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# PAPER TRADE JOURNAL

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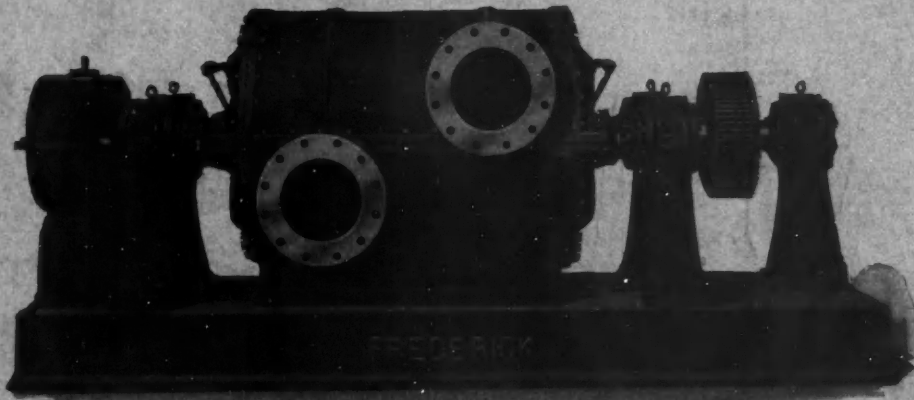
NEW YORK AND CHICAGO, APRIL 19, 1923

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FOR PAPER



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The International Weekly of the Paper and Pulp Industry and the Pioneer Publication in its field

## FIFTY-FIRST YEAR

Published Every Thursday by the

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Thursday, April 19, 1923

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## PRODUCTION OF WOOD PULP FOR MONTH OF FEBRUARY

According to Statistics Issued by the Federal Trade Commission the Stocks on Hand at the Mills at the End of the Month Equaled Twelve Days' Average Output of Ground Wood, Seven Days' Average Output of News Grade Sulphite, Ten Days' Average Output of Bleached Sulphite and Eight Days' Average Output of Easy Bleaching Sulphite—Output of Other Grades.

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., April 16, 1923.—In connection with the Federal Trade Commission's current statistics of the paper industry, a summary of the monthly reports from manufacturers of wood pulp and other kinds of pulp used in paper making is submitted herewith for the month of February, 1923.

### Pulp Production

The following is a tabulation of the production, pulp used by the company producing it, shipments to outside concerns, and stocks of finished pulp, in tons of 2,000 pounds on an air-dry basis, for February, 1923, compared with February, 1922, 1921, 1920 and 1919, for the reporting mills. The average production is based upon the reports covering the years 1919 to 1922, inclusive, and the average stocks on hand at the end of the month are for the 48 months of 1919 to 1922, inclusive.

	Num- ber of mills	On hand first of month, Net tons	Produc- tion for month, Net tons	Used during month, Net tons	Shipped during month, Net tons	On hand end of month, Net tons
Ground Wood Pulp:						
February, 1923	156	66,097	103,534	105,139	6,460	58,032
February, 1922	153	125,298	98,742	91,966	6,349	125,725
February, 1921	165	146,964	117,884	99,609	9,242	155,997
February, 1920	168	121,205	102,141	106,225	9,559	107,552
February, 1919	157	131,885	101,009	98,712	5,038	129,144
Average			108,583			144,471

	Num- ber of mills	On hand first of month, Net tons	Produc- tion for month, Net tons	Used during month, Net tons	Shipped during month, Net tons	On hand end of month, Net tons
Sulphite, News Grade:						
February, 1923	59	17,221	61,519	56,972	5,448	16,320
February, 1922	62	21,847	55,350	48,037	5,666	23,694
February, 1921	63	20,930	55,148	44,010	9,340	22,728
February, 1920	63	19,373	64,476	53,849	9,451	20,549
February, 1919	63	20,551	53,576	43,417	7,142	23,568
Average			54,694			20,839
Sulphite, Bleached:						
February, 1923	29	14,260	43,298	28,600	13,833	15,125
February, 1922	31	7,463	33,648	23,213	9,931	7,967
February, 1921	32	11,102	27,931	18,890	6,914	13,229
February, 1920	32	6,256	41,317	22,582	18,764	6,227
February, 1919	33	7,393	35,627	18,181	13,260	11,579
Average			36,294			9,591
Sulphite, Easy Bleaching:						
February, 1923	7	1,810	4,002	4,059	79	1,674
February, 1922	9	667	4,993	3,971	992	697
February, 1921	7	1,492	5,590	3,056	2,242	1,774
February, 1920	7	1,124	4,922	3,337	1,662	1,047
February, 1919	8	2,241	5,140	3,129	1,743	2,509
Average			4,899			1,318
Sulphite, Mitscherlich:						
February, 1923	7	1,530	6,608	4,365	2,471	1,302
February, 1922	6	1,549	5,502	3,277	2,174	1,600
February, 1921	7	3,034	4,412	2,983	4,73	3,990
February, 1920	7	1,756	6,690	4,382	2,642	1,422
February, 1919	7	1,714	6,432	4,136	2,279	1,731
Average			5,566			1,854
Sulphate Pulp:						
February, 1923	21	6,052	23,041	15,199	7,935	5,959
February, 1922	21	8,700	16,155	13,380	3,168	8,307
February, 1921	21	8,619	8,409	5,920	1,754	9,354
February, 1920	22	5,537	14,583	10,815	4,212	5,093
February, 1919	19	6,560	8,712	5,416	3,100	6,756
Average			14,628			6,706
Soda Pulp:						
February, 1923	27	9,558	36,463	20,771	15,026	10,224
February, 1922	27	10,444	27,386	17,246	9,985	10,599
February, 1921	26	8,551	23,960	14,619	8,514	9,378
February, 1920	29	3,734	31,178	18,367	13,232	3,313
February, 1919	28	4,305	27,262	15,688	10,375	5,504
Average			27,531			7,327

### Loss of Production

MONTH OF FEBRUARY, 1923 (WITH FEBRUARY, 1922, FOR COMPARISON)

Grade	Lack of orders		Repairs		Other reasons		Total	
	1923	1922	1923	1922	1923	1922	1923	1922
Ground Wood Pulp:								
Number of grinders	8	39	193	148	559	539	760	726
Total hours idle	4,032	12,482	7,349	20,429	134,525*	149,044*	145,906*	151,955*
Sulphite, News Grade:								
Number of digesters	8	33	4	12	6	23	18	68
Total hours idle	3,572	6,864	520	422	1,728	4,315	5,820	11,601
Sulphite, Bleached:								
Number of digesters	28	33	28	12	26	20	82	65
Total hours idle	1,612	8,410	1,607	975	675	1,562	3,894	10,947
Sulphite, Easy Bleaching:								
Number of digesters	0	3	0	1	8	0	8	4
Total hours idle	0	612	0	68	632	0	632	680
Sulphite, Mitscherlich:								
Number of digesters	0	0	8	17	0	0	8	17
Total hours idle	0	0	55	2,310	0	0	55	2,310
Sulphate Pulp:								
Number of digesters	3	12	7	0	5	13	15	25
Total hours idle	252	612	836	0	1,529	2,280	2,617	2,892
Soda Pulp:								
Number of digesters	0	76	8	4	17	19	25	99
Total hours idle	0	9,098	311	384	1,540	1,597	1,851	11,079
Other Grades:								
Number of digesters	0	3	0	2	4	1	4	6
Total hours idle	0	786	0	68	1,070	48	1,070	902
Total number of machines	47	199	248	196	625	615	920	1,010
Total hours idle	9,468	38,864	10,678	24,656	141,699	158,846	161,845	222,366

\*February, 1923, other—total include 134,105 hours due to water power conditions.

\*February, 1922, other—total include 136,698 hours due to water power conditions.

Other Than Wood Pulp:						
February, 1923	6	210	992	829	137	236
February, 1922	5	145	1,334	1,359	0	120
February, 1921	4	135	463	442	0	156
February, 1920	5	211	884	727	219	149
February, 1919	4	114	470	494	0	90
Average			690			194

Total—For All Grades:						
February, 1923	116,738	279,457	235,934	51,389	108,872	
February, 1922	176,113	243,310	202,449	38,265	178,709	
February, 1921	200,817	243,797	189,529	38,479	216,606	
February, 1920	159,196	266,191	220,294	59,741	145,352	
February, 1919	174,763	238,228	189,173	42,937	180,881	
Average		252,885			192,300	

**Total Stocks of All Grades**

Total stocks of all grades of pulp in the mills on February 28 amounted to 108,872 tons. Mill stocks of sulphite, bleached, soda pulp, and of other than wood pulp increased during the month; all other grades decreased.

**Ratio of Stocks to Average Production**

Comparing the stocks on hand at the domestic pulp mills at the end of the month with their average daily production based on the reports covering the years 1919-1922, inclusive, the figures show that:

- Ground wood pulp stocks equal 12 days' average output.
- News grade sulphite mill stocks equal 7 days' average output.
- Bleached sulphite mill stocks equal 10 days' average output.
- Easy Bleaching sulphite mill stocks equal 8 days' average output.
- Mitscherlich sulphite mill stocks equal 5 days' average output.
- Sulphate mill stocks equal 9 days' average output.
- Soda pulp mill stocks equal 9 days' average output.
- Mill stocks of "other than wood pulp" equal 8 days' average output.
- Total mill stocks of all grades equal 10 days' average output.

**Loss of Production**

The idle machine time of grinders and digesters reported to the Commission for the month of February, 1923, is shown in the attached tabulation. The number of grinders and digesters include only those for which idle time was reported during the month. The total number of machines may include duplications because the report may count the same machine twice if idle for different reasons during the different parts of the month. The reasons tabulated for lost time are "lack of orders" and "repairs." "Other reasons" include water conditions, etc. The time lost in February, 1922, is shown by grades and reasons, for purposes of comparison. Neither the number of machines nor hours idle include idle machines and the time lost in 10 mills not in operation during the month.

**Judson G. Rosebush Gives Y. M. C. A. \$25,000**

[FROM OUR REGULAR CORRESPONDENT.]

APPLETON, Wis., April 17, 1923.—Judson G. Rosebush of the Patten Paper Co., and the Northern Paper Mills, Green Bay, contributed \$25,000 toward a \$350,000 fund to erect a new Y. M. C. A. building in Green Bay. His Rosebush's donation was one of the largest in the campaign which still is in progress. He also was one of the largest contributors toward the Y. M. C. A. building fund in Appleton eight or nine years ago. He was elected international president of the Y. M. C. A. convention in Atlantic City last summer.

**Charleston Paper Co. Increases Stock**

The Charleston Paper Manufacturing Company, of Charleston, W. Va., has been allowed to increase its capital stock from \$500 and 4,000 shares of stock of no par value, to \$500 and 4,000 shares of stock of no par value and 2,000 shares of preferred stock of \$100 each.

**Filer Fibre Installs Paper Machine**

The Filer Fibre Company, of Filer City, Mich., which is installing a Fourdrinier Kraft paper machine, has its buildings practically completed and expects to be operating June 15 next. The Filer Fibre Company has had a successful career in the making of Kraft pulp and recently decided to make the finished product.

P. P. Schnorbach is the general manager and Max Oberdorfer is the engineer and chemist, who are the active heads of the company. Both of these men are reluctant to make any rash statements as to what kind of finished product they will produce except to state that they expect to compete with all competitive northern Kraft producers in supplying to the trade an excellent sheet of paper.

Max Oberdorfer is known to the paper trade and has had extended experience in pulp and paper making—having designed several Kraft mills before becoming interested in the Filer Fibre Company.

The Beloit Iron Works machine, with a trim of 144 inches, is being installed and it is claimed by the makers of the machine and by Mr. Oberdorfer that this machine will be able to operate at a speed of 700 revolutions per minute. Nothing has been left out in the purchase of this machine.

A power plant is being installed which will be second to none for a pulp and paper mill enterprise which will contain Badenhausen water tube boilers with a high rating and the necessary turbine driven generators to furnish the electric energy necessary.

The buildings are all of steel, concrete and brick, being practically fireproof throughout.

The company is located on Manistee Harbor, so that it can procure a supply of pulpwood by water or rail. The company also has timber holdings in the Upper Peninsula of Michigan and in Canada adjacent to water transportation in addition to large holdings in the Lower Peninsula of Michigan within a reasonable rail haul to its mill.

Both Mr. Schnorbach and Mr. Oberdorfer are very enthusiastic as to the prospect for the future for Kraft paper and the development of their enterprise at Filer City.

**Wages Increased in Kalamazoo**

Approximately 3,600 men and 700 women employed in the paper mills of Kalamazoo were made happy last week by announcement of an increase in wages of five cents an hour for all male employes and three cents an hour for women. This advance, which is made effective immediately, aggregates over \$10,000 each week or between \$525,000 and \$550,000 for the year.

It was the voluntary act of the managers of the Bryant Paper Company, Kalamazoo Paper Company, Allied Paper Mills, Rex Paper Company, Kalamazoo Vegetable Parchment Company and the Hawthorne Paper Company, consideration being given that there is a tendency everywhere toward higher cost of living, a general upward trend in prices. The concerns interested in the advance operate fourteen paper mills and six coating plants.

The new scale places a minimum of 40 cents an hour for common labor, with 77 cents an hour for machine tenders, 70 cents an hour for beater engineers and 45 cents an hour each for beater helpers and paper machine fourth hands. Tour workers are on duty 48 hours a week all other male employes 50 hours a week.

Female help, those in the coating, finishing and similar departments, are advanced from 29 to 32 cents an hour, or \$16 pay for a 50 hour week.

Less than thirty days past the Standard Paper Company, Western Board and Paper Company, Sutherland Paper Company, all of Kalamazoo; MacSimBar Paper Company, Otsego, and the Eddy Paper Corporation, Three Rivers and White Pigeon, in common with about forty other manufacturers of board, reduced their weekly work schedule to five days, at the same time granting in excess of ten per cent increase in wages. Between 500 and 600 local workers were affected by this change.

## ORDERS MORE PLENTIFUL IN PHILADELPHIA MARKET

**Printers Influenced Perhaps by the Likelihood of Advances Are Ordering More Freely Than They Have Been—Orders Also Increase in the Coarse Paper Divisions of the Market—Garrett, Buchanan Co. Purchases the Recently Opened Branch of the Whitaker Paper Co. at 26 North 5th Street—Herman N. Levy Is Appointed Receiver for F. M. Rudolph & Son.**

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, Pa., April 16, 1923.—Orders for paper are coming in much more freely than they have been. Quite a few of the printers have heard that the consumer requisition for office forms, letterheads and announcements involving the use of bonds, ledgers and writings, has grown very decidedly and that many buyers who periodically during the last year placed orders for two thousand copies of an office form or letterhead are now quite as freely placing business on a ten thousand basis. Because of the close co-operation between the paper trade and the printing industry, the missionary work done by the former in preaching the story of the inevitable firmness of prices and the probability of their increase because of the steadily mounting quotations for all raw materials and as well for labor, has in turn been carried to the consumer. His orders, if not his admissions, reflect his opinion that prices are bound to increase or will not decline and therefore he has nothing to gain and may have something to lose by deferring the placing of orders or of limiting their amount to immediate necessity. In addition to this growing conviction on the part of buyers there is of course the supplemental and dominating fact that those requirements steadily are growing and that an order of a given size which some months ago would have been adequate for the near future is now consumed in so short a time as to dictate that the purchases should be of larger volume than they have been.

In the coarse paper division the market of the past week was much the same as that during the preceding save that for practically every grade increase in the frequency of order and in the amount involved was noticed. The paper stock business, both for old papers and for rags continued with but little change, the better grade moving steadily and the cheaper while not as free in sales were in sufficient demand to maintain values at the levels reached a week ago. Resumption of full time activities at the MacAndrews & Forbes plant over in Gloucester has of course widened a bit the market for stock for board manufacture. Board prices for some time have been steady in the neighborhood of \$57.50 but it is believed that very shortly an advance will be announced.

### Coarse Paper Association Assured

The one topic of interest among the coarse paper and twine dealers is the meeting now definitely fixed for the Bourse, Wednesday, April 18, at which it is expected there will be permanently organized the protective and co-operative organization, the preliminary meeting for which was reported in these columns. It is believed, too, that the new body which while a separate entity from the Philadelphia Paper Trade Association, closely will be affiliated with it, will start off with nearly a 100 per cent membership of the coarse paper and twine industry, because the needs which impel the leaders in the movement to organize, and to take action, universally are felt. While for some time the paper distributors have been complaining over the growth of a system which made the distributors really fill the function of retailers but of course on the basis of wholesale prices, the trade agreement with the printer now has remedied that condition. But in the coarse paper the demoralization was and still is far worse. To illustrate from an example of actual happening:—A house widely known and one

of the leaders in both the coarse and fine paper field took an order from one of the "paper merchants" who carry their office in their hat, agreeing to make delivery where specified. This peripatetic dealer succeeded in placing the order, of course at a cut rate with a certain organization. But it happens that the president of the paper house in question is also the treasurer of this corporation and thus it came about that as treasurer he signed a check in favor of the firm of which he is president and at a price for the paper considerably under that which the paper house itself would have been glad to have sold the paper.

### Whitaker Co. Sells to Garrett-Buchanan

But the outstanding development of the week in the distributing trade generally is the sale by the Whitaker Paper Company of its stock, furniture and fixtures of the recently opened branch at 26 North 5th street, to the Garrett-Buchanan Company. The latter company has also taken over the lease of the warehouse and will operate it as a branch of what is left of the main building on Sixth below Market streets. All the office force headed by Miss Wood, and the shipping department also will be taken over. Of the sales organization of the Whitaker Company, only B. A. Arndt will join the Garrett-Buchanan forces. F. A. Roth of the Garrett-Buchanan Company has been transferred from its headquarters to the former Whitaker warehouse in charge of the bond papers. The purchase of the Whitaker plant and stock involving a deal of approximately \$30,000 came with suddenness, and was consummated in record breaking time. It is understood that for some time the Whitaker Company has been inclined to withdraw its warehouse from this market and that the Garrett-Buchanan fire presented an opportunity. The first tender of the Whitaker stock was made on Thursday and on Saturday was consummated and a sign announcing the taking over by the Garrett-Buchanan Company swung over the Fifth street building. The Whitaker Company like the Garrett-Buchanan Company was a distributor in this territory of the American Writing Paper Company's products and in the formal announcement of sale which it sent out the Whitaker Company concludes with the statement, "This deal will enable the Garrett-Buchanan Company to give an uninterrupted service on Eagle-A papers." President Whitaker of the Whitaker Company in person conducted the negotiations leading up to the sale which, however, were concluded in record breaking time for so important a transaction. It is generally understood that the sale of the stock and lease of warehouse means the retirement of the Whitaker Company from direct sales in this field. Manager Ramsen will return to the Baltimore Division headquarters. Louis Megargee and other members of the sales organization have not yet announced their plans. By the beginning of this week the Garrett-Buchanan Company was in complete possession of the North Sixth street warehouse and its signs hung from the building displacing those of the Whitaker Company. The considerable stock of Eagle AA papers which were being carried there fit in absolutely with the stock of the Garrett-Buchanan Company.

