MEMBER OF THE A. B. C.

FIFTIETH YEAR

PAPER TRADE JOURNAL

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

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PUBLISHED EVERY THURSDAY BY THE

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Production for March, 1922, Compared With March, 1921, Shows an Increase Amounting to About 9 Per Cent for Total News Print and 12 Per Cent for Standard News—Stocks of Rolls in Hands of Jobbers at the End of March Were 236 Tons Less Than the Stocks in the Hands of Jobbers at the Beginning of the Month—Average Price Paid by Jobbers Was $3.601 Per 100 Pounds.

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., April 26, 1922.—The following is a tabulation of the reports received by the Federal Trade Commission from domestic manufacturers of news print paper from jobbers buying and selling news print paper and from publishers using news print paper. Import and export statistics of the Department of Commerce are also included in the review. Whenever possible the figures for 1922 are compared with those for the corresponding period of 1921, 1920, 1919 and 1918.

The figures which follow show the results of the commission's tabulation for March, 1918 to 1922, inclusive:

	Number of mills	Stock on hand 1st of month	Production	Shipments	Stock on hand end of month
Total News Print:					
March, 1922	78	27,815	117,507	117,142	28,180
March, 1921	85	39,176	107,532	104,919	41,789
March, 1920	90	27,955	127,847	128,238	27,564
March, 1919	68	25,471	114,746	108,285	31,932
March, 1918	66	28,014	105,700	106,730	26,984
Total (3 mos.) 1922	..	23,934	321,101	316,855	28,180
Total (3 mos.) 1921	..	24,763	334,402	317,376	41,789
Total (3 mos.) 1920	..	15,369	371,745	359,550	27,564
Total (3 mos.) 1919	..	19,408	334,148	321,624	31,932
Total (3 mos.) 1918	..	31,713	304,904	309,633	26,984
Standard News:					
March, 1922	65	22,898	110,061	109,661	23,298
March, 1921	67	33,293	98,190	95,966	35,517
March, 1920	76	24,795	119,152	118,843	25,104
March, 1919	51	19,543	104,497	99,171	24,869
March, 1918	50	24,886	95,471	99,658	20,699
Total (3 mos.) 1922	..	19,607	299,813	296,122	23,298
Total (3 mos.) 1921	..	19,573	306,777	290,833	35,517
Total (3 mos.) 1920	..	12,338	339,451	326,685	25,104
Total (3 mos.) 1919	..	15,656	304,723	295,510	24,869
Total (3 mos.) 1918	..	26,482	276,031	281,814	20,699

NOTE—Above figures for total news print do not include hanging paper.

The average production of total news print and standard news, based upon the total combined production for the years 1918 to 1921, inclusive, amounted to 118,800 tons of total news print and 107,676 tons of standard news, for a period corresponding to March. The actual production amounted to 117,507 tons of total news print and 110,061 tons of standard news, which, for total news print was 1 per cent below the average for the four-year-period and for standard news 2 per cent above the average.

The production of news print for March, 1922, compared with March, 1921, shows an increase, amounting to about 9 per cent for total news print and 12 per cent for standard news.

The production for March, 1922, compared with March, 1920, shows a decrease of 8 per cent for total news print and a decrease of about 8 per cent for standard news.

The increase of production for March, 1922, compared with March, 1919, amounted to about 2 per cent for total news print and 5 per cent for standard news.

The production of total news print for March, 1922, was about 11 per cent more than for March, 1918, and an increase of 15 per cent for standard news.

Mill stocks of both total news print and standard news increased during March, 1922.

Loss of Production

The following tabulation shows idle machine time reported to the commission for the month of March, 1922. This does not include mills shut down during the entire month:

Reasons	Number of machines	Hours idle
Lack of orders	13	2,856
Repairs	8	220
Other reasons	10	719

Imports and Exports

The imports and exports of printing paper not dutiable (practically all news print) and of wood pulp for the month of February, 1922, compared with the month of February, 1921, were as follows:

	Feb., 1922 Net tons	Feb., 1921 Net tons
Imports of News Print (total)	82,390	58,893
From Canada	63,516	48,894
Sweden	10,871	694
Germany	3,098	5,642
Norway	2,431	2,858
Finland	2,263	417
Other countries	211	388
Exports of News Print (total)	836	2,530
To Cuba	581	949
Canada	60	63
Colombia	58	24
Other countries	137	1,494
Imports of Groundwood Pulp (total)	9,138	3,275
Imports of Chemical Wood Pulp (total)	66,443	15,547
Unbleached Sulphite	32,955	6,620
Bleached Sulphite	14,187	3,140
Unbleached Sulphate	19,042	5,787
Bleached Sulphate	259	.....
Exports of Domestic Wood Pulp	2,018	2,714

The imports of news print for February, 1922, were 23,497 tons more than for February, 1921. The exports for February, 1922, were 1,694 tons less than for February, 1921.

The tonnage to "other countries" under "exports of news print" for February, 1922, includes 33 tons to Salvador and 29 tons to Peru.

Jobbers' Tonnage

The following tabulation shows the news print tonnage reported by jobbers during the month of March, 1922, compared with March, 1921, March, 1920, March, 1919, and March, 1918, together with commitments to buy and sell.

	On hand first of month Net tons	Received during month Net tons	Shipped during month Net tons	On hand end of month Net tons	Commitments to buy Net tons	Commitments to sell Net tons
Rolls, March, 1922.	1,642	10,878	11,114	1,406	32,822	37,327
Rolls March, 1921.	2,531	6,873	7,292	2,112	41,347	47,364
Rolls, March, 1920.	2,156	7,873	7,839	2,190	40,264	48,391
Rolls, March, 1919.	3,083	2,962	3,126	2,919	55,063	65,148
Rolls, March, 1918.	2,654	3,805	3,329	3,130	56,860	57,169
Sheets, March, 1922	4,242	2,992	2,730	4,504	1,691	1,144
Sheets, March, 1921	5,763	1,642	2,457	4,948	2,566	1,827
Sheets, March 1920	3,671	2,465	2,877	3,259	4,871	3,341
Sheets, March, 1919	7,806	1,962	2,639	7,129	2,210	1,344
Sheets, March, 1918	6,278	3,825	3,392	6,711	6,265	5,530
Total News Print:						
March, 1922	5,884	13,870	13,844	5,910	34,513	38,471
March, 1921	8,294	8,515	9,749	7,060	43,913	49,191
March, 1920	5,827	10,338	10,716	5,449	45,135	51,732
March, 1919	10,889	4,924	5,765	10,048	57,273	66,492
March, 1918	8,932	7,630	6,721	9,841	63,125	62,699

Stocks of rolls in the hands of jobbers at the end of March, were 236 tons less than the stocks in the hands of the same jobbers at the beginning of the month. Stocks of sheets were 262 tons more at the end of March than at the beginning of the month. The net increase in the total stocks of news print in the hands of jobbers at the end of March, amounted to 26 tons.

Commitments to sell roll news were 4,505 tons greater than commitments to buy. Commitments to sell sheet news were 547 tons less than commitments to buy. Total commitments to sell both rolls and sheets were 3,958 tons greater than commitments to buy.

Publishers' Tonnage

Monthly tonnage reports from 664 (a) of the most important newspaper publishing concerns and associations, grouped according

to the principal business sections of the United States, together with a separate tabulation for the agricultural publications, show the following results for March, 1922:

Location of publishers (b)	Number of concerns	On hand first of month Net tons	Received during month Net tons	Used and sold during month Net tons	On hand end of month Net tons	In transit end of month Net tons
New England States.	81	17,464	17,055	17,406	17,113	1,610
Eastern States	174	56,443	57,961	61,312	53,092	8,149
Northern States	129	46,587	35,532	38,066	44,053	7,681
Southern States	76	9,002	9,787	9,457	9,332	3,238
Middle West States..	147	26,293	27,503	27,539	26,257	4,877
Pacific Coast States.	30	11,422	14,414	14,350	11,486	1,799
Farm Papers (c)....	27	6,301	1,308	1,444	6,165	52
Total	664	173,512	163,560	169,574	167,498	27,406

(a) This number represents a much larger number of publications.
(b) *New England* includes Connecticut, New Hampshire, Maine, Massachusetts, Rhode Island and Vermont; the *Eastern States* include Delaware, the District of Columbia, Maryland, New Jersey, New York and Pennsylvania; the *Northern States* include Illinois, Indiana, Michigan and Ohio; the *Southern States* include Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; the *Middle West* includes Arkansas, Arizona, Colorado, Idaho, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah, Wisconsin and Wyoming; the *Pacific Coast* includes California, Oregon and Washington.
(c) The farm papers for the most part use special grades of news print instead of standard news.

Publishers' stocks decreased 6,014 tons during the month. Average daily tonnage used during March was 98 tons more than the average used in February.

Publishers' stocks and transit tonnage on March 31 represented 37 days supply at the existing rate of consumption.

The domestic consumption of standard news by metropolitan dailies using between one-half and three-fourths of a million tons annually, for March, 1922, when compared with March, 1921, shows an increase of 12 per cent and an increase of 11 per cent when compared with March, 1920.

The above metropolitan dailies held 63 per cent of the tonnage on hand at the end of the month.

Average Prices Paid by Publishers

The weighted average price of contract deliveries from domestic mills to publishers during March, 1922, f. o. b. mill in carload lots for standard news in rolls was $3.615 per 100 pounds. This weighted average is based upon March deliveries of about 57,000 tons on contracts involving a total tonnage of approximately 613,000 tons of undelivered paper manufactured in the United States.

The weighted average contract prices based on deliveries from Canadian mills of about 27,000 tons of standard roll news in carload lots, f. o. b. mill in March, 1922, was $3.482 per 100 pounds. This weighted average is based upon the March deliveries on contracts involving about 270,000 tons of undelivered Canadian paper.

The weighted average market price for March of standard roll news in carload lots f. o. b. mill, based upon domestic purchases totaling about 9,000 tons, was $3.601 per 100 pounds.

Meet On Wage Question

At the time of going to press Wednesday afternoon it was impossible to ascertain the developments of the joint conference which was then in progress at the Murray Hill Hotel between representatives of eleven paper mills, headed by Floyd S. Carlisle, President of the St. Regis Paper Company, and J. P. Burke, President and Secretary of the International Brotherhood of Pulp, Sulphite and Paper Mill Workers, and J. T. Carey, President and Secretary of the International Brotherhood of Papermakers.

When the meeting convened it seemed likely that no decision would be arrived at until some time the following day, owing to the necessity for detailed discussion of the various points at issue. The paper manufacturers represented by Mr. Carlisle appeared firm in their demands that the wages of skilled workmen be reduced ten per cent, that unskilled workmen should be paid the current wages and that the payment of time-and-a-half for overtime be abolished.

It was not generally believed, however, that the labor representatives would concede to the proposed reductions, and the consensus of opinion was that the results of the "strike vote," taken among the workmen of the various mills during the past week, and announced behind the closed doors of the conference, would authorize Mr. Burke and Mr. Carey to "stand pat." This would, in all probability, precipitate a walkout on May 1.

The extent of the strike, it has been stated on reliable authority, has been greatly overestimated. Some reports had it that 100,000 employees would be involved. This rumor is, on the face of things, entirely erroneous. It has been estimated by one whose authority is unquestioned that only one third of the news print tonnage of the North American paper mills is represented by those actually connected with the situation.

The following companies will be involved in the event that the strike is declared:

St. Regis Paper Company, Watertown, N. Y.; St. Maurice Paper Company, Ltd., Montreal; The Spanish River Pulp and Paper Mills, Ltd., Sault Ste. Marie, Ontario; St. Croix Paper Company, Woodland, Maine; Hanna Paper Corporation, Watertown, N. Y.; Abitibi Power and Paper Company, Ltd., Montreal; Cliff Paper Company, Niagara Falls, N. Y.; The Pettebone-Cataract Paper Company, Niagara Falls, N. Y.; Tidewater Paper Mills Company, Brooklyn, N. Y.; Minnesota and Ontario Paper Company, International Falls, Minnesota; Fort Frances Pulp & Paper Company, Ltd., Fort Frances, Ontario.

Expect Strike May 1

[FROM OUR REGULAR CORRESPONDENT]

WATERTOWN, N. Y., April 24, 1922.—Failure of adjustment by compromise or otherwise of the differences between paper manufacturers and organized labor at the conference to be held in New York on April 26 is now freely predicted in this city. It is believed that the stage is already being set for a deadlock out of which must develop a strike on May 1. Just how protracted or sanguinary the trouble may be is not guessed, but it is seen that the five days remaining between April 26 and May 1 will not offer sufficient time for any sort of settlement of the controversy.

It is clear to trained observers that J. T. Carey, president of the International Brotherhood of Paper Makers, will present himself before the conference with his hands tied so far as power to negotiate is concerned. This conclusion is reached through the fact that he has spread a referendum among the locals of the organization and he must abide their decision. Votes have been taken already by several locals in Northern New York, and while no official report of the votes has been made, it is reliably reported that definite rejection of all three propositions has been accorded.

After President Carey has asked for and received instructions from his people it is pointed out that he must abide the verdict. That will mean, it is believed, that an irresistible force will come into contact with an immovable body. If the strike is of short duration it means a reconsideration on one side or the other, but no one here dares venture a guess as to what will happen—beyond the assertion that a strike will start on May 1.

May Erect Mill in Jacksonville

[FROM OUR REGULAR CORRESPONDENT]

JACKSONVILLE, Fla., April 24, 1922.—The city commission has directed the secretary to inform H. E. Ellis that the city would lease to him a portion of the Bentley shipyards for $300 a month, said ground to be used for the erection of a paper mill. Recently Captain Ellis made application for use of a portion of the Bentley yards, stating he desired to erect a paper mill there. It is understood that he intends to manufacture paper from marsh grass.

CANADA AGAINST EXPORT OF UNMANUFACTURED PULPWOOD

Widespread Movement Said to Be Rapidly Gaining Momentum for Either Provincial or Federal Laws Which Will Prohibit Exports From Freehold Lands—Believed That This Would Encourage the Establishment of Pulp Mills in Canada and Also Prevent American Interests From Coming into Canada and Buying Up Freehold Timber Lands to the Detriment of Local Industries.

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., April 24, 1922.—There is a widespread movement which is rapidly gaining momentum throughout Eastern Canada for either provincial or federal laws which will prohibit the export of unmanufactured pulpwood from Canada. The reason for this movement is two-fold. First, that an absolute embargo would encourage the establishment of pulp mills in Canada and, secondly, the fact that owing to the lumber shortage in the United States American interests are coming into Canada and buying up freehold timber limits to the detriment of local industries. Undoubtedly this last-named reason is one which is doing much to stir up public demand for an absolute embargo on the export of pulpwood. An instance showing how this works may be given. The lumbering community of Bridgewater, Lunenberg County, Nova Scotia, recently passed a resolution demanding that the Federal Government put an embargo on the export of pulpwood from freehold lands, stating that this was necessary to prevent the destruction of the forests. I understand that an immediate reason for the passing of this resolution was that the Hollingsworth Whitney Company, of Boston, had recently bought 200,000 acres of freehold timber lands in the vicinity of Bridgewater and it was the belief in Bridgewater that it was the intention of this firm to close up the local lumber mills and export the pulpwood to the Company's mills in Maine. This, of course, would ruin Bridgewater, which is entirely a lumber center. The same firm is reported to have bought another 100,000 acres of freehold timber lands in the Cumberland and Annapolis counties, Nova Scotia, and it is stated that the same fears are entertained in these centers.

A Prize for Bud-Worm Suppression

Frank J. D. Barnjum, of Montreal and Nova Scotia, who recently offered a series of prizes for the promotion of forest conservation, has now come forward with the offer of a prize of $5,000 for a practical method of combating and suppressing the spruce bud worm, bark beetle and borer which have caused so much damage in the forests of Eastern Canada and the United States. The province of Quebec alone has suffered a loss during the past ten years of 150,000,000 cords of standing pulpwood by these pests, which represents a market value in pulpwood of three billion dollars, or if manufactured into paper, of seven billion dollars. This represents a loss of wood sufficient for forty-five years' requirements for news print for the North American continent. This loss has prompted Mr. Barnjum to offer this substantial prize. Competition will close August 1st, and the $5,000 will be paid in cash for the successful suggestion that is accepted by the judges, who will be Sir William Price, of Price Brothers, Quebec; Dr. C. D. Howe, Dean of the Faculty of Forestry, Toronto University; Fred A. Gilbert, Great Northern Paper Company, Bangor, Me.; G. C. Piche, chief of Forest Service, Quebec, and Mr. Ellwood Wilson, Laurentide Company, Grand Mere, P. Q. In connection with this spruce bud worm plague, practical foresters here state that the spruce worm appears in cycles every 30 years. They do an enormous amount of damage in a few years and then disappear for a time. The visitation which is now about over has lasted for about ten years and is stated to be the most severe on record. The reason why it has lasted longer than usual and has resulted in greater damage is stated to be that owing to the wasteful methods of lumbering the woods have been filled with slash and dead trees which have encouraged the breeding of innumerable forest pests and, incidentally helped the spread of the spruce bud worm.

Water Plane Fire Patrol for Manitoba

The work of fire rangers in Northern Manitoba this summer will be facilitated by the introduction of a water plane, which will make regular patrols through the district. Supplies of gasoline will be established throughout the North, but the long canoe patrols which have been a part of the rangers' duties in the past will be unnecessary owing to the presence of the plane. Last summer 28 rangers were employed in Northern Manitoba patrolling the mineral belt, and the southern skirts of the fur area, but this number will be reduced during the coming summer.

Australian Wood Pulp Tests

C. Hartlett, Canadian Trade Commissioner in Melbourne, Australia, has reported to the Trade and Commerce Department that recent reports of experiments in woodpulping conducted by the Western Australia Forests Products Laboratory indicate that a number of species of Australian timbers are suitable for the manufacture of kraft paper. Excellent results have beeen obtained from hoop pine and silky oak in Queensland, especially from the latter, which is readily and cheaply grown, producing a cheap and strong wrapping paper. Both these timbers have been isolated by the Queensland Government for paper making. In cypress, pine and brown oak also the experiments have proven that Queensland has trees capable of producing a commercial kraft paper of excellent quality. In the State of Victoria, "woolybut," "silvertop" and "mountain ash" have also been tested with most satisfactory results. A series of cooking tests made of these timbers separately, and mixed together in any proportion, produced an excellent pulp. Arrangements are being made by the Commonwealth Institute of Science and Industry to carry out experiments on a semi-commercial scale with the various timber mentioned, the main object being, firstly, to try out on a large scale the applicability of the results obtained in the laboratory tests, and, secondly, to carry out the actual paper-making tests on the pulps produced from Australian timbers. If these tests are satisfactory, in all probability an attempt will be made to establish the pulp industry on a proper commercial footing.

Norwegian Pulp and Paper Industry

C. E. Sontum, Canadian Commercial Agent in Norway, writing under date March 14, states that the downward trend in the wood market continues, England being the weakest foreign market. Continental and overseas markets are somewhat firmer.

Moist mechanical pulp is beginning to show signs of improvement. In the paper market a lively demand continues for news print, but wrapping paper is weak. In general, however, the market has declined, causing stock quotations of most of the wood industries to fall. The high prices of raw materials and the low prices obtained for manufactured products have forced the manufacturers to sell at a loss, thus causing a serious disruption of trade, but the published accounts of this movement have beeen somewhat overstated. In this connection it is pointed out that in the year, 1920, there were buyers of wood and pulp at unusually high prices, and manufacturers had opportunities to close contracts securing work for all their industries for the ensuing year. At that time it was not thought unreasonable to demand kr. 60 per cubic metre for pulpwood timber, and, though this price was from four to five times pre-war prices, the manufacturers in their turn sold their products at eight to ten times pre-war values. These abnormal profits thus earned should assist them during the present depression.

In the autumn of 1920 the scarcity of coal and, consequently high prices made manufacture in the wood industries very difficult, and at the same time timber was being purchased to cover much more than the normal demand. Suppliers were allowed to deliver timber of such dimensions that the quantity by cubic measure far exceeded their calculations. As a consequence, the exporters were forced to choose between the partial and total cancellation of contracts or ruining their customers. Naturally the first alternative was chosen, and bonds were issued to the wood suppliers, the maturing of these bonds this summer being a big factor in the present stringency.

In addition to the above, the increasingly keen competition of Finland and Germany, with their depreciated currencies, has forced prices, already weak, still further down.

Trees for the Prairies

The shipments of tree seedlings and cuttings going out this spring from the Dominion forest nursery station at Indian Head, Saskatchewan, will be among the largest in the past five years. The kinds sent out are chiefly Russian poplar, willow, and caragana. They are used solely for planting shelter belts on prairie farms. Since the nursery was established about sixty million seedlings and cuttings have been distributed to prairie farmers.

Belgo Company to Extend

The Belgian Industrial Company at Shawinigan Falls, Quebec, is preparing to extend its paper mill, the cost of which will be from one and one-half million dollars to two million dollars. This does not include the cost of machinery. Preparations are now being made for excavation work and it is expected that the plant will be completed sometime during the middle of next year.

Canada's Water Power Development

Water power now developed in Canada represents an investment of $530,000,000, according to a report issued by the Water Power branch of the Department of the Interior. The present development represents an annual equivalent of 20,500,000 tons of coal. By 1940, should the rate of growth of installation during the past fifteen years be continued, the amount of investment will have grown to $1,000,000,000.

Wages in Paper Mills for March

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., April 26, 1922.—The Bureau of Labor Statistics, Department of Labor, has compiled figures showing the employment and wages paid in 58 paper mills during the months of March, 1921, and March, 1922. According to the Bureau's figures, there were 28,116 persons employed in these 58 mills during the month of March, 1921, as compared with 25,732 employed in the same mills in March of this year, showing a decrease of 8.5 per cent. The pay rolls in these mills amounted to $697,901 in March of 1921 as compared with $602,922 in the same month of this year, showing a decrease of 13.6 per cent.

The Bureau also shows a comparison between the employment and wages paid in 57 paper mills in the months of February and March of this year. In February there were 24,957 persons employed as compared with 24,832 in March, a decrease of 5 per cent. The payrolls amounted to $592,893 in February as compared with 582,973 in March, a decrease of 1.7 per cent.

The Bureau in connection with changes in wage rates and per capita earnings in the paper industry during the period from February 15 to March 15, says, "A 19 per cent decrease in wage rates was made in one mill. Two concerns reported a 10 per cent cut in wages, affecting 90 per cent of the force in one concern. The number affected in the other concern was not stated. When comparing per capita earnings for March with those for February, a decrease of 1.2 per cent appears."

Bids and Awards for Paper

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., April 26, 1922.—The Government Printing Office will open bids on May 29 for the following paper products on contract from July 1 to December 31: 5,000 Fiber Containers, 29¾ x 12¼ x 6⅞ inches; 40,000 Containers, 17 x 11⅜ inches; 15,000 Containers, 17¼ x 11⅛ x 5⅝ inches; 1,500 Containers, 11½ x 6⅞ x 5⅝ inches; 1,000,000 Cartons, 5½ x 5⅜ x 3¼ inches.

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

4,200 lbs. manila tag board, 22½ x 28½, 140: Dobler & Mudge, $.0925 per pound; Maurice O'Meara Company, $.0915; Old Dominion Paper Company, $.089; Mathers-Lamm Paper Company, $.064 and $.059; R. P. Andrews Paper Company, $.081.

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

4,800 lbs. Suede Cover Paper 20 x 25, 48: Dobler & Mudge, at $.097; R. P. Andrews Paper Company, $.1285; Knowlton Brothers, $.0988; The Whitaker Paper Company, $.0927; Wilkinson Bros. & Co., $.101; Geo. W. Millar & Co., Inc., $.1345; Old Dominion Paper Company, $.0999; Graham Paper Company, $.1025; Thos. Barrett & Son, $.1049; Reese & Reese, $.10.

2,190 lbs. 21 x 32½—No. 60 Salmon Ledger Paper: The Whitaker Paper Company, at $.2075, and Old Dominion Paper Company, at $.249.

The Ætna Paper Company has been awarded the contract by the Purchasing Officer of the Government Printing Office for furnishing 4,100 lbs. (200 reams) of 17 x 28, 20½, No. 16 of white glazed bond paper at $.11¼ cents per pound, bids for which were opened on March 22.

The Whitaker Paper Company will furnish 4,800 lbs. (100 reams) of 20 x 25, 48, of tea cover paper at 8¼ cents per pound, bids for which were opened on April 12.

The Ætna Paper Company will furnish 72,000 lbs. (2,000 reams) of 21 x 32—36, No. 20 white glazed bond paper at $.1088, and the Old Dominion Paper Company will furnish 8,100 lbs. (100 reams) of 32 x 48—81, white S. & S. C. printing paper at $.1124 per pound. Bids for these items were opened on April 14.

The Whitaker Paper Company has been awarded the contract by the Purchasing Officer of the Government Printing Office for furnishing 2,190 lbs. of 21 x 32½—109½, No. 60 salmon commercial ledger paper at 20¾ cents per pound, bids for which were opened on April 19.

The Whitaker Paper Company has been awarded the contract by the Purchasing Officer of the Government Printing Office for furnishing 4,800 lbs. (100 reams) of 20 x 25—48, rough suede cover paper at $.0927 per pound, bids for which were opened on April 19

Paper From U. S. for Australia

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., April 19, 1922.—Conditions in Australia are favorable for holding the trade the United States has developed in paper and for increasing business in certain lines, according to a report from Consul Norton, at Sydney.

