced on Grease-proof, Glassine, Waxing Papers and all kinds of Tissues. Address, Box 4557, care Paper Trade Journal.

DAPER BUYER AND CORRESPONDENT desires position. Familiar with all grades, sources of supply, etc. Three years with prominent Paper Exporters. Knowledge of Spanish and Stenography. Address, Box 4558, care Paper Trade Journal. N-3

PAPER SALESMAN desires position. Has handled Printings, Writings, Wrappings and some Specialties. Three years with large Paper House. Address, Box 4559, care Paper Trade Journal. N-3.

SUPERINTENDENT—Man thoroughly experienced in manufacture of Box Board wants position as Superintendent. Excellent color man, understands construction; 25 years experience. Address Box 4560, care Paper Trade Journal. N.3

EXPERIENCED ENVELOPE AND PAPE-TERIE MAN desires position with an A No. 1 Concern as Superintendent or Foreman. 15 years experience. Thoroughly familiar with all makes of Envelope Machinery and handling of high grade Papeteries. Best of references. Address, Box 4574, care Paper Trade Journal.

SULPHATE PULP—Expert in Mill Operation would like to get in with Mill having trouble or where production and cost is not satisfactory. Address, Box 4575, care Paper Trade Journal.

EXPERIENCED PAPER and Paper Stock Man desires position in Mill or Jobbers Office. Executive and Sales ability. Good accountant. Moderate salary. Married man. Address, Box 4578, care Paper Trade Journal. N-3.

MISCELLANEOUS

TRAFFIC MANAGER—Modern Business requires an efficient traffic manager. A man with ten years' experience as Traffic Manager desires position. Capable of handling all matter pertaining to transportation, qualified to organize this department, excellent character, best of references. Address, Box 4587, care Paper Trade Journal. N-10.

WANTED—2 3-Pocket Grinders, 54" diameter. Ring Olling. 2 Stone Sharpening Devices. 2 6" Centrifugal Stock Pumps. 1 Pressure Fliter, capacity 500,000 gallons, 24 hours. 1 60 lb. Pressure Pump, direct connection to motor, 200 gallons minute, 3 phase, 60 cycle, 600 volts. Address, Box 4544, care Paper Trade Journal.

WANTED—Three Beaters, preferably iron tub, capacity 1,000 lbs., to 1,500 lbs., double lighter construction without washing cylinders. Also three Jordans, about 20 tons capacity each. Address, Box 4546, care Faper Trade Journal.

WANTED TO BUY—A 48, 50 or 54-inch Paper Cutter, Seybold or Dayton pre-ferred. Give full particulars in first letter. Address, The Paper Novelty Company, Green Bay, Wisconsin.

Bay, Wisconsin.

N-10

WANTED—One good sized Heavy Duty
Rag Cutter. Give complete details and
price with your offering. Oertel Roofing Mfg.
Co., East St. Louis, Ill.

N-3

For Sale

BEATERS-6 N & W 48x48 rolls, 2 Emerson 48x48, 22' tubs.

CUTTERS—One 52" Sheridan, new model, 38" Guillotine.

CALENDARS—One Board rolls 16x50", one 7 roll open side 84".

EXHAUSTER—One Sturtevant.

JORDANS—One N & W Monarch, One Emerson large size, one Horne, one N & W Pony, with extra plug.

PULLEYS-All sizes.

PUMPS—Two 6" Emerson, one 4" Centrifugal, Law Mch. Co.'s make. 1—Type 4 Gould 5" triplex water pump.

PRESS ROLLS-One pair brand new, one R C 18x80, one Gun Metal 18x81, one 16x75", and 18x80, one others.

RAG CUTTERS-Four No. 2 Daniels, one Perkins.

REELS-One 2 bowl 56", one 2 bowl 58".

ROTARIES-Two 7'x22'.

SLITTERS-One 86" P & J, one 40" Kidder, one 104" B & C.

WINDERS—One 86" P & J, with slitters and rewinding shaft, for immediate shipment.

SAVE-ALL-One North.

ET MACHINES-5 N & W, with cutoffs, moulds 30x52", three extra cylinder moulds for these machines.

MILLS MACHINE COMPANY

Lawrence, Mass.

MISCELLANEOUS

WANTED:

ADAPTED FOR COLORED CREPES. STATE WIDTH OF MACHINE, DIAM-ETER OF DRIER, MANUFACTURER'S NAME AND PRICE. ADDRESS BOX 4580, CARE PAPER TRADE JOURNAL.

FOR SALE

FOR SALE-14 Calendar Rolls, 58" face, 8" FOR SALE—14 Calendar Rolls, 58" face, 8" to 16" diameter. 2 No. 1 Cladin Engines.

1 small Jordan Engine. 1 6" Horizontal Water Pump. 2 Air Fans. 5 Dryers, 48" diameter and 120" face, complete with frames and gears. Complete triple-deck frames for 44 Dryers. Will arrange terms to suit. Chesapeake Paper Board Co., Baltimore, Maryland.