### H. N. Levy Receiver for F. M. Rudolph & Son

Herman N. Levy was appointed during the week as receiver for the financially embarrassed paper manufacturing firm of F. M. Rudolph & Son, which operates a small mill known as the Guy or Thornedale at Thornedale, just above Downingtown. The receivership follows the filing of a petition in involuntary bankruptcy by a number of Philadelphia paper stock dealers including Infante Brothers and Alex. di Santi. On behalf of the firm its attorney announces that the embarrassment is only of temporary character, that its assets are several times its liabilities and that he is confident that its financial problem can be solved. The Rudolph Company for several years has been making sheathing and gray indented papers. The plant is the old mill of James F. Guy & Sons which dates back to about 1842 when it was established by James Guy on a ninety acre tract and long was known

for its production of heavy wrapping paper. It was operated recently by the Shortsville Company and then was taken over by Mr. Rudolph who is spoken of as an expert paper maker and who operated it on a modest scale. His attorney alleges that as a result of a real estate transaction a New Yorker secured a judgment, there being no funds at hand to meet a note for a commission and that thereupon the proceedings in bankruptcy were instituted. In its equipment there are two beaters, a Jordan and a sixty-inch cylinder, water and steam being used for operating power and with a capacity of five tons every twenty-four hours.

#### Printers Praise Paper Men

The very cordial relations between the fine paper distributors and their chief patrons, the printers, again were voiced publicly on Tuesday afternoon of last week at the bi-monthly meeting of the Typotheta of Philadelphia held in Kugler's Cafe and of further direct interest to the trade because of the presentation, in the ranks of the newly elected member of two paper firms, the Whitaker Paper Company, 26 N. 5th street, and the Curtis & Brother Company, 16 S. 5th street. The speaker was William Sharpless, chairman of the Trade Relations Committee of the Typotheta and at one time its most ardent advocate for the peremptory adoption by the paper distributors of the "Long price list." As a result of the conferences, there was evolved a better understanding and a reciprocity agreement which has operated to the complete satisfaction of both parties at interest and has brought about a finer relationship than ever before existed. In his address Mr. Sharpless said that many months now had elapsed since the working agreement was entered into and that there had not been by the paper distributors the slightest infringement of their promises nor even an approach to a violation of agreement. He impressed on his printer associates the fact that while in the past there had been misunderstandings and while the paper men had been looked on as a class who seemed determined to take advantage of the poor printer at any cost, actual experience had demonstrated that the paper distributors "are and I believe always have been as anxious to give us printers and other of their patrons, as square a deal as we give to our customers. I know of nothing that ever has taken place in our relationship, so important to both of us as this agreement. I am sure that it has done a vast amount of good to all concerned and that the principles on which it is based now are so firmly embedded in our practices that they will continue."

#### J. H. Sinex to Dine Business Family

So appreciative is President John H. Sinex, head of the Garrett-Buchanan Company, of the splendid services and wholehearted cooperation of his business family during the trying period of the disaster, Palm Sunday afternoon fire and thereafter, that it is proposed to give them a testimonial dinner. Edward James Cattel, former City statistician, now Field Secretary of the Convention Committee of the Chamber of Commerce, and a boyhood friend and schoolmate of President Sinex, has been asked to make an address at the function to be held in the near future.

#### W. H. George with Ward Co.

William H. George, one of the best known of the fine paper salesmen in the city, and who during his third of a century of experience in it, has developed a large clientele, during the week accepted a position on the sales organization of the D. L. Ward Company, having resigned from the employ of the Whiting-Patterson Company. Mr. George began his services in the paper trade in 1886 with the old firm of Irwin N. Megargee & Co. which subsequently became the Megargee-Hare Company, continuing with it for fifteen years. He then established himself in the paper brokerage business, specializing on direct mill shipments and maintaining an office for about sixteen years at 1011 Chestnut street. Two years ago he joined the Whiting-Patterson organization, specializing on book papers. E. J. Hamilton, who was on the coarse paper sales force of the Ward Company is now representing the Whiting-Patterson Company.

#### Eagle Lodge to Make Unusual Demand

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., April 18, 1923.—A rather unusual demand is being framed by Eagle Lodge Papermakers to present to the manufacturers at an early date, in that a guarantee of four days a week to skilled help is to be asked during the slack period. Just how the manufacturers are to provide work when orders are not forthcoming is not stated.

This demand and a demand for a 10 per cent increase in wages and the elimination of Saturday night and Sunday work will be presented at a conference which it is proposed to hold with the manufacturers at an early date. The skilled help are held to include the machine tenders, the back tenders, beater and washer engineers, and first helpers. The action of the papermakers will be reported to the session of the Allied Paper Trades Council at their meeting Sunday.

The manufacturers were not all agreed on the 10 per cent advance made a few weeks ago but it is understood that one large firm had determined to make the increase anyway and after a meeting of the manufacturers they all decided to advance together. The case for the paper manufacturers will be handled by Adam Wilkinson, labor commissioner for the American Writing Paper Company. Other unions are watching the outcome closely as it is figured that if the skilled help get their advances, advances will be asked for from the steam engineers, millwrights and other trades connected with the industry.

#### Bryant Paper Co. Hastens Building

Building operations at the new Central Power plant of the Bryant Paper Company are being speeded up in an effort to make up for numerous delays occasioned by the inclement weather during the latter half of March. The heavy reinforced concrete superstructure is practically completed, with the exception of putting in the upper floors. The work of installing the steel sash should begin at an early date. The general building contract is held by H. L. Vanderhorst, of this city.

V. D. Simon, Chicago, industrial engineer in general charge of working out the complete campaign of improvements as adopted by the Bryant Paper Company, reports that all equipment for the power plant is under order for early shipment. The boilers and coal bunkers are being assembled. Installations of this equipment should begin shortly.

When placed in operation this power plant will supply steam to mills Nos. 1, 2 and 3 of the Bryant division, electric power to the Superior and Imperial divisions and low pressure steam to the Superior, permitting the discontinuance and removal of four divisional boiler plants.

The next step is to be the electrification and modernization with greatly increased capacity in the Superior division, the final details of which are now being developed. The nature of this improvement and other improvements planned to follow in the Bryant Milham divisions will be announced at a later date.

#### Viscose Co. to Start at Nitro

[FROM OUR REGULAR CORRESPONDENT.]

NITRO, W. Va., April 16, 1923.—Viscose Company is about to begin the operation of its plant here. The general offices are at Marcus Hook, Pa.

It is said that the company's machine is the largest of its kind in the world. It is a three mold dry pulp machine, built by the Moore & White Company, of Philadelphia. In any event the felts which are being furnished by the Albany Felt Company of Albany, N. Y., are the longest of their kind that have ever been seen in this country.

The Viscose Company plans gradually to increase the size and capacity of its Nitro plant until it has at least a three-machine mill.

## EL-NORA LEE PAPER CO. TO MAKE KRAFT AND BOOK

**Will Develop Hopper Property at Howlandsburg by the Installation Immediately of a Paper Machine—Western Papermakers' Chemical Co. to Establish Sales Offices in England and Germany—Watervliet Paper Co. Orders Electric Equipment and Drive for Its Paper Machines and Will Install 80-inch Super Calender Stack and Rebuild 80-inch Coating Machine.**

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., April 16, 1923.—The El-Nora Lee Paper Company, of Kalamazoo, authorized capital \$600,000, has filed articles of incorporation with the secretary of state, announcing as its purpose the manufacture of kraft and book papers.

The incorporators are Irving Hopper, formerly general superintendent of the Kalamazoo Stationery Company; his wife, Elnora Lee Hopper, and R. C. Goembel, attorney.

The latter announces that the plans call for the development of the Hopper property at Howlandsburg, a point about three miles north of Galesburg.

"The El-Nora Lee Paper Company has been incorporated with an authorized capital of \$600,000 of which \$300,000 has been paid in cash and property," said Mr. Goembel. "We own 55 acres of land at Howlandsburg, while there are several buildings on the property, including the flour mill, at that point. There is good water power available. We have developed 300 horsepower to date and can increase that to 900 horsepower. Our pond site covers 45 acres.

"The flour mill is a large structure and can be converted easily to the needs of a kraft mill. Our immediate plans, in addition to installing a paper machine and equipment, include the erection of a filter plant. We don't think we will have to do much to the present buildings to make them suitable for our needs.

"There is no kraft paper manufactured in the Kalamazoo valley and a mill making that product merely increases the general line."

Howlandsburg is off a railroad line, being three miles north of the Michigan Central, at Galesburg, and about a mile from the Michigan Railway (electric), which runs through Yorkville. Mr. Goembel said that they had considered the matter of rail connections and have also studied the advisability of trucking their product to Galesburg and Kalamazoo.

### Chemical Co. to Invade Foreign Field

The invasion of foreign trade fields, the establishment of sales offices in Manchester, England, and Hamburg, Germany, and the successful marketing of rosin size for paper making, are among the notable accomplishments of the Western Papermakers' Chemical Company during the past twelve months.

William J. Lawrence, vice-president and general manager of the concern, during the discussion of the expansion of his company's export trade, remarked: "We have come directly into competition with the cheap labor of Europe and successfully combatted that obstacle, through the efficiency of our raw material facilities in the south, also through our superior methods of manufacture.

"We have been able to offer our products in Germany as a substitute for products formerly used there, giving better results to paper makers. Our organization has through tireless effort perfected methods of manufacturing rosin size and refining rosin by chemical control of the raw material.

"The existence of widely different chemical properties in rosin have long been recognized. By our refining methods we have been able to develop properties best adapted to rosin sizing in the paper industry, at the same time eliminating those properties not desirable."

Rosin refining was demonstrated the past week at the paper exhibit, given in connection with the annual meeting of the American Pulp and Paper Association, held in New York City. This was done by means of a very handsome model of a rosin refining plant, all units working perfectly and showing the process of handling this product, from the time the raw rosin is received at the plant until the final step in the production of the finished commodity.

This model plant will be installed in the company's local laboratory and used here in later demonstrations.

At present the Western Papermakers' Chemical Company is engaged in the erection of a model 100 barrel a day rosin plant at Savannah, Ga. This should be in production in 60 days. Similar plants, previously established at Pensacola and Jacksonville, Fla., have been overhauled and improved to the extent of increasing their capacity fully 25 per cent. The local concern will be able to draw raw rosin gum from the three leading production centers of the country, insuring a practically unlimited supply.

Another trade expansion step taken by the local concern during 1922 was to assume general sales management of the product of the Crystal Chemical Company, Summitsville, Ind., manufacturer of silicate of soda. The Indiana plant has a capacity of about two tank cars a day. This is marketed in connection with the rosin size, satin white and numerous other products of the Western Papermakers' Chemical Company.

### Orders Electric Equipment

The Watervliet Paper Company has ordered electric equipment and drive for its paper machine and expects delivery of the same in the next 60 days. This is part of an extensive program, looking to a general rehabilitation of the concern's power and production machinery.

The single cylinder uniflow engine, product of the Allis-Chalmers Company, Milwaukee, is in operation and working to perfect satisfaction of the management. Rated at 1,500 horsepower, it can easily develop 2,250 horsepower without danger. It is a very large engine, weighing 210,000 pounds, being one of the largest individual units in the Kalamazoo valley district. To properly set this power leviathan, it was necessary to build a reinforced concrete base, 25 by 39 feet in dimensions and eight feet thick. Direct connected to the steam engine is a 1,000 k.w. Crocker-Wheeler generator.

Other improvements to the mill equipment include the installation of an 80 inch super calender stack and the rebuilding of an 80 inch coating machine. The jordon engine is now electrically driven.

### General News of the Trade

The River Raisin Paper Company, Monroe, reports for 1922 a net profit of \$261,201 from total sales of \$7,242,764. Gross assets, as of December 31, 1922, were \$9,146,116 against \$9,096,903 for 1921 and \$10,684,178 for 1920. Current assets were \$1,079,070 and current liabilities, \$473,400, compared with \$883,601 and \$620,084 respectively for 1921. The company's surplus had increased from \$1,094,475 to \$1,375,766. The stock of this concern is now quoted on the Detroit Exchange.

The Bryant Paper Company is building a garage, 22 by 140 feet in dimensions to accommodate cars of its employees.

The Sutherland Paper Company is now running full capacity in all departments. The latest addition to the converting department, 150 by 60 feet in dimensions, one story, is of brick, concrete and steel sash. It is equipped with a battery of cutters, shapers and pasters and has a large capacity of small cartons.

### To Receive Envelope Bids May 2

The Post Office Department has announced that it will receive bids on May 2 for envelopes for the departments of the government for a period of one year beginning July 1, 1923. Specifications call for millions of various kinds of envelopes.



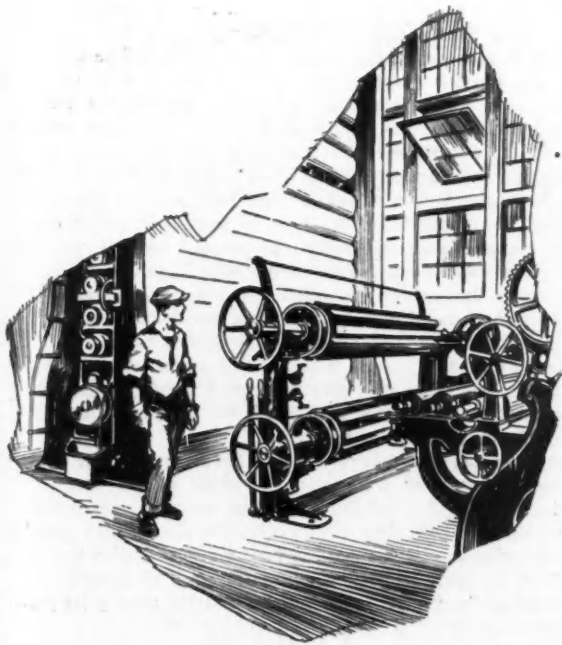


# The Peer of all Winders

THE *Beloit Double-Drum Winder No. 87-B* portrayed here is popularly regarded by the trade as the peer of all winders.

It is built for high speed and is successfully "keeping out of the way" of machines operated at over 1100 feet a minute. Its simplicity, ease of operation and dependable maintenance have won for it the unqualified support of the world's leading mills.

*We have a special information blank, which, when filled in by you, will give us a working basis for estimating your winder needs. Send for it—there's no obligation.*



**Beloit Iron Works**



**Beloit, Wis., U. S. A.**

## PAPER STOCKS NEGLECTED ON MONTREAL EXCHANGE

**Lack of Interest Is Considered Specially Surprising in View of the Fact All Records for Production and Consumption Will Almost Certainly Be Broken This Year—Quebec Government to Charge a Royalty of 50 Cents a Horse Power for Electricity Exported from the Province—New Departure Is Forecast in the Manufacture of Blotting Paper by the Forest Products' Laboratories.**

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., April 16, 1923.—What is characterized here, as one of the marvels of the street, is the neglect of the paper stocks on the Montreal Stock Exchange, particularly in view of the news which filters in concerning the general prosperity of the industry and certainty that all records for production and consumption will be broken this year, with the prospect that most companies will show very good earnings.

The recent statement of the International Paper Company may have had a depressing effect in some quarters but it is pointed out here that the big corporation is in a very different position from most of the big Canadian corporations, which confine their operation exclusively to news print. International has lines of paper production which have not attained the prosperity of the news print branch. It has also had an enormous war-cost wood pile which had to be written down, and this, no doubt has now been completed with the announcement of last year's deficit. This company is also handicapped as many of its older mills in the cost of getting supplies of raw materials, and it is only a matter of time when they will have to be scrapped or devoted to other purposes.

Possibly one of the reasons why the increasing prosperity is not reflected in the prices of the paper stocks is the certainty that the question of higher wages will shortly be up for settlement. So far Canadian producers have been averse to raising prices, believing that the best interests of the industry lay in keeping the price at the lowest possible point commensurate with costs of production.

This, of course, has been pleasing to the consumers and at the same time tends to restrict overseas production which is usually attracted by high prices. It also has a tendency to discourage the organization of new enterprises until such time as the present production indicates its inability to meet the demand.

If, however, the cost of production increases in Canada to any marked extent Canadian producers might have to revise their attitude.

### Royalty on Export of Power

The principle of charging a royalty of fifty cents a horse-power for electricity exported from this Province has been laid down by the Quebec Government and will be put into effect for the first time in connection with the development of the rapids at headwaters of the Quinze which will be leased by auction sale in this city on April 25 next.

The imposition of this royalty will not, for the present at least, affect any water powers which have been leased in the past but it is understood that now that the precedent has been created in the case of the Quinze River it will be applied with regard to all powers which are leased in future.

The upset price for the leasing of the Quinze River rapids is an annual rent of \$8,000. The company leasing the rapids will be bound by contract to pay fifty cents a horse-power and to develop at least 20,000 horse-power in four years.

This will net the Government \$18,000 a year at the end of four years and should all the power developed be exported out of the

province, it will mean with the new levy an additional revenue to the Quebec treasury of \$10,000.

### Export of Pulp from Nova Scotia

Opposition members in the Nova Scotia House of Assembly are pressing strongly for the revoking of the Order-in-Council by which the Oxford Pulp Company of Rumford Falls, Maine, is allowed to export pulpwood without first manufacturing it from its six hundred thousand acre lease of Crown Lands in Northern Inverness and Victoria Counties, Cape Breton.

The lease was originally made in 1859 for the term of thirty years, with the stipulation that the pulp should be manufactured in Nova Scotia. The lease was changed in 1901 to one for ninety-nine years and an order-in-council was passed to allow the exportation of the wood without manufacture.

### Wood Pulp Will Make Blotting Paper

An entirely new departure in the manufacture of blotting paper is forecast by the Forest Products Laboratories of Canada (Dominion Forestry Branch), Montreal, as a result of an investigation recently carried out in their experimental paper mill. The best grades of blotting paper have, hitherto, been made from rag pulp, but the laboratories have succeeded in producing a paper with excellent absorptive powers entirely from wood pulp. The interesting feature of the new paper is that it contains a large proportion of pulp made from a wood which, although plentiful, has found little employment in the pulp industry of Canada.