Print paper long has been supplied largely by the United States although Norway has taken a good part of the business lately. Blotting paper has been imported principally from the United States. Considerable wrapping paper also has been imported from this country but not as much as from Canada. About half the writing paper imported has been coming from the United States, imports from the United Kingdom being second in importance.

Several paper factories in Australia are expanding but even with the new high tariffs it will be a long time before they can satisfy the domestic demand. Paper napkins and paper towels are not used in Australia except to a limited extent but Consul Norton reports that probably it will be possible to develop a business in them. Some paper cups are being made locally.

PAPER HOUSES RESIGN FROM PHILADELPHIA TYPOTHETÆ

Announcement Is Made at Meeting Apparently Called to Revitalize the Long Price List Agitation—Allen E. Whiting, President of the Philadelphia Paper Trade Association, Says Step Is Not Hastily Taken and Was Not Prompted by a Spirit of Petulance—Is Felt that Long Price List Is of National Scope and Therefore Should Not Be Settled Locally—Increases Capital Stock.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, Pa., April 24, 1922.—The sensation of the week in the fine paper trade developed at a meeting held under the auspices of the Typothetæ of Philadelphia at Kugler's Cafe on Thursday of last week. The electrifying news was that all the fine paper houses holding membership in the paper trade division of the Typothetæ of Philadelphia had decided just a few minutes before the Typothetæ meeting was on to resign from it in a body.

This announcement came from George W. Ward, who for some time has been chairman of the Trades' Relations Committee of the Paper Trade Association of Philadelphia. It was made in the course of an address by Mr. Ward, commenting on remarks made by the speaker of the occasion, William Parshall, chairman of the National Committee on the Retail price-list of the United Typothetæ of America. Chairman Ward commenting on the fairness of Mr. Parshall's address announced in such a way that officials of the Typothetæ said they doubted if half those present had appreciated the significance of his word, that the entire paper trade division had decided to resign in a body, but that it would gladly continue to pay the dues previously assessed. Upon the conclusion of the meeting, Typothetæ official's expressed intense surprise and some indignation at the action of the papermen, characterizing it as indicative of a small and revengeful spirit. Investigation, however, discloses the fact that the misunderstanding arose solely from a peculiar chain of circumstances which will be made clear in official communications, but which were not announced when the sensational action of the fine paper distributors was made. The facts are that the Typothetæ on rather short notice had called a meeting in order to hear Mr. Parshall's presentation of the retail price-list question and that invitations went out only to printer members. Subsequently upon receipt of a telegram from him expressing his desire that the papermen should be present, efforts were put forth to secure their attendance and only then was it learned that a meeting of the fine paper people was in session.

Regular Bi-Monthly Meeting

This meeting of the fine paper division, however, was not a suddenly called one, but was the regular bi-monthly session. Without knowledge of the Typothetæ meeting, the Division took steps which had been in contemplation since the controversy over the long list, or retail price-list began and after the decision to withdraw was reached, it was determined to hold a future meeting at which a formal letter of notification was to be drawn up. It was therefore in a sense unexpected that the news of the action was communicated to the Typothetæ orally.

Commenting on the action taken, President Allen E. Whiting, of the Paper Trade Association of Philadelphia said, "There are still the very pleasantest relations between the paper distributors and our friends and customers the printers and any impression that we acted hastily or in a spirit of petulance, is unfortunate. Several months ago when the question of the retail price list first was taken up, a number of the houses felt that they should resign from the Paper Trade Division of the Typothetæ in order to avoid being in a position that might be embarrassing to either party, but they were pursuaded not to act as individuals. Since then, the opinion of several authorities learned in the law has been received that if litigation that is now pending against the U. T. A. and questioning the legality of its position in advising that paper purchasing be made only of long list houses, was successful, all the members of the Typothetæ and of course so far as we are concerned, the members of the Paper Trade Division specifically might be held accountable and it was solely for this reason to avoid a responsibility which we did not think we should permit ourselves to be in a position to have placed upon us, that we decided to withdraw. It was the intention to set forth these facts in an official letter. We, of course, are just as friendly as ever with the printers, and we are quite willing to continue such financial support as we have been able to give in the past."

Typothetæ's Attitude

Though executives of the Typothetæ are loath formally to discuss the proposition pending an anticipated receipt of a formal and official statement, their attitude is that under no circumstances would they agree to accept payments as dues from the paper distributor members even though such refusal means a loss of $1,200 to $1,500 per annum and that the long list question which they had been hopeful might still be amicably settled had now been made a rather acute controversy. Attention was called to the fact that the executive committee of the U. T. A. recently had recommended that in cities where the distributors refuse to issue a long list, local Typothetæ should consider the question of establishing their own co-operative buying organization. The printer organization officials take the ground that since the paper distributors have decided to withdraw, the printers can now with perfect propriety proceed with the development of the co-operative buying proposition. As a matter of fact, however, it is extremely unlikely that any developments along this line will take place for some time for the reason that the co-operative buying proposition was merely the recommendation of the executive committee and that final action cannot be taken until the meeting of the council in July. Meanwhile, however, a more acute situation exists here than at any time since the controversy began and developments by either side are looked forward to with keenest interest by the other.

Herewith is the list of the members of the Paper Trade Association, notice of whose withdrawal as a body was given orally by Chairman Ward of the Trades Relations' Committee:

The Typothetæ meeting at Kuglers was called for the purpose of arousing an interest which apparently had been somnolent in the long list agitation. Mr. Parshall spoke of the excellent results to both the printing trade and the paper distributors in Detroit and all through the State of Michigan which had followed the adoption there of the long list. He said that he proposed of setting forth the points of view of the printers. Mr. Ward made a brief address in reply in which he said that Mr. Parshall had made a fair statement and in a considerate attitude, but he indicated that the long list question was one of national scope and therefore could not be settled locally, but only through the National Paper Trade Association.

Garrett-Buchanan Co. to Increase Stock

Announcement officially is made that the Garrett-Buchanan Company as a result of action taken by stockholders and by directors, has made application for such an amendment of its charter as will permit an increase of the capital stock from the present $100,000 to $1,000,000. Save for this increase, there is to be no change in the organization. The Garrett-Buchanan officials report that business has been extremely successful, that there has accumulated $600,000 surplus. None of the stock of the company under its corporation papers when amended will be offered outside and present shareholders are to be given four shares in the corporation for each present share they hold, thus making a five to one apportionment.

PAPER DEMAND IN TORONTO SHOWING SLOW EXPANSION

Although Prices Seem to Be Pretty Well Stabilized It Continues Almost Impossible to Induce Buyers to Place Orders Ahead for Any Considerable Length of Time—Demand for Pulp Is Not Very Brisk and Prices Are Inclined to Weaken Rather Than Ascend—Dominion Engineering Works Gets Orders for Machines from Provincial Paper Mills and from Joseph Ford & Sons.

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ontario, April 24, 1922.—Business in the paper line continues to show steady but slow improvement. Each week witnesses a little larger volume than the previous one but the orders are for the most part small and customers are calling for speedy delivery. It seems impossible, although prices appear to be pretty well stabilized, to induce dealers to place orders ahead for any length of time. This condition of affairs has prevailed for quite a while and until there is a sharp revival in business and mills are not able to give prompt delivery, it is probable there will be no change in the existing methods.

The Easter trade was particularly good in the line of papeteries and fancy boxes. The paper box business has picked up materially during the past two or three weeks and now several plants are running nearly to capacity. There has been no change in the price of board and the manufacturers have sent out notices that present quotations will prevail until June 1. The only commodity, in which there has been any change is in the cheaper lines of cover papers, these having been reduced by one cent on lots of 500 pounds or up and three-quarters of a cent on less than 500 pounds.

The demand for pulp is not very brisk and prices are inclined to weaken rather than to strengthen. In quotations sent out by the mills for the coming month's trade, there has been a slight drop. Toilet and tissue plants are fairly well employed and a meeting of the manufacturers was held during the past week at which the outlook was carefully considered.

The view taken by the producers and jobbers is that the trade is strengthening and particularly in the tissue line, will grow better as the season advances.

Soda Pulp Plant Closed Down

The Provincial Paper Mills of Toronto which has for some years operated a soda pulp plant in connection with the Barber mill, at Georgetown, Ont., closed it up. It was found that soda pulp, which was used as a filler in several lines of book paper, was too expensive to produce under existing circumstances and that equally as good substitutes could be provided at considerably less cost. The closing of the soda pulp plant did not come as a surprise as the company have been contemplating this step for some time.

Contract Awarded for New Machine

A. G. Pounsford, general manager of the Port Arthur division of the Provincial Paper Mills Co. was in Toronto last week in conference with the officers of the company. He was accompanied by H. S. Taylor of the H. S. Taylor Company, Montreal, who is the consulting engineer for the new book paper mill which the Provincial organization is erecting at Port Arthur. Good progress is being made on the building on which some 200 men are employed. The contract for the new paper machine has been awarded to the Dominion Engineering Works of Montreal. A. N. Russell, engineer of the paper machinery department of that company, was in Toronto lately in connection with the contract. The machine, which will be built and delivered by November next, will be 146" wide with 126" trim. It will be equipped with 30 dryers, each of 4 feet diameter, with a wire 146" wide and 70 ft. long. A Millspaugh suction couch roll 25" in diameter, three sets of main presses, and a capacity of about 25 tons a day are other features of the Fourdrinier. There will be 2-8 roll calender stacks and one English type, surface winding reel and one Moore and White 4 drum winder with slitter attachment. The drive has not yet been decided upon but will probably be of the combination rope and cone pulley type although the sectional electric drive is being considered. The contract for the beaters has been awarded to the Port Arthur Shipbuilding Works who will also turn out other equipment for the plant. Mr. Pounsford states that the Port Arthur plant has 36,000 cords of pulpwood contracted for, which will be delivered during the coming season. The sulphite mill of the Provincial Paper mill at Port Arthur is running to capacity and turning out about 60 tons daily one-half of which is bleached.

Eastern Firm Adding Machine

The Dominion Engineering Works of Montreal have been awarded the contract by Joseph Ford & Sons of Port Neuf, Que. to build a 120" cylinder machine for turning out felt paper. The work is now in progress and the machine is to be delivered within five months.

Paper Box Manager Dies While Reading

F. B. Smith who was well known and highly esteemed in paper box circles, being for the past nine years manager of the A. D. Shoup Paper Box Company, Toronto, died very suddenly last week while reading. He was 58 years of age and leaves a wife and family. Mr. Smith was at home alone when the end came, his wife being away on a visit to her daughter.

Abitibi Company Building Railway

A private line of railway is being built by the Abitibi Power and Paper Company from Iroquois Falls to a point some 12 miles north of Cochrane. The road is being constructed in order to facilitate transportation of raw material to the mill and will connect the Iroquois Falls branch of the T. & N. O. Railway with Hughes Station which is on the main line of the N. T. R.

New Industry Locates in Belleville

A Federal charter was recently granted to the International Burr Corporation of Canada, Limited, who are establishing a factory in Belleville, Ont. The company will manufacture and market a product used in dressing pulp mill stones. Among the incorporators of the firm are C. B. Aiken, of Belleville and W. P. Aiken of Watertown, N. Y.

Personal Notes and Jottings

Mrs. Tresidder, wife of Roy Tresidder of Tressider Brothers, paper box manufacturers, Hamilton, died recently after a short illness. Besides her husband, she leaves a family of three children. Mr. Tresidder, who has the sympathy of many friends in the paper trade, was for many years, manager of the National Paper Goods Company, Hamilton.

F. H. Gage, of Toronto, sales manager of the Georgetown Coated Paper Mills, who along with his wife and family spent the past few weeks in Atlantic City, has returned home.

J. G. Elliott, president of the "Whig," Kingston, Ont., and former president of the Canadian Press Association, was elected president of the Ontario Educational Association at its annual convention in Toronto. Mr. Elliott has been a member of the Kingston Board of Education for the past thirty years.

John Martin of Winnipeg, former president of the Canadian Paper Trade Association, who with his wife and family have been touring Europe, is expected home early next month. Mr. Martin reports that his health has greatly improved.

F. A. Ritchie of Ritchie and Ramsay, coated paper manufacturers, Toronto, is spending several months at South Devon, England, along with his wife and family. He will not return to Toronto until July next.

D. Williamson of the Hudson Paper Company, Winnipeg, was in Toronto recently calling upon the members of the trade.

NO REDUCTION IN WAGES IN KALAMAZOO DISTRICT

May 1 Will See No Change in Wages Here, Mill Executives Say, Because With the Cost of Living at Its Present Status Any Reduction Would Be Unjust—Michigan Division of the American Pulp and Paper Mill Superintendents' Association Hold Interesting Meeting—Cost Association of the Paper Industry to Meet in Kalamazoo May 1—K. V. P. Co. Employees Get Bonus Checks.

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., April 24, 1922.—May 1 will see no reduction in the wages of employees of paper mills in Kalamazoo or throughout the Kalamazoo valley district, according to information furnished by a majority of the mill executives of this section. Further inquiry also brought out the statement that with the cost of living at its present status, any reduction would be unjust.

Investigation along this line was prompted by two reports from the East to the effect that on May 1 working agreements existing between 17 of the largest news print mills in the United States and Canada and their employees would expire and that the managers had practically agreed on a reduction of 10 per cent in skilled labor's pay, return to locality rates for unskilled help and straight time pay for overtime, Sunday, and holiday work.

Strike of 100,000 employees is threatened in retaliation, if such wage reductions are made effective.

The International Paper company is not affected by the expiration of the agreement. That concern has operated successfully on the open shop basis for nearly a year.

Reports from the east carry the statement that having in mind the stand taken last year by the International Paper company and its success in running its mills and gradually establishing the open shop system, employees may hesitate to precipitate a strike to run for any length of time. On the other hand demand for news print is now at its peak and manufacturers might hesitate to close down their mills, giving the advantage to non-union and foreign manufacturers.

There is no news print made in the Kalamazoo valley and the only effects of a great strike here would be purely sympathetic. The Kalamazoo local, International Brotherhood of Papermakers, is not in a position to make a serious fight.

Superintendents Meet

"The Use of Manganese Steel as Filler material for Beaters and Jordans" was the subject presented at Thursday evening's session of the Michigan division of the American Pulp and Paper Superintendents Association. J. H. Hock, Chicago, sales engineer of the Taylor-Wharton Iron and Steel Company, of High Bridge, N. J., was the speaker.

His talk was followed by the liveliest kind of general discussion. The consensus of opinion was that no hard and fast rule could be applied to the usage of mill equipment and that jordans and beaters in mills making board and coarse papers are subjected to far greater wear than similar equipment in book mills.

Dinner was served at 6:45 o'clock in the small dining room in the west corridor. Among the guests were Claude L. Nicely, president of the LaSalle Paper company, South Bend, and A. B. Thomas, general manager of the Eddy Paper company, Three Rivers and White Pigeon.

N. M. Brisbois, president of the Michigan division, announced the next meeting will be held Thursday evening, April 27, at the same place and at that time it is planned to complete all arrangements for the international convention to be held in Kalamazoo, June 1, 2 and 3. International President J. H. O'Connell will have returned from New York city by that time and will have complete details of his conferences with Secretary Burke of the Cost Association. With that data at hand, it will be possible to work out the details of the program.

Plans for Association Meeting

The next meeting of the Kalamazoo Local Division of the Cost Association of the Paper Industry will be held in Kalamazoo, Mich., on May 1, and an effort is being made to get as many executives there as possible. At the present time several of the most prominent ones have promised to attend and others have consented to do so if their engagements will permit.

J. Kindleberger, president of the Kalamazoo Vegetable Parchment Company will be one of the principal speakers, also C. M. Silver of Ernst & Ernst and Geo. Ferguson of the Watervliet Paper Company together with Paul L. Brossamle, ex-president of the Kalamazoo Local Division and Harry C. Bradford, secretary of that division.

The program for the meeting is as follows:

Address, Jacob Kindleberger; "A short synopsis of the progress of cost accounting in the Kalamazoo Valley," Paul Broesmale; "How an Executive can easily tell whether or not his Costs as submitted to him are correct" (Slides will be used), Harry C. Bradford; "The Benefits an Executive can derive from a complete accounting and cost system," B. M. Silver; "How much work and expense is necessary for a complete accounting and cost system," Geo. K. Ferguson.

All mills in the Kalamazoo District are urged to send representatives to this meeting whether they are members of the Cost Association or not, since membership in this association is not essential for those attending the meetings of its Local Divisions. The Cost Association expects that through its Local Division meetings it will stir up interest in its work which is to bring to the pulp and paper industry in general a realization of the vital necessity for proper accounting system if the industry is to be placed on a sound economic basis.

General News of the Trade

Ten loyal employees of the Kalamazoo Vegetable Parchment company have completed ten years' service with that concern and on Tuesday evening, April 18, were guests of honor at a supper and program, given at the New Parchment Community house. There was a big turn out of employees and Jacob Kindleberger, president of the company, made remarks appropriate for the occasion. In addition the ten employees each received a substantial bonus check as recognition of faithful service rendered over a long period. The list of ten-year workers follows: Charles Conrad, Henry Butler, Earl Boldman, Alice Rupert Butler, C. McMillan, George Martin, Alonzo Zeppernick, Peter deWolfe, Marion Weston, Adrian Tierson and Ben Grover.

R. B. Williams, manager of the Cleveland branch of the C. L. LaBoiteaux Company was in Kalamazoo the past week.

Bernard Benson, of Elkhart, has been calling on the trade throughout the Kalamazoo valley district the past week.

Mr. Moses Presented With Loving Cup

[FROM OUR REGULAR CORRESPONDENT]

SPRINGFIELD, Mass., April 24, 1922.—Horace A. Moses, president of the Strathmore Paper Company of Mittineague and Woronoco, was presented with a silver loving cup by personal and business associates at his home in this city on Friday night in honor of Mr. Moses' 60th birthday which was observed on Friday. About 300 business associates and personal friends of Mr. Moses gathered in his home on Friday night and extended their good wishes and congratulations. The gathering came as a complete surprise to Mr. Moses. It was brought about by those who have had an opportunity to know the scope of Mr. Moses' activities and work and to show publicly their appreciation of his efforts. The cup is inscribed as follows: "To Horace Augustus Moses on his sixtieth birthday, April 21, 1922, from his host of friends in appreciation of his many years of service in public welfare."

New York Trade Jottings

A petition in bankruptcy was filed Monday against the Unity Paper Box Company, Inc., of 46 Wooster street, by these creditors —Louis Rosenthal, $500; Kate Singer, $500.

* * *

C. A. Crocker, of Holyoke, was in New York last Thursday to attend the meeting of the National Industrial Conference Board. Mr. Crocker is the representative of the Paper Industry on that board.

* * *

The Charles W. Knode Company, Inc., paper mill representative, has announced the removal of its present office at 175 Fifth avenue to its new location at 115 Broadway, Room 1426, with the telephone number of Rector 7180.

* * *

O. M. Porter, Secretary of the Woodlands Section of the American Paper and Pulp Association, was re-elected Secretary of the New York Section of the American Society of Foresters at their annual meeting in Syracuse last week.

* * *

Joseph E. Carr, formerly connected with the Graham Paper Company as representative in Philadelphia, has joined the sales force of the Vallely-Schuyler Paper Company with offices at the Borden Building, 350 Madison avenue, New York.

* * *

After May 15, the National Aniline and Chemical Company, Inc., will be located in its new quarters at 40 Rector street, where it will have better facilities for handling its business. Until that time the company will occupy its old offices at 21 Burling Slip, New York.

* * *

The National Wax and Paper Manufacturing Company, now located in the Bush Terminal Building at the foot of 37th street, Brooklyn, has moved its offices to the Wurlitzer Building, 119 West 41st street, New York City. Its new phone numbers will be Bryant 2570 and 2571.

* * *

The Congress Paper Company, Inc., announces its removal from 206 W. 29th street to 287-289-291 Ninth avenue, New York City. In their new quarters the company will occupy about 10,000 sq. ft. of floor space, or about twice that of its previous location. The sales force has also been increased for the convenience of customers.

* * *

The Great Notch Paper Company, Inc., will remove from its present location of 41 Park Row, to 101-103 Varick street, between Canal and Broome streets, where it will open a warehouse. It requests that all communications and goods be sent to its new address after May 1. The telephone number is Canal 8815.

* * *

W. G. MacNaughton, Secretary of the Technical Association, has announced that plans are being made for the meeting of the Executive Committee of the Technical Association to be held at Woronoco, Mass. George E. Williamson, of the Strathmore Paper Company and President of the Association, has called the meeting for May 4 and 5.

* * *

Dr. Hugh P. Baker, Secretary of the American Paper and Pulp Association, visited Albany on April 21 to attend a meeting of leaders in the newly formed Adirondack Mountain Club. Preliminary plans were discussed by the assemblage, including trail making and shelter building for the benefit of mountain climbers in the Adirondacks.

* * *

H. H. Reynolds, President of the Salesmen's Association of the American Paper and Pulp Association, was in the city last Thursday and held a conference with Dr. Hugh P. Baker, Secretary of the American Paper and Pulp Association, and Mr. MacLaurin, vice-President of the New York District of the Salesmen's Association. Plans for the activities of the Salesmen's Association both nationally and in the New York District were worked out together with a schedule of luncheon meetings for New York and New England members of the Salesmen's Association. Luncheons will be held May 3, May 31 and June 28, at the Arkwright Club, 320 Broadway. T. J. McMannis, Director of Publicity and Advertising in the Edison Division of the General Electric Company, will speak at the first luncheon.

Boston Business Continues Slightly Better

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., April 26, 1922.—A continuance of slightly better business, noticed in these parts for the past two weeks, is reported this week. Some houses claim a "right smart" trade while others a "medium" and there are those who still continue to moan "hard times."

Extremely high water through Maine, Vermont and New Hampshire has affected mill production to some extent and in certain quarters has done much damage. The big textile strike which has paralyzed the industry in this part of New England continues, with no breaking signs in view. This particular labor matter has cost the paper industry in this section thousands of dollars, including many heavy personal losses.

Despite these factors, however, fine goods and certain brands of coarse papers are moving well, with business picking up considerably in the board branch of the trade. Candy and show concerns are hitting their stride again and heavy orders for board are being placed.

Orders are constant for fine grades of stationery and printers are coming into the market for larger supplies of various grades.

Old papers and rags remain quiet but certain indications in the waste paper business during the past few days has given a few dealers some hope of better business. Rag papers are almost dormant.

A pamphlet on "The Correct Use of Bond Papers" issued by the American Writing Paper Company has created a great demand in this city. The booklet is the first of a series to be published on the correct use of paper.

Trade Commission Proceeds Against Typothetæ

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, April 24, 1922.—The Federal Trade Commission in its case against the United Typothetæ of America began proceedings in the case in Chicago, April 17. Testimony was taken daily with the exception of Thursday, the 29th, and the first week of the case came to a close shortly after noon Saturday, April 22, with the testimony among others of three local paper merchants. The paper men called by the Commission as witnesses and participants in the "Three Year Plan" of the Typothetæ are, George M. Seaman, president of the Seaman Paper Company; Arthur Bermingham, president of Bermingham & Prosser, and George R. Tolem, vice-president and general manager of the Midland Paper Company. These paper men were asked to testify as supplymen to the printing trades. The Commission charges that the "Three Year Plan", which is supported by the supply trade to the extent of one-tenth of one per cent of their sales is operated in restraint of trade in that it tends to establish a fixed price for printing.

A letter written in 1918 by the manager of a local supply house, not a paper merchant, was read, and in part states: "We feel that we were forced into it against our judgment." The paper men were asked to give their reasons for contributing to this plan, and were asked if any pressure was brought to bear in making them become advocates.

Obituary

Daniel Franklin Lafean

PHILADELPHIA, April 24, 1922.—Daniel Frank Lafean, former Congressman from Pennsylvania, and banking commissioner under ex-Governor Brumbaugh, and organizer and stockholder of the York Card and Paper Company and member of a family intimately associated with paper industries in his home town, died suddenly in Philadelphia on Thursday of last week. He had come from Atlantic City to consult a physician, fell unconscious on the street at Broad and Norris, and died in an undertaking establishment to which he hastily had been taken while a conveyance and medical aid were being sought. Mr. Lafean was 61 years of age and had been in ill health for almost two years. His condition being aggravated when charges were made against him as banking commissioner in relation to the failure of the North Penn bank. At the trial in December of last year, he was immediately acquitted. Mr. Lafean served six years in Congress, long played a dominant part in the politics of Pennsylvania and was active in many industrial enterprises.

Frederick Clarence Traver

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, April 24, 1922.—Frederick Clarence Traver, who for the past 27 years has been the executive head of the F. C. Traver Paper Company, of Chicago, died at his home, a suburb, just beyond the city limits, April 18.

Mr. Traver was 55 years old and has spent most of his life in the paper business. Twenty-seven years ago he founded the F. C. Traver Paper Company, and prior to that had beeen identified with the industry as a salesman. He was considered by his friends in Chicago to be one of the best known paper men in the Middle Western section.

Death came to Mr. Traver after an extended illness. When he first took ill, he resigned from the presidency of his firm and was succeeded in that office by his son, George W. Traver, who will head the company. There were no other changes necessitated in the official personnel of the company, it was said.

E. A. Newton

BALTIMORE, Md., April 18, 1922.—E. A. Newton, who for the past five or six years had been treasurer and general manager of the Glatfelter Pulp Wood Company with offices at 603 American building, Baltimore, died very suddenly of typhoid fever on April 17 in Johns-Hopkins hospital. Mr. Newton was about thirty-five years old and is survived by his wife and two children.