FOR SALE—Paper Cutting Plant. One 40"
Kidder Slitting Machine, one 48" Hamblet
Sheeter and one 38" Jones Undercut Powder
flat cutter Machine. Address, P. O. Box 300,
Emerson, New Jersey.

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.

FOR SALE

Wholesale Paper Concern handling general line, both Coarse and Fine Papers and Paper Specialties. Es-Papers and Paper Specialties. Established fifteen years. Doing a growing business with established trade and territory. Excellent facilities, five-story modern brick building, private side track, good equipment. Location especially suitable to Eastern markets. Address, Box 4581, care Paper Trade Journal.

FOR SALE

FOR SALE-9 Dryers, 28" x 52", complete with frames, felt and rolls, gsars, two cone pulleys and steam connections. Address, Box 4386, care Paper Trade Journal.

FOR SALE—Two Hoffman Couch Rolls, seventy-eight inches in diameter, need recovering. Address, Box 4548, care Paper Trade Journal.

COAL-Moshannon and "E Seam" bituminous coals, low sulphur, low ash. Lowest freight rate east and north. \$2.50 net ton, to. b. mines. Halden-Kelley Coal Company, 209 Market St., Clearfield, Pa.

SWEDISH PRINTING PAPER: good quality, below market price. Rolls—25½ inch broad, 400 tons. Sheets 22% x 33 inches. \$9 tons, and 36% x 55 inches, 116 tons. Address, Box 4563, care Paper Trade Journal.

Rebuilt Paper Mill Machinery

-In Stock and Guaranteed Not Where Is and As Is

Not Where Is and As Is

FOURDRINIER PAPER MACHINE: One 112",
one 96", one 72".

FOURDRINIER PARTS: Pusey & Jones 13",
118", 112", 100".

PRESS PARTS FOR PAPER MACHINES: Pusey
& Jones Bell Crank housing two sets 18" x 114",
three sets 18" x 10", two sets 18" x 96", Black
& Clawson Swing Arm housings with rolls.

DRYERS: Four 48" x 111", sixteen 48" x 106",
ten 48" x 68", one 48" x 51".

MARSHALL DRIVES: 8 Black & Clawson selfcontained stand with friction clutch cone palley
and 6" x 7" mortise gears. Mortise gears and
pinions for Pusey & Jones Marshall drives
5" to 8" face.

CHILLED CALENDERS: One 66" face, 5ve roll;
one 41" face, five roll.

one 41" face, five roll.

DILLON DOCTORS: for Machine Calenders 60" to 120" face.

SLITTERS AND WINDERS: One 120" Warren, one 82" Pusey & Jones two drum, one 100", 44", 36" Kidders.

REELS: Pusey & Jones two drum upright 84" to 114".

The state of the s

Brushing Engines. SCREENS: Four 12-plate open-side Packer. STUFF PUMPS: Deane Triplex 8" x 12", Gould Triplex 8" x 10", Sandusky Triplex 4" x 6", REVOLVING SHEET CUTTER: One 104" Horse, one 34" Clark, one 74" Finlay, one 50" Hamblet Diagonal, two 42" Finlay.

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has the largest circulation of any magazine covering the Paper and Pulp field

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OILET PAPER CONVERTER, located Central West, desires permanent paper mill connection. Particularly interested in 10th cylinder tissue, finished and unfinished. Highest rate credit and good record for fair dealing. Address 4567, c/o Paper Trade Journal.

GIBBS-BROWER BULLETIN

PAPER MILLS FOR SALE

IN THE EAST

Manila, Fibre, Colored Textile, Kraft and Colored Specialties Mill. Two Fourdrinier Machines triuming 68 inches. Twenty-five tons, 24 hours. Also Pulp Mill, Grinders, digesters and wet machines. Ground wood 12 tons, sulphite Fibre 7 tons, 24 hours. 600 horse water power, purest water, also steam and electricity. Mill on two railroads with private sidings.

Crepe towel and Toilet Mill. Fourdrinier Machine trimming 68 inches. I tons 24 hours. 100 horse water power. On main line railroad. Excellent location.

Chip, News, Manila lined and Container board specialties mill. six cylinder machines trimming 86 and 94 inches. 100 tons 24 ho Water and Steam.

Water and Steam.

We offer the finest developed water power loft in New England, 400 horse water power. Fifteen acres of land, eighteen buildings, storehouses and dwellings. On main line Boston and Maine railroad. All there but the paper mill. Will sell at sacrifice for quick turnover. We offer used Fourdrinier paper machine trimming 72 inches. Complete and in good condition. Immediate delivery and reasonable price.

IN THE WEST

Container, liner and combination Box Board Mill. Two 5 cylinder machines. Trimming 70 and 84 inches, 45 tons 24 hours, 650 horse water power, steam and electricity. On two large railroads with private sidings.

Straw Kraft, Butchers' Fibre, sulphite wrapper and car Linings Mill. Fourdrinier machine trimming 61 inches. 12 tons 24 hours. Steam. Railroad Sidings.

GIBBS-BROWER COMPANY.