### Filer Fibre Co. Now Running

It has been reported recently by several newspapers that a general strike was declared at the pulp mill at Filer City, Mich., owned and operated by the Filer Fibre Company.

There was a certain class of men at the Filer Fibre Company plant that asked for more wages and they walked out. In order to give time to this certain class of men for negotiations, the mill was shut down and the balance of the crew were given employment in the construction of a new paper mill and outside work. At no time was there a general strike declared. After six days of shut down, the men agreed to come back and the mill is now running. Everybody is satisfied as to the wage scale and hours.

One of the officials stated that for two and one-half years the price of domestic chemical pulp has not made it possible for manufacturers in this country to realize cost out of their product as the Swedish chemical pulp has been sold and delivered at far below the cost of manufacturing pulp in the United States.

The Filer Fibre Company, realizing that it was not going to be able to continue in the pulp business alone, is building a paper mill in conjunction with its pulp mill, which will consume a large portion of the capacity of the pulp mill.

The paper mill should be in operation before the Summer is over and the prospects for kraft paper are bright at this time.

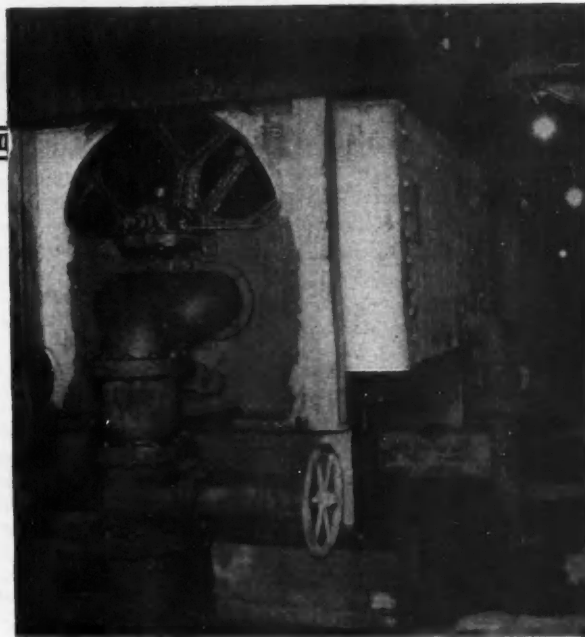
It is further stated that the news print manufacturers certainly made a mistake when they did not allow the placing of a duty on chemical pulps because if there had been a reclassification and duty placed on all kinds of pulp, with the exception of ground wood, it would have helped the paper business and the news print paper producers as well.

### Paper Trade Journal Boston Office Burned

[FROM OUR REGULAR CORRESPONDENT.]

BOSTON, Mass., April 16, 1923.—The Arco building at 127 Federal street, in which is located the New England office of the PAPER TRADE JOURNAL, was damaged by fire to the extent of more than \$8,000 last night.

The fire gave the firemen a stubborn battle for more than two hours. The PAPER TRADE JOURNAL office is located on the third floor.



# *The Philadelphia Paper Mfg Co.* *says*

"We are getting very satisfactory results from this Bird Save-All (illustration above) and expect to install an additional one this year"

*Ask for Catalog*

**BIRD MACHINE COMPANY**  
SOUTH WALPOLE  
MASSACHUSETTS

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

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

# *The* BIRD SAVE-ALL

## PAPER DEMAND IN TORONTO IS SOMEWHAT LESS ACTIVE

**Unseasonable Weather Thought to Be Responsible in Part for the Falling Off in Orders—News Print Continues in Very Active Demand—A. E. Wicks, President of the Hawk Lake Lumber Co. of Monteith, Says There Will Be No More Unsold Pulpwood Piled Along the Transcontinental Railway Either East or West of Cochrane by June 1—Conducts Wood Operations in Ontario.**

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ont., April 16, 1923.—Business in the paper line has for some reason or other suffered quite a slump during the past few days and jobbers report that April trade so far has been below normal. The backward spring weather is held to account in part for the falling off of orders. Tissue mills report that orders are fewer than they have been for some time but the demand for toilet papers keeps up well. News print is in active demand.

There was talk for several weeks of an advance in prices in flat papers but, as this has failed to materialize, it is now felt there will be no change in quotations for some time. Manufacturing stationers and envelope plants are fairly busy. Coated paper mills report but little change in conditions. The two machines of the Fort William Paper Company are now in operation and when they are running to capacity, the output will be about one hundred and sixty tons daily of news print. The Spanish River Pulp and Paper Mills are working to the utmost. The organization during the past season succeeded in cutting its entire supply of about three hundred thousand cords of pulp wood for the current year and is now awaiting the spring break-up.

### Great Lakes Co. Accepts Power Pact

Negotiations, which have been in progress for a long time between the Ontario Government and the Great Lakes Pulp and Paper Company, of Port Arthur, having as their objective the securing of the company as a power consumer from the Nipigon Hydro system, have arrived at a successful conclusion. The new agreement provides for the annual sale to the company of ten thousand horse power of electrical energy at eighteen dollars per horse power. The conclusion of the covenant marks the end of a matter of long controversy. The agreement states that the Great Lakes Company must take power not later than June, 1924, and the company's original concession also provides that \$400,000 expenditure shall be made upon its plant during the present year. The exact location of the industry is not yet definitely fixed, being a matter of competition between Port Arthur and Fort William. The consummation of the arrangement with the Great Lakes Company is of particular importance as the \$180,000 in revenue, which the deal will yield annually, will go to reduce the annual deficit of \$300,000 which the Nipigon system is at present incurring. The Great Lakes Company will spend several million dollars in the erection of a new pulp and paper plant, which project has long been held up owing to the dispute over the power problem.

### Putting Up New Rossing Plant

The Hawk Lake Lumber Company, of Monteith, will ross 25,000 cords of spruce pulpwood this summer and ship it out, in addition to some 10,000 cords, which it now has ready to ship. A. E. Wicks, president of the company, says that by June 1 there will be no more unsold pulpwood piled along the Transcontinental railway either east or west of Cochrane, Ont. The Hawk Lake Lumber Company, which some time ago secured a pulpwood concession from the Ontario Government, is erecting a rossing plant at Wasach, forty-five miles west of Cochrane and is installing a Canadian barking

drum. Twenty thousand cords now in the river at Wasach will be rossed.

### Hammermill Co. Busy in Ontario

An extra provincial license was recently granted to the Hammermill Paper Company, of Erie, Pa., to manufacture, sell and deal in paper products, pulp and pulpwood in Ontario and to invest a sum not exceeding five hundred thousand dollars in the operations in the Province. The Hammermill Company, which conducts extensive pulpwood operations in the Port Arthur district, has contracted for about eighty thousand cords this year to be delivered during the coming season of navigation, f. o. b. vessel. A large proportion of this wood has been purchased from jobbers but the company has acquired some fifteen thousand cords from settlers. The company state that last winter was the best one experienced in woods activities in a number of years. Contractors went through the whole season practically without a break and all were able to take out their entire cut.

### Ground Wood Plant Resumes

The Cornwall Pulp and Paper Company's plant at Cornwall, which was acquired some time ago by the Glengarry Pulp Company, in which Toronto capital is interested, is once more in operation after being shut down for a long time. A number of improvements have been made to the mill by the new company and the output is about thirty tons a day of ground wood pulp. Large quantities of wood are being received which will keep the grinders working at capacity.

### Notes and Jottings of the Industry

H. A. Goldsbrough, late of the London, Eng., office of the Hodge-Sheriff Paper Company has come to Canada and is now attached to the sales force of the headquarters of the firm in Toronto.

S. F. Duncan, of Toronto, Treasurer of the Provincial Paper Mills, paid a visit during the past week to the new mill at Port Arthur and reports that everything is running smoothly.

H. M. Thorne, secretary-treasurer of the Canada Paper Company, Montreal and Toronto, who has been spending a holiday in Bermuda, has returned home.

James T. Venables, of Montreal, Canadian representative of Charles W. Williams & Co., paper dealers of New York City, was in Toronto last week calling upon the trade.


C. E. French, who for the past two years has been on the Toronto sales staff of the Howard Smith Paper Mills, Montreal, has been appointed export representative of the firm and will shortly leave on an extended visit to several foreign countries. He will be succeeded in Toronto by Arthur Hobson, who for some time has been the Winnipeg representative of the Howard Smith Mills.

At the last regular meeting of the Toronto Carton Club there was a good turnout of members and trade prospects were discussed for the coming season. Among the visitors were John Small of the Guelph Paper Box Company, Guelph, and Duncan McDermott of the Somerville Paper Box Company, London, Ont.

Under the direction of F. W. Fisher, of Toronto, a campaign in the interest of safety is being carried out among the employees of the various plants in the paper box line. A committee has been appointed to receive suggestions with a view to keeping accidents down to the minimum.

Harold F. Bullard has been appointed general manager of the Dryden Paper Company, of Dryden, Ont., succeeding J. B. Beveridge, who recently resigned, and has entered upon his new duties. For ten years Mr. Bullard was in the service of the Laurentide Company, at Grand Mere, Que., and during the last five was purchasing agent for the company.

The annual meeting of the Canadian Paper Box Manufacturers' Association will be held at the Clifton House, Niagara Falls, Ont., on June 25 and 26. S. J. Frame, of Toronto, is secretary-treasurer of the Association and it is expected there will be record-breaking attendance at the gathering.



## If You Do Not Want to Make Better Pulp and Paper Skip This Advertisement

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If you are interested in improving your product, in making exceptionally clean pulp and paper, and increasing the efficiency of the paper making process, we have something to tell you.

P. A. P. A. Rotary Screens will make better paper and increase the efficiency of your plant. They can be placed directly on the floor, are easily and quickly erected and require no special foundation. They are of simple, rigid construction, with long lasting screen plates and are noiseless in operation. *They have no shaking parts, foaming is eliminated, and they require little power.* They are, in fact, *the first successful inward flow rotary screen on the market.*

A letter will bring you full information regarding them.

### Valley Iron Works Company

Plant: Appleton, Wis.

New York Office: 350 Madison Ave.

## HUMMEL-ROSS BUILD MODEL MILL AT HOPEWELL

The Hummel-Ross Fibre Corporation has under construction, and partially in operation, an interesting mill located at Hopewell, Va. The plant is designed for a capacity of 100 tons per day of kraft pulp and paper, but the first installation will produce only half that quantity of paper. Fifty tons of strong pulp per day are now being produced and marketed, and it is expected that during May of this year, part of this tonnage will be converted into paper in the paper mill now approaching completion, and soon after that period the pulp production will be increased to 100 tons per day, the surplus of which will be marketed.

### Pulp Mill Laid Out on Broad Lines

The pulp mill was laid out on broad lines, with a power plant capable of taking on the additional load incident to the increasing capacity, and the whole plant has been carried out in a way that reflects credit on the enterprise, that bids fair to become as important a factor in the sulphate paper field, as is the Hummel & Downing Company's property at Milwaukee, Wis.

J. P. Hummel, formerly the head of the Milwaukee concern, is president of the new organization, which is an assurance that it will be a strong factor when the development plans are carried to maturity. For several years Mr. Hummel has been looking to the south for a field of endeavor, and the combination of plentiful wood supply, water transportation to New York and other Atlantic Coast points, and healthful climate and beautiful situation, convinced him that the cellulose plant of the DuPont Company (a war by-product), and the enormous lakes of nitre cake left in its wake were added inducements to locate at Hopewell, Va.

The Hummel-Ross Fibre Corporation has employed Joseph H. Wallace & Co., of New York as its engineers, and an examination of the plans of development, and the work already completed, will be of interest to paper makers who have an opportunity to visit the plant.

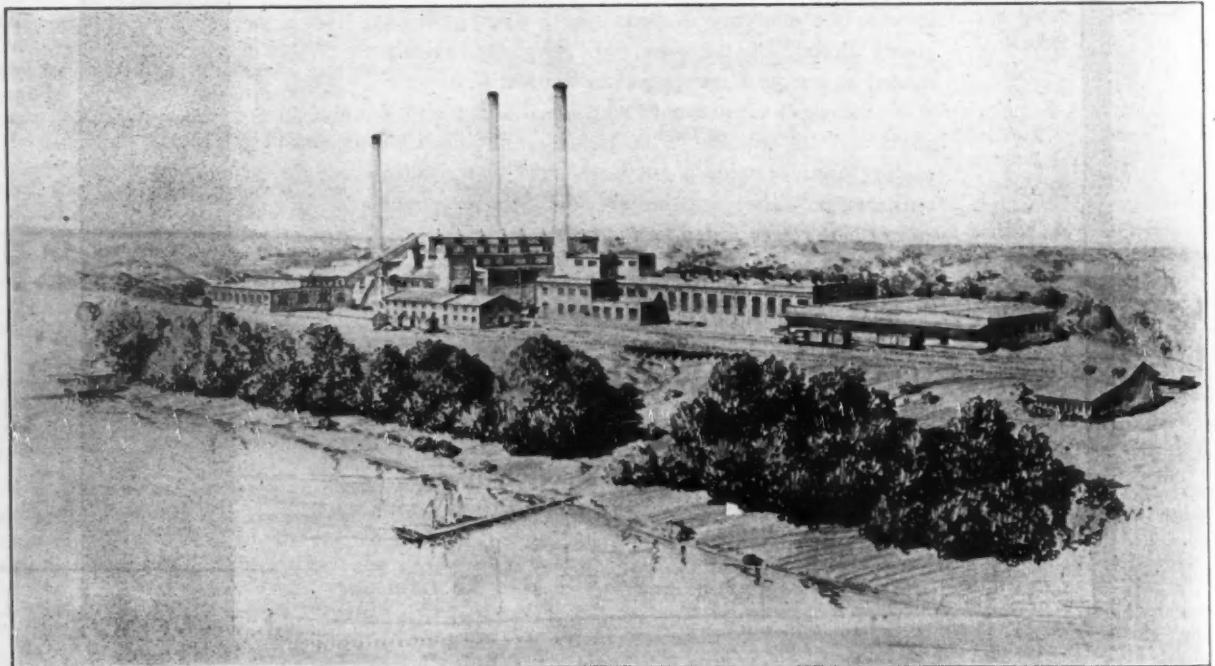
Approaching, as one does, from City Point—historically of in-

terest as General Grant's base in the Civil War campaigns of the Wilderness—the office, as first reached, is attractively located, overlooking the James River from the high plateau on which the plant is located.

### Paper Mill Designed for 100 Tons of Kraft Per Day

The paper mill is beyond, on the right. This is designed for the production of 100 tons per day of kraft wrapping paper. It is now equipped for half of this production, while provision is made for the installation of a second machine and the extension of the finishing building in two directions—practically duplicating the present arrangements symmetrically along the longitudinal axis of the buildings. The building, exclusive of the finishing room, is 343 ft. in length, and will eventually be 135 ft. wide at the wet end. It is now constructed 87 ft. wide, with temporary siding and full length, providing for the future installation. Ninety feet of this length is a two story section, having in addition a monitor story 18 x 55 ft. in area.

Slushed pulp is delivered to two 8' Green Bay Thickeners in this monitor story, from pumps in the Digester Building; the white water flowing back to the new save-all house by the digester building. The stock falls by gravity to a 16 ft. agitator tank immediately beneath the thickeners and above the beater floor, from which it is delivered as required at the proper consistency to the beaters on the floor below. Four 67 x 60-inch roll, best type high speed Jones beaters are suitably arranged about this tank and individually driven by belts from 125 HP motors on the basement floor, below. On the beater room floor are also four large size Horne Jordans, and the superintendent's office. These Jordans are direct-connected to 250 HP synchronous motors, and so connected by their flow boxes and piping that any combination in series or parallel may be employed. This arrangement permits of maximum modification of the stock to meet requirements.



PLANT OF THE HUMMEL-ROSS FIBRE CORP., AT HOPEWELL, VA.

# Van-Stoning

## BYERS PIPE

### GENUINE WROUGHT IRON

**O**VER six years ago, the Byers Company conducted experiments which showed conclusively that Byers Genuine Wrought Iron Pipe was capable of being Van Stoned. But the proper equipment was lacking for doing the work on a commercial basis.

Enterprising pipe fabricators, who for some time had been cognizant of these facts, then undertook to design and construct such equipment.

We now take pleasure in announcing that these efforts have been entirely successful, so that Byers wrought iron pipe is now being easily, quickly, and satisfactorily Van Stoned. The strength of the joints leaves nothing to be desired.

Through this new development, power and industrial piping specifications calling for Byers Genuine Wrought Iron Pipe, Van Stoned, are now being filled promptly and at an economical cost. Information and prices on request.



*Byers  
Genuine Wrought Iron  
Van Stoned Pipe*

## A. M. BYERS COMPANY

PITTSBURGH, PA.

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### The Beater Room

On the floor below the beater room, at an elevation approximately ground level, are four 12-foot diameter x 24-foot horizontal wood-stave stuff chests with agitators, and also the necessary tanks and equipment for sizing material. The four beaters are spouted to two of these chests, from which the pumps deliver to the Jordan; and from thence the flow is to the other stuff chests, from which it is pumped to the screens.

The basement floor under the beater room, not covered by the stuff chests, is extended beyond the 90 ft. length of the beater building for 72 ft. additional. On this floor are located the stuff pumps, couch save-all, blower fan, paper mill engine, and other pumps and necessary accessories of the paper machine. The machine floor, under which there is no basement, is 6 ft. above this floor, and open across this section to the engine room. The machine room proper is 252 ft. long and 50 ft. wide as built, with provision for extending the clear span roof trusses and the traveling crane for a width of 78 ft. providing for the second machine, with ample space between.

The machine is a Downington Fourdrinier, trimming 120." It is equipped with two P. A. P. A. Spangenburg Screens, 25" suction couch roll, one suction press, and two ordinary presses with top rolls of stone, 38 48 inch x 130 inch driers, four felt and one lead drier, one stack of calenders, English type reel and Warren winder.

Farnsworth system of return condensation is employed, apparatus being in two pits at rear of machine; all condensation from this and the engine room returning overhead to the feed water heater in the Power Building.

### The Machine Room

The machine room is spanned by a 10-ton traveling bridge crane, and provision is made for handling product through large doors to the finishing room by a light crane at end of the machine. There is a clear head room under trusses of 24 ft. and 19'6" under the crane. The hood is of asbestos mill board, being framed in the truss. Five 5' ventilators pass through the roof from the hood. The ducts of the fan ventilating system pass through the trusses and distribute outside the hood under the roof, which is of gypsum slab. The room is well lighted by large fixed Fenestra sash, and every consideration for a clean, free operation of the machine is provided.