The Glatfelter Pulp Wood Company supplies the pulpwood for the mills of P. H. Glatfelter Company in Spring Grove, Pa.

Andrew Ramsey

Andrew Ramsey, who died recently at his home in Woodstock, was for many years a traveler for Kilgour Bros., manufacturers of paper bags, Toronto. He was well known in the paper trade, particularly in Western Ontario and only retired from the road a short time ago owing to ill health. Mr. Ramsey had lived in Montreal, Hamilton and London previous to making his home in Woodstock.

Elastoid Fiber Co. in New Home

WALTHAM, Mass., April 17, 1922.—During the past few days the Elastoid Fiber Company has been engaged in moving the old plant on Lexington street to the more commodious and convenient place on Exchange street and, while the work of getting settled is not yet finished, the new building is being used in conducting the business of the concern. Norman Marshall, president of the company, has given the building his personal attention since the work of erection first started in order that nothing might be left undone to meet the requirements of the company and to insure the city a building of which it might well be proud. The plant has been under construction since September, 1921.

The structure covers an area two hundred feet long and seventy feet wide, running adjacent to the railroad tracks. The proximity of the tracks insures a minimum of labor and time in loading and unloading cars. The four walls of the building are literally of glass, large windows being the main feature of the walls. The building is constructed entirely of concrete, brick and glass, with office partition walls of gypsum blocks. A sprinkler system has been installed as protection against fire and the building will be steam-heated. At one end of the building, the east end, the offices of the concern are located.

It is planned, according to President Marshall, to erect another building of about the same dimensions, in front of the present structure, at some future date, and by using steel trusses and glass, to connect the two, thus really making a third building.

The new home of the Elastoid Fiber Company will be one of the most "flexible" plants of its kind in the world, having facilities for making a greater variety of paper tubes, it is claimed, than any other plant now in existence. Working at maximum capacity, the plant will have an output of one hundred million tubes annually. The firm makes tubes used in textile mills, piano rolls for player pianos, tubes for mechanical purposes, insulation for electrical devices and enabled candles for electric fixtures and other kindred articles.

The company has been in existence for about twelve years, being located during that period, on Lexington street, near the Waltham North Station. When the new plant is ready for business, after workmen have completed their labors it will have capacity to employ about one hundred hands.

Valley Mills to Start Building Soon

Officers of the Valley Paper Mills Company, organized about 18 months ago, said excavation for their new mill at Neenah would be started the latter part of this month or early in May. Detailed plans for the plant are almost completed. The main building will be nearly 800 feet long and will be located near Blair Springs where an abundant supply of fresh spring water is assured. A large reservoir to hold the water will be built.

It was said the stock sale had progressed sufficiently to warrant construction on the plant. Officers were reticent about discussing the equipment but it was learned that two paper machines will be installed. One machine will manufacture glassine and greaseproof papers while the other will be used for making French folios and similar papers. It had been planned to begin construction of the plant last October but plans were not completed in time, officers said.

Reed-Pulp Industry in Japan

OSAKA, Japan, March 27, 1922.—In a town named "Kiho" in the south-eastern extremity of Corea, the Corea Fibre Industrial Company conducted by the Suzuki & Company produces pulp made of reed. This is the only reed pulp mill in Japan. It was established in 1915 and since then a considerable sum of money has been invested and spent for the study of the reed-pulp making industry. At least, this reed pulp has commenced to make its appearance in the market.

The fiber of reed is said to resemble Esparto and can be successfully used in making the first class paper by mixing with wood pulp.

Package Protection

The easiest, cleanest, safest method of making a package secure is to tie it with twine. Then if you are carrying the package, a handle or grip is provided, and if you are sending it, even though the paper is torn, the Twine will keep the average package intact.

COLUMBIAN TWINES

are the solution to the package moving problem. These durable Twines are uniform, and possess great strength for their yardage. There is that same feeling of satisfaction, when you tie your package with Columbian, that you would experience if you were securing it with lock and key.

Don't worry about your Twine Problems. Just write our Service Department and they will solve them for you, as they are equipped with the experienced working knowledge that there is individuality to Columbian Twines. In other words, there is a Columbian Twine for every purpose.

BY INVITATION MEMBER OF

NEW YORK, U.S.A.

Columbian Rope Company

373-90 Genesee Street

Auburn ***"The Cordage City"*** **New York**

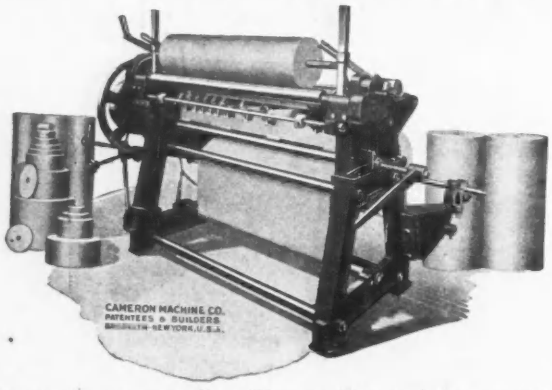
Branches: **New York, Chicago, Boston, Baltimore, Houston**

NEW SLITTING AND ROLL-WINDING MACHINE

Paper box manufacturers often have to slit and re-roll various kinds of paper into roll sizes suited to the orders in hand, and there is a real need for a machine which can be depended on for doing this work in a simple, quick and economical manner. The Cameron Machine Company has recently produced a machine especially for this service. The requirements of box manufacturers were studied so as to cover them fully as to a convenient and dependable machine which would save labor and waste, and at the same time be as low-priced a machine as possible without sacrificing anything in efficiency and service.

Principle of the New Machine

This new machine, known as Camachine Simplex, Type 40, Model BM, incorporates in the simplest possible form what is known as the Cameron principle of slitting and roll-winding. That is to say, it uses the time-honored system of slitting known to the trade as



CAMERON SLITTING AND ROLL-WINDING MACHINE, SIMPLEX TYPE, MODEL BM

the Cameron "score cut" principle, together with a simplified form of rewinding mechanism which the company calls the "simplex" method of roll-winding.

The rolls are wound up on a single shaft, side by side, supported and revolved by two rollers, one of which is the cutter backing roller against which the cutter wheels are spring pressed. This roller has an extremely hard, polished surface made of steel of the highest quality and the greatest degree of hardness which steel alloys and modern methods of heat treating have made it possible to produce. The cutter roller is practically indestructible and its surface remains smooth and even and insures that the slit sections are perfectly slit and remain in an accurate side by side relation as they are being rewound into firm rolls.

The "score cut" method of slitting consists of a cutting disc with a "V" edge mounted on a ball bearing so as to revolve under spring pressure in contact with the surface of the material to be slit. The spring pressure forces the edge of the cutter wheel through the material, the material being supported by the smooth, polished surface of a flint hard cutter backing roller. This roller is one of the two rewinding rollers on which the paper is wound up into rolls. Consequently, the strips produced by the slitting operation remain side by side in contact with the same roller on which they are slit and under proper control for producing good results.

Obviates Various Troubles

This method does away with the troubles arising from the use of the old style method of slitting where "rotary shear" discs are arranged in pairs with overlapping edges, also the difficulties of rewinding where each strip is led separately to one of several rewind shafts.

The speed of the travel of the paper through the machine is very rapid, but evenly and perfeectly regulated, as it is controlled by the surface speed of the rewinding rollers on which the paper rests.

Accessories With Machine

Certain accessories can be furnished with the machine, such as a measuring attachment to record the length of the run in feet, yards or in standard sheet lengths. If it is desired to slit strips having a scalloped edge for some sort of fancy requirements that might come up, all that is necessary is to substitute for the regular standard cutter wheel a cutter wheel having a pinked or scalloped edge of the required pattern.

It is just as easy to slit and wind very narrow rolls as it is to produce wider rolls, as they are all wound on the one shaft and each roll supports the other. Rolls of comparatively large diameter, say, for instance, fourteen inches, can be produced just as easily as rolls of less diameter. If desired, the rolls can be wound up on paper, wood or iron cores, or, if preferred, without any core at all in the finished roll. If it is necessary to make a trim on the edges of the original web, this trim can be extremely narrow—a mere shaving.

It is also possible to run an original roll through the machine and slit only part of it, keeping the remainder for a subsequent run to be converted into any widths that may later on be required, by simply returning the unslit portion of the roll to the mill roll shaft and passing it through the machine again, producing sizes then required.

News of Chicago Trade

CHICAGO, April 24, 1922.—Business among the local paper merchants during the past week or two is said to have been a little better and while there have been but few concrete signs of any material pick-up in bulk orders the buying tendency is sufficiently strong to give the paper men here some hope of improvement in their future.

The second floor of the building of 345 North Crawford street, with 5,000 square feet of floor space has been leased for a term of years at an annual rental of $2,200 a year by Jordon Bros., a new Chicago paper box factory.

Doerr & Frank Rowe, is the name of a new Chicago Paper Box Company which recently took a term lease on the fifth floor of a building at 154-60 Whiting street at an annual rental of $2,100.

Lewis R. Whalen, Frank C. Jensen, George F. Whalen and Arthur G. Powell are the principals of a recently incorporated company which will do a jobbing business in twine and paper products. They have incorporated under the title of, Abbot, Whalen & Jensen, Inc., and located at 811 Sedgwick street, Chicago. This new company has been capitalized at $10,000.

Pejepscot Co. to Discharge Pulpwood at Bath

BATH, Me., April 25, 1922.—The Pejepscot Paper Company has decided to make Bath its port of discharge for Canadian pulpwood instead of Belfast. For a number of years all of the company's pulpwood came from the Canadian forests, where it was discharged into special cage cars and hauled over the Maine Central to the company's big plant in Topsham, Me.

Seven years ago the discharging plant was moved to Belfast, where it was badly damaged by fire last year. The company has a large fleet of barges and two towboats, all owned by the Sagadahoc Touring Company, a subsidiary concern, and it is proposed to keep a constant line of barges coming to this city, both from eastern Maine and the provinces, loaded with pulpwood in order to get 15,000 cords before cold weather sets in. To accomplish this, crews of stevedores will work day and night.

PAPER MAKING CONDITIONS IN GERMANY

BERLIN, Germany, March 30, 1922.—The domestic price of news print for March has been fixed by the Selling Union of the German Printing Paper Mills and by the Selling Union of the Outsider Mills at 3.25 marks the kilogram. The newspaper publishers denounced this price to the government as too high, and an official investigation has been made at several mills, with the effect, that the price was approved. In the meantime, in accordance with the fall of the mark, the cost of paper making has risen, and now paper makers and newspaper publishers are considering the price for April deliveries. The prices of all other grades of paper are being fixed by the paper makers alone, but the newspaper publishers are influential enough to get the Government's and Parliament's help. So the newsprint manufacturers had to prove, that they are entitled to an April price of 11 marks, which they ask. They did this in specializing the actual costs of newspaper making as follows: Wood for paper making cost in March about 500 to 600 marks a cubic metre (about ⅛ cord) in the mill yard, now it costs 800 to 1,200 marks. Mechanical pulp cost in March 430 marks the 100 kg. at the wood pulp mill, and sulphite pulp in newspaper quality 690 marks; this price has been raised for April by the Union of Chemical Pulp Makers to 1,100 marks, and the price of mechanical pulp will be raised in the same proportion. The price of 1 ton of good coal at the paper mill was in March 1,040 marks and will rise in April on account of higher freights and taxes. The wages had to be substantially raised with the higher cost of living.

All these circumstances are about the same with the other grades of paper, and so the market is prepared for new prices about 50 to 80 per cent higher than those which ruled in March. And even at these prices jobbers and converters try to get as much paper as they can, as everybody fears that the mark will fall still lower, all depending on the political developments, and there is no confidence in the results of the conference of Genoa. Yet nobody knows, whether some political action will not stop the fall of the mark, and then the price of paper might begin to go down with the price of all other commodities. So we are living in a state of uncertainty which hampers enterprise.

Some Prices

It would be an error to believe, that exportation is the easier, the lower the mark is standing. On the contrary, the home prices go upwards quicker than the mark is falling. This is proved by statistics compiled lately. They are founded on official dates and "Index" figures in Germany and in the United States. The main figures are:

Date	German Index of Prices of Goods	American Index of Prices of Goods	Buying Power for German Goods of the Dollar in Marks	Relative Buying Power of the Dollar
June 9, 1914.....	1.0	1.0	4.2	1.0
January 1, 1920.....	11.0	2.35	19.7	2.53
January 1, 1922.....	36.0	1.22	123.9	1.48
February 14, 1922.....	39.6	1.27	130.0	1.54
March 14, 1922.....	48.9	1.34	153.3	1.50

We see, that the Americans bought cheaper in Germany than in America.

January, 1920,	by	60.4 per cent
January, 1922,	by	32.7 per cent
February, 1922,	by	35.2 per cent
March, 1922,	by	33.4 per cent

From these figures freight, insurance, export fees and duty have to be deducted, which make an average of 15 per cent of the price, so that the Americans bought in Germany cheaper than at home at an average.

January, 1920,	by	45.4 per cent
January, 1922,	by	17.7 per cent
February, 1922,	by	20.2 per cent
March, 1922,	by	18.4 per cent

Thus the best opportunity for American buyers in Germany was in the beginning of 1920, although they got only about 50 marks for a dollar; now they get 330 marks for it, but the prices of all goods are very high here.

The export fees for goods which represent little workmanship are higher than the fees for goods which are ready for consumption. So in the paper trade the fee amounts to 10 per cent for rag pulp, to 8 per cent for old paper, to 7 per cent for chemical and mechanical pulp from wood, straw and esparto, for boards, printing paper and body paper for photographic purposes; to 6 per cent for blotting, wrapping, real parchment, writing, drawing and tissue paper.

A Project for Making Pulp from Rushes

Some rumor in papermaking circles was excited last year by the foundation of a limited company under the title "Rohstoff-Verband A-G." in Eisenach, a small town of Central Germany. This company claims to have a process for making paper pulp out of the rush which covers big areas in Germany and other countries, and besides for gaining sugar and cattle-food from the roots of the rush and from the liquor (water with certain bacterias) with which the stems of the rush have been treated in order to gain the paper pulp. A saxon board mill, the "Muldenthalwerke A.-G." in Freiberg, Sa., has erected an experimental plant, and the above named company publishes articles, in which the new process is prophesied to revolutionize the art of paper making.

The Leipsic Fair

The Leipsic Fair of this spring was more thronged than ever in its many centuries old history. More than 150,000 tickets for buyers have been sold by the Leipsic Fair Office, and about 30,000 of these buyers were foreigners from all countries east and west, north and south. Big deals in paper and stationery have been made, but every buyer had to submit to the clause that the price which will rule at the time of delivery has to be paid. Almost all manufacturers in every line, not only in the paper trade, were sold out for some months before the Leipsic Fair, and the paper makers are now sold out till about August. Nobody knows what prices will rule next month, but everybody is prepared for a continued boom in the prices, as taxes, freight and postal charges increase almost every month, and with the constantly rising cost of living the wages go upwards with same proportion. Yet it would be an error to suppose that the boom in the prices brings our prices to the level of the world market and ruins the export business; for faster still our mark goes down, and so the countries with high exchange can easily buy German goods notwithstanding their high price in paper-marks. The publication of the new payment terms and control measures of the Reparation Committee was followed by a new heavy fall of the mark and has aroused great indignation even in the most peaceful and patient circles of the country. We are ready to pay as much as we can, but we wish to retain within the limits of our country the small degree of freedom which has been left us by the so-called Peace Treaty of Versailles.

Mill Management Changes

OREGON CITY, Ore., April 14, 1922.—The change in management at the Crown-Williamette Paper Company here, announced some weeks ago, is in effect. C. W. Morden, formerly manager of the mechanical department, with headquarters in Portland, takes charge of the West Linn mill, while A. Bankus, formerly manager both here and at Canas, will be assistant to A. J. Lewthwaite, head of the Northwestern division of the company.

Paper Conditions in Hungary

WASHINGTON, D. C., April 5.—American Vice-Consul Willson at Budapest, has sent the following dispatch to the Department of Commerce regarding the shortage of news print paper in Hungary:

According to reports, the Hungarian press is having difficulty in obtaining news print paper because all paper used by the printing houses and newspapers must be imported and because the present price of news print is two hundred times its pre-war price.

Prior to the war Hungary produced about two-thirds of the news print paper which it consumed. The present consumption of the country is estimated at about 13,200 metric tons per annum, all of which must be imported. Czechoslovakia, Germany, and Austria, in the order stated, are the chief sources of supply.

The following table shows the unbroken increase in the price per kilo (2.2 pounds) of news print paper in Hungary from 1914 to 1921:

	Crowns.
1914	0.26-
1915	.26- 0.29
1916	.30- .40
1917	.60- 1.10
1918	1.50- 2.00
1919	(1)
1920	7.00-14.00
1921 (Jan. to Sept.)	18.00-25.00
1921 (Oct. to Dec.)	30.00-45.00

Additional charges for the cost of wrapping, damaged paper, transportation, etc., amounting to approximately 15 per cent of the mill price, bring the price of news print delivered in Budapest to about 52 crowns per kilo.

Although a number of attempts have been made to establish a news print-paper mill in Hungary, no favorable results have been attained, owing to the fact that all raw material must be imported and to the further fact that no local capitalist is willing to take the risk of such an undertaking at the present time, when the Hungarian crown has such a low purchasing value on the foreign markets.

Mr. Naylor to Address Cost Association

[FROM OUR REGULAR CORRESPONDENT.]

E. H. Naylor, secretary-treasurer of the Writing, Book, Cover and Tissue Associations, well known as the author of "Trade Associations" will address the Connecticut Valley Local Division of the Cost Association of the Paper Industry at Holyoke, Mass., on or about May 23 next.

Mr. Naylor, it need hardly be said, is a very good speaker and will have some very interesting things to say regarding association work and cost work in particular. While he is not a practical cost accountant, he has made a study of the subject during his many years' connection with the pulp and paper industry, as is indicated in his book and, therefore, the officers of this division sincerely hope that as many members as possible will arrange to attend this meeting and make it one of the most successful yet held in Holyoke.

Charles A. Esty Paper Co. Elects Officers

[FROM OUR REGULAR CORRESPONDENT.]

WORCESTER, Mass., April 24, 1922.—At the recent annual meeting of the Charles A. Esty Paper Co., Worcester Mass., Charles A. Esty was re-elected president and treasurer and Edward D. Bement, vice-president. Graham Blandy 2nd, was elected secretary and assistant treasurer.

Mr. Blandy has been associated with the company for some time, coming directly from the American Wood Board Company, Schuylerville, N. Y., of which he was secretary. His previous experience in the industry was acquired with the Dennison Manufacturing Company, St. Croix Paper Company, and the American Writing Paper Company. Mr. Blandy is married and has two children and resides in Worcester, Mass.

Mr. Edward Sherbut for five years with the Sutphin Paper Company, of New York City, has joined the sales force of the Charles A. Esty Paper Company, and will give particular attention to the Worcester County territory, visiting the trade formerly called on by R. E. Knight.

British Paper Makers Directory

The 1922 issue of the directory of paper brokers of the United Kingdom which has been again authentically revised and thoroughly brought up-to-date has just been received.

The chief features in the 1922 edition are:

The list of paper makers, &c., &c., of U.K. under all the various headings carefully and authentically revised to date.

List of paper makers representatives in London and chief provincial towns with mills represented.

London wholesale stationers.

List of trade designations (used by paper makers, wholesale stationers, &c., for papers, stationery, cards, &c.) with very numerous additions to date.

Actual watermarks. Trade names of infinite value to printers, stationers, publishers, and all handlers of paper.

New paper trade customs.

A classification of advertisers, forming in itself a complete directory of paper makers' suppliers, &c.

Northwestern Paper Merchants' Assn. Election

[FROM OUR REGULAR CORRESPONDENT]

MINNEAPOLIS, Minn., April 18, 1922.—At a meeting of the Northwestern Paper Merchants' Association, April 6, officers for the ensuing year were elected as follows: President, H. W. Mathewson, Paper Supply Company, Minneapolis; vice-president, E. A. Beckjord, E. J. Stilwell Paper Company, St. Paul; secretary-treasurer, W. C. Wilson, McClellan Paper Company, Minneapolis; fine-paper committeeman, F. L. McClellan, McClellan Paper Company, Minneapolis; alternate, L. R. Boswell, Minneapolis Paper Company, Minneapolis; coarse-paper committeeman, Frank P. Leslie, John Leslie Paper Company, Minneapolis; alternate, F. G. Leslie, Leslie, Donahower Company, St. Paul, Minn.

Joins Chicago Gummed Tape Co.

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, April 24, 1922.—John W. Sterling, manager of the Chicago Mill of the McLaurin-Jones Company, successor to the Ideal Coated Paper Company, has resigned from the company, and purchased an interest in the Chicago Gum Tape Company, 171 N. Dearborn street, Chicago, and will be Vice-President.

Mr. Sterling's years of service with McLaurin-Jones Company, and his acquaintance with the trade has made him many friends, who will wish him success in his new connection.

Albert Diem Returns From Florida

[FROM OUR REGULAR CORRESPONDENT]

CINCINNATI, Ohio, April 24, 1922.—Albert Diem, chairman of the Board of the Diem & Wing Paper Company has returned after spending the winter at his winter home at Seabreeze, Fla., to preside at a meeting of the board of directors of the Diem & Wing Paper Company, Saturday, April 22. He will leave on the 18th of May for a trip abroad of several months' duration.

Brown Co. Owns Vast Timber Tracts

PORTLAND, Me., April 24, 1922.—The Brown Company—one of Portland's oldest and leading industries and the largest manufacturer of bleached sulphite fiber pulp and kraft wrapping paper in the country—has increased its holdings of timber lands, it became known last week, until it now holds more than 3,500,000 acres or more than 5,400 square miles of territory, more than five times the area of the State of Rhode Island.

And in addition to its increase in timber holdings, the company has enlarged its accretion of water power from 25,000 horsepower to 40,000 horsepower.

These property additions have been made by the company at a cost of $10,137,000 and have been acquired gradually since the fall of 1919. The timber interests purchased during that period total more than 500,000 acres.

Announcement of these large additions to the Brown Company's working facilities was coincident with the announcement, by Hornblower & Weeks, that they would offer the company's six per cent serial gold debenture bonds, series "B," to the amount of three million dollars, the offering being the second under an authorized issue of $15,000,000.

Established in 1852 as the Brown Company, it became the Berlin Mills Company in 1888, acquired the Burgess Sulphite Fiber Company in 1908 and was absorbed into the Berlin Mills Company in 1917, when the name was changed to Brown Company. It owns all the stock of the Brown Corporation, organized under the laws of the Province of Quebec and the earnings of these companies have been largely invested in the business until combined assets of the companies are in excess of $62,000,000. Annual sales during the last five years have averaged $25,810,000.

Besides bleached sulphite fiber pulp and kraft wrapping paper, the Brown Company manufactures bond paper, lumber and allied products. Its daily capacity is 600 tons of bleached sulphite fiber, 200 tons kraft paper and bond paper, 150,000 feet merchantable lumber and 1,200 window frames.

The mill properties, located at Berlin, Gorham and Shelburne, N. H. consist of two paper mills, two sulphite fiber mills, a saw mill and six hydro-electric plants with an installed capacity of 40,000 horsepower and a steam plant with a capacity of 20,000 horsepower. The Canadian plant manufactures sulphite fiber pulp, which is shipped free of duty to the American plants and there manufactured into kraft paper, which is protected by a duty of twenty-five per cent.

When the $15,000,000 bond issue was authorized to permit the company to acquire further property rights, in 1919, $6,750,000 of bonds were sold. The company at once began to acquire the desired property and since that time has expended $7,759,000 in plants and $2,378,000 for timber lands. And while making these expenditures it has reduced its bonded indebtedness $2,286,000.

All the common stock of the corporation is owned and all offices in the corporation held by four brothers, H. J. Brown, president; O. B. Brown, vice-president and treasurer; W. R. Brown, assistant treasurer, and D. P. Brown, a director. The original owner of the company was William W. Brown.

Sun Gets Decision Against Hanna Paper Corp.

[FROM OUR REGULAR CORRESPONDENT]

WATERTOWN, N. Y., April 24, 1922.—The Appellate Division of the Supreme Court has just handed down a decision adverse to the Hanna Paper Corporation in an action for damages for breach of contract brought by the Sun Printing and Publishing Association of New York. When issue was first joined Elon R. Brown as attorney for the local paper company demurred to the complaint. Supreme Court Justice Bijur, of New York, ruled in favor of the defendant, but the Appellate Division has reversed the decision. The case will now be taken to the Court of Appeals.

Floyd L. Carlisle, president of the Hanna Paper Corporation since local capitalists bought the Hanna control, was asked concerning a report in a local paper that his company must account to the plaintiff for $1,500,000. "The damages claimed were never anything like a million dollars, and in the second place the case has never been tried to determine the question of damages, the technical question of allowing the demurrer being the only point at court. If the Court of Appeals should sustain the Appellate Division, then the case would be placed on trial. It would be several years before a verdict could be established, even with such a ruling by the highest court.

Mr. Carlisle leaves Tuesday night for New York, where on Wednesday, he will participate in the conference of manufacturers and labor leaders on the question of a new agreement.