Paper and Pulp Mill Brokers,

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OUR MOTTO: "Service First."

Chicago Office: 181 Quincy St., Chicago, Ill.

Missisquoi Pulp and Paper Company

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VERMONT

White and Tinted Bristols-White Blanks-Index Bristol and Specialties in Card Boards.

of absolutely the finest quality

LOMBARD & CO.

Importers and Dealers

236-238 A Street : BOSTON, MASS.

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THE WOOD'S MACHINE

Distinctive performance and intensified confidence in this machine as a Pulp Thickener, Save-All, Washer or Water Filter insure success in its building.

On the market but a few years, our installations number more than Eighty-five. Twenty-nine sold the past year.



MADE BY GLENS FALLS MACHINE WORKS GLENS FALLS, N. Y.

Try our Split Cams for your Flat Screens

SIMPLICITY, in cylinder and vat construction, operation automatic, and without couch roll, doctor or any complicated mov-

DEPENDABILITY, in its simple revolving cylinder only, with nothing to get out of order, requiring little attention, and having a patented principle of maintaining wires always clean, insuring continuous performance. PRODUCTIVENESS, enor-

mous, through clean wires, large screening surface, patented unique method of discharge and freedom from shut-downs.

DURABILITY, by rigid construction, ample bearing surfaces, nothing to injure wires and highest grade materials.

All these enhance its value and involve upon you the duty of investigation.

Architects and Engineers

CAREY, JAMES L., Paper Mill Architect and Engineer, 208 North Laramie ave-nue, Chicago, Ill.

cue, Chicago, III.

CHAPMAN, C. A., Inc., Paper Mill Architects
and Engineers,
38 Jackson Boulevard E., Chicago, III.

CNOW. S. M., Mill Architect, Engineer, SNOW, S. M., Mill Architect, Engineer, Paper and Pulp Mills. Steam and Water Power Plants. 65 Kilby street, Boston, Mass.

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Importer of Rags, Bagging, New Cuttings.

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Branch House, 75 W. 25th street, N.Y.C.

IVERPOOL MARINE STORE CO., Liverpool, England, L.M.S. Wood Tag, Manila, Rope and Star Brands (Registered).

SIMMON'S, JOHN, SONS, Paper and Paper Stock, 28 and 30 South Marshall street Philadelphia, Pa.

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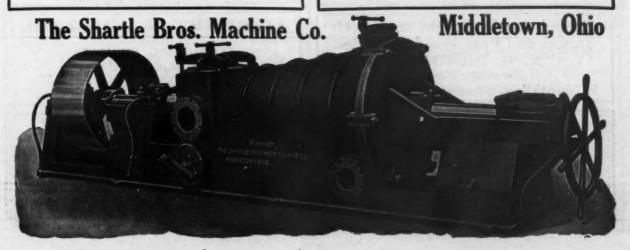
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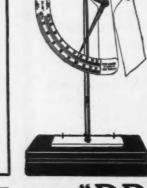
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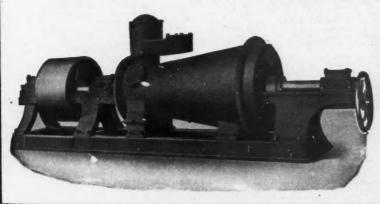
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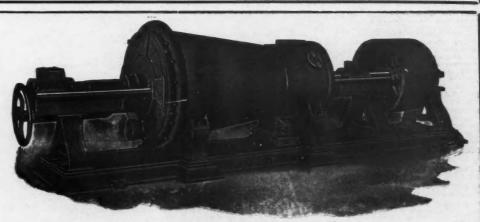
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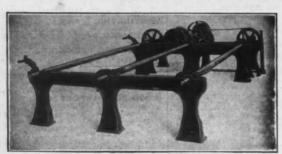
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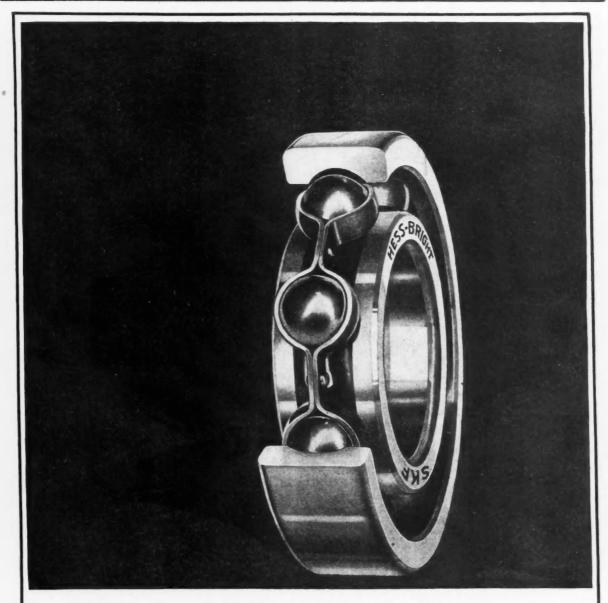
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