There is a 6 ft. x 8 ft. electric elevator at the end of the passage communicating with the beater room and the ground level floor of the basement under. Stairways of easy access connect the engine room floor and beater room with the machine floor.

These buildings are of brick and structural steel, with concrete sub-base, all of attractive exterior appearance, and completely painted inside in white.

The finishing room, at the end of the machine room, is of brick and timber construction, 90 x 125 ft. wide, with temporary end wall and temporary side for future extension in two directions. There is a loading platform along the side where the spur track runs the entire length of the paper mill. This room is of 16 ft. head room, and well lighted. The machinery in this room consists of a Hamblett Duplex Cutter with Erie Layboy, a Cameron Rewinder, and a Seybold Trimmer. Additional equipment will be installed as the trade demands require.

The building is not only for paper storage, and for use as a shipping room, but will house the machinery for rewinding, sheet cutting, and manufacture of counter rolls, automobile tire wrapping, gummed tape, etc.

While the paper mill represents entirely new construction, alterations in the pulp mill section have resulted in economies and increased production that have been most gratifying to the officers of the company.

### The Power Plant

The boiler house, just beyond and in line with the paper mill, is equipped with four 600 HP Edgemoor boilers, and complete coal handling equipment. By replacing unsatisfactory stoker equipment with Riley extra long retort stokers and suitable fan equipment, and rearranging the baffle construction in the boilers, they are now being run at 200 per cent of rating, while 300 per cent was readily obtained on peak demand. This enables the 100 ton pulp mill to operate on two units, while the 50 ton paper mill on the third leaves a spare boiler.

The power plant, adjacent to the boiler house, contains one 750 KW non-condensing turbine, the exhaust of which is used on the pulp drying machine and the multiple-effect evaporators of the liquor recovery. In addition there is a 600 KW Allis-Chalmers condensing turbine, and the usual power plant accessories—feed water heater, boiler feed pumps, etc. On the turbine floor is the switchboard, recently added for the paper mill equipment.

It is the intention of the company to purchase a part of electrical power from the Virginia Railway and Power Company, whose lines extend into the company property. This is provided for by an outside sub-station with transformer capacity of 3,000 K V A. the secondary current being distributed from the regular switchboard.

### Digester Building

The digester building, beyond the power house, has two units of four digesters, each 8 ft. x 25 ft. These digesters were from the DuPont Hopewell units for cotton purification. By fitting them with suitable false bottoms and installing external Morterud Heaters for circulating liquor, the output per cook was increased over 25 per cent—although partially due to improvements in the chip size and better charging. Production is now over 50 tons per day on a single unit of four. This pulp is run on a Downington Machine in adjacent building, and marketed 85 per cent dry. The second unit of four digesters will supply the paper machine.

The water supply is from two wells, the James River and city mains. The pump house is located at the foot of the bank on the river shore. The recent installation of tanks and savelalls has affected a saving of over 50 per cent of water by re-use, and the return of over 3 tons of pulp per day formerly passing to waste with the water. The use of city water has been almost entirely eliminated.

At the end of the digester building is the evaporator room with four Zaremba evaporators, used in triple effect, and on a gallery alongside digesters are twelve settling tanks for causticized liquor.

### Recovery House

The recovery house, beyond the digester building, contains four units each of smelters, rotary incinerators and disc evaporators with dissolving tank. An interesting feature of the process here is the addition of salt cake in solution to the black liquor before evaporation, instead of as solid in the smelters. The DuPont manufacture of explosives here left a war accumulation of nitre cake in two large deposits, or lakes as they are termed. This was an attractive feature in locating this plant here, representing as it does, a supply of salt cake for an indefinite future.

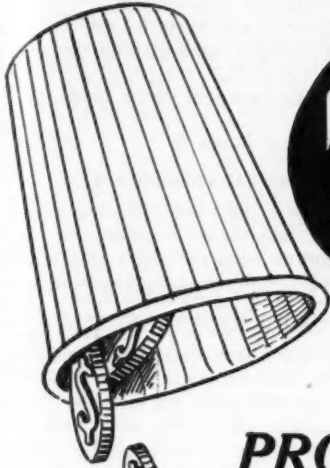
The leached solution from this deposit is pumped to the chemical house, where the excess acid is neutralized by soda ash; it is then in suitable condition to be added to the black liquor as sodium sulphate in solution; when the smelters are reached, conversion takes place the same as if added at this point.

At the rear of the recovery house are two liquor causticizing tanks, the settling tank being in the digester house, as mentioned. The intended installation of Sludge Filters will effect a saving, and convenience at this point.

The wood room is located at the top of the river bank, immediately opposite the digester building. The wood—short leaf

(Continued on page 34)





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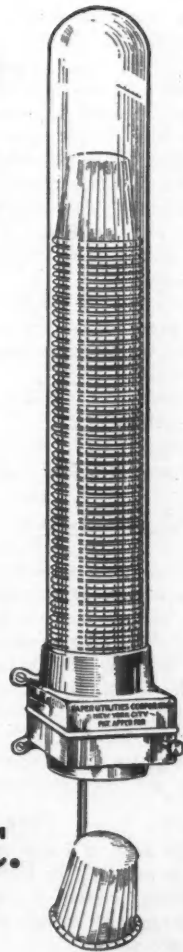
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## Trade Mark Department

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

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

**PATRICIAN**—No. 172,554. Peninsular Paper Company, Ypsilanti, Mich. For cover paper.

**SYRACS BRAND**—No. 174,112. Schmeer's Paper Box Company, Syracuse, N. Y. For paper boxes.

**ROVER**—No. 175,272. Rushmore Paper Mills, Inc., Brooklyn, N. Y. C. For toilet paper and paper towels.

**SECURITY**—No. 174,319. Geo. W. Millar & Co., Inc., N. Y. C. For wrapping paper.

**SMITHSONIAN**—No. 175,219. The Smith Tablet Company, Inc., Holyoke, Mass. For writing paper and mailing envelopes, papeteries, tablets, pads, books, and folded and ruled papers.

**CHARTER**—No. 174,555. The Cincinnati Cordage & Paper Co., Cincinnati, O. For writing paper.

**B W**—No. 172,142. Byron Weston Company, Dalton, Mass. For writing paper.

**HYLO M. F.**—No. 175,662. Kimberly-Clark Company, Neenan, Wis. For book papers.

**HY-G**—No. 174,141. Independent Paper Mills, Inc., Brooklyn, N. Y. For paper towels and napkins.

**PRIMO M. F.**—No. 175,663. Kimberly-Clark Company, Neenan, Wis. For book papers.

**O H & P—WE NEVER SLEEP**—No. 145,597. Supreme Orient O. O. H. & P., Schenectady, N. Y. For letterheads, envelopes, report blanks, billheads, receipt books.

**KERRYVALE**—No. 175,749. White & Wyckoff Manufacturing Company, Holyoke, Mass. For papeteries, writing and typewriting tablets, writing paper in reams, pounds and other packages and mailing envelopes.

**PAISLEY**—No. 175,706. J. C. Blair Company, Huntington, Pa. For paper for writing and printing purposes, drawing paper, pencil paper, envelopes, writing tablets, pencil tablets, blank books and papeteries.

**POSTEX**—No. 176,028. E. E. Lloyd Paper Company, Chicago. For writing paper.

**PUBLIC SAFETY BOND**—No. 173,566. Harlem Card and Paper Company, Inc., New York City. For writing paper and cardboard

### HUMMEL-ROSS FIBRE CORP.'S NEW MILL

(Continued from page 32)

southern pine—is delivered by rail. The company owns adequate supplies of standing timber for the future operation of this mill, but are now purchasing in the market. The wood is conveyed from piles beyond the wood room to dry drum barker, and fed to an 88-inch Carthage chipper and to a 48-inch chipper for small stock. By suitable conveyors, screens, and Lombard crusher, these chips are delivered to the digester bins in a uniform size that has materially helped in obtaining the increased output per digester. Alongside the paper mill are the machine shop, pipe shop, and stores buildings.

#### Plant Conveniently Located

The plant is conveniently traversed by standard gauge track, and is connected by narrow gauge track to the City Point Wharf, permitting receipt of raw material, and shipment of product, by water as well as rail, making especially accessible the important Atlantic ports.

The buildings of this plant are of unusually substantial construction, of steel, concrete and brick, conveniently arranged along

graded roadways and maintained in excellent condition. The property is fully protected by a system of water mains, hydrants and hose stations and pump in the pump station, as well as city water, and sprinkler equipment in the buildings.

which are piped with city water and sewerage, and are of substantial frame construction.

This plant is sure to be an important factor in the growing sulphate field.

### New Superintendent at Groveton Mill

The Groveton Paper Company, Inc., has added the services of L. L. La Duke to its well balanced organization. He assumed the duties of superintendent of the paper mills on April 1, and as he is well experienced in the lines this company manufactures, he should be a valuable asset.

He has spent practically his whole life in the paper business in which he started with the International Paper Company, for whom he worked for several years. He spent some time in France doing special work and for the past eight years has been superintendent of the Parker-Young Company at Lincoln, N. H.

The Groveton Paper Company has two mills turning out ninety tons of paper per day. Its lines are well established on the market. "Dello Bond" is especially well known to the trade as is also its line of envelope manilas. In addition this company manufactures many bleached sulphite paper specialties and other grades of manilas.

Many improvements have been made during the past few years and as the company manufactures its own unbleached and bleached sulphite pulp, it is able to supply its customers with products of the highest quality.

Mr. La Duke will undoubtedly be able to assist materially in carrying out and furthering the present policies of this company.

### Dr. Ralph Rindfus Resigns

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., April 16, 1923.—The resignation of Dr. Ralph E. Rindfus, secretary and director of the American Writing Paper Company was received and accepted today by President S. L. Willson of the company, effective at once. When questioned as to whether any further resignations were expected President Willson said that at least two more were anticipated but that nothing was yet ready to announce. It is currently reported that there are likely to be other changes made soon. Dr. Rindfus had also directed the work of the Research Department with much success. He was unable to be reached tonight and his future plans are unknown.

### R. R. Campbell Resigns

HOLYOKE, Mass., April 17, 1923.—R. R. Campbell, vice-president and production manager for the American Writing Paper Company tendered his resignation today to president S. L. Willson of the company. Mr. Campbell came to the company in January, 1918 as assistant to the president. He has no plans for the immediate future but expects to remain in Holyoke for some time.

### Oxford Paper Co. Improvements

[FROM OUR REGULAR CORRESPONDENT.]

RUMFORD, Me., April 17, 1923.—The Oxford Paper Company is to make important additions to its mechanical equipment in the near future, including a new paper machine and a trestle for carrying woodpulp at a total estimated cost of \$300,000, it is reported here. The paper industry in Maine is prosperous at the present time, with even better prospects for the coming months, and a continuation of profits now prevailing will mean an increase of facilities throughout the state, as there has been comparatively little new construction among the paper mills of Maine since 1920.

Established 1886

## Friendly Enemies

*Even the worst enemies of M. Gottesman & Company—(and enemies and success are achieved together) grudgingly admit that we secure results.*

*If we do achieve ideal results it is not because we possess any secret formulae for success, but rather that long study of all the problems involved and actual practice in solving them have given us a gold mine of experience which we can apply to each new problem as it comes along.*

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## New York Trade Jottings

A voluntary petition in bankruptcy has been filed by Emil Cohen doing business as the Lexington Paper and Twine Company, 128 East 110th street, New York City. Liabilities were listed at \$3,624 and assets \$1,658.

\* \* \*

The Invincible Paper and Pulp Corporation, of 135 Broadway, New York, has removed its offices to the Canadian Pacific Building at 342 Madison avenue. The new telephone numbers of the concern are Murray Hill 1347-8-9.

\* \* \*

M. J. Davis, Secretary of the Hammond Bag & Paper Company of Wellsburg, W. Va., spent part of last week in New York visiting the exposition at Grand Central Palace and calling on the machinery trade that is furnishing some of the equipment for the new paper mill and bag factory this company is erecting.

\* \* \*

The Universal Paper Company of 870 Broadway, New York, announces that it has no connection whatsoever with any other concern in New York or elsewhere. Nor does this concern claim any connection with the name of Universal stationery or any other similar name to their own, the "Universal Paper Company."

\* \* \*

Lew Glickman, for 15 years associated with L. Glickman & Co., has recently been appointed treasurer of the De Lux Paper Company, Inc., jobbers and distributors of paper, paper bags and specialties of 121 Spring street, New York. "You'll like our weigh" is the catchy slogan of the latter concern, and this is incorporated in the business card used by its representatives.

\* \* \*

Eastern Paper Stock and Chemical Company, Inc., is now located in its own office in the Bowery Savings Bank Building, 110 East 42nd street, New York, opposite Grand Central Terminal. The concern is occupying Suite 712 with the telephone number Vanderbilt 2685. It will specialize in the handling of paper makers supplies including waste paper, rags, rope, bagging, etc., as well as baling presses, waste receptacles and wire bale ties. The officers of this new concern are J. L. Shulman, president and treasurer; Maurice Shulman, vice-president, and H. L. Jacobsen, secretary. Inquiries from paper manufacturers covering any of their various requirements are cordially solicited.

\* \* \*

George C. Kennedy has resigned from the New York Sales Department of the Allied Paper Mills. Mr. Kennedy has opened offices at 85 Water street, where he has storage facilities and will represent the Paper Products Company, of Swarthmore, Pa., also handling the crepe paper specialties made by the Erving Paper Mills, Erving, Mass., and toilet paper made by the Crescent Paper and Machine Company, Phoenix, N. Y., as well as filter paper made in Japan and other specialties. Mr. Kennedy was for many years associated with the International Paper Company, Chemical Paper Company and Warren Manufacturing Company. His new phone number is Bowling Green 4338.

\* \* \*

In its issue of Wednesday morning the Wall Street Journal printed the following: International Paper dropped 3 points to a new low for the year at 45, at which figure it was within 2 points of the 1922 low. International Paper has been comparatively inactive since the annual report was made public, but yesterday large blocks made their appearance on the tape. It is said the holdings of the Boston contingent remain intact and there will be no contest at the coming annual meeting. Company's earnings have been improv-

ing and there will be a surplus after dividends in the first half of the current year.

### Link-Belt Co. Issues New Book

The Link-Belt Company of Chicago and Philadelphia has recently issued a very comprehensive and instructive book on "Electric Hoists and Overhead Cranes." It is not only profusely illustrated with photographs of actual installations showing some of the most recent Link-Belt Electric Hoist applications, but with line and wash drawings, the subject of proper installation and efficient operation is fully covered.

Going further than the usual catalog, this new book tells, in print and picture, of the practices and methods employed by users in widely divergent fields.

For instance, the practices of a sewer contractor in Maryland, who used a hoist for removing dirt—and the methods employed at a ship building plant in Texas which employed the same means for moving and placing timbers, is illustrative of the wide range of activities covered by this comprehensive book.

Copies of the book, called "Book No. 480," are obtainable from the Link-Belt Company's headquarters in Chicago or Philadelphia, or from any one of their many branch offices.

### Man, 30, Found Dead in Pulp Car

Suffocating, presumably, from the deadly sulphuric fumes which emanated from a carload of sulphite pulp ignited by his cigarette, a young man about thirty years of age was found dead last week by an inspector of the Champion Coated Paper Company, of Hamilton, Ohio. The car, shipped by the Lagerloef Trading Company, of 52 Vanderbilt avenue, New York, had been previously rejected upon the grounds that the sulphite was burned. This unaccountable circumstance led to the subsequent investigation which divulged the gruesome fate of its lone passenger. The latter, whose identity is unknown, was believed to have been dead for nearly two weeks.

### Nekoosa-Edwards Improvement

Continued cold weather is hampering construction work of the Nekoosa-Edwards Paper Company at Nekoosa and Port Edwards, Wis. The work now is ten days behind schedule and the snow of last week is expected to slow up the work still more.

About 35 men are employed in excavating for the hydro-electric plant and steam turbine room at Nekoosa and about 125 men are engaged in other construction at Nekoosa and Port Edwards. The Meyer Construction Company which has the contracts for erecting the new buildings to house the new machines and power plant, has about 75 men at work at the mills.

### Ohio & Michigan Paper Buys Gelzer Co.

The Ohio and Michigan Paper Company, Toledo, Ohio, whose structure was damaged by fire on March 19, has purchased the business and property of the Gelzer Company, paper products, wholesaler, at Monroe and Huron streets.

R. L. Gelzer, the president, will retire it is said. The Ohio and Michigan Paper Company officers will not be changed.

The Ohio and Michigan Paper Company has opened a temporary office at 125 Ontario street.

### Robert P. Stevens Resigns

Robert P. Stevens who has been superintendent of the National Folding Box Company at New Haven, Conn., since and before the erection of the plant has resigned to take effect May 1. Mr. Stevens has several things in prospect, but as this is his first vacation in seven years he expects to take a good rest before completing any plans for the future.



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# Westinghouse

## Obituary

### William Cooper Stebbins

[FROM OUR REGULAR CORRESPONDENT.]

WATERTOWN, N. Y., April 16, 1923.—William Cooper Stebbins, 56 years of age, a leader in business circles of this city, died Sunday morning, April 8, following an illness of pneumonia. His health this winter had been poor and he had two attacks of grip, one in January and another early in March from which he had not fully recovered.

Born in Little Falls, N. Y., he came here in 1890 when a young man and had since made his home in Watertown. In that period he rose to a position where he became known as an important figure in financial affairs, especially in paper manufacturing. His business associates today attributed to him the credit of having saved many paper mills from failure during the war period by carrying accounts for many of them long past due in the time of the depression.

While he was affiliated with many concerns as a director or officer he devoted most of his duties to W. C. Stebbins' mill supply business. He handled paper mill felts, wire, chemicals and dyes. He was the representative for New York State for E. I. DuPont de Nemours and Company. For 16 years he was associated with the Badische dye firm of Germany, but at the outbreak of the war severed his connection with them.

Many of his close business associates recalled how a few years ago he had assisted in the reorganization of several paper companies in this section as one of the largest creditors. The condition of the mills was not generally known and his willingness to assist them through the financial crisis was responsible for their continuation and eventual success. Modest, unassuming and almost retiring, he never mentioned his help or the part he played in keeping up the industries.