Col. Franklin to Be Director of Camp Devens

[FROM OUR REGULAR CORRESPONDENT]

SPRINGFIELD, Mass., April 24, 1922.—Col. Benjamin A. Franklin, vice-president of the Strathmore Paper Company of Mittineague and Woronoco, has been appointed director of the citizens' military training camp which will be conducted at Camp Devens at Ayer, Mass., this summer.

The camp will be held from August 1 to 30 and it is expected that about 3,000 will attend should Congress vote the necessary appropriation. Col. Franklin is an officer in the organized reserves and in charge of a supply train. Frederick Schultz, physical director at the Young Men's Christian Association of this city, will be assistant director of the camp.

New Tariff Bill May Be Law About August

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., April 26, 1922.—Some of those who have been in closest touch with the tariff situation feel that the bill will become law, if no unforeseen circumstances arise about August 1. This opinion is predicated on the bill being under discussion on the floor of the Senate during the months of May and June and the bill being in conference for the month of July. The understanding here seems to be that the Democrats do not wish to unduly delay the passage of the bill because many of them, as well as the Republicans, have political fences which need mending seriously.

Change in Print Paper After April 23

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., April 19, 1922.—Officials of the Customs Service are advising collectors of customs throughout the country of the change in the law regarding the importation of printing paper into the United States on and after April 23.

It will be remembered that up to a couple of years ago no duty was charged on the importation of printing paper if valued at 5 cents per pound or less. When the price of printing paper advanced Congress changed this law to 8 cents and under for a period of two years. That two years elapses on April 23.

No Dumping of Pulpwood

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., April 26, 1922.—There is no dumping of wood pulp from Scandinavian or European countries or from Canada, according to officials of the Customs Service. An investigation of this subject has been under way for some time. Officials of the Customs Service state, however, that no decision has been reached yet regarding the dumping of news print paper on the American market.

The Customs Service has announced that dumping has been found of sheathing paper from British Columbia.

PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

For the Month Ending February 28, 1922, and for the Eight Months Ended February 28, 1922, as Compared with Corresponding Months of Two Previous Years.

IMPORTS—PAPER.

Paper and Manufactures of.	February 1921. Quantity.	February 1921. Value.	February 1922. Quantity.	February 1922. Value.	Eight Months Ended February 28 1921. Quantity.	Eight Months Ended February 28 1921. Value.	Eight Months Ended February 28 1922. Quantity.	Eight Months Ended February 28 1922. Value.
Books, Music, Maps, Engravings, Etchings, Photographs, and other Printed Matter.....Free	----------	$357,705	----------	$294,733	----------	$3,585,196	----------	$2,477,699
Books, Music, Maps, Engravings, Etchings, Photographs, and other Printed Matter.....Dut.	----------	165,423	----------	152,182	----------	1,666,126	----------	1,410,883
Decalcomania paper, not printed.....Free	----------	6,325	----------	2,396	----------	156,159	----------	59,425
Lithographic Labels and Prints (except Post Cards).....lbs..Dut.	81,759	55,490	124,055	47,637	827,136	556,336	1,041,035	489,557
Paper Hangings.....Dut.	----------	23,246	----------	55,050	----------	226,468	----------	252,764
Photographic .....lbs..Dut.	46,112	9,761	195,096	48,829	925,535	259,465	1,428,488	267,337
Printing Paper—								
News print.....lbs..Free	117,786,748	7,302,112	164,780,569	5,709,753	1,031,055,674	56,233,339	1,214,021,537	49,102,290
All other .....lbs..Dut.	10,146	1,362	51,572	6,218	3,792,976	485,863	276,917	39,133
Post Cards, Souvenir.....Dut.	----------	5,203	----------	5,219	----------	154,906	----------	81,041
Pulp board, in rolls, not laminated..lbs..Dut.	1,987,725	62,552	4,784,063	141,349	56,400,677	1,850,859	22,951,443	611,440
Surface-coated .....lbs..Dut.	69,033	16,785	62,771	12,510	872,325	244,087	433,107	96,126
Wrapping .....lbs..Dut.	854,272	67,926	1,886,000	63,237	4,269,099	382,713	10,831,366	416,373
All other.....Dut.	----------	274,741	----------	223,723	----------	2,404,622	----------	1,658,908
Total Paper, and Manufactures of.....	----------	$8,348,631	----------	$6,767,836	----------	$68,206,139	----------	$56,963,085
CRUDE PAPER STOCK.								
Rags (except woolen).....lbs..Free	8,256,641	$247,083	2,297,318	$322,111	130,890,306	$5,060,231	128,869,541	$1,896,004
All other kinds of paper stock...lbs..Free	6,238,362	142,630	2,228,830	297,855	117,443,108	4,419,050	93,837,646	1,988,809
WOOD PULP.								
Mechanically ground.....tons..Free	2,924	$173,824	8,159	$263,805	146,058	$11,376,801	160,841	$4,189,727
Chemical—								
Unbleached—								
Sulphate .....tons..Free	5,167	$639,413	17,002	$1,072,050	100,635	$12,822,387	156,560	$9,355,318
Sulphite .....tons..Free	5,911	660,740	29,424	1,858,023	192,347	27,593,794	226,059	12,783,389
Total .....tons	11,078	$1,300,153	46,426	$2,930,073	292,982	$40,416,181	382,619	$22,138,707
Imported from—								
Norway .....tons	25	$3,080	1,835	$40,622	6,273	$996,761	8,010	$391,908
Sweden .....tons	4,195	519,350	23,153	1,511,984	78,256	11,225,064	167,931	9,174,875
Canada .....tons	6,646	742,432	18,734	1,156,760	185,998	24,721,279	159,577	10,065,905
Other countries.....tons	212	35,291	2,704	220,707	22,455	3,473,077	47,101	2,506,119
Bleached—								
Sulphate .....tons..Free	----------	----------	231	$16,477	8,333	$1,175,932	4,409	$263,852
Sulphite .....tons..Free	2,804	$444,771	12,667	1,088,514	73,059	14,000,403	90,114	7,744,431
Total .....tons	2,804	$444,771	12,898	$1,104,991	81,392	$15,176,335	94,517	$8,008,283
Imported from—								
Norway .....tons	200	$36,000	4,326	$377,945	8,744	$2,108,792	13,789	$1,274,581
Sweden .....tons	100	20,344	2,080	142,139	12,388	2,096,807	11,592	806,894
Canada .....tons	2,044	307,867	6,083	559,353	52,318	9,517,946	55,315	4,954,066
Other countries.....tons	460	80,560	409	25,554	7,942	1,452,790	13,821	972,773
CHEMICALS AND OTHER PAPER MAKERS' MATERIALS.								
Colors or dyes, n.e.s.....lbs..Dut.	217,525	$290,427	219,140	$240,589	2,519,053	$3,862,184	2,194,238	$3,162,203
Imported from—								
Germany .....lbs	59,878	$57,005	74,216	$88,411	1,004,858	$1,444,382	1,016,731	$1,871,281
Switzerland .....lbs	130,952	206,783	79,847	87,402	763,938	1,565,201	791,103	1,152,823
United Kingdom.....lbs	8,245	11,582	50,049	42,700	205,985	259,020	240,933	238,019
Other countries.....lbs	18,450	24,057	15,028	22,076	544,272	593,581	145,471	200,128
Indigo—								
Natural .....lbs..Dut.	----------	----------	----------	----------	111,389	$271,173	20,619	$26,626
Synthetic .....lbs..Dut.	1,442	$547	3,752	$5,724	265,333	201,477	413,192	224,149
Alizarin and alizarin dyes.....lbs..Dut.	35,599	33,331	45,449	43,359	238,044	291,068	291,552	435,554
Lactarene or Casein.....lbs..Free	909,706	112,240	1,488,824	99,383	9,914,299	1,176,221	6,318,313	397,720
Lime, Chlor. of, or bleaching powder, lbs..Dut.	257,824	5,957	1,759,715	22,794	2,328,434	88,122	15,293,296	230,407
Magnesite, not purified.....tons..Free	1	95	2,870	103,847	30,708	497,327	36,197	655,856
Potash, Hydrate of.....lbs..Free	----------	----------	969,377	49,056	970,603	243,988	9,622,453	385,374
Sulphur or Brimstone.....tons..Free	----------	----------	----------	14	----------	20	2	134
China clay or kaolin.....tons..Dut.	6,294	75,843	14,887	161,591	215,930	2,434,955	115,940	1,193,806
PULP WOOD.								
Rough .....cords..Free	34,173	$412,845	37,003	60,926	247,294	$3,106,959	112,649	$1,375,986
Peeled .....cords..Free	144,896	2,359,725	55,353	867,948	828,170	12,319,351	354,067	3,941,778
Rossed .....cords..Free	8,951	162,948	3,266	36,594	142,702	2,668,254	48,256	745,181
Total .....cords	188,020	$2,935,518	95,622	$965,468	1,218,166	$18,154,564	514,972	$6,065,825

(*Continued on page* 40)

PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

(*Continued from page 38*)

EXPORTS—PAPER.

PAPER AND MANUFACTURES OF.	February 1921. Quantity.	February 1921. Value.	February 1922. Quantity.	February 1922. Value.	Eight Months Ended February 28 1921. Quantity.	Eight Months Ended February 28 1921. Value.	Eight Months Ended February 28 1922. Quantity.	Eight Months Ended February 28 1922. Value.
Paper, except printed matter (total)		$5,043,965		$1,486,480		$48,614,746		$12,140,184
PRINTING PAPER—								
News Print lbs.	5,059,057	$389,716	1,671,844	$75,886	54,497,474	$3,950,768	20,708,066	$1,003,677
Exported to—								
Canada	125,695	$11,699	120,416	$5,695	1,087,283	$88,230	267,389	$19,263
Cuba	1,898,957	140,327	1,162,276	47,627	13,430,154	976,504	10,754,317	494,587
Argentina	1,459,089	105,757			22,379,739	1,309,569	2,860,169	113,294
Brazil	8,678	485	13,500	750	1,076,648	123,503	120,684	9,343
Uruguay	640,228	47,027			1,645,464	103,290	73,255	3,516
Other South America	55,285	6,625	244,493	12,114	4,183,338	387,149	1,318,855	68,108
China	62,022	5,661			1,591,578	164,457	394,621	18,806
Philippine Islands	498,017	42,233			2,511,665	171,268	1,949,443	101,211
Australia	170,655	17,286			733,827	80,238		
Other countries	140,431	12,616	131,159	7,300	5,857,778	546,560	2,969,333	175,299
Bible or India paper lbs.			263	$63			†7,408	†$1,659
Other book paper, not coated lbs.	8,042,296	$1,388,061	1,353,145	$145,784	67,284,683	$11,121,904	12,480,790	$1,402,324
Exported to—								
Greece	9,566	$2,073			756,384	$98,100		
United Kingdom	3,059	800	52,137	$11,170	961,704	211,593	254,196	$49,964
Canada	136,731	21,120	182,370	22,325	3,535,009	514,953	1,811,130	208,254
Mexico	299,002	63,359	173,100	17,061	1,561,178	306,996	2,101,988	243,312
Cuba	807,193	153,483	151,422	16,662	10,352,666	1,827,679	1,387,671	142,371
Argentina	1,583,572	246,700	7,352	1,056	11,029,874	1,545,605	261,329	36,028
Brazil	160,894	30,241	19,431	1,801	4,727,645	875,027	347,506	54,775
Chile	62,747	12,337	1,680	437	925,502	171,965	51,444	6,962
Colombia	109,644	15,422	50,230	5,443	1,300,209	223,457	222,817	22,851
Peru	289,541	52,402	11,787	2,458	1,027,045	180,357	284,697	28,376
Uruguay	99,098	15,295			1,907,122	267,080	325	43
Venezuela	33,628	6,016	23,263	2,722	1,204,329	219,859	412,260	49,896
British India	86,358	18,436	73,178	8,187	2,786,237	444,082	395,590	38,797
China	1,200,314	246,786	123,300	12,156	5,613,119	967,333	1,100,982	112,643
Dutch East Indies	110,078	16,131			1,185,576	190,463	7,186	914
Japan	142,568	17,804	165,623	12,118	1,108,426	160,868	1,490,317	141,130
Philippine Islands	654,662	122,841	132,397	12,999	3,923,112	683,249	811,580	88,087
Australia	1,564,172	222,263	56,600	5,672	6,876,514	989,960	436,296	43,584
Other countries	689,469	124,462	129,275	13,497	6,503,032	1,243,278	1,103,476	134,335
Cover paper lbs.			75,866	$12,092			†192,843	†30,146
Grease-proof and waterproof paper lbs.		$16,602	23,996	3,674		$303,411		52,260
Wrapping paper lbs.	3,087,362	346,296			35,389,200	4,573,522	*11,682,845	*777,175
Kraft wrapping lbs.			70,027	4,905			†126,794	†9,833
Other wrapping lbs.			2,680,671	166,943			†4,739,510	†311,480
Writing paper and envelopes		831,667				7,114,569		*1,033,894
Writing paper, except in papeteries lbs.			379,817	62,049			†1,069,020	†177,893
Surface-coated paper lbs.			201,058	36,612			†421,422	†84,333
Tissue and toilet paper lbs.		112,609				1,433,861		*398,118
Tissue and crêpe paper lbs.			227,241	47,791			†346,665	†83,920
Toilet paper lbs.			302,768	33,325			†590,422	†66,211
Paper towels and napkins lbs.		27,896	65,244	11,837		313,768		95,274
Bristols and bristol board lbs.			57,222	8,720			†116,113	†20,690
Paper board and straw board lbs.		318,180	2,746,810	121,347		4,214,221		952,679
Sheathing and building paper lbs.			364,460	14,035			†610,407	†21,279
Wall board of paper or pulp sq. ft.		84,912	556,263	20,782		1,115,209		230,615
Cigarette paper and books lbs.			24,925	13,016			†86,133	†37,081
Photographic paper lbs.			77,613	66,585			†249,156	†249,336
Paper hangings (wall paper) yard		112,759	1,674,730	52,863		829,091		245,768
Paper bags lbs.		95,178	1,188,470	102,780		1,752,936		518,779
Boxes and cartons lbs.		114,264	508,848	41,282		1,646,296		689,977
Carbon paper lbs.		69,219	42,518	32,551		676,625		273,692
Envelopes lbs.			128,514	27,173			†374,485	†71,087
Indurated fiber ware lbs.			4,389	792			†17,014	†4,711
Playing cards pack		90,482	207,300	32,606		803,678		248,735
Cash-register and adding-machine paper lbs.		50,174	36,203	4,493		211,881		74,432
Papeteries (writing paper in boxes) lbs.			15,878	6,571			†31,965	†12,729
Other paper and paper products, n.e.s. lbs.		995,950	2,738,958	339,923		8,462,896		2,960,447
Books, maps, pictures, and other printed matter lbs.		$1,970,820				$17,845,452		*$9,481,915
Books and Pamphlets lbs.			1,438,555	$481,912			†2,783,519	†1,051,261
Maps and charts lbs.			7,416	10,709			†27,287	†41,145
Music in books or sheets lbs.			32,695	25,375			†60,235	†46,952
Souvenir post cards lbs.			142,767	20,288			†356,963	†47,920
Lithographically printed matter, except post cards and maps lbs.			87,062	48,245			†244,646	†168,209
Other printed matter lbs.			1,187,830	455,498			†3,162,080	†1,118,810

WOOD PULP AND PAPER STOCK.

Wood Pulp	2,423	$264,002			18,992	$2,144,806	*11,740	*$614,098
Mechanical wood pulp tons							†1	†50
Sulphite wood pulp tons			1,564	$68,917			†3,442	†158,117
Soda wood pulp tons			83	7,467			†511	†48,433
Kraft wood pulp tons								
Other wood pulp tons			155	11,445			†253	†18,004
Rags, and other paper stock lbs.	2,553,198	68,025	6,795,301	100,134	47,696,975	1,549,878	38,498,998	587,492

PAPER AND PULP MACHINERY.

Paper and pulp-mill machinery		$377,476				$2,690,054		$1,376,074
Pulp-mill machinery lbs.			23,912	$5,071			†51,325	†14,705
Paper-mill machinery lbs.			962,608	305,739			†1,521,185	†544,099

*July 1 to Dec. 31, 1921. †Jan. 1 to Feb. 28, 1922.

Editorial

Vol. LXXIV New York, April 27, 1922 No. 17
FIFTIETH YEAR

The Long Price List Again

The advice of the PAPER TRADE JOURNAL to the paper merchants of the country, not to allow themselves to be stampeded by the aggressive agitation of the United Typothetæ of America into too hastily accepting the long price proposition of that organization, is apparently being heeded.

In this connection, an interesting report comes from Philadelphia, of the resignation in a body of all the fine paper houses, holding membership in the Paper Trade Division of the Typothetæ of Philadelphia. While it is stated that this action was not hastily taken but had been carefully considered for some time, it seems that its announcement at the time was influenced by the attempt on the part of officials of the Typothetæ to revitalize the issue just when, in the words of a great statesman, it was subsiding for the time, at least, into innocuous desuetude.

We believe the statement of Mr. Allen E. Whiting, president of the Paper Trade Association of Philadelphia, that this action was not taken in any spirit of petulance, although judging from reports some members of the Typothetæ have in the past months, not always acted in a manner which could lead it to expect much consideration from the paper men.

Apart from the merits of the long price question as a merchandising proposition, there have, as is well known, come into the matter of late some legal consideration and until these are settled, it seems the part of wisdom, so far as paper merchants are concerned, to have no connection with the matter.

If it is determined that the principle is at variance with the Federal price laws, the matter must, of course, be dropped and if it is not, it should in due course, be considered in a rational manner.

In the meantime nothing will be gained by impatience; but honest co-operation, on the other hand, between paper merchants and printers will certainly stimulate greater than anything else can, the return to better business, which all so much desire.

Continued Decline in Exports

The exports of paper, according to figures just furnished by the Department of Commerce at Washington again showed a decline for February, reaching the unusual low total of $1,486,480 as compared with $1,810,413 for January and $5,043,965 for February of last year. The export of paper for the eight months ending with February were valued at $12,140,181 as compared with $48,614,746 for the same period last year.

The exports of news print especially showed a big falling off, the total for February being only $75,886 as compared with $216,254 for January and $389,716 for February of each year. The export of news print for the eight months ending with February amounted to $1,003,677 as compared with $3,950,768 for the same period in last year.

The exports of wrapping paper also showed a considerable decline for February, the figures being Kraft wrapping, $4,905, and other wrapping $166,943 as compared with Kraft wrapping $4,928 and other wrapping $144,537 for January and $346,296 for all varieties of wrapping for February of last year. The exports for the two months' period ending with February were Kraft wrapping, $9,833 and other wrapping $311,480.

The exports of cover paper for February were valued at $12,092 as compared with $18,054 for January, of grease-proof and waterproof paper $3,674 as compared with $5,143 for January, of writing paper except in papeteries, $62,049 as compared with $115,844 for January, of surface coated papers, $36,612 as compared with $47,721 for January, of tissue and crepe paper, $47,791 as compared with $36,129 for January, of toilet paper, $33,325 as compared with $32,886 for January, of bristols and bristol board, $8,720 as compared with $11,970 for January, of paper board and straw board, $121,347 as compared with $140,856, for January, of sheathing and building paper, $14,035 as compared with $7,244 for January, of wall board or pulp $20,782 as compared with $29,478 for January, and of cigarette papers and books, $13,016 as compared with $24,065 for January.

The imports of paper and manufactures of paper for February continued about the same as in recent months being valued at, $6,767,836 as compared with $6,788,137 for January and $8,348,631 for February a year ago. The imports of paper and manufactures of paper for the eight months ending with February were valued $56,963,085 as compared with $68,206,139 for the same period last year.

The imports of news print for February were valued at $5,709,753 as compared with $5,941,351 for January and $7,302,112 for February of last year. The imports of news print for the eight months ending with February amounted to $49,102,299 as compared with $56,233,339 for the same period last year.

The imports of rags for paper stock for February showed a big falling off, being valued at $322,111 as compared with $538,402 for January and $247,083 for February of last year. The imports of rags for the eight months ending with February were valued at $1,896,004 as compared with $5,060,231 for the same period last year.

The imports of all other kinds of paper stock for February were valued at $297,355 as compared with $282,357 for January and $142,630 for February of last year. The imports of all other kinds of paper stock for the eight months ending with February amounted to $1,988,800 as compared with $4,419,050 for the same period last year.

The imports of ground wood for February showed a big decrease from January but were considerably larger than in February a year ago. The imports for February amounted to $263,895 as compared with $470,310 for January and $173,824 for February of last year. The imports of ground wood for the eight months ending with February were valued at $4,189,727 as compared with $11,376,801 for the same period last year.

The imports of unbleached sulphate for February were valued at $1,072,050 as compared with $1,296,092 for January and $639,413 for February of last year. The imports of unbleached sulphate for the eight months ending with February amounted to $9,355,318 as compared with $12,822,387 for the same period last year.

The imports of unbleached sulphite for February were valued at

$1,858,023 as compared with $2,142,323 for January and $660,740 for February of last year. The imports of unbleached sulphite for the eight months ending with February were valued at $12,138,707 as compared with $27,593,794 for the same period last year.

The imports of bleached sulphate for February were valued at $16,477 as compared with $89,813 for January and no imports for February of last year. The imports of bleached sulphate for the eight months ending with February were valued at $263,852 as compared with $1,175,932 for the period last year.

The imports of bleached sulphite for February were valued at $1,088,514 as compared with $1,801,676 for January and $444,771 for February of last year. The imports of bleached sulphite for the eight months ending with February were valued at $7,744,431 as compared with $14,000,403 for the same period last year.

Dr. Baker to Visit Europe

Dr. Hugh P. Baker, executive secretary of the American Paper and Pulp Association, will spend eight weeks in Europe this summer, studying the paper industry, particularly in Scandinavia, with reference to its bearing on the future of the industry in America.

In addition he will bear a special commission from the Department of Commerce for the making of a special study of the effect on the paper industry here and abroad of the establishment of new republics in Europe, and the revision of boundaries of old nations, as a result of the war.

Arrangements for this trip were proposed at a meeting of several leaders in the industry at a luncheon given by President Raybold of the Association and developments since the trip was authorized have been so far completed that it is now certain that Dr. Baker will sail for Scandinavia on June 10.

Particular attention will be paid to the condition of the paper industry in Finland and Czecho-Slovakia, and Dr. Baker's trip will take him as well to Sweden, Norway and Germany, with shorter stays in other countries of Europe, his return being from a southern European port.

The American Paper and Pulp Association wishes to have Dr. Baker investigate particularly the conditions in Norway, Sweden and Germany, while the Department of Commerce is particularly anxious to learn what changes will result in Czecho-Slovakia and Austria, as well as Poland, as the result of the revision of European national boundaries.

The fact that Dr. Baker's doctorate degree was taken in a German university where he spent two years, will greatly facilitate his study of business conditions in foreign lands, as German is a common language for international conversations in northern Europe.

European Conditions and American Business

"European Conditions and their Effect on American Business" will be the main topic at the tenth annual meeting of the Chamber of Commerce of the United States, to be held in Washington May 16 to 18. This announcement was made by the Chamber today when it made public a tentative program for the meeting.

Because of the interest of business men throughout the country in the general subject it is predicted that the convention will be one of the largest ever held by the Chamber. More than 1,400 business organizations have been asked to send representatives and an attendance of from 4,000 to 5,000 business men is looked for.

"In selecting the subject for the convention," said a statement by the Chamber today, "there was a desire to obtain a thorough discussion of world business conditions as well as domestic conditions for use as a basis of judgment in planning measures to insure a continuing future prosperity in the United States. The situation abroad has been constantly changing and the time has come for a new inquiry into the facts. The biggest question before American business men today is the problem of formulating intelligent plans that may be of assistance in restoring normal economic conditions.

"No plans can be made that do not take into account the European situation, including such problems as the Allied debts, reparations settlements, paper currency issues, exchange fluctuations, ocean shipping, etc."

As in previous years the work of the convention will be done largely in group sessions. Groups representing the major divisions of business will take up the questions before the meeting in their relation to the particular interests or industries within the group.

Plans Pulp Mill for Aberdeen

ABERDEEN, Wash., April 12, 1922.—To discuss further plans for establishment of a wood pulp mill here, the Aberdeen Chamber of Commerce executive committee will confer tomorrow with Henning Helin, the British Columbia engineer, who was here more than a month ago to promote plans for erection of a plant in Aberdeen, and who will arrive in the city today or tomorrow, according to a letter received this morning by Secretary W. L. Morris. "Mr. Helin has kept in constant correspondence with the Chamber since leaving early in March," said Mr. Morris. "His letter today would indicate that his investigations are favorable to establishment of a plant here."

Mr. Helin's plan provides for utilization of waste of Harbor mills for raw material and fuel, using all refuse that is now thrown into the mill burners. Eight Harbor mill owners expressed willingness to supply the required raw material for the plant, which would be of 100-ton daily capacity and would employ 150 men. To produce 100 tons of pulp daily, 800 tons of raw material and fuel would be required. The site under consideration is that of the old Michigan mill in South Aberdeen, adjacent to the new Saginaw Timber company shingle mill.

White River Rapids Paper Co. Plans

Organization of the White Rapids Paper Company, announced in last week's PAPER TRADE JOURNAL and transfer of large tracts of land near Marinette and Menominee from Hooper and Hooper of Oshkosh, to the new company, have given rise to numerous rumors regarding erection of a new paper mill on the property. About 4,000 acres and immense waterpower was included in the transfer.