Mr. Stebbins was vice-president of the Agricultural Insurance Company and a member of the board of directors. He was also a director in the Northern New York Trust Company, West End Paper Company, Oswegatchie Paper Company and Bagley and Sewall Company. When he first came to Watertown he entered the employ of the Agricultural Insurance Company, but after a few years resigned to go into partnership with the late Charles N. Sherman in the mill supply business.

### Varnum Swift

[FROM OUR REGULAR CORRESPONDENT.]

BOSTON, Mass., April 16, 1923.—Varnum Swift, aged 63 years, who for the past twelve years was connected with W. H. Claffin & Co., Inc., wholesale paper merchants, 332-340 Summer street, as manager of the toilet, tissue and specialties department died Wednesday of last week after a brief illness.

He was widely known in the paper trade having started in the business with his father when he was a boy and continuing his connection with it all his life. He was for many years associated in the business with his father under the firm name of M. A. Swift & Son, at 33 Exchange street.

### Frank D. Haskell

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., April 16, 1923.—Frank D. Haskell connected for the past 20 to 25 years with the American Woodpulp Corporation in the capacity of sales representative for this city, died early this week, leaving a wife and family. Mr. Haskell enjoyed a wide acquaintance in the Michigan trade and was perhaps one of the best known paper men in Kalamazoo at the time of his demise.

Every buyer and seller of paper should have a copy of Lockwood's Directory of the Paper and Allied Trades.

### Smith Paper Co. Improvements

[FROM OUR REGULAR CORRESPONDENT.]

LEE, Mass., April 18, 1923.—Engineers and contractors have been recently examining the water power between the Smith Paper Company's Niagara and Centennial mills. This proposition is for a continuation of the work begun last fall with the object of placing an electric plant on the island in the river below the mills and using the water power to generate electric power to be used in the mills.

The company is now using a large amount of electrical power besides its five water privileges. It is a singular coincidence that the first water power plant on the Housatonic river at Lee built by John Winegar before Lee became a town was only a few rods below where it is now proposed to locate this electric plant.

### World Paper Trade Information

The Paper Division of the Department of Commerce is beginning to receive replies to its paper questionnaire which was sent out some time ago to Commercial Attaches, Trade Commissioners and Consular officers throughout the world. John Matthews, Jr., chief of the division, requested this information from various government attaches regarding the paper industry in the countries to which they are attached. Mr. Matthews believes that he has obtained a great deal of valuable information and as soon as this can be tabulated it will be made public.

### Buys Toledo Stationery Co.

The Kalamazoo Stationery Company's last acquisition in its steady expansion is the purchase of the entire tablet business of the Toledo Stationery and Manufacturing Company, good will, stock and equipment. In the future this business will be handled from the Kalamazoo office. Frank Poneman, president of the Toledo Stationery and Manufacturing Company, has notified the trade of the completion of the deal and his firm's formal retirement from the tablet field.

### Globe Mill Addition Nearly Finished

Work is about completed on the addition to the Globe mill of the Kimberly-Clark Company at Neenah and a dancing party for employees was held in the new structure Friday evening.

The new mill will be equipped for the manufacture of "Kotex" a cellucotton product. The cellucotton department some months ago outgrew its quarters and a large addition to the mill was necessary.

### Bankruptcy Petition Against Rudolph & Son

A petition in involuntary bankruptcy was filed during the week against F. M. Rudolph & Son, paper manufacturers, whose mill is located at Thorndale, just above Downingtown, Pa., by three stock dealers, Herman R. Levy, \$1,021; Infante Brothers, \$620 and Alexander di Santi, \$1,656.

### American Toilet Paper Co. Formed

The American Toilet Paper Company, Utica, has filed articles of incorporation with the Secretary of State of New York providing for 500 shares of preferred stock, \$100 each, and 700 shares of common of no par value. The actual capital is \$25,000. The incorporators are J. E. Mitchell and J. P. Liddy. A. J. Foley, Utica, is the attorney.

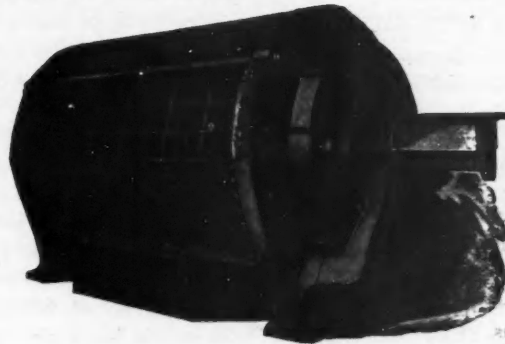
### Paper Board Corp. Incorporates

The Paper Board Corporation of America, Tonawanda, has filed articles of incorporation with the Secretary of State at Albany, N. Y., and will issue 7,500 shares of preferred stock, \$100 each, and 800 shares of common stock of no par value.

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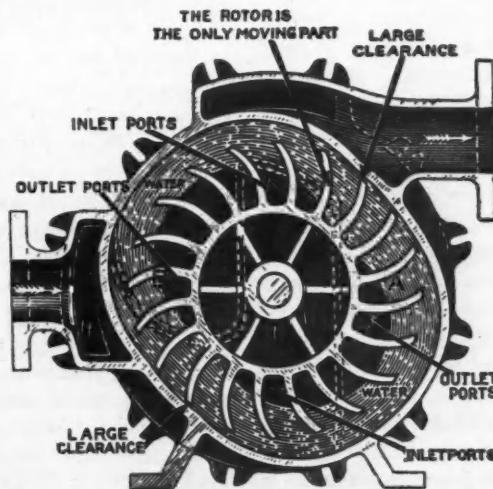
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Boston, Mass.

# Editorial

Vol. LXXVI New York, April 19, 1923 No. 16

HENRY J. BERGER, Editor

## SWEDISH PULP STRIKE SETTLED

The news, which reached the paper and pulp men of the United States while they were in convention at the Waldorf Astoria, New York, of a complete arbitration in the Swedish pulp lockout was perhaps the most welcome tidings that they possibly could have received. At the time of the Swedish settlement it was unofficially estimated that approximately 2,500 tons of sulphite and 800 tons of kraft pulp were tied up each day that the stagnation continued. One prominent New York importer estimated that since the inception of the strike, no less than 240,000 tons of chemical pulp of various grades have been curtailed from the production of Sweden, or more than half the tonnage which the United States received from Sweden in 1922.

A few other importers adopt a more conservative attitude with regard to the Swedish situation and estimate the production loss at less than 200,000 tons for the entire duration of the lockout. From the outset, paper manufacturers of the United States have refused to grow panicky over the state of affairs in the Scandinavian Peninsula, and at no time during the past three months has there been a "rush" on the market to cover requirements for later in the current year. Paper manufacturers have been inclined to minimize the importance of the strike in view of the fact that it came at a time when no open water shipments were being made. Thus, they reasoned, the most serious aspect for the immediate future would be a depletion of stocks on hand at the open ports of Sweden, and this would have taken place even though the icebound production centers farther north had continued full-blast operations. There was also a sentiment current in the domestic trade that importers and domestic representatives of Swedish mills were not entirely averse to the lockout in view of the strengthening effect it would naturally have on the foreign chemical pulp market.

Despite the fact that several importers drew a parallel to the conditions which obtained in the pulp markets of 1920, at which time stocks at American mills had diminished to a great degree and buyers flooded the market, this "rush to cover" failed to materialize during the late strike and, on the contrary, pulp consumers of the United States appeared to maintain a distinct poise and equanimity throughout the situation, critical as it was alleged to have been. This must not be interpreted to mean, however, that the effects of the Swedish lockout have faded into the distant past merely because a common meeting ground has been found for the widely variant views of pulp workers and mill owners. As a matter of fact, the lockout had a far-reaching economic effect in the markets abroad as well as in this country. This is attested to by the fact that England and France are both outbidding American pulp purchasers in Sweden at the present time and from foreign trade journals it may be observed that the prices they are paying are relatively higher than those which obtain in the market here.

On the one hand, then, there are those whose interest it appears

to be to emphasize the seriousness of the recent strike just as on the other hand there is an equally assertive element that would gladly pass it off as a triviality. The former are dogmatic in their insistence that stocks on hand in Sweden at the close of 1922 were sadly depleted and that the market was at that time in a very strong position. This seems not quite to have been the state of affairs, however, in view of the fact that Swedish pulp has continued to enter this country in no small quantity since January 1 and prices have undergone but relatively slight upward revisions.

Importers now aver that the very heavy losses in production coming as a result of the strike will make themselves felt in the United States market before the coming of the summer months and that prices will make up for lost time during the next few weeks.

In conclusion it may be stated that irrespective of the conflicting convictions of importers and pulp consumers of the United States, the strike abroad inflicted a severe economic wound in the world's pulp industry for the present year. Sweden as the world's second largest producer of chemical pulp will hardly be in a position to overcome the heavy losses which this cessation of work has meant to its pulp industry even though capacity operations are carried on for the balance of 1923. The United States, as Sweden's most important customer, can ill afford to lose this volume of pulp, and whether or not any consequential effects have been noticeable in American prices up to this date, it stands to reason that the market will be in a strong position for many months to come if for no other reason than that there will not be enough pulp to go around.

## PREVENTING BUSINESS DEPRESSION

The Business Cycle Committee which was appointed more than a year ago by Secretary of Commerce Hoover as Chairman of President Harding's Conference Committee on Unemployment concludes that preventative measures for depression following periodic booms must lie in the better handling of business in boom times because depressions are due to over expansion, inflation, loss of efficiency, waste, and extravagance in the boom periods; that therefore the first point of attack on the problem must be more informed action by individual business men in periods of rising markets in order that excessive expansion may be prevented and the extent of the decline reduced. Stress is laid upon the necessity of better understanding of the business cycle by the business executives generally. The suggestions for control of excessive expansion embraces recommendations as to the control of credit by individual banks, possible control of inflation by the Federal Reserve System, the control by individual business men of expansion in their own business, and the retardation in boom times of Governmental and large utility building and construction.

The methods of reducing the extent of the decline lie in the building up of governmental and public utility construction in times of depression, the use of unemployment funds, and the expansion of Federal, State and farm employment bureaus. The better control of credit against over expansion and speculation through individual banks and the guidance of business itself by danger signals of over expansion are fundamental.

The committee considers that before the banks, business men, and others can take constructive action in the enlightened conduct of business in this relation, there must be recruited and constantly



disseminated the fundamental information on which the trends in business can be properly adjudged by each individual business man, and it strongly recommends the recruiting of enlarged and more systematic statistical information by the Department of Commerce and its wider dissemination.

The committee calls attention to the fact that the ebb and flow in demand for consumable goods is less controllable than that of construction of buildings and equipment both governmental and private; that the tendencies of boom periods is to thrust a double burden on the community of providing for increased consumable goods and at the same time undertaking the larger burden of construction; that, therefore, the construction industries are to some extent the balance wheel on the ebb and flow of boom and depression.

The committee points out the part the Federal Reserve Banks can play in restriction of speculation and at the same time in liberalizing credit in times of depression, and it points out that at the present time the Federal Reserve Banks hold a larger supply of gold than is necessary to support the credit machinery of American commerce and suggests that consideration be given to shipments from the United States and thus accomplishing the double object of preventing both temptation to inflation of credits on the basis of this surplus gold supply and at the same time the great embarrassment of possible financial credit difficulties that would arise if foreign drafts were made upon the gold which had been used as a credit basis.

Secretary Hoover, in a foreword to the report, says: "I am confident that it represents a definite advance in economic thought and offers practical constructive suggestions that should make for progress.

"The report does not suggest panaceas or economic revolution but seeks to drive home the facts that the enlargement of judgment in individual business men as to the trend of business and consequent widened vision as to approaching dangers will greatly contribute to stability and that the necessary information upon which such judgments can be based must be systematically recruited and distributed.

"The investigation shows that many firms have pursued such policies and have come through the recent period of business disaster with success and stability and that ignorance of determinable facts accounts for the disasters to many others."

#### To Investigate Argentine Casein

F. W. McSparren and R. Schoenrick of the United States Tariff Commission will sail for the Argentine on Saturday, to start their investigation into the casein situation in connection with change in the tariff rates. It is expected that the two experts will be in the Argentine for some two months. Applications from paper manufacturers are that the rate now effective be reduced by 50 per cent. In connection with the casein investigation, the Tariff Commission is sending out a lengthy questionnaire to casein manufacturers.

#### Hawley Paper Co. Announces Increase

A substantial increase in wages for all employees of the Hawley Pulp and Paper Company Oregon City, Ore., went into effect April 1, Willard P. Hawley Jr., vice-president and general manager, has announced. Officials of the company are working out a new wage scale to be announced later.

#### Wilson Paper Corp. in New Building

On April 7 the Robert Wilson Paper Corporation, with offices formerly at 280 Broadway and warehouse at 170 Greene street, moved to larger quarters at 379 Pearl street, near New Chambers, where it now occupies the entire building, comprising six floors and basement.

This company was organized less than five years ago, and started business with an office at 299 Broadway. A year later larger quarters were required and the firm leased up-to-date offices in the Stewart Building, 280 Broadway, which it has occupied up to this time. About a year after organization a stock of paper was purchased and carried in warehouse at 440 Pearl street, and later at 170 Greene street. A steady growth in business made larger quarters necessary and the 379 Pearl street building was secured so that stock and offices could be consolidated under one roof.

The officers of the company include: President and treasurer, Robert Wilson; vice-president, Thomas Wilson, and secretary, B. P. Wilson.

Mr. Wilson has had the advantage of always having been connected with the paper industry. He started work first with the Monadnock Mills in Bennington, N. H., later going with the Merrimac Paper Company of Lawrence, Mass. For some years he worked for the Howard Paper Company, Urbana, Ohio, and later was manager of the Sterling Paper Company at Hamilton, Ohio. Returning East, he spent several years in the distributing end of the industry, with the R. P. Andrews Paper Company, and in 1918 organized the Robert Wilson Paper Corporation, and started in business for himself.

#### To Start Work on Tomahawk Kraft Co. Plant

APPLETON, Wis., April 17, 1923.—Work on the \$1,200,000 construction program of the Tomahawk Kraft Paper Company, which recently purchased the property of the Pride Pulp and Paper Company at Tomahawk, will be started as soon as weather conditions permit. The principal projects are dam and a pulp mill at Grandmother Falls. This is one of the most important waterpowers in northern Wisconsin.

The new company elected its officers last week. They are: O. Bache-Wiig, president; John F. Ross, first vice-president; S. V. Bugge, secretary and treasurer; A. L. Kreutzer, assistant secretary and treasurer.

About 150,000 feet of lumber and ten carloads of cement which will be used in construction of the dam has arrived on the building scene and more will be on hand when actual building operations begin. A half-million feet of lumber will be used in construction of the dam. Motor trucks will convey the building material from the nearest railroad to the dam which is a considerable distance.

Some logging will be necessary along the river before construction of the dam can be started. The dam will be a mammoth structure, built of concrete. A large hydraulic power house will be built in connection.

A sulphate pulp mill and acid plant probably will be erected in the near future at Wisconsin Dam. Power will be transmitted to this property from the new power house at Grandmother Falls. About 200 men will be engaged in construction work at Wisconsin dam.

#### International Paper Increases Wages

An increase in wages, effective April 15, in all its mills has been announced by the International Paper Company, according to advice received here last week. The percentage of advance will not be announced for several days, but it is understood that it will be in the line with the statement of President Dodge in his annual report that the International would continue to pay the highest prevailing wages in the industry.



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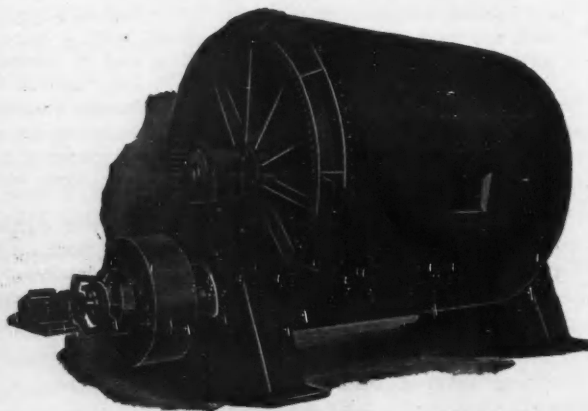
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## Section of the

# 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

## ELIMINATION OF WASTE\*

By L. W. WALLACE, EXECUTIVE SECRETARY FEDERATED AMERICAN ENGINEERING SOCIETIES

That wasteful habits exist in American industry is generally acknowledged. However it is not so well known through what avenues of industrial activity wasteful habits manifest themselves nor is there any general conception as to the extent and seriousness of them. It is unquestionably true that every strata of our economic, political and social life is materially affected by the wasteful habits prevailing in American industry. At frequent intervals some aspect of their workings come to view. These aspects attract attention, cause alarm and some effort is made to correct them. Usually such efforts are confined to limited scopes, do not touch fundamentals and are temporary in corrective results. The great necessity is to implant in the minds of all concerned that wasteful habits are subtle and persistent, and that they exist because of the violation of fundamental principles.

In this discussion an endeavor will be made to point out some of the more flagrant sources of waste; show the extent of their ramifications; indicate possible means of correction.

Waste has been catalogued under four general categories, as follows:

1. *Low Production*—caused by faulty management or control of materials, plants, equipment and men.
2. *Interrupted Production*—resulting from idle men, materials, plants and equipment.

3. *Restricted Production*—intentionally caused by owners, or management, or labor.

4. *Lost Production*—caused by ill health, physical defects and industrial accidents.



H. S. TAYLOR, NEW PRESIDENT OF TAPPI

Low production due to faulty management is more pronounced and far reaching than many realize. The fundamentals of good management—namely careful planning and control of production—have not penetrated the mass of American industry.

Conscious production control tends to reduce or eliminate waste by shortening the total time of production. It insures the delivery of materials where and when needed. Furthermore conscious production control reduces idleness of material, of workers and of equipment.

An element of faulty management quite apparent is the lack of balance of production capacity and of demand. In some American industries this is a very serious matter. This is one of the difficulties with the coal industry.

Not only is there an unbalanced production capacity and demand but just as serious and apparent is the marked unbalanced productive capacity of departments in given plants which result in a slowing down of production, increased costs, hardships and labor unrest.

Management is responsible for such conditions and it is management that must study the problem and install those improved methods that will correct the evil.

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\*Delivered at the Annual Dinner of TAPPI.

### Cancellation of Orders

Another source of waste in industry and commerce is the prevailing practice of cancellation of orders between manufacturers and mill and between manufacturers and customers. An equally wasteful custom is the returning of goods ordered and received. The cancellation of orders and the return of goods are vicious practices and they hinder stabilization.

Through the operation of faulty management and the lack of adequate production control, there is a large area of waste due to: no correlation between production schedules and sales policies; large loss of materials, goods and human labor through inadequate inspection; financial distress and unfair and destructive competition through lack of uniform cost accounting.

There is a very large amount of waste due to unsatisfactory labor relations. The most important, and unfortunately the most difficult thing that industrial and commercial leaders must do to remedy this condition is to adopt a policy of absolute frankness and candor—to make known to the great army of wage earners of America the economic facts controlling the industrial and commercial life of this nation, and of the world. Too much secretiveness and not enough publicity has been the fault of the industrial and commercial leader. If managers would only "put their cards on the table," take the workers into their confidence, inform them of the financial conditions of the company, the cost of manufacture, and make them feel a joint responsibility in meeting the problems ahead, the results would be surprising. True, it will require courage to adopt such a policy, but it would eradicate much misunderstanding with its resulting restlessness and disturbance of the even tenor of production.

Not only should industrial and commercial leaders frankly discuss such matters with their employees but they should feel the responsibility of informing the general public on such phases of their respective enterprises as affect the public; many of the facts heretofore withheld have fairly belonged to the public. Indeed, if this policy of publicity had been followed much violent legislation, and commission and board control of industry and of commerce would never have materialized.

### Standardizing Products

Perhaps one of the most active phases of the campaign to eliminate waste at present is the effort to standardize products. We pride ourselves on being a nation of individuals, and cultivate a taste for distinctive articles of dress, and even the useful things of everyday life. The assurance of the salesman that there is not another hat like this one on the market, that this is the only necktie in existence of this particular shade, enhances the value of these articles to such an extent that we do not begrudge the extra cost of being "different." But the few dollars we pay do not constitute a fair compensation to the manufacturer for his expense in maintaining such a wide range of styles, shades, and sizes to cater to the public taste. An authority on dress has said that the clothing should be the background to the personality, and if regarded as such why cannot the individuality be expressed in the *personality* without requiring 283,000 combinations of styles, cuts, weaves and colors from which to select our suits in order that we may be distinctive.

### Interrupted Production

Interrupted production is manifested through unemployment; by industrial depressions; intermittent employment caused by seasonal activities; unemployment due to labor disturbances.

Industrial depressions come frequently. They are always attended by a large amount of unemployment. Unemployment is one of the tangible means of measuring the extent and magnitude of the depression. In January, 1921, there were approximately 3,300,000 industrial workers out of employment. The economic

and social and moral ill effects of such unemployment are beyond our conception. Notwithstanding that such a condition reoccurs with surprising regularity, there is no authoritative agency that deals with this problem. Each time that an industrial depression—with its attendant unemployment measured in millions of men and women occurs, Unemployment Boards, Committees, or Commissions are appointed to take such steps as will alleviate the condition. The emergency passes, the agencies disband, no permanent record is made of the methods used, or of the results obtained, consequently upon such resources the problem is again approached in an ineffective way and without any benefit from past experience.

A permanent, authoritative and competent agency should be formed to study the unemployment problem in a broad way and to carry out experiments to determine the most feasible methods of handling the same. Such an agency would not have to wait for a general depression—as normally there are more than a million idle wage earners in the United States. And again there are hundreds of thousands that are unemployed 25 to 35 per cent of the year. Therefore the extent and the evil effects of the intermittent and (or) seasonal aspect of many industries have not been appreciated. As large as are the economic and social losses experienced every 7 to 10 years due to a business depression, yet they are perhaps exceeded by the accumulated losses due to intermittent and (or) seasonal working of a large area of American industry. Unemployment with all of its attendant economic, social and moral ills is always present. It demands the earnest attention of a constructive and a comprehensive body.

### Intermittent Employment

A large number of American industries normally operate intermittently that is, they are not uniformly active throughout the year. The clothing worker is idle 31 per cent of the year; the shoemaker 35 per cent, the building trades worker 37 per cent. The records for many other industries are similar.

Such intermittent employment not only reduces the production in the industries where it exists but other forms of waste obtain. The greatest amount of labor unrest, discontent, and open labor disturbance occur in those industries that operate upon a highly seasonal basis. This is one of the outstanding facts concerning the building, coal, and clothing industries.

The labor difficulties in these three essential industries could be greatly reduced by an adoption of a more uniform production schedule. That this can be done is apparent. There are no insuperable difficulties to be overcome. Such a change of policy would require a reversal in management and financial methods now in vogue. But such changes within themselves would be beneficial to the industry.

### Restricted Production Intentionally Caused by Owners, Management or Labor

That an intentional, premeditated and at times, a criminal restriction of production has been enforced by owners, by management and by labor, at times individually and at other times collectively, is generally known. Owners and management have caused a restriction of production in order to increase prices.

Labor has restricted production individually and collectively. The individual by soldiering on the job; by throwing machinery out of adjustment and by other means.

Collectively labor has restricted production through the enforcement of certain regulations. The limitations placed upon the adoption of automatic and time saving machinery is a restriction—as well as the fixing of a low maximum amount of pieces that a workman may make per day.

In some instances labor may have had some justification. No doubt some of its regulations have been formulated to remove intolerable conditions. However, labor as all others who restrict

productions and thereby reduced the economic wealth of the nation, suffers ultimately and are open to severe and justified censure.

#### Lost Production Caused by Ill Health, Physical Defects and Industrial Accidents

The 42,000,000 men and women gainfully employed in the United States probably lose on an average more than 6 days annually, from illness, disability, including non-industrial accidents. To reduce by one day the illness per person would be equivalent to adding 140,000 to our labor supply.

It is estimated that 25,000,000 workers have defective visions requiring correction. Hood Rubber and Underwood Typewriter Companies found that 20 per cent of their inspectors were unable to see sufficiently well to locate defects.

The foregoing statements of facts are appalling. They clearly disclose wasteful industrial habits. It is known that a very large percent of such waste may be eliminated by physical examinations, attention to simple measures of hygiene and by the dissemination of information appertaining to health among the working classes.

#### Industrial Accidents

In 1919, there occurred in industry 33,000 fatal accidents, 57,500 non-fatal accidents causing four weeks or more of disability; 3,000,000 accidents causing at least one day's disability.

Experience has shown and authorities agree that 75 per cent of these losses can be avoided. For sake of argument assume that only 50 per cent are avoidable. Then the total equivalent addition to the labor supply based on 260 days per year would be—approximately 27,000.

By the wasteful habit of not preventing avoidable accidents and the use of preventative medicine whereby at least one day of absence due to illness could be eliminated, the equivalent labor supply of approximately 167,000 workers per year are lost. This reckoning takes no account of the reduced quantity and quality of production due to disability previous to and following illness and accidents.

The foregoing remarks applied to industry in general. Time did not permit of an exhaustive treatment; only a few salient points could be mentioned. Many striking examples of waste have been enumerated. Let us now direct our attention to the Paper and Pulp Industry. In the first place it is well to consider the condition relating to the basic material of this industry namely soft or pulp wood. This is especially important since the industry is confronting a serious situation in regard to present and future supply thereof.

American industry is confronted with a serious labor shortage due to restriction of immigration and to continued emigration. One way of partly offsetting this is to reduce the loss of labor supply incident to accident and illness.

#### Original Virgin Timber

The original virgin timber of the United States was approximately 50,000 feet per capita of 100,000,000. Today the merchantable timber supply is about 25,000 feet per capita. Of this amount, less than 20,000 feet per capita is virgin or original timber. In other words, the virgin timber supply per capita of 100,000,000 is now only 40 per cent of the original.

Originally there were approximately ten acres of virgin forests per person for a population of 100,000,000. Today there are only 5 acres of virgin and second and third growths per capita. A reduction of 50 per cent in the acreage of all grades of timber growth. The present day acreage consists of approximately 30 per cent of first growth, 25 per cent second growth in a fair reproduction condition, 30 per cent second growth of inferior or questionable value; 15 per cent or 80,000,000 acres of waste land without suitable seed trees and hence will not reproduce timber

through the working of nature. The annual growth over the entire forest area of the world is some 62 billion cubic feet. In some countries the annual growth equals the annual consumption; in others it is less. In still, others, which include Canada and United States, the production far exceeds the consumption. It would appear, therefore, that there was an ample supply of timber production for the world's consumption.

However, this is somewhat misleading, as the timber upon which the present civilization depends is the timber from common trees of the temperate zones, as pine, spruce, larch, fir, oak, birch, hickory and a few others. The rate of decrease of such woods is rapid. Therefore, the world is facing a shortage of soft woods. The soft woods are likely to play a very important part in the economic and indeed in the social shifts in the world's affairs before many years. Because of this it is evident that those who shall rely upon importations of soft woods will be sorely disappointed. The United States has had a slight foretaste of this through the embargo on pulpwood exports from the Crown lands of Canada. It is the belief of Colonel Greeley, Chief Forester of the United States, that such an embargo is likely to be extended to all forest lands of Canada.

Colonel Greeley further adds that should this be done raw wood would be completely shut off as a source of supply for the paper industry of the United States.

This illustrates the hazard of becoming dependent upon foreign supplies.

The foregoing has indicated that the virgin forests of the United States have been reduced to approximately 40 per cent of the original; that the world's supply of soft woods is being rapidly depleted; that dependence upon importations of soft-woods is hazardous; that the day is rapidly approaching when the supply of merchantable timber will play an important role in the economic and social aspects of the nation.

#### Should Pause and Consider

The situation is such that all American citizens should pause and consider; should begin to plan ways and means whereby the available supply of soft-woods may be conserved and the production of a supply for the future may be started. This is a problem that this association is particularly concerned with as soft-wood is the very backbone of your industry. But you are not alone. There are many other industries largely dependent upon wood or paper as a basic material for production. To recite a few of the more important industries concerned; automotive, book and newspapers and general printing, concrete construction, building, farm machinery, furniture, jewelry, lumber, music, shipbuilding, wood-working, pulp and paper, and many others. In fact, as some one has said, "timber is a basic raw material, as widely used and as necessary to national existence as coal."

I have taken the pains to enumerate a number of important industries dependent upon soft-woods for the purpose of giving emphasis to the statement that in any effort to conserve our timber supply and to project plans for the growth of a supply for the future, concerted action is essential. No one agency can accomplish much. There must be the fullest co-operation and exchange of information, such co-operation and exchange of information as has characterized the paper and pulp industry. The action of some of your mills in jointly investigating white-water losses and making the findings known to the industry is highly commendable and it is that form of co-operation required to accomplish the most in eliminating the waste of industry. Another important step would be for all the mills of the industry to make definite experiments, and to pool the results for the benefit of the industry as a whole. From the start that you have made I am confident that the fullest co-operation and coordination will obtain. This association occupies a strategic position in this regard and should, therefore, be instrumental in securing not only

the united effort of the mills in the campaign for eliminating the wastes of your industry, but the combined effort of all interests in eliminating the wasteful use of our timber supply.

I shall not discuss the internal wastes of your industry as you have an able committee working on that problem. I would urge you however to bear in mind the remarks concerning industry in general, as doubtless some of the conditions alluded to are to be found in your industry as well as that of others. You should study the report of Waste in Industry and interpret your attention to what might be done in a broad and a comprehensive way to eliminate the profligate waste of your basic material and to perpetuate an ample supply thereof than to discuss the internal wastes of your industry even if I were competent to do so.

#### Profligate Waste of Timber

You must know that a profligate waste of timber is occurring within the U. S. there are many evidences of it. Dr. Compton, secretary and manager of the National Lumber Manufacturers' Association, recently stated before a Congressional Committee:

"It is asserted on competent authority that the present movement within the lumber industry alone for prevention of waste in lumber utilization involves a possible saving to producers and consumers of not less than \$250,000,000 annually; and that in the field of logging, manufacture, distribution and final utilization of all forest products, the possibilities of total savings to the public and to industries, are in excess of \$500,000,000 annually. This saving is largely a problem of increasing industrial and commercial efficiency. It is an industrial and not a governmental problem."

It has been said that nowhere in American life is waste more conspicuous than in the manner in which we use the products of our forests. It does not require much observation or a stretch of the imagination to be convinced that this is true, particularly when you are informed that: the waste in the woods in the form of tops, limbs, fairly large logs and stumps aggregate about 16.6 per cent of the total volume of the standing tree; that in manufacturing the log into lumber, lath, shingles and the like, there is a mill waste of 44.3 per cent of the volume of the tree; that in many cases the waste due to milling operations is much greater than 44.3 per cent; that only 33.5 per cent of the tree leaves the sawmill as undressed lumber; that between the undressed lumber at a sawmill and final form in which it is used a large percent of avoidable waste ensues; that eventually only 17 to 20 per cent of the standing tree is used in the finished commodity. A loss of approximately 80 per cent between the standing tree and the finished commodity. Some of it is unavoidable, to be sure, but much of it is avoidable without question. While much good work has been done by the Forest Products Laboratory and other agencies in reducing this waste, yet the good work should be speeded up and more active support given.

#### Forest Fires

Another very large source of waste of the present supply and of that of the future is due to forest fires. For a six-year period, the average annual loss of property from forest fires was \$16,424,000. This great loss resulted from 33,500 fires per year. The acreage burnt over was 7,088,000 annually. What this means to future generations no one can predict. But it is of sufficient moment not only for the future, but for the present, to challenge the earnest attention of your group as well as that of every other group interested in safe-guarding the economic and social status of the Nation.

There appears to be a marked lack of standardization throughout the field of timber production and consumption. This fact contributes in no small way to the wasteful use of the timber supply.

For instance, there are about 6,000 brands of paper, 50 per cent of which are more or less active. There is an enormous amount of paper made into samples without any real ability on the part

of the buyer to judge either of the value or fitness of the paper for the lack of standards by which to judge.

#### Waste in Conversion in Processes

There is an enormous wastage of paper in conversion processes. The measurement of 927 catalogs showed that there were 147 different sizes. Oftentimes, a purchaser will specify a dimension, which is really immaterial to him, which will require either the cutting of a fractional amount from a standard sheet or the manufacture of special size sheet, either of which is a wasteful practice. A wastage of only one-fourth inch on a 6 x 9 page is equal to 7 per cent of the total cost of the paper.

It has been shown that among current magazines, there are 18 variations in width and 76 in length of page or column; trade papers, 33 variations in width and 64 in length; newspapers, there are 16 in width and 55 in length. Taking into consideration the variations of width within each length and vice versa, there is an appalling total which accomplishes little or nothing and which contributes a tremendous money value to the waste basket each year. Size and number of magazines, newspapers, Saturday Evening Post Story.

In other industries that use soft-woods, there is a large area of no standardization. A partial list of those activities wherein there is no or at least very little standardization is as follows: Auto bodies, boards, cabinets, caskets, fixtures, furniture, musical instruments, window and door frames, farm machinery, many phases of lumber and other commodities. The foregoing recital should be sufficient to convince one of the great field of possibilities in standardization within those industries that are large users of wood. This association can surely be useful in this direction.

#### Reforestation

Many other avenues of waste could be pointed out. However, I desire to use the remaining time in discussing the topic of producing a future supply of soft woods, or reforestation. It is not meeting the problem to conserve what we now have and much can be done in that direction. However, we have been so wasteful that the growing of a future supply is imperative. This may be more clearly realized when you are again reminded that the annual consumption of timber in the United States is six times the annual production. Already, large areas of the United States are almost depleted of spruce pulp woods. For example, it is estimated that New York has only a 15 year supply and Maine 30.

The Middle Atlantic States contain 31 million acres of heavily culled or logged lands. The Lake States have 35 million acres of such lands. The Bureau of Forestry estimates that we are likely to have some 470 million acres of land that will be largely non-productive unless timber culture gives it employment. Most of New England's supply is exhausted and the drift is now toward the Western Coast and, particularly to Alaska. However, such supply is far removed and in securing it, increased costs and delays are encountered and transportation mediums and charges become very serious factors.

Therefore, the paper and pulp industry is vitally involved with reforestation as the future supply of its basic material must come through the results of reforestation.

Reforestation is therefore an economic factor of first importance in relation to a future supply of forest products.

It is also a factor of economic and social importance for still another reason and that is for the preservation of water power and supply. Cut over lands soon become badly washed; the dirt and silt find their way into the streams; fill reservoirs and destroy water power. Also, heavy floods, with a long wake of economic disasters, ensue. In some sections of the United States, the results are already apparent.

It is an encouraging fact that many individuals and agencies

are awake to the conditions and are endeavoring to apply suitable checkmates. This is an effort that requires support and encouragement. And it is to be hoped that your association will become more actively interested in this great national problem.

**The Problem Crystallized**

The problem of the elimination of waste as it concerns the paper and pulp industry crystallizes in my mind as follows:

First: The elimination of waste within the industry itself through the action of the management of each plant and through a combined effort. The latter is necessary because many causes for waste do not inherently abide in any given plant and, secondly, many wastes within a given industry can be successfully dealt with only through the processes of research, standardization and free interchange of information. These require the expenditures of much time and money, the expenses of which and the results of which should be shared by and participated in by the industry as such.

Second: Endeavor to secure a material reduction in the appalling waste of the basic material in the forests, at the saw-mills and in the processes of fabrication for commodities. This offers a rich field for accomplishment, which accomplishment will be realized only to the degree that all interests concerned pool their

efforts for a common good. This means that the paper and pulp industry should take the lead, perhaps, in bringing together representatives of all interests to the end that a national longtime constructive plan may be evolved. The Bureau of Forestry cannot do all the work. Your organization cannot. It is a problem of such magnitude and importance as to challenge the earnest co-operative and continued support of all concerned.

Third: The future supply of timber, the preservation of the lands, the conserving of the water power of the land demand that a practicable, comprehensive and all inclusive reforestation plan and schedule be devised and put into execution.

No other group is more vitally affected by or should be more concerned with these issues than is yours. I know of no group that is better fitted to take an ever-growing part of influence and helpfulness in this regard than is your group. The field of endeavor is of such prime economic and social importance as to command your earnest consideration and endeavors for years to come. I venture to predict that if you will meet your opportunity and responsibility in the fullest measure that many will be your rewards and that you will sense a feeling of deep satisfaction because of your contribution to the economic stability and growth of the nation.