The fact, according to incorporators and engineers of the new company, is that erection of a paper mill or development of the water power is not contemplated for the immediate future. No plans of any kind have been made, it is said. It is true that engineers have made surveys and have done other work but it was entirely of a preliminary nature to determine possibilities.

According to the best available information the assertions that are made in Wisconsin that the Kimberly-Clark Company is behind the project are unfounded. The White Rapids Paper Company was organized to take over the property from its original owners to hold it until conditions warrant development.

Filer Fibre Co. to Increase Stock

LANSING, Mich., April 24, 1922.—The application of the Filer Fibre Company, of Manistee, for permission to increase its capital stock to $1,000,000, to erect and operate a paper mill in addition to its present pulp mill, was approved last week by the Michigan Securities commission, and the company was authorized to sell the additional stock.

The Filer Fibre Company earned large profits in 1918, 1919 and 1920. Officials of the company presented figures to show that the company would have made a good profit last year if it had had a paper mill in addition to the pulp mill.

Section of the Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G. MacNAUGHTON, Secretary

PREPARATION AND TREATMENT OF WOOD PULP

Volume III of "The Manufacture of Pulp and Paper," an official work consisting of five volumes, prepared under the direction of the joint executive committee on Vocational Education representing the Pulp and Paper Industry of the United States and Canada has just appeared.

In compiling into one text the lifetime work and knowledge of over a hundred men prominent in the pulp and paper industry, J. Newell Stephenson, the editor, has really accomplished a masterpiece. Volume III which has just been released from the publisher is, in fact, the first volume to be published in the English language dealing solely and comprehensively with the manufacture of wood pulp.

The authors of various sections of the work are the best available men in their special lines, and the whole treatise has been so assembled that it may be used as a textbook for home study, classroom work or kept as a reference book. The simpler principles of mathematics, elementary science and the principles and practice of pulp and paper manufacture are lucidly presented and yet the work has none of the aspects of a technical dissertation.

Is Up to Date

The authors avoid sweeping generalities by way of illustration, and confining themselves to the specific and graphic, drive each successive point "home." The fact that the edition bears a 1922 copyright only serves to illustrate how "up-to-the-minute" are its contents. A wealth of illustrations accompanied by detailed descriptions of typical apparatus makes for clearness and understanding, while there is a complete glossary of terms with which the layman might not be familiar at the close of Section 1. Besides this, there are several bibliographys dealing chiefly with the woodlands.

The complete work of five volumes, after a general discussion of mathematics, how to read drawings, and a presentation of the principles of physics as applied to the manufacture of pulp and paper in Volume I, goes on in Volume II to make clear salient factors in mechanics, hydraulics, electricity and chemistry. The present volume limits its scope to the actual preparation of pulp, for, in the words of the editor, "the attention . . . is warranted by the essential place now held by this source of paper-making material. From a comparatively small industry fifty years ago the making of paper is now a major industry, employing thousands of workmen, and converting much wood, otherwise worthless, into an important article of international commerce. The greatest advances in connection with the paper industry have been in the development of pulp manufacture." Volumes IV and V, when they come out, will be devoted exclusively to the manufacture of paper.

"Preparation and Treatment of Wood Pulp" is a book that may be read understandingly "from acid-maker and reel-boy to superintendent and manager," and it is the aim of the committee which compiled it to afford all connected with the paper industry an opportunity to learn more about the great field in which they earn their livelihood. Roughly, the book is divided into the following sections: Properties of Pulpwood, Preparation of Wood, Manufacture of Mechanical, Sulphite, Soda, and Sulphate Pulps, Treatment of Pulp, Refining and Testing of Pulp, and the Bleaching of Pulp.

Questions in Each Section

Following each of these logical sections, the authors have compiled a series of examination questions to test the knowledge of the reader. Thus, after the section on the properties of wood, we find the interrogation: "What is the most important part of wood to the paper maker?" and "With what substances is cellulose associated closely in trees and plants? Name the compound celluloses so found." After another section on the treatment of pulp, the following are among the questions that occur: "Explain the principle and purpose of riffling," and "Why is lap pulp often pressed?"

It may be seen from these few examples, picked at random, how thorough and comprehensive the work really is. For the benefit of those who for some reason desire to specialize on a particular subject such as "The Coloring of Paper," or "The Manufacture of Wood Pulp," these volumes have also been issued in pamphlet form. Any individual section of the work may be secured independent of the remainder. Volume III is handsomly bound and contains some 673 pages of solid text. For anyone interested in paper or pulp, it is well worth reading.

The volume is published by the McGraw-Hill Publishing Company, 370 Seventh avenue, New York, and should be ordered from the Technical Association, 18 E. Forty-first street at $5 a copy.

British Technical Section Election

The Technical section of the Paper Makers' Association of Great Britain, at its annual meeting, has chosen W. E. Nuttall as chairman, and F. Heckford as vice-chairman, to succeed Mr. Arthur Baker and Major Aitken, respectively. A. W. Foster was re-elected secretary. The prominence given the past work and future plans of the technical section in the executive committee's report at the meeting of the general association indicate the high value that is placed on this phase of the industry by the companies concerned.

A NEW IDEA IN CHIP BREAKING*

By A. D. Wood, Champion Fiber Co., Canton, N. C.

My first work in a sulphite mill was both a job and a position. My job was to perform some of the work which has been done in more recent years by the chip screen and chip breakers. My position was alongside a conveyor near the chipper, together with two other boys. We sorted the chips as they went past, on their way to the blower which sent them to the chip-bin, picking out the knots and slivers which were sent to the boiler house as fuel.

I was in a position to observe chipper operation and to become well acquainted with the character of its product. Our instructor was insistent upon two details. We must take out the slivers which were too long to yield to the cooking process and we must not waste wood by removing what he called "cards," which were chips of the proper length, measured with the grain of the wood, unless there was knot in the card, in which case he instructed us to break away the good wood and throw out the knot.

It was some years after this that I first saw a chip screen. It was receiving the chips from one chipper, and the thought came to me at once that it lacked the intelligence of the conveyor boy

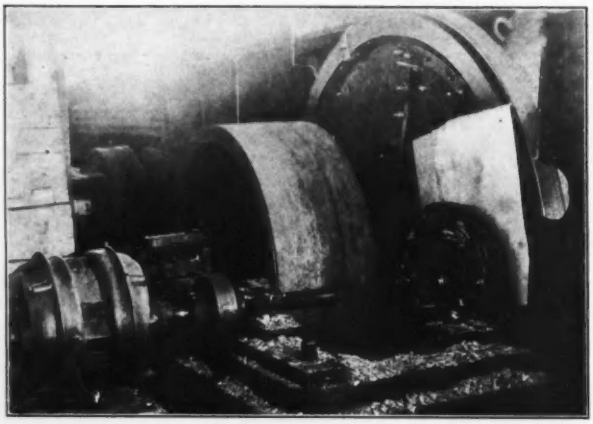
Breaker Showing Its Face With Spikes

and was screening out a great deal of good wood, in the form of cards, together with the slivers. But the screen accomplished one thing the boy could not do. It removed the sawdust.

Next I saw a chip crusher installed between the chipper and the screen and this increased the output of sawdust to such an alarming extent that it was taken out. Following this, improvements were made, and crushers were designed which reduced this waste.

Two General Methods

In visiting several mills I found there were two general methods of chip treatment in vogue. In one case *all* the chips from the chipper were put through a breaker, then screened, the saw-



The New Idea Breaker

dust wasted and the rejects given further treatment with rechippers. The other plan was to send all the product of the chipper directly to the screen, and send only the rejects to the rechipper, breaker or crusher.

In the first case a large proportion of the chips already small enough to go through a screen were subjected to the action of the crusher, an obvious loss of power, and I think you men here who are familiar with the process will agree with me that this method increases the loss due to sawdust.

In the second case, where everything goes from the chipper to the screen, and only the rejects are treated, a large proportion of these rejects are in the form of "cards" or unbroken chips, of a suitable size for cooking. The greater the amount of coarse chips the less efficient the screen becomes, for the big chips become vehicles upon which the smaller chips may ride over the screen. If these cards and large chips are sent to a rechipper, many of them will be cut up and this will add again to the output of sawdust.

How to Break Chips of Suitable Size

The problem which confronted us was how to break the chips to a suitable size for screening, without increasing the sawdust loss or the power consumption, and attached you will find two photographs of its solution. In order to take the photograph of the breaker in place it was necessary to slip a sheet of white paper between the chipper disc and the breaker disc; the white sheet is not a part of the equipment.

Those among you who are familiar with the operation of chippers will recall that there is a place on the chipper hood or bonnet, on the back side of the chipper, just where the chips come through the chipper disc, which wears through in a short time and has

*Read at the Annual Convention of the Technical Association of the Pulp and and Paper Industry at the Waldorf-Astoria, New York.

to be patched. This is the place where the chips are thrown with great force, as they are cut off in the chipping process, and it is at this point that we arranged to receive these chips upon a bed of spikes.

What the Pictures Show

Figure 2 shows the New Idea Breaker in place, directly connected to a motor, which we run at a speed of 570 r.p.m., but here I might add that the device will do considerable work when standing still, due to the high velocity of the chips. It will not plug the chipper and give you trouble if you shut it down, but it does better work when revolving, and it may be that later tests, which we plan to make, will discover a better speed. At present it requires a little less than four and one-half horsepower.

We have two 88 inch Cathage chippers equipped with these breakers, the chips from each of the chippers going to a Ryther and Pringle chip screen. The rejects from these two screens go to a conveyor, to a Jeffrey shredder, then to a separate chip screen, the rejects of which are returned to the shredder. Just before I left we ran another test with and without the two New Idea breakers, and we found that the treatment of the chips requires over twenty H. P. less when the breakers are running. In other words we use four and a half H. P. on each of the two breakers, nine H. P. in all, and we reduce the power consumption on the other unit over twenty H. P. by so doing. We further found eight to ten per cent less sawdust was made when the breakers were running.

No definite arrangements have been made as yet for the manufacture of this device, but we expect to conclude them at an early date. I have just received notice that a United States Patent has been allowed upon it and the attorneys are making progress with the Canadian Patent. Three of us developed the idea and took equal shares in the patent—Lawson Trantham, our Wood Room Foreman, E. T. Self, a mill wright, being my partners.

UTILIZATION OF LATEX IN PAPER MAKING

By Frederick Kaye, A. R. C. Sc. College of Technology, Manchester

Some week ago the Paper Trade Journal *printed a brief article on the use of rubber in paper making, a description of the new process and the claims made for it written by the inventor is now presented from the Manchester Guardian Commercial.*

The new use for rubber which has been found by my discovery of its application in the form of rubber latex to paper-making has aroused considerable interest.

The nature and condition of rubber in the latex form is not generally understood. Rubber latex is the rubber-yielding fluid which is obtained from the laticiferous tubes which ramify the delicate tissues of the rubber tree between the cambium—the growing layer of the tree—and the inner bark layers. When the bark is cut by incision, or by the modern method of excision—that is, by the removal of the bark in successive thin shavings in oblique lines round about one-third of the circumference of the tree at distances, say, of 18-in. apart, so as to expose the laticiferous tubes or ducts—the latex flows down the lines of the cuts and is allowed to run into suitable collecting cups. The tapper goes from tree to tree, and finally returns and collects the latex into larger containing vessels and carries the material to the congulation factory. The trees may be tapped for a good part of the year at short day periods, and the yield per acre will be 300 to 400 lbs. of dry rubber per year. The latex will contain about 30 per cent of rubber, or 3 lbs. of rubber per gallon.

The rubber in the latex consists of exceedingly minute microscopic globules of liquid rubber in the form of an emulsion. The coagulation of the rubber is brought about by suitable chemical means, and the rubber is denatured and changed into the solid form, a condition which is such that, as yet, no means is known for the reversion of the process, whereby the rubber can reassume the perfectly fluid condition it possesses in the native latex or milk.

The latex, on exposure, will slowly be changed by the development of acid, and thereby the rubber will be coagulated and rise to the top in solid particles, which will coalesce and form a cake of rubber. On treating the fresh latex with suitable preservatives, such as ammonia and formaldyde, the rubber will be preserved in the liquid form for a lengthy period, and, in this manner, can safely be shipped from the rubber-producing countries to the paper-manufacturing countries.

Improving the Fiber

When rubber latex, suitably diluted, is added to the beaten pulp in the beater of the paper-making machine, and, after thorough mixing with the pulp, is afterwards, if necessary, thrown out on the fiber by a suitable coagulative agent, the rubber becomes as closely associated with the fibers as would be the case with a dye or an extremely attenuated rosin size, &c., but the material condition and physical qualities of the fibers are improved and strengthened. Experiments show that the hydration of the fiber is modified and stimulated by the action of the rubber latex. In fact, there is room for much valuable and interesting research as to the technical effect of rubber latex during the beater process.

The rubber, which is precipitated or incorporated with the fiber, has no deleterious effect upon the color of the finished and dried paper. Experiments with cotton, linen, bleached sulphite, bleached esparto, bleached straw, and bleached bamboo have shown that the whiteness of the paper is not affected.

The use of rubber latex appears to improve the texture, and makes the paper more uniform when viewed by transmitted light. The feel of the paper, especially with paper containing larger amounts of rubber, is much improved, and becomes more pleasant to the touch, and such paper should have a good market for the manufacture of thick paper and boards for the binding of books, &c.

The strength of paper depends upon the nature of the fibers and the time and character of the beating to which they are subjected. The prolonged beating which is necessary in most cases to get the strength required is an expensive item in the cost of paper-making. By the use of rubber latex, often in small quantities, the paper is strengthened very considerably, and therefore it is easy to realize that a shortening of the time of beating will be possible in many cases. It has been found that a pulp beaten 2 to 2½ hours may give a paper as strong or stronger than that from the same fiber beaten 3½ to 5 hours. When this is worked out in a satisfactory manner on a big commercial scale it will be seen that the use of rubber latex ought to lessen the cost of production very considerably.

While the tensile strength and bursting strength is increased another important effect is the increase of the folding resistance of the paper. Many otherwise excellent papers are often spoiled by the fact that, on folding, the paper cracks along the line of fold. Somewhat expensive methods have been adopted to try to overcome this objectionable property. With rubber latex a paper can be readily made to have a high folding number and to possess the property of folding without serious, permanent cracking along the line of fold.

With and Without Rubber Latex

The following table gives comparisons of papers produced from fibers without and with rubber latex:

Material	Untreated		Treated	
	Folding resistance	Bursting strength 0.1 mm.	Folding resistance	Bursting strength 0.1 mm.
Cotton-waste	220	31lb.	1,300	40lb.
	194	.....	2,800	
Cotton-linters fiber	99	30lb.	6,625	53lb.
	80	.....		
	100	37lb.	3,500	52lb.
Printing paper	2	71lb.	250	20lb.
		.....	80	
Writing paper	20	22lb.	1,060	34lb.
	27	.....		
Sisal hemp	700	32lb.	8,000	40lb.
	1,200	.....	4,000	51lb.
	927	41lb.	3,100	52lb.
	760	41lb.	3,000	
Manila hemp (old rope)	726	41lb.	24,000	60lb.
		.....	20,000	
Jute (waste)	330	30lb.	2,125	54lb.
	375	.....	2,300	
Waste flax	38	25lb.	800	40lb.
	100	.....	1,113	
Red cover paper 60% broke	8	9lb.	80	18lb.
	6	.....		
Ditto	25	13lb.	1,975	30lb.
Brown cover paper 50% broke	25	15lb.	2,500	40lb.
	60	.....	5,160	37lb.
Bleacher sulphite		.....	260	40lb.
+ 10% waste flax		.....	7,500	43lb.
Bleached sulphite (beaten 2 hours)	10	9lb.		
	30	22lb.		
	65	11lb.		
	12	10lb.		
	7	11lb.		
Ditto		.....	600	30lb.
		.....	3,350	25lb.
		.....	400	35lb.
		.....	2,138	30lb.
		.....	224	30lb.
		.....	826	30lb.
Shelving paper, etc., broke 80.90%	5	10lb.	1,100	30lb.
		7lb.	100	27lb.
		.....	80	27lb.

The bursting srtength is pounds per square inch calculated to a thickness of 1-10th millimetre.

Waterproof

Paper containing rubber latex is more water-repellent than the same paper without rubber, and a suitable treatment of the fibers in paper-making with rubber latex will give a waterproof paper.

The electrical resistance and dielectric properties of paper may be improved by the addition of rubber latex.

Paper pulp, after the addition of rubber latex, readily absorbs dyes, and in some cases the dyed paper is slightly darkened in color. It appears likely that smaller amounts of dye will give the standard shade desired.

It is apparent that the loading matter, such as china clay, will be better retained in a latex paper with lessened loss in the backwater. Experiments are being conducted in this regard.

Practical commercial experiments in paper mills have shown that the labor costs, &c., of the addition of rubber latex are negligible. All the work required is the dilution of the latex and its filtration, if necessary, through fine sieves before addition to the beaten pulp, and also the control of the amount and nature of the coagulative agent. The passing of the diluted latex through a centrifugal machine will prevent the need for any filtration. The paper may be machine-sized or tub-sized in the usual manner. The latex-treated pulp is transferred to the cistern and then passed through the paper-making machine without any deleterious effects upon the wire or felts.

Till the latex is more or less standardized on the plantations the amount of rubbr in the latex in each delivery car can be easily determined by pouring, say, 10cc. or 50cc. of the latex into methylated spirit of acetone, and then drying and weighing the solid coagulum. Hence, the volume of latex for, say, one ton of paper can easily be calculated. The quantity will depend upon the nature of the fibre and the quality and character of the paper to be made. With high-grade fibers a small amount will often be sufficient to produce the paper required.

Quantity and Cost

Many papers have been made to give a rubber content on the dried paper of 0.1 per cent ranging up to 1 per cent, with highly satisfactory results, while in other cases experiments have been made to give a rubber content up to 5 per cent and more. Papermakers will soon be able to determine for themselves the amount of rubber latex necessary for their own furnishes to give the quality aimed at.

The cost of the latex will be controlled by the current price of rubber, the freightage, and the cost of the containing vessels. For some time to come the cost should be from 1s. to 1s. 6d. per pound of actual rubber content. Therefore the cost of the latex for a paper to contain 0.5 per cent of rubber would be 12s. to 18s. per ton of paper made. Better organization of the supply and cheaper packing in bulk should help to bring down the cost. But over and against the cost of the latex will be the lessened cost of production if the time of beating is decreased, together with the increased value of many grades of the paper made. In many kinds of paper, containing larger quantities of rubber, cheaper and inferior fibers may be advantageously used, while the increased value of such paper and board for specific purposes will much more than carry the cost of the latex.

Experiments show that latex paper and boards containing large proportions of waste paper will be valuable for many purposes.

There is a good field for further experiments in this direction.

Linoleum Substitute

By using very strong fibers, such as Manila hemp, sisal hemp, jute, etc., and using higher percentages of rubber, say up to 20 per cent and more, products can be made on the paper-making machine to take the place of leather for many purposes. Such products can, if necessary, be vulcanized by any suitable method.

By using mechanical wood, waste paper and various other fibers, with loading materials, and increasing the quantity of rubber latex used, linoleum-like products can be cheaply and abundantly made on a paper-making machine. These goods will be water-proof and very resistant to abrasion due to constant hard wear. By mechanical devices now being perfected it will be possible to make these goods with beautifully coloured designs inlaid in the material.

Experiments show that many kinds of asbestos goods, such as high-pressure packing, can be made by the addition of rubber latex more cheaply.

The latices of gutta-percha and balata can be used in the manufacture of paper and other goods to contain these natural products for the specific purposes for which their properties make them so valuable.

Experiments Successfully Conducted

Experiments on a commercial scale have already been conducted successfully in paper mills, and arrangements have been made for further commercial tests as to the production of latex paper in different paper mills in Lancashire, Yorkshire, the Midlands, London, and the South. When these have been proved satisfactory arrangements will then be made to import larger supplies of latex for use in the paper industry.

Study Paper Making at Warren Plant

Westboro, Me., April 17, 1922.—The rest and lunch room for the outside crews at the paper mills of the S. D. Warren Company, where the class in pulp and paper making holds its meetings, has been fitted up with blackboards, benches, etc., like a schoolroom. The class is composed of men from all the different departments who are interested in learning the fundamentals of the industry. The meetings are held on Tuesday evenings from 6:30 to 8 o'clock. E. L. Lincoln of the S. D. Warren office, is in charge of the paper club, as the class is called, and he is assisted by Stephen E. Patrick of the industrial department of the Westbrook High School.

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

Elongation and Shrinkage of Paper on the Paper Machine.—A. Vander Sticher. *Papeterie,* xlii, 270 (March 25, 1920); *Pulp and Paper,* xix, 834 (Aug. 11, 1921).—Translation by A. Papineau-Couture. See *Pulp and Paper,* xviii, 756 (July 7, 1920).—A. P.-C.

Preparation of Textile Threads from Wood.—*Papeterie,* xlii, 1106-1113 (Dec. 25, 1920); xliii, 9-13 (Jan. 10, 1921); 50-54 (Jan. 25, 1921); *Paper,* xxviii, No. 12, 28-31, 40 (May 25, 1921).—Translation by A. Papineau-Couture. See this journal lxxii, No. 27, p. 46, June 30, 1921.—A. P.-C.

The Determination of Beta- and Gamma-Cellulose.—*Paper,* xxviii, No. 15, 21-22 (June 15, 1921).—Translation by Clarence Jay West. The determination of the hemi-celluloses (beta- and gamma-cellulose) in the alkaline filtrates from the determination of alpha-cellulose. (See this journal lxxiii, No. 20, p. 46, Nov. 17, 1921), is based on the oxidation of the cellulose ($C_6H_{10}O_5 + 6O_2 = 6CO_2 + 5H_2O$) and titration of the excess of oxidizing agent, the usual one being potassium bichromate. Hydrogen peroxide and hypochlorite were tried but were found totally unsuitable for the purpose. A series of experiments carried out with a view to determining the best conditions for oxidizing with potassium permanganate gave the following indications: Oxidation in alkaline solution and titration of the acidified solution are not suitable procedures. The determination is possible only, if the solution is acidified and excess of potassium permanganate added, and the solution boiled. The addition of too much concentrated sulphuric acid causes a decomposition of the permanganate on heating, with an evolution of oxygen, and correct results can only be obtained by carefully choosing the time of heating.—A. P.-C.

Process for the Manufacture of Parchment Paper.—Can. patent No. 194,344, Walter Dagnall, Hampton Wick, Middlesex, England, Dec. 2, 1919. Same as Eng. patent No. 123,594 and Fr. patent No. 495,742. See this journal lxxii, No. 7, p. 60, Feb. 10, 1921.—A. P.-C.

Method of Cleaning Paper Machine Felts.—Can. patent No. 213,564, Geo. K. Walker, Glens Falls, N. Y., U. S. A., Sept. 27, 1921. A cleansing liquid is applied to one side of the felt to loosen the foreign material thereon, and then suction is applied to the same side of the felt to open the meshes and remove the liquid and foreign material.—A. P.-C.

Flat Suction Box.—Can. patent No. 212,893, Robert J. Marx, London, England, assignee of Jacob Heess, Ebertsheim, Rhenish Palatanate, Germany. Aug. 9, 1921.—The boxes are arranged side by side without any interval between adjacent boxes. (Same as Fr. patent No. 511,466. See this journal lxxiii, No. 8, p. 42, Aug. 25, 1921. See also *"Effects of the Arrangement of the Suction Boxes on the Life of Fourdrinier Wires,"* in PAPER TRADE JOURNAL, lxxiii, No. 19, 80, 82 (Nov. 10, 1921).—A. P.-C.

Beating Engine.—Can. patent No. 212,898, Ernst Mahler, Neenah, Wis. U. S. A., Aug. 9, 1921.—(See *"Characteristics of the Niagara Beater," Pulp and Paper,* xix, 723, K-7, July 7, 1921.—A. P.-C.

Process for Preparing Paper Making Stock.—Can. patent No. 212,476, C. H. Allen and E. J. Trimbey and The Great Northern Paper Co., assignee of a half interest, all of Millinocket, Me., U. S. A., July 12, 1921. The various paper making ingredients are made into fluid mixtures or solutions, and the fluid mixtures or solutions so prepared are poured into a common stream and the volumes delivered by the individual streams are proportioned to cause their union into a common stream of the desired composition for the paper machine. (See also *Pulp and Paper,* xix, 357, K-7, March 31, 1921.)—A. P.-C.

Outline of Laboratory Tests in Connection with Pulp and Paper Making.—A. Lechatelier. *Chimie et Industrie,* iv, 529-542 (Oct., 1920); *Paper,* xxviii, No. 8, 17-21 (April 27, 1921).—Translation by A. Papineau-Couture. See *Pulp and Paper,* xix, 21, K-6, Jan. 6, 1921.—A. P.-C.

The Aldehyde Content of Sulphite Alcohol.—Rudolph Sieber, Kramsfors. *Svensk Pappers-Tidning,* Sept. 15, 1920; *Pulp and Paper,* xix, 719, 728 (July 7, 1921).—Translation by Paul Bartholow. See this journal lxxiii, No. 11, p. 46, Sept. 15, 1921.—A. P.-C.