## SOME CAUSES FOR THE DETERIORATION OF THE COLOR OF SODA PULP UPON AGEING

C. S. HAMM, CHIEF CHEMIST AND ASSISTANT SUPERINTENDENT OF THE MEAD FIBRE CO.\*

It is commonly recognized that the color of bleached soda pulp deteriorates or "goes back" when the pulp is aged over comparatively short periods of time. Until rather recent years when various attempts have been made to develop a form of apparatus to record color, it has been extremely difficult to arrive at any intelligent conclusions as to what extent deterioration takes place. At the present time with a colorimeter and color standards of a more or less fixed nature, it is possible to follow in a much more satisfactory manner this peculiar behavior of bleached soda pulp.

On account of the way in which light is reflected from surface of different irregularities, it is very unsatisfactory to attempt comparisons with the eye, for in one position a certain sample will appear lighter than when in another position under different light reflection. The use of some sort of colorimeter is almost absolutely essential for making comparisons of this nature. By rapidly rotating the samples under observation the effect of the irregularities of surface are entirely eliminated.

**Hess-Ives Photometer Used**

In the experiments which follow, the Hess-Ives Tint Photometer was used in making all the color comparisons. While no attempt was made to analyze the color readings, it will be observed on shades of white that an increase or decrease in the readings through the "red," "green" or "blue violet" screens indicates an increase or decrease in the brightness of the sheet.

**Brighter Color Beneath Surface**

All of the commercial samples of soda pulp show a brighter color beneath the surface, than directly on the surface. When the pulp is deeply marked by a coarse felt the high spots of the markings are always more discolored. When this condition is more pronounced than usual one hears the comment that the pulp has been scorched on the driers. However, if a sample is taken at the

wet end of the drying machine and an adjacent sample taken when the sheet is on the reel a very interesting comparison may be made. It will be noted that the outside of the machine-dried sample is lower in color than the inside, while very little if any difference can be observed between the inside and outside of the air-dried sample but the inside of the machine dried sheet is high in color than any part of the air-dried sample.

The following Tint Photometer readings will illustrate this point:

	Red	Green	Blue violet
1. Inside of machine dried sheet.....	95	87	82
2. Outside of machine dried sheet.....	93	86	81
3. Outside and inside air-dried sheet.....	94	87	81

This condition would immediately suggest that instead of the pulp being scorched there has been, due to rapid evaporation on the driers, a concentration at the surface of some impurity carried by the pulp.

**Alkali Responsible for Staining Effect**

Very weak solutions of a few inorganic salts which might easily be incorporated in the pulp such as sodium chloride (NaCl); calcium chloride (CaCl<sub>2</sub>); calcium hydroxide (Ca (OH)<sub>2</sub>); sodium hydroxide (NaOH) and sodium carbonate (Na<sub>2</sub>CO<sub>3</sub>) were dropped upon a piece of filter paper and also upon soda pulp. When the solutions dried, calcium chloride and sodium chloride produced no stain, while calcium hydroxide produced a faint but noticeable yellow stain and sodium hydroxide and sodium carbonate yielded a pronounced yellow stain exactly similar to the yellow discoloration noticed on the surface of the machine-dried pulp. These results seemed to indicate that some alkali was responsible for the staining effect on the surface of the machine-dried sheet. Consequently the previously mentioned samples were ashed and the alkalinity determined with reference to the weight of the bone dry pulp when the following results were obtained:

	Alkalinity
1. Inside of machine dried pulp.....	0.52%
2. Outside of machine dried pulp.....	0.88%
3. Outside and inside of air-dried pulp.....	0.65%

\*The writer wishes to acknowledge his indebtedness to G. C. McNaughton, superintendent of the Mead Fibre Company, for his assistance and advice in the preparation of this article. Delivered at Sectional Meeting on Soda and sulphate Pulp at the annual meeting of the TAPPI, April 9-13, 1923.

### How Lime May Get Into Pulp

The most likely chances for lime to get into the pulp would be from improperly settled cooking or bleach liquor, while insufficient or improper washing of the unbleached pulp might introduce caustic soda or sodium carbonate into the stock. While the former would be readily observed in the plant operation and corrected, errors in washing more frequently escape detection.

It was thought that an ash test on the unbleached pulp would indicate the thoroughness and uniformity of washing providing cooking conditions and kinds of wood used were uniform. Accordingly samples of brown stock were taken every four hours, and ash determinations made, after they had been dried in an electric oven. Following these the ash was titrated with  $n/10$  HCl, but as the alkalinity was in direct ratio to the ash the titration tests were unnecessary for regular control. Experiments on brown stock were conducted over a year's time and hourly samples from daily bleached pulp production filed for future reference.

Upon examination of the latter after varying periods of time differences in the color were readily apparent to the eye, while at the time of manufacture they had shown no difference by their Tint Photometer readings. References to the ash record for the brown stock corresponding to the samples, showed that the white samples which had markedly deteriorated were produced from brown pulp of high ash content.

### Lower Color—Higher Alkalinity

For example below is shown the data for eight months old samples produced on four consecutive days when washing experiments were conducted on a plant scale:

Sample	Tint Photo Readings When Made			After 8 Months			Alka- linity in	
	R.	G.	BV.	R.	G.	BV.	Brown Stock %	White Stock Ash %
A	98	91	82	93	84	75	0.78	0.36
B	97	90	81	94	85	73	0.72	0.33
C	97	91	81	97	90	80	0.59	0.23
D	98	91	83	97	91	82	0.55	0.23

It will be noted from the Tint Photometer readings that samples A and B have deteriorated far more than C and D. At the same time the ash from the brown stock and also the alkalinity of the ash in the white stock of the two former samples are considerably higher than the two latter. The same relation between color and alkalinity will be noted by reference to the previous table of color tests for machine dried and air dried sheets. Lower color is accompanied by higher alkalinity.

### Show Harmful Effects of Ash and Alkali

These few data are representative of a long list of those taken in regular mill control work. They show in a striking manner the deleterious effects when an unnecessarily high ash or alkalinity exists in the pulp. Assuming that the wood is properly cooked for thorough washing, the washing operation in the light of these data assumes a position of extreme importance. While the effluent from the pan may indicate complete washing it is not an entirely infallible test. If the pan is so constructed or the digester blown into the pan in such a manner that the formation of pockets or dead spaces is possible, under such conditions the test of the effluent will not be reliable. Also a certain amount of soda is occluded in the fibers. This amount of soda is usually neglected when checking soda losses in the plan, but if carefully determined will often account for a surprising amount customarily attributed to rotary stack losses.

A large percentage of this occluded soda and objectionable alkali is removed in the screens and subsequent thickening before bleaching.

For example identical stock washed in the laboratory showed an ash of 0.43 per cent and an alkalinity of 0.21 per cent, while ordinary pan washing yielded an ash of 0.73 per cent and 0.45 per cent alkalinity. The bleach consumption of the former was 17.09

per cent against 17.7 per cent for the latter and the former responded more readily to the bleach with a noticeably brighter color.

### Would Add Sulphuric Acid

Some authorities advocate the addition of a small amount of sulphuric acid to the bleachers at the end of the bleaching operation to liberate the last traces of the bleach. Mill practice has shown that a greater amount of acid (preferably  $H_2SO_4$ ) is highly desirable in order to reduce the alkalinity produced by the occluded soda inside the cell walls of the fiber, the alkalinity in the water used and the alkaline bleach solution as well as to liberate the last traces of the bleach. Unless sufficient acid is used the high color secured by this means will not be permanent.

### Permanence Is Indicated

Below is listed the Tint Photometer readings and alkalinity of the ash for pulp produced under the above conditions. They illustrate the improvement in color as well as the decrease in alkalinity which is an indication of permanence.

Sample	Tint Photometer Readings			Alkalinity of Ash in Finished Pulp %
	Red	Green	B. V.	
No. 1. No acid used.....	95	87	79	0.60
No. 2. $1\frac{1}{4}$ gal. 66° Bé. $H_2SO_4$ per ton of pulp.....	98	92	83	0.23

Following is also an analysis of the ash of the acid treated pulp after it was machine-dried:

The ash from 10 g. of bone dry pulp contained—

Silicon dioxide ( $SiO_2$ ).....	0.0045 g.
Aluminum oxide ( $Al_2O_3$ ).....	0.0050
Iron oxide ( $Fe_2O_3$ ).....	0.0010
Calcium oxide ( $CaO$ ).....	0.0210
Magnesium oxide ( $MgO$ ).....	0.0072
Sodium oxide ( $Na_2O$ ).....	0.0065
Sulphuric acid ( $SO_3$ ).....	0.0085
(SO <sub>3</sub> combined with alkalis as sulphates)	

### Conclusions

These few data have been incorporated into this article with the hope that it may attract the attention of others interested in the subject. While considerable additional data is yet to be collected to confirm thoroughly the foregoing experiments the writer feels he is justified in offering the following:

1. In ageing of soda pulp the discoloration increases as the alkalinity of the pulp increases.
2. Low alkalinity may be maintained by careful control of the washing operation and the use of sufficient sulphuric acid at the end of the bleaching operation.

### Personal Mention

Gosta P. Genberg, who has been associated with John E. Alexander in the chemical laboratory of Nekoosa-Edwards Paper Company at Port Edwards, Wis., sailed this week for Sweden. Mr. Genberg will spend the summer renewing acquaintance with his friends and studying the recent developments of the industry in Scandinavia, Finland and Germany, returning to this country in the autumn.

Robert Karlberg, head chemist of the Holmens Bruks & Fabriks Aktiebolag, sailed for his home this week after spending the past three months in visiting representative mills of Canada and United States. Mr. Karlberg expressed himself delighted with the cordial treatment he has everywhere received.

### Canadian Export Paper Co. Moves

The Canadian Export Paper Company, Limited, has moved its offices from the Sun Life Building, Montreal, Que., to the sixth floor of the Canada Cement Building.



## BIBLIOGRAPHY OF PAPERMAKING FOR 1922

Technical Association of the Pulp and Paper Industry Committee on Abstracts and Bibliography, Contribution No. 40. Clarence J. West, Chairman, and A. Papineau-Couture.

In presenting the bibliography of papermaking for 1922, the Committee has felt it desirable to introduce a greater number of subdivisions than have been used heretofore. It is hoped that the new arrangement may make the bibliographic material more available and thus more useful. Additional headings or changes in the ones used in this list will be welcomed.

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See also Drying.

(To be Continued)

Section of the

# COST ASSOCIATION OF THE PAPER INDUSTRY

*Affiliated with*  
**THE AMERICAN PAPER AND PULP ASSOCIATION**  
 Conducted by **THOS. J. BURKE, C.A., Sec-Treas**

## "PAPER PROFITS"

By Thos. J. Burke, Secy.-Treas. Cost Association of the Paper Industry and Asst. Secy. American Paper and Pulp Industry

The term "Paper Profits" has a very significant meaning in the financial world. Such profits, of course, represent profits made according to the books, but not yet converted into cash. For paper manufacturers perhaps the term "paper profits" has a different meaning, namely, profits made by making paper. It would seem that many paper manufacturers do not appreciate the fact that they are really in business to make "profits," rather than "paper," the making of paper being merely the avenue chosen by them for the making of profits.

### Manufacturing on Larger Scale

The time has come when owing to world-wide competition it has become necessary to manufacture on an increasingly larger scale, and thus it has become more difficult for manufacturers to keep in direct contact with the different phases of their manufacturing operations. They have had to delegate different parts of the work to assistants and to rely on these assistants to keep them informed as to what is going on in their departments. Since each department must influence to some extent the work of other departments, it can easily be seen there must be close co-operation between all of them if the chief executive is to receive correct information from them all, and thus be in a position to judge correctly regarding the efficiency of his mill. The question is then, how can such close co-operation best be accomplished? Of course, the information the executive wants more than anything else concerns the "cost" of manufacturing his different lines, and the "expense" of selling and distributing them, because then he is in a position to judge whether he can compete successfully in the various available markets.

### Executives Usually Not Accountants

As a rule, executives are not accountants, and often have little patience with the stereotyped accountant's reports. They want the information, but they want it supplied in such a way that it can be easily assimilated. Cost accountants in the industry are gradually coming to realize that this is a fact, and that it is partly their own fault that the importance of the work they are doing has not been generally recognized by their employers. On the other hand, many of these employers should be willing to admit that they themselves have not fully recognized the fact that they must have absolutely dependable cost figures if they are to carry on business successfully. They have all realized the necessity of getting the service of the best available salesmen, knowing that if their products were not pushed and brought to the attention of

buyers in a proper manner, their receipts would fall off, and consequently, their profits.

### Another Important Point

The just as important point that they must know just how much profit these receipts include, does not seem to have made such an impression on them. Many large mills have adequate cost departments, but the men in charge of these departments seldom receive the same co-operation from the executive as that given the sales manager. Just as long as this condition exists, the pulp and paper industry will have periods of big losses, because many mills will continue to rely on their sales departments to carry them over periods of depression as best they may, instead of adopting the policy, during such periods, of at least refusing to sell below cost by getting absolutely dependable cost figures from their cost departments and instructing their sales managers to sell paper at or above these figures, or not at all. The trouble is that when business improves and paper can be sold at a fair price, many executives do not think it necessary to worry further about their cost figures. The point that if the cost department is to serve them satisfactorily it must have reliable figures during good as well as bad times, is overlooked. It is just as important to have reliable cost figures in good times as well as bad times, especially when all the items entering into the cost of making paper are rising faster than selling prices. It is really difficult to understand how some big mills are conducting their business with the unsatisfactory cost systems which they are now using.

### Large Capital Invested

The fact that the pulp and paper industry is one in which the amount of capital invested is very large in comparison with the annual turnover is very important, and should never be overlooked. This fact makes it imperative that if a fair margin of profit is to be earned on this capital, *all* sales must include their share of profit. Since it is impossible to make agreements legally to restrict production, and of course, quite impossible to regulate demand, we shall always have periods of good and poor business. The only thing the industry as a whole can do to restrict its losses during periods of poor business, is to see to it that every manufacturer keeps himself well informed regarding his costs, and if we are to rely on the statements of the chairman of the Federal Trade Commission, there is no legal objection to groups of manufacturers agreeing not to sell their products below these costs. Such agreements, of course, will be worthless if manufacturers do not know

what these costs are, hence the necessity for, and the importance of, having thoroughly reliable cost figures.

#### What the Cost Association Has Been Doing

The Cost Association for several years past has been impressing these points on paper manufacturers. The officers of the association believe that the best approach to the solution of the problem of getting all manufacturers to realize these facts is by means of standardized cost estimate sheets, because these sheets, which have been carefully drawn up, will contain a list of every item which enters into the cost, so that it will not be possible for any manufacturer to overlook any of these items when making up a cost estimate.

#### Carrying the Work Further

To carry the work still further, it should be possible to obtain from groups of manufacturers cost figures relating to separate operations, and by compiling a composite report from these figures, enable them to make comparisons on a fair basis. Such comparison should enable them to form a fair judgment regarding the

manufacturing efficiency of their mills, as compared with other mills making the same products. Ignorant competition, meaning competition from manufacturers who are not reliably informed regarding their manufacturing costs, is the bane of all industry, and in times of depression is particularly rife in the pulp and paper industry.

But there are several groups of far-seeing executives within the industry who realize the handicaps under which it is operating, and are striving to remove them. One of the greatest of these handicaps is "ignorant competition," which can never be removed until the fact is brought home to the manufacturers who form the "ignorant group" that they are really within that class, and they are shown how to get out of it. Let the leaders within the industry but once make up their minds that this work ought to be done, and it will be done, and when it has been accomplished, the way will have been opened for the carrying out of many other plans for the industry's further progress and growth because the industry will then be operating on a sound, economic basis, and manufacturers will be in a position to supply the funds necessary for the financing of these plans.

## WHY DOES ROSSED WOOD COST MORE THAN PEELED WOOD?

The following replies to the above question were received by O. M. Porter, Secretary of the Woodlands Section of the American Paper & Pulp Association, from the woods managers of three large Maine companies:

#### Twenty-five Per Cent. Differential

(1) "It is my opinion that no mill can afford to buy rossed wood on a 25 per cent differential. I also believe that no operator can afford to manufacture rossed wood for less than this figure. The waste in rossing is considerable, and it is liable to be much higher where wood is rossed in or near the woods rather than at the mill, as the machinery is usually not so well set up and the men not particularly experienced in rossing.

Our test in the amount of solid wood content of a cord of rossed wood as compared with the content of a cord of peeled wood showed 7.54 per cent more in the rossed wood. In 1919 the market price differential was 11.25 per cent, or 3.71 per cent higher than the greater amount of wood fiber would warrant."

#### A Tabulation

(2) "I think that your figure of 25 per cent comes very near covering the situation, the following tabulation would indicate that there might be some justification for an even greater differential. This may, of course, depend upon the degree of rossing, owing to the grade of our product.

	Peeled wood	Rough wood to ross
Cost at rossing plant.....	\$13.50	\$12.00
Loss in rossing (to clean wood 33 per cent).....	.....	4.00
Cost of rossing (including plant depreciation).....	.....	2.50
Cost of loading on cars.....	1.00	0.50
Total costs .....	\$14.50	\$19.00
Percentage increase of cost of rossed wood over peeled, 31 per cent.		

#### More Solid Wood to Cord

(3) "With regard to your inquiry as to reasons for rossed wood having a higher average cost per cord than peeled, I can think of a few why it might have a higher value, and one or two for its having a higher cost. Rossed wood is, of course, more valuable than peeled wood, inasmuch as it is better fitted,—the sticks being more nearly cylindrical. There is, therefore, more solid wood to the cord. The wood is cleaner and will produce better pulp and paper as the skin under the bark, which frequently adheres to peeled and tumbled wood, is entirely removed in rossed wood. The one factor which might materially increase the cost of rossed wood, as compared with peeled wood, is that the shrinkage from rough to rossed is much greater than that from rough to peeled,—running with some wood as high as 30 to 35 per cent. I do not know whether or not the increase in solid wood content per cord of rossed wood

is comparable with the increase in value, but probably all these factors enter in making up the 25 per cent difference."

#### Paper Concerns Prepare for Spring Floods

[FROM OUR REGULAR CORRESPONDENT.]

APPLETON, Wis., April 18, 1923.—While paper mill officials of the Wisconsin river valley are preparing for spring floods which they fear might be the most serious in many years, they are seriously hampered by the exceedingly low water stage. The Consolidated Water Power and Paper Company was forced to close down its No. 4 machine, one of the largest in the world, in order to conserve power for the grinders. It was impossible to operate the big machine and the grinders at the same time with the present stage of water and inasmuch as the reserve supply of pulp is about exhausted it was decided to close down the machine. This condition probably will exist until the long delayed spring causes the heavy snow in the northern part of the state to melt.