Examination of Wood Cellulose.—F. Lenze, B. Pleus, and J. Muller. *J. Prakt. Chem.,* ci. 213-264 (1920-1921); *Analyst,* xlvi, 106 (March, 1921).—Digestion of cellulose with 17 per cent sodium hydroxide solution, for the separation of alpha-cellulose, effects solution of its other constituents, such as oxycellulose, hydrocellulose, cellulose, dextrin, hemicelluloses, pectin, lignin, resins, and fat; for the determination of these the solution is first treated with acids and alcohol. For the estimation of oxycellulose, 10 g. of air-dried cellulose are treated with 100 cc. of 17 per cent caustic soda solution for 1-2 hours, 100 cc. of water are then added, the mixture is passed through a porcelain filter, and 100 cc. of the clear filtrate transferred to an erlenmeyer flask. The residue on the filter is washed with water, digested with 5 per cent acetic acid, washed till neutral, and then treated twice more with caustic soda solution as before, 100 cc. from each filtrate being added to the original amount in the flask. The solution is neutralized with concentrated nitric acid and then heated on a water bath for three hours with 125 cc. of 20 per cent nitric acid and 500 cc. of water. The residue is collected on a tared filter, washed with warm water till neutral, and dried at 100° C. to constant weight. This method is preferable to the determination of the copper number, which gives only empirical results. Hemicelluloses are identified by converting them into sugars by heating for 5 hours with 4 per cent hydrochloric acid. For the estimation of xylose, derived from xylan by the furfural distillation, an improved apparatus has been devised. It comprises a 300 cc. round-bottomed flask with a long neck, into which the still-head is closely fitted by means of a ground glass joint and maintained in position by a spring clip. The still-head is bulb-shaped and terminates above in a funnel and stopcock. A lateral tube is fused into the bulb with its end projecting slightly into the interior and bent upwards, and the other end of the tube has a bend at a right angle passing through a rubber stopper into a Liebig condenser. A graduate measuring flask receives the distillate. The heating bath consists of calcium chloride solution with a surface layer of paraffin or vaseline to check evaporation. The furfural-yielding constituents of cellulose exist partly as xylan and partly as a more firmly combined complex compound. The presence of mannan is indicated by the formation of mannose on hydrolysis with weak hydrochloric acid; mannan is more easily separated than xylan.—A. P.-C.

Reagent for Wood and Vanillin.—J. Grus. *Ber. Deut. Botan. Ges.*, xxxviii, 361-368 (1921); *Analyst*, xlvi, 253 (June 1, 1921).—When a wood shaving is dipped into a solution of vanadium pentoxide in dilute phosphoric acid the cell walls gradually assume a yellowish brown color. The addition of vanillin to this reagent produces a reddish brown precipitate, or if the test be applied on a microscope slide reddish-brown crystals may be observed.—A. P.-C.

The Adetyl Content of Lignin.—Hans Pringsheim and Hans Magnus, *Z. Physiol. Chem.* cv 179-186 (1919); *Chem. Soc. Abs.*, cxvi, Pt. 1, 473 (1919).—The authors have investigated the origin of the acetic acid produced in the dry distillation of wood and in the processes by which wood and straw are broken down by alkaline digestion. In the latter process, the whole of the acetic acid formed is derived from the lignin substance when the digestion is carried out without heating. If, however, the wood or straw is treated with a solution of sodium hydroxide at the boiling point, with or without the use of increased pressure, a small fraction of the acetic acid formed has its origin in the cellulose. The lignin prepared according to the method of Willstätter and Zechmeister (*Z. angew, Chem.*, xxxii, 41, 1919) is not identical with the natural product, since it has undergone hydrolysis and has lost its acetyl groups. The natural product may be regenerated by acetylation. The lignin from hornbeam contains nearly double the number of acetyl groups found in the lignin from pine-wood.—A. P.-C.

Notes on Textilose.—Paul Francis. *Monit. Papeterie Française*, lii, 649-650 (Oct. 15, 1921).—The author briefly reviews the development and present status of the textilose industry and concludes that though there were many failures, due to textilose being put to many uses for which it was not suitable, this material has a very legitimate outlet for certain articles which do not require to be washed, such as bagging, carpets, hangings, etc.—A. P.-C.

A Trip to La Loutre.—The Gouin Dam. J. N. Stephenson. *Pulp and Paper*, xix, 1043-1046 (Oct. 13, 1921).—Account of a trip to the Gouin dam built at La Loutre at the head of the Saint-Maurice river, with a view to equalizing the flow of the river by forming the largest artificial water storage in the world (140 miles long).—A. P.-C.

Lignin Investigations.—Karl H. A. Melander, Pappersmassekontoret, Stockholm. *Cellulosechem.*, ii, 41-43 (1921); *Paper*, xxviii, No. 21, 19-21 (July 27, 1921).—Translation by C. J. West. The waste liquor from the sulphite process contains at least two kinds of sulphur-containing lignin substances, for the addition of 21 g. of salt per 100 g. of liquor at 65° to 70° C. produces a precipitate of alpha-lignin, whilst beta-lignin remains in solution. According to Klason the residue obtained by evaporation of the waste liquor to dryness contains 71 per cent lignin, and on this basis alpha-lignin represents 26.5 per cent of the dry substance. Alpha-lignin was purified by repeated solution and precipitation by salting out; the product contained when dry 20 to 30 per cent of sodium chloride. This product which, apart from the sodium chloride, is a mixture of high molecular ligninsulphonic acids containing loosely bound SO_2, is termed alpha-ligninsulphonic acid, and the proportion of sulphur to carbon in it is by no means constant. In the waste liquor alpha-lignin-S-acid is combined with calcium, but on salting out the product contains only a small proportion of calcium. The analysis of a number of preparations of free alpha-lignin-S-acid shows that the existence of a well-defined sulphonic acid cannot be assumed. Calculations for a sulphur-free substance, based on the assumption that during the sulphite process one molecule of sulphurous acid is united to a double bond in lignin, vary considerably, but in the majority of cases 34 atoms of carbon and 11 atoms of oxygen per molecule are indicated. The principal difference between the products lies in the hydrogen content. The conclusion is drawn that the products contain relatively high proportions of loosely-bound SO_2. When alpha-lignin in relatively dilute solution is precipitated with hydrochloric acid the free alpha-lignin-S-acid is obtained, whereas in concentrated solution hydrochloric acid precipitates the sodium salt of alpha-lignin-S-acid.—A. P.-C.

Lignin Investigation.—Karl H. A. Melander. Cellulosechem., ii, 69-73 (1921); *J. Soc. Chem. Ind.*, xl, 620A (Sept. 15, 1921).—Alpha-lignin-S-acid, as obtained from sulphite waste liquor, forms compounds of widely varying solubility in water with aromatic amines, such as *o*- and *p*- toluidine, phenylhydrazine, alpha- and beta-naphthylamine, and quinoline. Analyses of the *o*-toluidine, aniline, and alpha-naphthylamine compounds show that there is one atom of nitrogen for each atom of sulphur, the acidic nature of the alpha-lignin-S-acid is wholly due to the sulphur grouping, and the formula for the corresponding sulphur-free alpha-lignin varies from $C_{20}H_{24}O_8$ to $C_{34}H_{44}O_{11}$. On treating a solution of alpha-lignin-S-acid with increasing quantities of hydrochloric acid, the quantity of lignin-S-acid increases rapidly at first, then more slowly, and finally diminished slightly. This behavior indicates that alpha-lignin-S-acid is a single acid or a mixture of similar acids. When alpha-lignin-S-acid is heated with alkalis acetic acid is liberated, so that the sulphur-free alpha-lignin is probably a mixture of substances derived by splitting off of one or more formyl or acetyl group from a substance present in wood.—A. P.-C.

Lignin Investigations.—Karl H. A. Melander. *Tekn. Tidskr.*, 1919; *Chem. Soc. Abs.*, cxvi, Pt. 1, 473-474 (1919).—By treatment of sulphite waste liquor with sodium chloride, the author has obtained a substance which differs considerably in its properties from that prepared by Klason by precipitation with calcium chloride. After purification it forms a mixture of similar lignin-sulphonic acids of high molecular weight in which a portion of the sulphur dioxide is loosely held in ester-like combination. The author designates the mixture *alpha-lignin-S-acid*, and has shown that the main portion of it is monobasic, whilst only a small portion is dibasic. Vanillic acid, protocatechuic acid, and catechol are formed when it is fused with alkali under various conditions. Acetic acid and small amounts of higher fatty acids are also produced, thus pointing to the presence of acetyl groups. The yield of catechol attains 10 per cent of the organic matter of the original substance. Free alpha-lignin-S-acid is obtained as a pale-brown powder, which readily becomes resinified when hydrochloric acid is added to the solution of the salted-out product. It is hydrolyzed by treatment with alkali. There appears to be little prospect of obtaining the acid in the crystalline condition, since analysis indicates that it is a mixture of relatively complex compounds of almost identical percentage composition. In the *salts* with naphthylamine and toluidine, an atom of nitrogen is present for each atom of sulphur; the latter, however, appears to be present in different forms, partly firmly an partly loosely combined, in the acid. The sodium salt is described. The brown color of alpha-lignin-S-acid renders its titration in the presence of indicators a matter of difficulty. The equivalent 782 is obtained by titration with sodium hydroxide and determination of the end-point by measurement of the electrolytic conductivity of the solution. Comparison of the potential of the solution against that of a calomel electrode gave the value 882 for another specimen. In certain cases the use of phenolphthalein was found possible, and the results show that the presence of an atom of sulphur in the free acid corresponds

with that of one ionizable hydrogen ion, so that a carboxyl group cannot be present. The sodium salt is not perceptibly hydrolyzed; determinations of the molecular weight in aqueous solution by the freezing-point method gave values between 822 and 991 for different specimens. The electrolytic conductivity of aqueous solutions of the sodium salt at different dilutions has also been determined.—A. P.-C.

Notes on the Copying Power of Letter-Copying Paper.—H. Micoud. *Monit. Papeterie Française,* lii, 647-649 (Oct. 15, 1921). Translated by A. Papineau-Couture in PAPER TRADE JOURNAL, lxxiii, No. 26, 47-48, (Dec. 29, 1921). Comparison of two samples of letter-copying paper, one of which was satisfactory and the other not, showed the following differences. The satisfactory paper was composed of 30 per cent hemp rags, 45 per cent cotton rags, and 25 per cent chemical balsam pulp; the other consisted of 100 per cent chemical balsam. The former was more opaque, softer, more flexible, had less rattle and more bulk, which latter shows that the fibers were less crowded together and consequently had greater absorbing power. Both pulps seem to have been well hydrated, which was to be expected from paper weighing 15 g. per sq. m. The good paper, however, had been beaten in several stages: the fibers were cut fairly short so as to give good absorbency, and just sufficiently hydrated to work well on the machine. The poor paper had been beaten all in one operation and was too "wet," resulting in poor absorbency. The ash was practically the same in both papers (0.67 and 0.7 per cent). The resin content of the paper does not exert much influence on the quality of the paper, provided it is not excessive.—A. P.-C.

Improvement to Autoclaves (Digesters).—Fr. patent No. 513,406, M. Lamassiaude, Haute Vienne, France. *Papeterie,* xliii, 748,751, (Aug. 25, 1921). The loss of heat from autoclaves or drier heads is greatly diminished by means of a double envelope, which forms a chamber which is put under vacuum and in which are placed a series of parallel plates having a low radiating capacity so as to reduce the amount of radiation through the chamber.—A. P.-C.

Machine for Picking Up and Folding Sheets of Paper.—Fr. patent No. 517,648, R. Braunstein, Seine, France, Dec. 20, 1920. *Papier,* xxiv, 312 (July, 1921).—Two hollow cylinders, each having a row of holes along a line parallel to their axes, are geared so as to turn at the same speed in opposite directions. They can be connected alternately with a vacuum pump and with the atmosphere. The supply of paper sheets is placed above the cylinder. When the holes come opposite the paper, the inside of the cylinders is connected with the suction pump, so that the sheet is drawn in between the cylinders and folded. The cylinders are then automatically connected with the atmosphere, so that the folded sheets fall into a suitable receptacle underneath.—A. P.-C.

Process and Apparatus for the Manufacture of Paper Thread, Either Alone or in Combination with Textile Fibers.—Fr. patent No. 517,743, E. Claviez, Germany, Dec. 21, 1920. *Papier,* xxiv, 314-315 (July, 1921); *Monit. Papeterie Française,* lii, 644-645, (Oct. 15, 1921). The sheet of paper is passed through rolls which transform it into a sort of open-work paper fleece, which is then divided into strips in the usual way and the strips are twisted either alone or with textile fibers.—A. P.-C.

The Use of Coumarone Rosin for Sizing Paper.—*Seifensieder Ztg.,* xv, 296 (1921); *Rev. Prod. Chim.,* xxiv, 417 (July 15, 1921).—During the war coumarone resins were used in Germany for sizing paper. Attempts were made to saponify them so as to use them in the same manner as the natural resins; but this could not be done either with caustic alkalis in alcoholic solution under a pressure of 8 atmospheres, with soda lime, or with sulphuric acid. They were used by emulsifying them by means of glue or rosin soap and adding to the pulp in this condition. Since the end of the war the use of coumarone resins for sizing has almost entirely ceased owing to the entry of French and American resins into the country. —A. P.-C.

Process of Retting Plants for Obtaining Textile or Paper Making Fibers.—Fr. patent No. 518,535, Louis Peufaillit, France, Jan. 4, 1921. *Papier,* xxiv, 354, (Aug., 1921). Same as Can. patent No. 209,491, March 15, 1921. See this journal, lxxiii, No. 19, p. 72, Nov. 10, 1921.—A. P.-C.

The Toxicity of Various Fractions and Combinations of Fractions of Coal-Tar Creosote to Wood-Destroying Fungi.—Henry Schmitz and S. M. Zeller, School of Forestry, University of Idaho, and Oregon Agricultural College.—*J. Ind. Eng. Chem.,* xiii, 621-623 (July, 1921).—A. P.-C.

Packing Material from Cellular Paper.—Fr. patent No. 518,098, Emil Klus and Ernst Klus, Austria, Dec 24, 1920. *Papier,* xxiv, 315, (July, 1921). Cellular paper is opened out and then pressure is applied in a direction parallel to the axis of the cells.—A. P.-C.

Process for Sizing with Water Glass.—Fr. patent No. 518,701, Max Muller, Germany. *Monit. Papeterie Française,* lii, 542-543, (Sept. 1, 1921). One part of animal size is dissolved in 6 parts of water, and while still hot is mixed with a solution of one part of 38° Bé waterglass in 8 parts of water. After cooling, the still fluid mixture is treated with a precipitant, e. g., aluminium sulphate, with vigorous stirring until part or the whole of the size-waterglass combination has been precipitated. It is preferable not to precipitate completely, and at any rate care must be taken to avoid excess of sulphate of alumina. The size suspension is then added to the stock, followed by sulphate of alumina in the usual manner until slight acid reaction. For the preparation of a stable sizing emulsion it is advisable to add an antiseptic to the solution before the precipitation with the alum. It is also advisable to add loading material, coloring matter, etc., before precipitating, so as to obtain a complete fixing and even distribution of the materials on the pulp.—A. P.-C.

LIST OF ABBREVIATED AND FULL TITLES AND OF ADDRESSES OF THE JOURNALS FROM WHICH ABSTRACTS HAVE BEEN PREPARED FOR THIS ISSUE.

Analyst	The Analyst. 195 Victoria St., London, S.W. 1, England.
Ber. Deut. Botan. Ges.	Berichte der deutschen botanischen Gesellschaft. Gebr. Borntraeger, Schöneberger Ufer 12a, Berlin, W. 35, Germany.
Cellulosechem	Cellulosechemie. Otto Elsner, Oranienstr. 140-142, Berlin, S. 42, Germany.
Chem. Soc. Abs.	Journal of the Chemical Society—Abstracts. Gurney & Jackson, 33 Paternoster Row, London, E.C. 4, England.
Chimie et Industrie	Chimie et Industrie. 49 Rue des Mathurins, Paris, France.
Industrie Chimique	L'Industrie Chimique. H. Mounier, 32 Rue Le Peletier, Paris (IX°), France.
J. Prakt. Chem.	Journal für Praktische Chemie. J. A. Barth, 16 Dörriensth., Leipzig, Germany.
J. Soc. Chem. Ind.	Journal of the Society of Chemical Industry. Central House, 46 and 47 Finsbury Square, London, E.C. 2, England.
Monit. Papeterie Française	Le Moniteur de la Papeterie Française. 154 Boulevard Haussmann, Paris (8°), France.
Paper	Paper. 251 West Nineteenth St., New York City.
PAPER TRADE J.	PAPER TRADE JOURNAL. 10 East Thirty-ninth St., New York City.
Papeterie	La Papeterie. 9 Rue Lagrange, Paris (5°), France.
Papier	Le Papier. 16 Rue du Rocher, Paris (80), France.
Pulp and Paper	Pulp and Paper Magazine of Canada. Gardenvale, Que., Canada.
Svensk Pappers-Tidning	Svensk Pappers-Tidning. Svenska Pappersbruksföreningen Hovslagaregatan 3, Stockholm, Sweden.
Z. Physiol. Chem.	Zeitschrift für Physiologische Chemie (Hoppe-Seyler's). Walter de Gruyter & Co., Berlin and Leipzig, Germany.

ABSTRACTS OF A. C. S. PAPERS READ AT BIRMINGHAM

The following are extracts of papers read at the spring meeting of the American Chemical Society at Birmingham, Ala., April 4 to 8:

The Effect of Concentrated Hydrochloric Acid on Different Celluloses.—By E. C. Sherrard and A. W. Froehlke.—A preliminary report on an investigation to differentiate celluloses from various species of woods by observing the action of concentrated hydrochloric acid by means of the polariscope. Characteristic curves are given showing changes in specific rotation. Cotton and spruce cellulose give similar curves although it has been shown that mannose is present in spruce cellulose and absent in cotton. For such a comparison a standard cellulose is required.

The Effects of Salts Upon the Acid Hydrolysis of Wood.—By E. C. Sherrard and W. H. Gauger.—In a search for a material to act as a catalyst in the hydrolysis of wood, a number of salts and acids have been tried. The effect of these added materials upon sugar and alcohol yields as well as the effect produced by varying some of the conditions under which the hydrolysis was carried out are given in the report.

Sugar Formation in a Sulphite Digester.—By E. C. Sherrard and C. F. Suhm.—This paper contains charts showing the rate of formation of sugar during the conversion of white spruce into sulphite pulp by the Mitscherlich and Ritter-Kellner processes. Time and steam pressure appear to exert the greatest influence on sugar formation.

Some of the Products Obtained in the Hydrolysis of White Spruce Wood with Dilute Sulphuric Acid Under Steam Pressure.—By E. C. Sherrard and G. W. Blanco.—A study of products formed in the hydrolysis of wood and wood cellulose has furnished valuable information concerning this reaction and the composition of these two substances.

Approximately 20 per cent of the wood cellulose is hydrolyzed with the formation of mannose, glucose, galactose, xylose and arabinose. Mannose and glucose represent nearly two-thirds of these sugars.

Spruce cellulose prepared by the Cross and Bevan method yields mannose, glucose and pentoses on hydrolysis with dilute hydrochloric acid. This indicates a marked difference in the chemical constitution of wood cellulose and of cotton cellulose. The latter does not yield mannose or pentose sugars on hydrolysis.

The Distribution of Methoxyl in the Products of Wood Distillation.—By L. F. Hawley and S. S. Aiyar.—At the last meeting of the Society it was reported that the methoxyl had been determined in the charcoal, settled tar, dissolved tar, pyroligneous acid, and gas, from the distillation of maple wood both treated and untreated with sodium carbonate. This work has been continued to include oak and one softwood and also one other catalyzer, phosphoric acid. In the case of oak and the softwood the increase in methyl alcohol due to sodium carbonate is not balanced by the decrease of methoxyl in the charcoal and the dissolved tar alone (as was the case with maple), but also by a decrease in the methane in the gas. The increase in methyl alcohol due to phosphoric acid was accompanied by decreases in the methoxyl of all the other products.

The Chemistry of Wood—V.—By G. J. Ritter and L. C. Fleck.—This article records the analysis of eight more species of wood in continuation of similar previous work. No very striking variations in composition were noted. In a study of the distribution of the pentosans it was found that both alpha and beta cellulose contained pentosans, the alpha cellulose containing the higher proportion The distribution of the methoxyl groups was also studied and it was found that in general the lignin of softwood contained a greater proportion of the total methoxyl of the wood than the lignin from hardwoods.

The Chemistry of Wood—IV—The Analysis of Western White Pine and Eucalyptus.—By S. A. Mahood and D. E. Cable.—This paper represents a continuation of the investigation of the chemistry of wood carried on by the U. S. Forest Products Laboratory. In addition to those constants determined by Schorger methods are given in this paper for the determination of alpha, beta and gamma cellulose and of lignin. The values obtained for Western White Pine are in the main similar to those obtained for other conifers while the values for Eucalyptus do not vary greatly from the values previously obtained on broadleafed trees. Since according to the values obtained in this series, the woods fall into two groups of fairly uniform composition depending upon whether they are from broadleaved trees or from conifers, the suggestions are made that a more detailed study of the splitting products, particularly the cellulose and lignin, of the woods of these two groups be made.

Some Observations on the Determination of Cellulose in Woods—II.—By S. A. Mahood.—In a previous communication the author showed that the yields of cellulose from woods obtained by Schorger's modification of the Cross and Bevan method of cellulose determination are higher than those obtained by Seiber and Walter's modification. It was suggested that this difference might be due (1) to a difference in concentration of the chlorine in contact with the sample or (2) to a difference in temperature at which the chlorinations are made.

The present paper covers an investigation of these two points. It has been found that the yield of cellulose obtained by the Seiber and Walter method of chlorination can be made to accord with that obtained by the Schorger method by diluting the chlorine used with an equal volume of air. There appears to be no difference in the percentage of cellulose obtained by the Seiber and Walter method when chlorination takes place at zero and at room temperature.

The Willard crucible has been found to be more suitable than the Gooch crucible with the fiber pad, as proposed by Seiber and Walter, for making chlorinations of cellulosic materials.

The results show that the lower yield of cellulose obtained by the Seiber and Walter method of chlorination is due to too concentrated a stream of chlorine and not to too high a chlorination temperature.

To Revoke Order Regarding Dumping of Tissue

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., April 26, 1922.—The Customs Service of the Treasury Department will issue an order in the next few days revoking a decision to the effect that there is dumping of tissue paper on the American market from England.

Although officials of the Customs Service refuse to discuss the situation, it is generally understood here that some of the American tissue paper manufacturers alleged that there was dumping of tissue paper on the market by British interests, but these same people have now gone to the department stating that there is no such dumping. There seems to be a feeling that there has been some communication between the American tissue paper manufacturers and their large customers, the carbon paper manufacturers.

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By Clarence Jay West, Chairman, Committee on Bibliography, T. A. P. P. I.

(Continued from last week.)

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(To be continued)

SCANDINAVIAN PAPER AND PULP INDUSTRIES

WASHINGTON, D. C., April 26, 1922.—Grosvernor M. Jones, chief of the Paper Division of the Department of Commerce has the following to say regarding the Finnish and Swedish paper and pulp industries:

In general in the European woodpulp and paper industry the advantage of Germany and Finland over Norway and Sweden, on account of exchange conditions, is to be seen. Germany and Finland continue to do a much better business in marketing news print paper and pulp than do Norway and Sweden. Recent market conditions in the Finnish and Swedish paper and pulp industries are described below.

Finland's Paper Mills Operating at Full Capacity

In contrast to the strikes and lockouts which have prevailed in recent months in other Scandinavian countries, Finland during the year 1922, so far has enjoyed industrial peace. Likewise, in contrast to conditions in other Scandinavian countries, Finland has had such a large supply of orders for paper as to enable her paper mills to operate at full capacity. In the middle of March it was reported from Finland that orders from the United States were being received in such volume that in some cases the Finnish paper mills were compelled to decline American orders because they could not contract over the long periods desired. France, Holland and Denmark, were also energetically buying paper from Finland in March, although in relatively small quantities compared with the United States. England, which usually is a large customer of Finnish paper mills, during the same period was, oddly enough, holding back conspicuously in her orders.

It is interesting to note that at present certain interests in Finland are advocating placing an export prohibition on pulpwood. The effectiveness of the Canadian provincial pulpwood embargoes in stimulating the growth of the pulp and paper industry in Canada is apparently resulting in a desire in Finland to emulate the Canadians in this matter. The managing director of the Central Association of the Finnish Wood Working Industries is advocating the removal of the Finnish export duties on wood products, especially that on cardboard, because of the heavy decrease in the exports of cardboard from Finland during the past year.

Slight Improvement Shown in Sweden

Conditions in the Swedish pulp and paper industry are improving very slowly, according to a report received in March. The sulphite mills are receiving increased orders from England and the Continent, but most of these orders are for small quantities and are not large enough to give real relief. Consequently a continued restriction of output is advocated. Orders from the United States are said to be sluggish. It is interesting to note that Germany is providing no competition of importance to the Swedish sulphite industry, because the German sulphite factories are sold out for one or two months ahead. On the other hand, in spite of the favorable conditions in the Finish pulp industry there are offers of Finnish pulp at prices low enough to have a disturbing effect on the market for Swedish sulphite.

There are practically no European orders for Swedish sulphite pulp, according to reports in the middle of March. The United States is the best customer, but orders from the United States have lately fallen off. Mechanical wood pulp is in the best situation of any kind of pulp in the Swedish market. Considerable sales have recently been made and the market has become much firmer.

To Be Assistant Superintendent of Nonotuck Mill

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., April 24, 1922.—William B. Clements, Jr., former business agent for the Eagle lodge of papermakers of this city and for the past few months a salesman for the Cabble Wire Works, has been appointed assistant superintendent of the Nonotuck division mill of the American Writing Paper Company of this city. Mr. Clements begins his new duties on May 1.

New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, April 26, 1922.

Gradual strengthening of the New York market may be traced directly to the increased confidence which is universally exhibited. Paper manufacturers have had the confidence to continue producing in the face of losses. They have been confronted with exorbitant labor prices and unstable international conditions which have taxed their resources to the limit—still, those able to survive have not ceased to manufacture paper even when their books showed it to be a break-even proposition or a losing one.

Paper merchants and jobbers have known the strain of high printing costs, an unstable market and a sporadic demand. Many have not had the resources with which to lay in a stock adequate to meet their trade, but with the revival of confidence during the past few weeks, contracts have been resumed and prospects are much brighter. Everywhere along the line the realization is taking hold that the only way to combat an economic depression such as the industry has been suffering is for each individual to do the utmost in his own sphere. Labor may be said to be the keynote of the entire situation. Taking the nominal figure of 5,000,000 men out of work—many of them mill workers, it is agreed that if they could be automatically reinstated in the capacity of producers, and, incidentally consumers, they would immediately absorb the additional output created by their labor. This would be true, not only in the paper business, but in every other industry, and the United States would again be commercially sound.

No immediate adjustment of this sort may be effected, however, without the assumption of an enormous burden on the producing end of the trade. Manufacturers cannot pay war prices for labor. When this is realized by the workingman, he will no longer strike for wages that are impossible to pay, but realizing that his employer's prosperity is his own, will buckle down and work for anything—as his employer has done for months—until economic values are righted.

News print is still going strong and the increased demand has not flagged during the past week. It is encouraging to note that publishers are receiving more advertising of late with a consequent increase in the size of their issues.

Book paper prices seem to be on the incline towards a firmer level due to the additional business which is coming to the manufacturers. The machine finished grade averages around 6.00 to 7.25 cents a pound f. o. b. mill while the super calendered book is being quoted at 6.70 to 7.50.

Steadier prices characterize the fine paper market and increasing quantities are in demand. The higher grades of ledger and bond paper appear to be on the incline, although the stronger demand is for the cheaper grades of sulphite bonds.

Quotations on tissue of all kinds show that the market is strengthening, although scarcely anything like normal activity has yet been attained.

A noticeable steadiness in the kraft market has been prevalent during the past few weeks in spite of the recent importations from Germany and Sweden. Domestic kraft wrapping paper manufacturers are optimistic over the increase in volume of business. No. 1 domestic holding firm at 7.00 to 7.50 cents a pound.

Board is strengthening considerably, but the brunt of the increased activity has been borne by the box board element. Paper box manufacturers are encouraged by the greatly augmented consumption and are conducting operations on a larger scale to meet the demand.

Mechanical Pulp

Characterized by a general quiet tone, the mechanical wood pulp market is, nevertheless, on a fairly stable basis, the pulp offerings not being of any size large enough to influence values. Domestic has been holding its own at $33 per ton with imported in the neighborhood of $36.

Chemical Pulp

Paper mills continue to absorb the amount of chemical pulp requisite to their demands, keeping the market fairly steady, but no striking changes in price or consumption have been noted recently. Quotations, especially on domestic pulp seem to have taken a slight downward trend, and this may be accounted for by the competition of foreign sulphite at relatively cheaper prices.

Old Rope and Bagging

Exhibiting a very gradual improvement, the general policy in the old rope and bagging markets has been characterized by hand to mouth buying. No market can be said to exist in many of the lines, as insignificant and sporadic are the transactions, and most of the prices quoted are nominal.

Waste Paper

Dealers and packers of waste paper are not inclined to sell ahead due to the gradually but steadily rising market. Higher grade stocks are scarce and the demand is steadily increasing. Except in the lower grades prices have stiffened considerably, and dealers are optimistic regarding the immediate future.

Rags

A slight movement has been perceptible in the rag market and it is generally thought to be regaining its foothold. Prices continue to fluctuate, however, and the demand is generally very quiet with the exception of a few bleachable grades of new and old rags. Very little importation is taking place due to the fact that prices abroad are higher than mills will pay in the domestic market. All prices quoted are nominal as many of the transactions are consummated at bargain prices which do not demonstrate a market

Twine

No drastic changes in either direction are noticeable in the twine market, but a consistently steady demand gives ground for optimism. Conditions are much better than this time last year.

I. P. Co. Surveying Black River Water Power

WATERTOWN, N. Y., April 24, 1922.—A corps of surveyors is now employed by the International Paper Company making a detailed survey of the water power possibilities of the company property in this district. The engineers are now working on both sides of Black river on the Ontario, Glen Park and C. R. mill sites along about two miles of company property.

Just what this procedure pretends is only conjectural, for no definite information is being given out by officials of the company or by the surveyors. The company has three small developments with a possible head of about 75 feet in the combined developments. It is considered possible that some one has in mind a plan to make a unified development and utilize the power commercially. It is also suggested that the company might be seeking definite information on the value of the property as a power site because of the possibility of a scale.

It seems to be well established that the company will never again manufacture paper in the Black river district. It is claimed that the only thing that could bring about a reopening would be a very exceptional boom in the paper business. When the strike closed the mills a year ago there was on hand a considerable cordage of pulpwood. Of late this has been either sold or removed to some of the other mills of the company.

The survey at this time is taken to mean that within the near future this property will either be sold in toto or in separate parcels and the company withdraw entirely from this district. In that event the installation of some other industry in the plants is expected.

Market Quotations

Paper Company Securities

New York Stock Exchange closing quotations April 25, 1922:

STOCKS.	BID.	ASKED.
American Writing Paper Company, pref.	34	34½
International Paper Company, com.	48	48¼
International Paper Company, pref., stamped	66½	68
Union Bag & Paper Corporation	64	66

Because of the unusual conditions prevailing in the various markets quotations are more or less nominal.

Paper

F. o. b. Mill.			
Ledgers	10.50	@	30.00
Bonds	8.50	@	55.00
Writings—			
Extra Superfine	14	@	25
Superfine	13	@	20
Tub Sized	10	@	16
Engine Sized	9.00	@	15.00
News—f. o. b. Mill—			
Rolls, contract	3.50	@	—
Rolls, transit	3.50	@	
Sheets	4.00	@	
Side Runs	3.25	@	3.50
Book, Cased—f. o. b. Mill			
S. & S. C.	6.50	@	7.50
M. F.	5.75	@	7.00
Coated and Enamel	8.00	@	10.00
Lithograph	8.00	@	10.00
Tissues—f. o. b. Mill			
White, No. 1	.75	@	.80
Colored	1.00	@	2.00
Anti-Tarnish	.75	@	.80
Silver Tissue	1.50	@	2.70
Manila	.75	@	.80
Kraft—f. o. b. Mill—			
No. 1 Domestic	7.00	@	7.50
No. 2 Domestic	5.75	@	6.50
Imported	5.75	@	6.00
Screenings	2.50	@	3.50
Manila—			
No. 1 Jute	8.50	@	9.00
No. 2 Jute	7.75	@	8.50
No. 1 Wood	4.50	@	5.50
No. 2 Wood	4.00	@	4.50
Butchers	4.25	@	4.75
Fiber Papers—			
No. 1 Fiber	6.00	@	6.25
No. 2 Fiber	5.25	@	5.50
Common Bogus	1.75	@	2.25
Card Middies	4.00	@	5.00
Boards—per ton—			
News	37.50	@	45.00
Straw	40.00	@	45.00
Chip	36.50	@	40.00
Binders' Board	60.00	@	70.00
Sgl. Mla. Ll.Chip	57.50	@	65.00
Wood Pulp	75.00	@	90.00
Container	65.00	@	70.00
Wax Paper—			
Self Sealing White 28 and 30 lb. basis	10.00	@	11.00
Waxed Tissue	1.40	@	1.60
Glassine—			
Bleached, basis 25 lbs.	12.75	@	13.25
Bleached, basis 20 lbs.	13.75	@	15.25

Mechanical Pulp

(Ex-Dock.)

No. 1 Imported	32.00	@	36.00

(F. o. b. Pulp Mills.)

No. 1 Domestic	29.00	@	33.00

Chemical Pulp

(Ex-Dock, Atlantic Ports.)

Sulphite (Imported)—			
Bleached	4.00	@	4.50
Easy Bleaching	2.85	@	3.25
No. 1 Strong unbleached	2.50	@	2.90
No. 2 Strong unbleached	2.25	@	2.60
No. 1 Kraft	2.50	@	3.00
Sulphate—			
Bleached	3.90	@	4.00

(F. o. b. Pulp Mill.)

Sulphite (Domestic)—			
Bleached	4.00	@	4.50
Strong unbl'chd	2.60	@	2.90
Easy Bleaching Sulphite	2.60	@	3.25
News Sulphite	2.50	@	2.80
Mitscherlich	2.80	@	3.10
Kraft (Domestic)	2.50	@	3.00
Soda Bleached	3.50	@	3.75

Domestic Rags

New Prices to Mill, f. o. b. N. Y.

Shirt Cuttings—			
New White, No. 1	10.00	@	10.50
New White, No. 2	6.00	@	6.50
Silesias, No. 1	6.00	@	6.50
New Unbleached	8.50	@	9.00
Washables	3.25	@	3.50
Fancy	4.50	@	5.00
Cottons—according to Grades—			
Blue Overall	5.75	@	6.00
New Blue	4.00	@	4.50
New Black Soft	3.00	@	3.25
New Light Seconds	2.75	@	3.00
O. D. Khaki Cuttings	3.00	@	3.25
Men's Corduroy	2.50	@	2.75
New Canvas	6.50	@	7.00
New Black Mixed	2.25	@	2.75
Old White, No. 1—			
Repacked	5.50	@	6.00
Miscellaneous	4.50		nominal
White No. 2—			
Repacked	2.75	@	3.00
Miscellaneous	2.00	@	2.25
St. Soiled White	1.25	@	1.50
Thirds and Blues—			
Repacked	1.50	@	1.65
Miscellaneous	1.10	@	1.15
Black stockings	2.25	@	2.50
Cloth Strippings	.90	@	1.00
No. 1	.90	@	1.00
No. 2	.80	@	.90
No. 3	.55	@	.65
No. 4	.55	@	.65
No. 5A	.90		nominal

Foreign Rags

New Light Silesias	6.00	nominal
Light Flannelettes	6.75	nominal
Unbl'chd Cottons	7.50	nominal
New White Cuttings	9.50	nominal
New Light Oxfords	6.00	nominal
New Light Prints	4.50	nominal
New Mixed Cuttings	2.00	@ 2.50
New Dark Cuttings	1.90	@ 2.10
No. 1 White Linens	9.00	@11.00
No. 2 White Linens	6.50	nominal
No. 3 White Linens	5.00	nominal
No. 4 White Linens	3.50	nominal
Old Extra Light Prints	2.00	nominal
Ord. Light Prints	1.75	nominal
Med. Light Prints	1.50	nominal
Dutch Blue Cottons	1.85	nominal
German Blue Cottons	1.50	nominal
Ger. Blue Linens	3.50	nominal
Checks and Blues	1.50	nominal
Dark Cottons	1.00	nominal
Shoppery	.85	@ .90
French Blues	2.00	nominal

Bagging

Prices to Mill f. o. b. N. Y.

Gunny No. 1—			
Foreign	.75	@	.80
Domestic	.75	@	.80
Wool, Tares, light	1.20	@	1.30
Wool, Tares, heavy	1.15	@	1.25
Bright Bagging	1.00	@	1.10
No. 1 Scrap	.80	@	.90
Sound Bagging	.80	@	.90
Manila Rope—			
Foreign	4.25	@	4.50
Domestic	4.50	@	4.75
New Bu. Cut	1.80	@	1.90
Hessian Jute Threads—			
Foreign	4.25	@	4.50
Domestic	4.00	@	4.25
Mixed Strings	.80	@	.90

Twines

Cotton— (F. o. b. Mill)			
No. 1	32	@	34
No. 2	30	@	32
No. 3	26	@	28
India, No. 6 basis—			
Light	17	@	18
Dark	17	@	18
B. C., 18 Basis	38	@	40
A. B. Italian, 18 Basis	50	@	60
Finished Jute—			
Light, 18 basis	25	@	26
Dark, 18 basis	26	@	28
Jute Wrapping, 3-6 Fly—			
No. 1	22	@	23
No. 2	30	@	31
Tube Rope—			
4-ply and larger	14	@	16
Fine Tube Yarn—			
5-ply and larger	18	@	20
4-ply	19	@	21
3-ply	20	@	22
Unfinished India— Basis	15	@	16
Paper Makers Twine Balls	12	@	14
Box Twine, 2-3 ply	16	@	17
Jute Rope	12	@	14
Amer. Hemp, 6	32	@	34
Sisal Hay Rope—			
No. 1 Basis	14	@	16
No. 2 Basis	12	@	14
Sisal Lath Yarn—			
No. 1	13	@	14
No. 2	10	@	12
Manila Rope	17	@	18

Old Waste Papers

(F. o. b. New York)

Shavings—			
Hard, White, No. 1	3.75	@	4.00
Hard, White, No. 2	3.25	@	3.50
Soft, White No. 1	3.15	@	3.30
Flat Stock—			
Stitchless	1.55	@	1.65
Over Issue Mag.	1.55	@	1.65
Solid Flat Book	1.40	@	1.50
Crumpled No. 1	1.05	@	1.15
Solid Book Ledger	2.00	@	2.25
Ledger Stock	1.55	@	1.65
No. 1 White News	1.65	@	1.75
New B. B. Chips	.47½	@	.52½
Manilas—			
New Env. Cut	2.75	@	3.00
New Cut No. 1	1.75	@	2.00
Extra No. 1, Old	1.50	@	1.60
Print	.80	@	.90
Container Board	.60	@	.70
Bogus Wrapper	.55	@	.60
Old Krafts, machine compressed Bales	1.75	@	1.85
News—			
Strictly Overissue	.70	@	.80
Strictly Folded	.55	@	.60
No. 1 Mixed Paper	.45	@	.50
Common Paper	.30	@	.35

CHICAGO

[FROM OUR REGULAR CORRESPONDENT.]

Paper

F. o. b. Mill.			
All Rag Bond	35	@	40
No. 1 Rag Bond	30	@	35
No. 2 Rag Bond	18	@	20
Water Marked Sulphite	10	@	14
Sulphite Bond	9	@	12
Sulphite Ledger	12	@	13
Superfine Writing	18	@	24
No. 1 Fine Writing	14	@	22
No. 2 Fine Writing	12	@	20
No. 3 Fine Writing	8	@	12
No. 1 M. F. Book	6¼	@	7
No. 1 S. & S. C. Book	6¼	@	7½
Coated Book	8½	@	10½
Coated Label	8½	@	10½
News—Rolls, mill	3½	@	4½
News—Sheets, mill	3¾	@	4¾
No. 1 Manila	5½	@	6
No. 1 Fiber	5	@	—
No. 2 Manila	4½	@	—
Butchers' Manila	4	@	—
No. 1 Kraft	7	@	—
No. 2 Kraft	6	@	—
Wood Tag Boards	4	@	—
Screenings	2½	@	—
Boards, per ton—			
Plain Chip	35.00	@	40.00
Solid News	40.00	@	45.00
Manila Lined Chip	45.00	@	52.50
Container Line—			
85 Test	60.00	@	65.00
100 Test	65.00	@	70.00
Binders' Board	75.00	@	—
Solid Wood Pulp	80.00	@	90.00
Straw Board	35.00	@	40.00
Filled Pulp Board	55.00	@	60.00

Old Papers

Shavings—			
No. 1 Hard White	3.00	@	3.25
No. 1 Soft Shav.	2.50	@	2.75
No. 1 Mixed	1.00	@	1.10
No. 2 Mixed	1.00	@	1.10
White Envel. Cuttings	3.25	@	3.50
Ledgers and Writings	1.50	@	1.75
Solid Books	1.25	@	1.50
No. 1 Books, light	.90	@	1.00
Blanks	1.75	@	2.00
Ex. No. 1 Manila	1.90	@	2.00
Manila Envelope Cuttings	2.25	@	2.35
No. 1 Manilas	1.20	@	1.30
Folders News (over issue)	1.00	@	1.10
Old Newspaper	.80	@	.85
Mixed Papers	.70	@	.75
Straw Clippings	.70	@	.75
Binders Clippings	.70	@	.75
Kraft	1.75	@	2.00
New Kraft Cuts	2.25	@	2.30
Roofing Stock, f.o.b. Chicago, Net Cash—			
No. 1	25.00	@	
No. 2	23.00	@	
No. 3	21.00	@	
No. 4	21.00	@	

PHILADELPHIA

[FROM OUR REGULAR CORRESPONDENT.]

Paper

Bonds	.10	@	.60
Ledgers	.15	@	.40
Writings—			
Superfine	.15	@	.20
Extra fine	.12	@	.22
Fine	.20	@	.30
Fine, No. 2	.20	@	.25
Fine, No. 3	.15	@	.20
Book, M. F.	.06	@	.09
Book, S. S. & C.	.08	@	.15
Book, Coated	.08	@	.15
Coated Lithograph	.10	@	.15
Label	.06	@	.15
News	.05	@	.07
No. 1 Jute Manila	.12	@	.13
Manila Sul., No. 1	.08	@	.08½
Manila No. 2	.07½	@	.08
No. 2 Kraft	—	@	.08½
No. 1 Kraft	—	@	.09½
Common Bogus	.02½	@	.03
Straw Board	35.00	@	45.00
News Board	32.50	@	35.00
Chip Board	27.50	@	32.00
Wood Pulp Board	90.00	@	100.00

(Carload Lots)

Binder Boards—			
Per ton	65.00	@	75.00
Carload lots	60.00	@	65.00
Tarred Felts—			
Regular	48.00	@	50.00
Slaters	54.00	@	56.00
Best Tarred, 1-ply (per roll)	1.35	@	1.50
Best Tarred, 2-ply (per roll)	1.00	@	1.15
Best Tarred, 3-ply	1.50	@	1.65

Bagging

F. o. b. Phila.

Gunny No. 1—			
Foreign	.75	@	—
Domestic	.70	@	—
Manila Rope	4.00	@	4.50
Sisal Rope	.75	@	.80
Mixed Rope	.75	@	.80
Scrap Burlaps	1.00	@	1.25
Wool Tares, heavy	2.50	@	2.75
Mixed Strings	.75	@	.80
No. 1, New Lt. Burlap	.75	@	.80
New Burlap Cuttings	1.75	@	2.10

Old Papers

F. o. b. Phila.

Shavings—			
No. 1, Hard White	3.50	@	3.75
No. 2, Hard White	3.00	@	3.25
No. 1 Soft White	3.00	@	3.25
No. 2 Soft White	1.75	@	2.00
No. 1 Mixed	1.50	@	1.75
No. 2 Mixed	1.00	@	1.25

(Continued on page 66)

Imports and Exports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING APRIL 22, 1922

SUMMARY

News Print.....421 rolls, 172 bls.
Printing Paper.....827 rolls, 33 cs.
Surface Coated Paper.....50 cs.
Filter Paper.....9 cs., 30 bls.
Drawing Paper.....5 cs.
Cigarette Paper.....290 cs.
Packing Paper.....295 bls., 2,003 rolls.
Insulating Paper.....3 cs.
Miscellaneous Paper.....241 bls., 26 cs., 238 rolls.

CIGARETTE PAPER.

Liggett & Myers Tobacco Co., Ohio, Havre, 8 cs.
American Tobacco Co., by same, 200 cs.
P. J. Schweitzer, Fouchurch, Marseilles, 13 cs.
P. J. Schweitzer, La Touraine, Havre, 46 cs.
Gluckman & Strauch, by same, 8 cs.
Liggett & Myers Tobacco Co., Olen, Havre, 15 cs.

DRAWING PAPER.

H. Reeve Angel & Co., Westerdyk, Rotterdam, 5 cs.

FILTER PAPER.

H. Reeve Angel & Co., Westerdyk, Rotterdam, 9 cs.
C. G. Euler, Ohio, Havre, 30 bls.

SURFACE COATED PAPER.

G. Germert, Lone Star State, Bremen, 10 cs.
Lindmeyer, Johnson Paper Co., Westerdyk, Rotterdam, 40 cs.

PRINTING PAPER.

Miller, Wright Paper Co., Westerdyk, Rotterdam, 752 rolls.
Irving Nat'l Bank, Pr. Matoika, Bremen, 752 rolls.
J. L. N. Smythe & Co., Oregonian, Hamburg, 8 rolls.
Chemical Nat'l Bank, by same, 67 rolls.
Gerhard & Hey, Cragness, Hamburg, 25 cs.

NEWS PRINT.

Chemical Nat'l Bank, Oregonian, Hamburg, 272 rolls.
Wm. Schall & Co., Hellig Olav, Copenhagen, 172 bls.
Wm. Schall & Co., by same, 149 rolls.

PACKING PAPER.

Ladenburg, Thalman & Co., Cragness, Hamburg, 254 bls.
Irving Nat'l Bank, Bergensfjord, Kristiania, 1,980 rolls.
Int'l Acceptance Bank, by same, 123 bls.
Int'l Acceptance Bank, by same, 41 bls.

INSULATING PAPER.

Westinghouse Electric Manfg. Co., Paris, Havre, 3 cs.

PAPER.

A. Murphy & Co., Paris, Havre, 1 bl.
Cheramy, Inc., by same, 13 cs.
Windowphanie Co., by same, 28 bls.
Wilkinson Bros. & Co., Inc., Hellig Olav, Copenhagen, 34 bls.
Wilkinson Bros. & Co., Inc., by same, 238 rolls.
Irving Nat'l Bank, by same ,178 bls.
Heidelbach, Ickelheimer & Co., Westerdyk, Rotterdam, 13 cs.
A. Murphy & Co., La Touraine, Havre, 5 bls.
Judson Freight Forwarding Co., by same, 9 cs.

RAGS, BAGGING, ETC.

Castle, Gottheil & Overton, La Touraine, Havre, 73 bls. news cuttings, 153 bls. rags.
Castle, Gottheil & Overton, Paris, Havre, 39 bls. rags.
Stone Bros. & Sherwin, by same, 123 bls. rags.
E. Butterworth & Co., Archimedes, Manchester, 180 bls. Bagging.
American Exchange Nat'l Bank, by same, 66 bls. paper stock.
E. J. Keller Co., Inc., by same, 303 bls. bagging.
E. J. Keller Co., Inc., Cragness, Hamburg, 106 bls. bagging.
E. J. Keller Co., Inc., by same, 29 bls. rags.
Castle, Gottheil & Overton, by same, 61 bls. rags.
Irving Nat'l Bank, by same, 116 bls. rags.
F. P. Gaskell & Co., by same, 78 bls. rags.
Castle, Gottheil & Overton, Ohio, Havre, 121 bls. rags.
Irving Nat'l Bank, by same, 381 bls. rags.
Albion Trading Co., by same, 31 bls. rags.
E. J. Keller Co., Inc., E. Dawn, Rotterdam, 156 bls. bagging.
E. J. Keller Co., Inc., Algeria, Glasgow, 27 bls. rags.
S. Silberman & Co., N. Amsterdam, Rotterdam, 46 bls. paper stock.
Castle, Gottheil & Overton, by same, 259 bls. rags.
Castle, Gottheil & Overton, Ikala, London, 37 bls. rags.
American Wood pulp Corp., Oregonian, Hamburg, 52 bls. news cuttings.
E. J. Keller Co., Inc., by same, 44 bls. rags.
E. J. Keller Co., Inc., Westerdyk, Rotterdam, 16 bls. rags.
B. D. Kaplan & Co., Scythia, Liverpool, 239 bls. rags.
Mutrick Bros., by same, 16 bls. rags.

OLD ROPE.

First Nat'l Bank of Boston, Westerdyk, Rotterdam, 154 coils.
First Nat'l Bank of Boston, N. Amsterdam, Rotterdam, 175 coils.
Brown Bros. & Co., Norfolk Range, New Castle, 593 coils.
Niebrugge & Day, Cragness, Hamburg, 98 coils.

WOOD PULP.

Kidder, Peabody & Co., Bergensfjord Kristiania, 2,400 bls., 304 tons.
J. Anderson & Co., by same, 600 bls., 101 tons.
Nilsen, Lyon & Co., by same, 400 bls., 50 tons.
Tidewater Papermills Co., Wm. Melbourne, Liverpool, N. S., 8,273 bls., 827 tons.

WOOD FLOUR.

B. L. Soberski, Bergensfjord, Kristiania, 897 bags.
Alker Chemical Co., Cragness, Hamburg, 201 bags.

CASEIN.

Atterbury Bros., Pan American, Buenos Aires, 334 bags.

PHILADELPHIA IMPORTS

WEEK ENDING APRIL 22, 1922

E. J. Keller Co., Inc., Soestdyk, Rotterdam, 1,624 bales rags.
M. Gottesman & Co., Inc., Delaware, Christiania, 2,500 bales wood pulp.
Castle, Gottheil & Overton, Carson, Bremen, 458 bls. rags.
Castle, Gottheil & Overton, Slavic Prince, London, 383 bls. rags.
Castle, Gottheil & Overton, Morristown, Hamburg, 40 bls. rags.
Castle, Gottheil & Overton, Manchester Port, Manchester, 84 bls. new cuttings.
Castle, Gottheil & Overton, Barbadian, Bremen, 98 bls. rags.

NEW ORLEANS IMPORTS

WEEK ENDING APRIL 22, 1922

E. J. Keller Co., Inc., Coldbrook, Antwerp, 70 bls. bagging.
Castle, Gottheil & Overton, Leerdam, Amsterdam, 111 bls. rags.

BOSTON IMPORTS

WEEK ENDING APRIL 22, 1922

Castle, Gottheil & Overton, Homestead, Rotterdam, 894 bls. wood pulp.

Protects Crops With Perforated Paper Roof

Paper manufacturers will be interested to learn of a new contrivance composed of heavy, waterproofed paper which will be literally spread as a roof over acres of farm land for the protection of sensitive crops from excessive sunlight, heavy winds and excessive rains.

Such an invention, if perfected and adopted would entail the manufacture of an unlimited quantity of the material to supply a market which has never been scratched.

Ramon Novoa, a Porto Rican, educated in the University of Valparaiso, Ind., has applied for a patent on this invention which, he believes, will revolutionize intensive farming.

In outlining his invention to a representative of THE PAPER TRADE JOURNAL, Mr. Novoa described the paper composition as follows: "It is a heavy, flexible, chemically prepared, perforated paper roofing of great tensile strength and containing one of the highest elemental resting materials known to science. I have named it 'meteorite paper' because it is designed to defeat or counteract unfavorable meteorological and atmospheric conditions."

The paper roofing, Mr. Novoa went on to explain, may be used over and over again for several seasons. The device supplants the cold frame, and by reason of its cheapness, may be used on a much more extensive basis.

It has also the additional advantage of allowing a certain amount of sunlight to penetrate, as well as breaking the full force of torrential rains and heavy winds.

Stretched over a wooden frame, ten feet above the ground, the paper roofing readily admits of the entrance and egress of trucks, agricultural implements, etc., prevents water-logging of rolling land, and, according to the inventor, improves the quality, taste and color of the crop under cultivation by conserving a proper amount of moisture in the soil and regulating the distribution of the elements.

Berry Paper Co. Improves Quarters

[FROM OUR REGULAR CORRESPONDENT.]

LEWISTON, Me., April 24, 1922.—The Berry Paper Company has taken a long lease of its store and basement at 49 Lisbon street, a part of the second floor and the whole of the third and fourth floors. In all, the lease calls for over 1,500 feet of floor space. Practically the whole is being rebuilt and remodeled. The basement is used for receiving and shipping, the first floor is the retail store, the second is used for offices, the third for wholesale stock and sample rooms and for the office furniture salesroom while the fourth floor is used for the printing and binding business and the wholesale paper stock.

Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, April 26, 1922.

BLEACHING POWER.—Quoted at 1.65 to 1.75 cents per pound, works, the demand for domestic bleaching powder remains slack, although indications of firmness are noticeable in the market.

BLANC FIXE.—Movement of blanc fixe is light but active. Paper mills are beginning to require more of the chemical, but the prices still remain in the neighborhood of 3.50 to 3.75 cents a pound with no sudden change anticipated in the near future.

CASEIN.—Dealers in this product feel that the present prices are firm and will remain so for some time. Available stocks of Argentine casein are scarce, the European market consuming practically the entire Argentine production at 10.50 and 11.00 cents a pound, while the price quoted at New York in carload quantities is 10.00 cents.

CAUSTIC SODA.—The spot market for caustic is considerably firmer. It is now quoted at the somewhat higher figure of 3.26 cents a pound, works, with the demand steadily increasing from domestic mills.

CHINA CLAY.—Mills are requiring more China clay than they have in recent months to provide for the increased demand. Prices of English clays are between $13 and $18 a ton, domestic unwashed selling as low as $6 to $8 and the washed product $8 to $10.

LIQUID CHLORINE.—Merchants handling this product find that the paper trade consumption is materially increasing with a consequent strengthening of the market. Liquid chlorine is still quoted at 5.50 to 7.00 cents per pound in 100-pound cylinders.

ROSIN.—At $5.20 per barrel of 280 pounds, the rosin market has remained firm throughout the past week. Foreign demand is increasing and domestic mills are requiring more each week.

SALTCAKE.—Activity in the saltcake market is becoming more pronounced, and the prices are assuming a certain degree of firmness due to the heavier demand from the paper mills and the glass industry. Acid-cake is quoted at prices ranging between $20 and $21 per ton, while chromecake has remained steady at $18.

SATIN WHITE.—At 1.50 cents a pound, satin white is selling for less than it costs to produce and ship it. The demand is light, and there is an adequate supply on hand to cover the market. Dealers expect a slight advance in price when the demand returns to normal.

SULPHUR.—The price of sulphur has stiffened somewhat for spot lots, and the market has been quite active, many dealers taking advantage of the lower rates on water shipments. Prices are now quoted at the somewhat wider range of $15 to $17 a net ton at the mines and $18 to $20 f. o. b. New York.

STARCH.—Although no striking change is expected in the starch market, the rising prices of corn has tended to make the situation look more firm. Pearl starch is quoted at 2.50 cents a pound, carload, and bags have been selling for 2.22.

SULPHATE OF ALUMINUM.—Iron free is selling at 2.00 to 2.25 cents per pound, the commercial grade of sulphate of alumina having remained at the steady price of 1.40. The market is generally believed to be quite firm.

SODA ASH.—Despite the generally active trend of most chemicals, soda ash continues to remain fairly quiet, no great demand being in evidence. Quotations at the plant average 1.50 cents a pound in bags.

TALC.—Car lot quantities of talc for shipment within two weeks are selling for as low as $16 per ton, while the price for small lots varies between $16 and $18.

Market Quotations

(*Continued from page 63*)

Solid Ledger Stock.	2.00	@	2.25
Writing Paper....	1.80	@	2.00
No. 1 Books, heavy.	1.50	@	1.75
No. 2 Books, light.	1.25	@	1.50
No. 1 New Manila.	2.75	@	3.00
No. 1 Old Manila..	1.50	@	1.75
Container Manila..	1.00	@	1.10
Old Kraft	1.90	@	2.00
Overissue News....	.75	@	.80
Old Newspaper....	.50	@	.60
No. 1 Mixed Paper.	.45	@	.50
Common Paper....	.40	@	.50
Straw Board, Chip.	.40	@	.45
Binders' Bd. Chip.	.40	@	.45
Domestic Rags—New.			
Price to Mill, f. o. b. Phila.			
Shirt Cuttings—			
New White, No. 1	.09¼	@	.09¾
New White, No. 2	.05	@	.06
Silesias, No. 1..	.04½	@	.05
New Unbleached.	.08½	@	.08¾
Washables	.03	@	.03½
Fancy	.04½	@	.05
Cottons—according to grades—			
Blue Overall	.04	@	.04½
New Blue	.02	@	.02¼
New Black Soft.	.03	@	.03¼
New Light Seconds	.02	@	.02¼
Khaki Cuttings...	.02¼	@	.03¼
Corduroy	.02	@	.02½
New Canvas	.07	@	.07¼
New Black Mixed	2.75	@	3.00
Old			
White, No. 1—			
Repacked	.06	@	.06½
Miscellaneous ...	.04½	@	.04¾
White, No. 2—			
Repacked	.03	@	.03½
Miscellaneous ...	.02½	@	.02¾
Thirds and Blues—			
Repacked	1.65	@	1.80
Miscellaneous ...	1.40	@	1.55
Black stockings...	1.75	@	2.25
Roofing Stock—			
No. 1.....	.90	@	1.00
No. 2.....	.80	@	.90
No. 3.....	.70	@	.80
No. 4.....	.70	@	.80
No. 5A.....	nominal		
B.....	nominal		
C.....	nominal		

BOSTON

[FROM OUR REGULAR CORRESPONDENT.]

Paper

Bonds	.07	@	—
Ledgers	.09	@	.09½
Writings	.07½	@	.05
Superfine	.12	@	.13
Fine	.10	@	.10½
Books, S. & S. C...	.07	@	.07½
Books, M. F.....	—	@	.06½
Books, coated	.08½	@	.07½
Label	.08½	@	.10
News sheets	3.05	@	—
News, rolls	3.75	@	4.00
Manilas—			
No. 1 Manila....$6.75		@	
No. 1 Fibre.....	6.00	@	6.25
No. 1 Jute.....	8.50	@	9.00
Kraft Wrapping...	7.00	@	7.50
Common Bogus....	3.00	@	

Boards

(Per Ton Destination)

Chip $35.00		@	
News, Vat Lined...	37.50	@	39.00
Wood, Vat Lined..	47.50	@	
Filled News Board.	37.50	@	
Solid News Board..	42.50	@	45.00
S. Manila Chip....	52.50	@	
Pat. Coated	70.00	@	75.00

Old Papers

Shavings—			
No. 1 Hard White	3.50	@	3.75
No. 1 Soft White	3.00	@	3.25
No. 1 Mixed....	1.50	@	1.75
Ledgers & Writings.	.03	@	—
Solid Books	1.75	@	2.00
Blanks $1.30		@	$1.45
No. 2 Books Light.	.60	@	.70
Folded News, over issues $11.50		@	12.50
Mixed paper 47.50		@	50.00
Gunny Bagging....	.75	@	.80
Manila Rope	4.25	@	4.50
Common Paper ...	.35	@	.40
Old News.....	.80	@	
Old Kraft	1.75	@	1.80

TORONTO

[FROM OUR REGULAR CORRESPONDENT.]

Paper

(Mill Prices to Jobbers f. o. b. Mill)

Bond—			
Sulphite	11	@	12½
Light tinted.....	12	@	13½
Dark tinted.....	13½	@	15
Ledgers (sulphite).	—	@	13
Writing	10½	@	13½
News, f. o. b. Mills—			
Rolls (carloads).	3.50	@	
Sheets (carloads)	—	@	4.25
Sheets (2 tons or over)	—	@	4.50
Book—			
No. 1 M. F. (carloads)	9.50	@	—
No. 2 M. F. (carloads)	8.50	@	—
No. 3 M. F. (carloads)	8.00	@	—
No. 1 S. C. (carloads)	10.00	@	—
No. 2 S. C. (carloads)	9.00	@	—
No. 1 Coated and litho. 15.00		@	—
No. 2 Coated and litho. 14.00		@	—
No. 3 Coated and litho. 13.25		@	—
Coated and litho., colored 15.25		@	—
Wrapping—			
Grey	4.75	@	—
White Wrap.....	5.25	@	—
"B" Manila.....	5.75	@	—
No. 1 Manila.....	7.50	@	—
Fibre	7.25	@	—
Kraft, M. F. or M. G.	8.75	@	—

Pulp

(F. o. b. Mill)

Ground Wood.....$25.00		@	$32.50
Sulphite easy bleaching	60.00	@	65.00
Sulphite, news grade.	50.00	@	60.00
Sulphite bleached...	90.00	@	95.00
Sulphate	70.00	@	

Old Waste Papers

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut..	4.00	@	—
Soft White Book Shavings	3.15	@	—
White Bl'k News	1.70	@	—
Book and Ledger—			
Flat Magazine and Book Stock (old)	1.45	@	—
Light and Crumpled Book Stock	1.30	@	—
Ledgers and Writings	1.80	@	—
Solid Ledgers....	1.80	@	—
Manilas—			
New Manila Cut.	2.00	@	—
Printed Manilas..	.90	@	—
Kraft	2.25	@	—
News and Scrap—			
Strictly Overissue	.90	@	—
Folded News....	.90	@	—
No. 1 Mixed Papers	.60	@	—
Domestic Rags—			
Price to mills, f.o.b. Toronto.	Per lb.		
No. 1 White shirt cuttings	.09¼	@	.10
No. 2 White shirt cuttings	.05½	@	.05¾
Fancy shirt cuttings	.05½	@	.05¾
No. 1 Old whites	.04	@	—
Thirds and blues	.02	@	.02¼
	Per cwt.		
Black stockings...	1.75	@	1.85
Roofing stock			
No. 1.....	1.25	@	—
No. 2.....	1.15	@	—
Roofing stock			
Manila rope.....	.04¼	@	.04½
No. 2.....	.01½	@	—
Gunny bagging ...	1.00	@	1.25

WANT AND FOR SALE ADVERTISEMENTS

CLASSIFIED RATES

Minimum rate for advertisements of 25 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, and small For Sale Ads, 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

SPECIALTY MILL wants superintendent with good conception of business, ability to develop ideas, and who is tactful and competent in handling help. A man familiar with cylinder and fourdrinier machines preferred. Applicant must state length of time in present position, experience fully, salary now receiving, and any other information that would be of interest to prospective employer. Address, Box 4976, care Paper Trade Journal. tf

WANTED—Experienced superintendent for paper bag manufacturing plant making square, flat, automatic, millinery bags, etc. Must be thoroughly competent to supervise all mechanical details, handling help, and get maximum production consistent with first class product. Must have all details of experience, salary expected, etc., in first letter. Address, Box 4993, care Paper Trade Journal. A-27

WANTED—Reliable machine tender, running tissues on cylinder machine. A good job for the right man. Apply Empire Paper Co., Ithaca, New York. M-4

ENGINEERS—DRAFTSMEN—A leading organization has position open for energetic, live and experienced resident engineer for paper mill construction; also in need of three or four draftsmen familiar with general plant equipment, lay-out in connection with paper, pulp and sulphite work, men of at least five years' experience wanted. Salary will be in accordance with ability. Address, Box 5007, care Paper Trade Journal. My-11

BAG PRINTER WANTED—One capable of taking complete charge of bag printing, composition, and stereotyping department. State experience, salary expected, etc. Address, Box 5008, care Paper Trade Journal My-11

WANTED: Superintendent for solid container box factory operating Swift Automatic Cutters and Creasers. Address, Box 5024, care Paper Trade Journal. tf

HELP WANTED

EXPERIENCED MEN in Paper Industry. Our confidential and personal service limited to the pulp, paper and allied trades. Can be of valuable assistance to you in locating desirable connections. Address, The Industrial Service Bureau, 1502 Monadnock Block, Chicago, Illinois. A-27

REPRESENTATIVE WANTED: Experienced paper salesman by Combine of German paper mills. Business on commission basis. Chief brands, Unprinted Wall paper, Oatmeals, Ingrains, Glazed Printing, Packing, Insulating Papers, Boards. Address, Box 5023, care Paper Trade Journal. A-27

WANTED—Salesman to solicit on a commission basis jobbing and consuming trade in Pennsylvania, outside of Philadelphia and Pittsburgh, for waxed and special treated papers. Address, Box 5009, care Paper Trade Journal. A-27

WANTED: For Board Mill, Western New York, machine Tender and Beaterman. Must be A No. 1 on container, news and manilla lined. State wages required. Address, Box 5025, care Paper Trade Journal. My-11

WANTED: Experienced super calender runners on book paper. Mill in New York State. Address, Box 5026, care Paper Trade Journal. My-4

WANTED: First class beaterman for beating and coloring stock for cylinder machine making specialties. Give references and previous employment. District of Columbia Paper Mfg. Co., Washington, D. C. My-4

WANTED: A high grade machine tender for Harper Fourdrinier. Must be proficient on light weight waxing papers. Good working conditions for proper man. State experience and reference. Address, Box 5028, care Paper Trade Journal. My-4

SALESMEN: TOILET PAPER: Experienced men who can sell quality toilet papers to the better class of jobbers. Our line will require carrying a complete set of samples in order to show the grades and exact appearance of the finished product. Good territory available. Universal Crepe & Tissue Mills, Inc., main office, 117 East 18th Street, New York City. A-27

WANTED: Master Mechanic for paper mill in Central New York; one capable of installing machinery, keeping machinery in first class shape, and able to handle men. Give experience, age and salary desired in first letter. Address, Box 5029, care Paper Trade Journal. A-27

WANTED: Four beatermen. Must be first class on book paper. State age and experience in your first letter. Best of industrial relations. Address, Box 5030, care Paper Trade Journal. My-4

SITUATIONS WANTED

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

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

DOES YOUR MILL pay? If not, why not have a superintendent with proven ability and experience that will make it pay? Address, Box 4977, care Paper Trade Journal. Je-2

SITUATIONS WANTED

EXPERIENCED BOSS BEATERMAN. Up-to-date man accustomed to nearly all grades, wants to make change after May 15, 1922. Address Box 5002, care Paper Trade Journal. A-27

SUPERINTENDENT of ability open for position with good company making box board, container board, wall board, bristol board or straw. A man that understands a plant thoroughly and gets good results. Address, Box 4997, care Paper Trade Journal. M-4

BOSS FINISHER wants position—Thoroughly experienced finisher. All grades of Fourdrinier and Cylinder Papers. Competent and reliable. Highest references. Address, Box 5004, care Paper Trade Journal. A-27

SUPERINTENDENT - MANAGER Wants position. Twenty years' experience on all grades paper. Expert on colors. Fourdrinier and cylinder machines. Best references. Address, Box 4988, care Paper Trade Journal. MA-18

PRACTICAL ACCOUNTANT and office manager, with paper mill experience, desires connection with New England mill. Twelve years' experience privately, and with professional firm, in finances, production, cost, accounting, systematizing and office efficiency work. Practical man who can eliminate unnecessary details and produce successful results in administrative and control work. Address, Box 5012, care Paper Trade Journal. A-27

SUPERINTENDENT or assistant superintendent on tissues, toilets or towels desires position. Have had 17 years' experience in this line. A-No.-1 in production and upkeep. Can handle help. Location no object. Best references. Address, Box 5013, care Paper Trade Journal. M-4

MASTER MECHANIC desires position. Twenty years' experience in mills of all grades of paper and pulp, also on steam, water and electric power. Best references. Address, Box 5014, care Paper Trade Journal. J-16

SITUATION WANTED by beater engineer with 25 years' experience in fast news mills in States and Canada. Good color man. Best references. Address, Box 5015, care Paper Trade Journal. My-18

MANAGER open for position. Can make sulphate, also soda from pine or other woods. Ability to handle help and machinery to get results. Large experience making various kinds of paper. Practical on upkeep for continuous operation. Correspondence solicited. Address, Box 5017, care Paper Trade Journal. A-27

SITUATIONS WANTED

EXPERIENCED MAN, 32 years of age, connected with the paper industry for fifteen years, both as salesman and managerial executive, having thorough knowledge of fine, printing and coarse papers and boards, desires location with mill or reputable distributor. Address, Box 5022, care Paper Trade Journal. My-4

WANTED: Position as superintendent or production manager in prepared roofing plant. Thoroughly familiar with Guyton & Cumfer outfit. Experienced Asphalt chemist having handled asphalts over eighteen years. Over four years with large prepared roofing concern holding positions from chief chemist to assistant manager, and now engaged in research work. Thorough knowledge of raw materials as well as quality of manufactured products. Can increase production through improved manufacturing methods. Address, Box 5031, care Paper Trade Journal. My-4

EXPERIENCED PAPER SALESMAN, 28 years of age, well acquainted with the jobbing trade for the past eight years, desires reputable connection and change from his present position. Eastern or Middle Western territory preferred, but will consider other sections as acquaintanceship is countrywide. I have exceptional wide knowledge of coarse papers. Would prefer a commission proposition. All correspondence will be held strictly confidential. Address, Box 5032, care Paper Trade Journal. My-11

TORONTO PAPER JOBBERS and Mills agents desire exclusive agency, commission basis or direct purchase that can compete successfully in Canada in price and quality. Address, Box 5033, care Paper Trade Journal. My-11

BOOK AND BOND PAPER VERSUS CURLY PAPER.—Papermaker now employed, with references as to character and experienced in increasing the capacity of mill equipment and in eliminating defects in manufacturing, invites inquiries from mills with production limited by any particular department, equipment or difficulty. Assurance that correspondence will be held confidential, would be appreciated and inquiries from mill executives will be so considered. Address, Box 5034, care Paper Trade Journal. My-18

FOREMAN desires position with De-inking Plant. Thoroughly understands cooking, grading, and bleaching of old papers. Twenty years experience. Married man. Best of references. Address, Box 5035, care Paper Trade Journal. My-11

MILLS WANTED

A new Chicago jobbing house with unlimited financial resources, doing a mill business, wants good connection on Bonds, Ledgers, Book Papers, Coated Papers, Lightweights, Writings, Manilas, Bristols, and fine papers of all kinds. Our ability and experience in the paper business is thorough.

Our knowledge of and prestige with the trade is very extensive. Address, Box 5040, care Paper Trade Journal. A-27

The Want Columns of the Paper Trade Journal are Result Getters

TRY THEM

FOR SALE

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

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

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

FOR SALE— 14 Calendar Rolls, 58" face, 3' 14" diameter. 2 No. 1 Claflin Engines. 1 small Jordan Engine. 1 6" Horizontal Water Pump. 2 Air Fans. Complete triple-deck frames for 44 Dryers. Will arrange terms to suit. Chesapeake Paper Board Co., Baltimore, Maryland. tf

FOR SALE—Three Howard Refiners, in A-1 condition. Address, Box 4999, care Paper Trade Journal. A-27

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

FOR SALE—Two Dunning and Boschert Hydraulic presses, size 36 x 42", with 12 trucks and 50 extra mats. Address, Box 5020, care Paper Trade Journal. My-11

FOR SALE: Cylinder Press felts 13 x 86 and Cylinder wets 64 x 80, drier felt duck six naught 80 to 86" wide, 32 to 56 yards long, also stock pumps and motors. Address, Box 5038, care Paper Trade Journal. My-11

FOR SALE: Straw Board Mill equipped to manufacture straw for corrugating, at an attractive figure and upon attractive terms. All correspondence confidential. Address, Box 5039, care Paper Trade Journal. A-27

FOR SALE

One New York Safety 5" x 8" vertical steam engine, 32" x 4½" fly wheel, Pickering Governor.

One bank of 13 dryers 28" diameter, 80" face, set in two tiers, complete with top and bottom felt stretcher guides, and carrying rolls in first-class condition, with steam headers. Now in use.

One two drum reel for 84" machine complete, now in use.

One 10 plate, Harmon screen, complete with plates, driving pulley and three extra sets of plates.

One Pope Mullen screen, 10 plates, 12" x 42".

One 36" Holyoke Machine plater.

One 6" x 16" Holyoke Machine, horizontal, single plunger, belt driven, water pump.

Address, Box 4989, care Paper Trade Journal. A-27

FOR SALE

Box Board Mill, nearly new. Central New York State. Plenty land for expansion. Siding, water rights, small water power possibilities. All equipment first class. Well situated for raw materials and near a box making center.

Will consider sale outright or capital from responsible and experienced man. Address, Box 4955, care Paper Trade Journal. tf

MISCELLANEOUS

WANTED—8 plate open Packer Screen with or without plates. State lowest cash price. Mill Department, Rose Lithographic Corporation, 55-33rd Street, Brooklyn, New York. A-27

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

SWIFT, GEORGE W., JR., Designer and Manufacturer of Special Machinery for Manufacturing and Printing Paper Goods, Bordentown, N. J. 8-24-22

WANTED: Two color rotary press 40 x 30 to 50 x 30 for electrotype plate-roll rewind. State make, condition, price, and where can be inspected. Address, Box 5036, care Paper Trade Journal. A-27

WANTED: Duplex Cutter, fitted with Brannan Folder and one set of 25 roll stands. Address, Box, 5037, care Paper Trade Journal. A-27

Classified Advertising BRINGS RESULTS

Rebuilt Paper Mill Machinery in Stock and Guaranteed

NOT WHERE IS AND AS IS

FOURDRINIER TISSUE MACHINE—One 96", one 68".
FOURDRINIER PARTS—Pusey & Jones 118", 100". Kutter Trowbridge 96".
PRESS PARTS FOR PAPER MACHINES—Pusey & Jones bell crank housing two sets 18"x96", Black & Clawson swing arm housings with rolls.
DRYERS—Four 48"x111", thirteen 36"x95", four 48"x68", one 84"x67", eleven 42"x66".
MARSHALL DRIVES—Two Black & Clawson self-contained stand with friction clutch cone pulley and 6" mortise gears. Mortise gears and pinions for Pusey & Jones Marshall drives 5" to 8" face.
CHILLED CALENDERS—One 65" face, five roll; one 54" face, five roll.
DILLON DOCTORS—For Machine Calenders 60" to 120" face.
SLITTERS AND WINDERS—One 120" Warren, one 108", 36" Kidders.
REELS—Pusey & Jones two drum upright 48" to 114".
BEATERS—Five 72"x42" Noble & Wood, one 66"x42" Noble & Wood, equipped with three cylinder washers; one Dilts 62"x50" iron tub, one Jones 62"x52", seven Horne 36"x36". Two No. 2 Claflins, two No. 1 Claflins.
JORDANS—One Wagg Majestic, three No. 2 Dillon Improved, one Large Horne, four Monarch, one Jones Standard, two Pope Brushing engines.
SCREENS—Six 10 plate open side Packer, two 6 plate, one Moore & White auxiliary.
STUFF PUMPS—Deane triplex, 9"x8", Gould triplex 8"x10", Sandusky triplex 4"x6".
REVOLVING SHEET CUTTERS—One 104" Horne, five 61" Hamblet, four 61" Finlay, one 50" Hamblet diagonal, one 42" Finlay.
WET MACHINES—Four 72" Bagley & Sewall Hydraulic.
SUPER CALENDERS—One 45", one 42", one 36" Holyoke.

We have a large number of pumps and over five hundred calender, press and couch rolls in stock.

FRANK H. DAVIS COMPANY
175 Richdale Ave., Cambridge, 40, Mass.

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