Sudden warm weather, however, may again cause a shut-down of the mill, this time because of too much water. Officials of the Nekoosa-Edwards Paper Company have warned people living along the Wisconsin river to be prepared for an exceedingly flood stage this spring. They base their predictions on the deep snow in the northern woods and the fact that the melting has been delayed until very late in the season which may result in exceedingly warm weather when the thawing does begin. The usual April rains have been belated and are expected to add to the volume of water. The ground is frozen which means that water will run off instead of being absorbed, adding to the menace of high water.

The Marinette and Menominee Paper Company also has been hampered by low water and the utility company which furnishes part of the power to the mills was forced to cut off service a few times.

Mills in the Fox river valley have not been hampered by low water this year. In fact the river is slowly approaching the high water stage. Because of the improvements in the government works in the Fox river this year little damage from spring floods is expected.

#### G. L. Henderson Leaves Pejepscot Paper Co.

BRUNSWICK, Me., April 17, 1923.—The resignation of George L. Henderson as secretary and assistant treasurer of the Pejepscot Paper Company has been announced, to take effect May 1. Mr. Henderson, who has held the position since April, 1921, has resigned a position as vice-president, treasurer and director of the Rye Trust Company, Rye, N. Y.

**Let Them Drink to your business health in cups you sell**

each drink a cup—each cup a sale for you and at lowest cost of any cup on the market.

At such prices **SALES RESISTANCE IS NEGLIGIBLE** and our direct advertising assistance in your city will get immediate results as it is now doing in many cities.

Burt's Paper Drinking Cups are made of fine white paper, without wax to make drinks taste, and are reinforced so holders are not necessary. They are kept under glass and cannot be wasted or soiled before use.

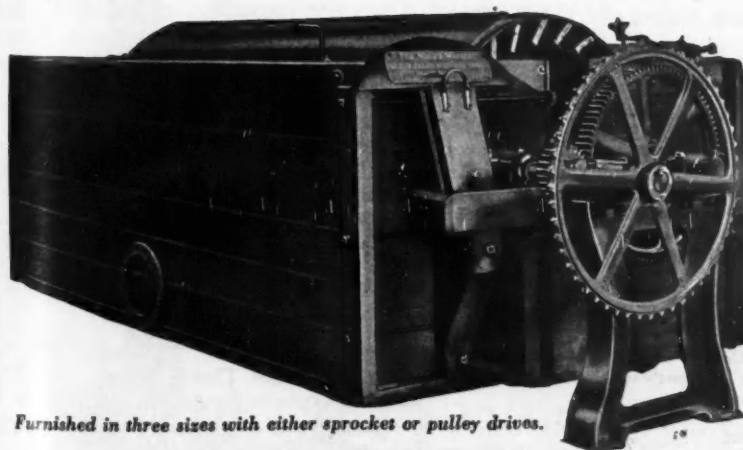
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**PRODUCTIVENESS**, enormous, through clean wires, large screening surface, patented unique method of discharge and freedom from shut-downs.

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

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

## THE UTILITY OF COSTING\*

Business men are somewhat like the Athenians of old, whose principle desire of life was to learn some new thing, and who at once discarded any thought which had a suspicion of being a platitude. Consequently, when circumstances revealed the necessity for Scientific Costing, the theme of its importance was hailed as a considerable advancement in the realm of business thought, and it was regarded as the up-to-date thing at once to instal a system which would enable the rising cost of production to be immediately realized, and the best price obtained. The exigencies of a war-time demand brought out the advantage to be gained by this information being readily available, and, indeed, the requirements of Government Departments rendered some business incapable of profitable conduct unless the contractor had all his costs at his finger tips.

### Care on Design of the System

This fresh-found enthusiasm for costing led to considerable care being bestowed upon the design of the system which was to give this eminently desirable result, and much ingenuity was displayed in improvising methods to record the work's activities. Likewise meticulous care was given to the detailed working of the system. But circumstances altered, Government Departments ceased to require almost impossible information at impossible notice; prices declined; business thought changed its mood; but the costing system went on and was improved by experience, with the result that records are today more accurate. Foremen and workers have grown accustomed to recording time, to booking materials to job numbers, and the underlying fact that establishment charges are actual expenditure has been firmly installed in business minds. The costing system is not, however, in the fortunate position of being able to show the way to enhanced prices, and because its true function has not been realized, it is in danger of being regarded merely as an additional expense department. The facts it reveals are looked upon as those it is desirable to have available in case of emergency; but the eager desire for the figures has gone, because they cannot be turned to the immediate advantage which formerly was the case.

### Utility of Scientific Costing

It is profitable, therefore, to discuss the utility of scientific costing, and to deal with it from the points of view of both the employer and employee, and also from the distinctive position of the professional cost accountant.

As regards the employer, the business man as the term is commonly understood, the first consideration must be stated negatively, and it is simply this: A costing system is not, and never can be, a means of obtaining an increased selling price. There is a sense in which costing has nothing to do with figures at all. Naturally, actual costs will be obtained, but the most important thing about an actual figure of cost is the relation it bears to a previously ascertained figure. The essence of the result obtained is its percentage rise or fall over the last result. Costing deals with facts, whether pleasant or unpleasant; it is the pointer which tells how much weight is on the scale; it will record what is there, but it will record a little as faithfully as it will record a lot; it is the recorder of market fluctuations and of works efficiency, and whether or not business is profitable in the peculiar circumstances of the moment.

### Value Lies in Use to Which It Is Put

The utility of a costing system to a management lies in the uses to which it is put. If the system is regarded as a detailed accounting system then the best can never be obtained. The

\* From "The Cost Accountant."

costing system should be an early report on the running efficiency of the works, and the means by which managerial control is exercised.

Employees should entertain favorable views to costing. The common complaint of the men is that actual conditions are not realized and wages bear no relation to services rendered, but are a see-saw competition, first up and then down, according to the relative strength of the side. The ingrown feeling of mistrust can only be removed when it is realized that some method easily capable of assimilation can be devised by the means of which services rendered and the margin of selling price available for the remuneration of those services can be discussed without valuable data of working being disclosed to the detriment of the establishment. This can be accomplished by a carefully devised costing scheme, and the increasing demand of labor to have a voice in the control of a business can be fairly and squarely met if confidence can be placed in the percentage record of increased or decreased production. In the space available it is only possible to suggest a line of thought in this matter, but it is obviously capable of large extension.

The cost accountant is particularly interested in the further uses to which a costing system can be put. Much will depend upon his mentality. Too much regard for figures may be his downfall. The preparation of the statement of a cost is important and should be efficiently performed by the cost clerks, but the cost accountant will begin when the clerical work ends. The essential part of his labor is the inference to be drawn from the figures as prepared. Unless he is able to interpret the results so that the management can realize the actual position and act accordingly he can never come into his own. The utility of costing depends more than anything else on the utility of the cost accountant.

### Reid Creditors May Lose \$500,000

Creditors of the bankrupt Robert H. Reid Pulp and Lumber Corporation probably will lose from \$250,000 to \$500,000, it was revealed at a referee's hearing in Albany, N. Y. Accounts of the firm are said to be involved with those of Horace S. Bell, vice-president and broker, who died after a fall in an Albany street on the day the corporation became bankrupt. Creditors, including women supposed to have been interested in the firm by Mr. Bell, are residents and firms in Manchester, N. H., and Bangor, Portland and Waterville, Me.

### Takes Over Essex Pad & Paper Co.

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., April 18, 1923.—The Cleary Manufacturing Company has been organized under the laws of the state of Massachusetts with a capital of \$25,000. The concern has taken over and is operating the former Essex Pad and Paper Company. The incorporators are James F. Cleary, Sr., James F. Cleary, Jr., A. T. Coderre and B. Louise Sullivan. They manufacture paper pad and school supplies.

### To Head American Tissue Mills

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., April 18, 1923.—Benjamin F. Perkins, 2d, has been elected president of the American Tissue Mills, Inc., succeeding James Robinson who has resigned and gone into other business. A bill in equity was brought against Mr. Robinson recently by the company to force his resignation but this it is understood will now be dropped.



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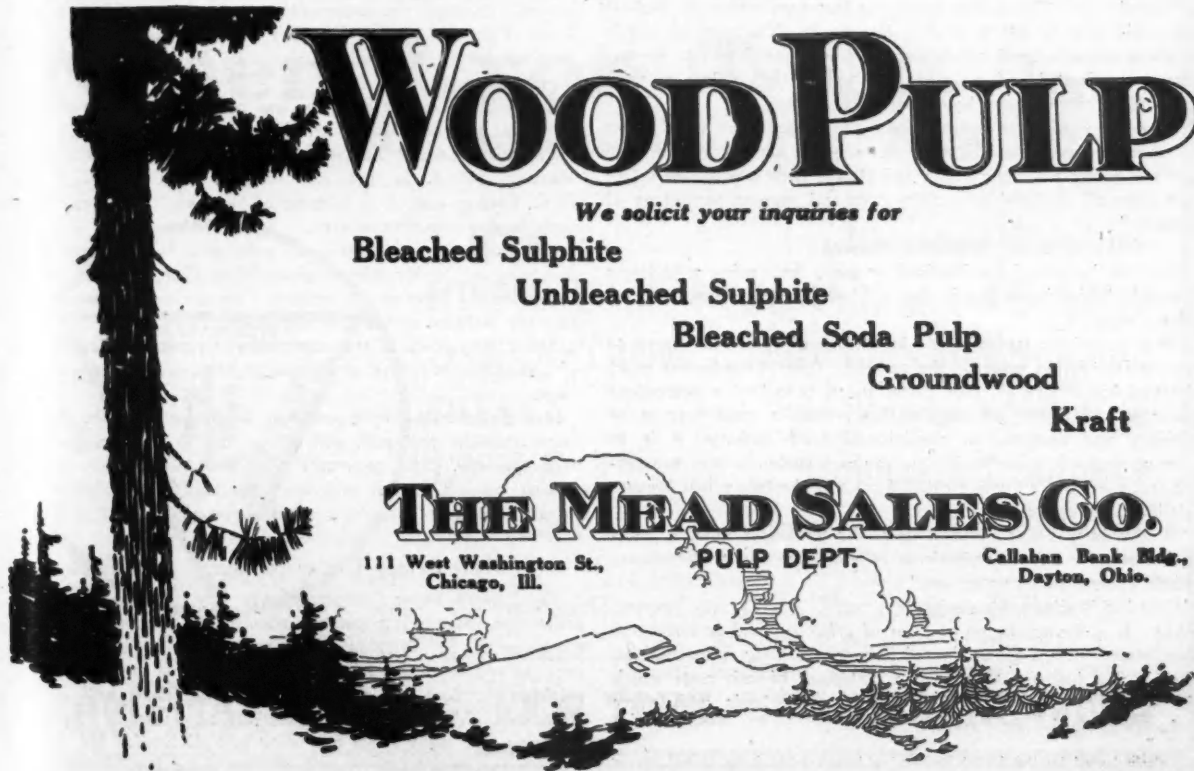
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10. Promote intelligent competition?
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12. Permit you to bid safely?

Here is a testimonial of results from a prominent producer of steel products using an effective system:

"You ask the results (of the cost system installed) which we actually see.

"First, certain lines of products which we had previously pushed, thinking they were carrying a very fair profit, were discontinued entirely as we found they were being manufactured at a loss.

"Second, the actual loss on products manufactured on certain groups of heavy machines were found to be much in excess of the estimated cost. The selling price was increased materially and we were still able to sell at a very fair profit. The cost of certain products manufactured on lighter machines was found to be less than we estimated and we were able to sell the product of these machines at more nearly the market price.

"The net result was that the load was spread more evenly over all of our machines and light machines which had previously stood idle and heavy machines which had always been overloaded in the past were all operated at a more even and regular percentage of capacity."

### Uniform Systems

Are you in one of the hundred or more lines using a Uniform System? The printing line is one, and here's what a manufacturing printer says—

"It goes without saying that a knowledge of costs enables one to place a fair selling price on the product. The psychological value of actual knowledge of costs, furthermore, is to lend a tremendous power to the factor of salesmanship. With a consciousness of efficiency and economy in administration of business, it is of great consequence to be enabled to say to a customer or a prospective customer that a given estimated price is absolutely just because it is based on known cost figures.

"We would under no circumstances even think of running a printing business, or any other business in which we might be engaged, without the use of a cost system."

What is a Uniform System?

Ans. It is the setting up of a set of principles and an outline of plans adaptable to a given line of industry enabling, when desired, those in that industry to present a statement of unit costs which will be in every particular on a comparable basis with other producers using the same system.

\*Bulletin issued by Fabricated Production Department of the United States Chamber of Commerce.

COST SECTION

Here is the testimony from the electrical industry—

"Generally speaking, it is our opinion, based on experience, that it (a uniform cost system) has strengthened the position of the electrical manufacturers in dealing with the government and with large customers in all contracts or reports in which costs were an essential feature. That is to say, a cost based upon the standard practice of the industry inspires confidence as the soundness of the basis on which it is compiled."

The foregoing is all good selling argument, but there are many lines yet not getting these benefits and, of course, are on an unequal basis with those who use uniform methods.

If you are a member of a Trade Association which has not taken up Cost Accounting as a study or activity, why not suggest it now?

Mr. Gaskill, of the Federal Trade Commission, speaking in an advisory capacity, has approved cost accounting as a legitimate association activity and collective cost studies per se are permissible.

The way is therefore clear to push this work in your industry, and we can aid you by supplying information as to how an industry can build its own system. Our Progress Chart showing what others are doing will interest you. However, whether your cost problem is individual or that of your whole industry, if you will state it we believe we can be of service to you—we suggest an inquiry.

### New Paper Mill for Fox River Valley

[FROM OUR REGULAR CORRESPONDENT.]

APPLETON, Wis., April 14, 1923.—Rumors are current in the Fox river valley that a new papermill is to be built at or near Merrill the coming year but thus far no confirmation of the stories has been possible. Papermakers say they had heard the rumors but are unable to connect anyone with the proposed plans.

It is quite generally supposed that the rumors originated from the organization of the Tomahawk Kraft Paper Company which recently acquired the papermill and waterpower property of the Pride Pulp and Paper Company at Tomahawk. This company proposes to erect a pulpmill near the Tomahawk papermill the coming summer.

Organization of the company was perfected with the election of directors who are Henry M. Thompson and Willits Pollock of Milwaukee; George M. Seaman of Chicago; O. Bache-Wiig of Mosinee, and A. L. Kreutzer, John F. Ross, Fowler P. Stone, C. C. Yawkey and D. C. Everest of Wausau. Directors will meet early in April to elect officers.

The stockholders, it is said, are principally Wausau men who are interested in the Mosinee Sulphate Fibre Company and Marathon Paper Mills. Several Milwaukee, Chicago and Tomahawk men also are included among the stockholders.

The capital stock in the new company consists of 10,000 shares of cumulative preferred stock and 10,000 shares of non-par value stock.

It is probable the waterpower at Grandmother Falls, about five miles from the papermill, will be the first to be developed by the new company. The papermill at Tomahawk, which has been making catalog papers, will be converted to manufacture kraft papers; similar to the output of the sulphat fibr plant at Mosinee.

### New Safety Collar for Paper Machines

The Hoberg Paper Company, Green Bay, is using a new safety collar for papermill machines, invented by George J. Lentz, an employee of the company. The new collar is an improvement over the old set screw type and can be used on any type of paper machine. It does not mar or scratch the shaft and is easily adjustable. About 25 of the collars are now used by the Hoberg Company and many more are being manufactured. Mr. Lentz is not determined whether he will market the collar.

Agents  
**SUNDS AKTIEBOLAG**  
**STRONG SULPHITE**  
*indirect cooking*


---

**PERKINS-GOODWIN CO.**  
 NEW YORK  
**PULP and PAPER**

---

Agents A/S Toten Cellulosefabrik  
**BLEACHED SULPHITE**  
 AGENTS GULSKOGEN  
**CELLULOSEFABRIK**  
 EASY BLEACHING  
**SULPHITE**

**Nilsen, Lyon & Co., Inc.**  
 110 East 42nd St.      *Selling Agents For*      **NEW YORK**

	<b>TOFTE</b>	Bleached Sulphite
	<b>HISSMOFORS</b>	Strong Unbleached Sulphite
	<b>OSKARSTROM</b>	Easy Bleaching Sulphite
	<b>DIESEN</b>	Bleached Sulphate
	<b>ESSVIK</b>	Unbleached Sulphite
	<b>KROGSTAD</b>	Easy Bleaching Sulphite

*Stocks Carried on Dock For Prompt Delivery*

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**CHRISTIANIA**      **NEW YORK**      **GOTHENBURG**

# Imports and Exports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

## NEW YORK IMPORTS

WEEK ENDING APRIL 14, 1923

### SUMMARY

News print.....	523 bls., 2,425 rolls
Printing paper.....	122 cs., 267 rolls, 80 bls.
Hangings.....	23 bls., 7 cs.
Wall paper.....	6 bls.
Cigarette paper.....	208 cs.
Wrapping paper.....	76 bds., 176 bls.
Packing paper.....	109 cs., 1,478 bls.
Filter paper.....	66 cs.
Photo paper.....	2 cs.
Tissue paper.....	51 cs., 3 bls.
Drawing paper.....	2 cs.
Writing paper.....	52 cs.
Fenestra paper.....	16 cs.
Surface coated paper.....	6 cs.
Miscellaneous paper.....	11,997 rolls, 164 cs., 1,155 bls.

### CIGARETTE PAPER

Rose & Frank, Olen, Havre, 108 cs.  
P. J. Schweitzer, Belgenland, Antwerp, 78 cs.  
Max Spiegel, Taormina, Genoa, 22 cs.

### WALL PAPER

A. Murphy & Co., Mount Clay, Hamburg, 3 bls.  
A. Murphy & Co., Mauretania, Liverpool, 3 bls.

### PAPER HANGINGS

W. H. S. Lloyd & Co., Mesaba, London, 23 bls., 7 cs.

### PRINTING PAPER

B. F. Drakenfeld & Co., Andania, Liverpool, 5 cs.  
Perry, Ryer & Co., Columbia, Glasgow, 66 cs.  
Parsons & Whittemore, Brasilia, Hamburg, 267 rolls.  
F. Puttmann, Belgenland, Antwerp, 37 cs.  
H. Reeve-Angel & Co., Inc., President Roosevelt, Bremen, 80 bls.  
B. F. Drakenfeld & Co., Colonial, Liverpool, 9 cs.  
Oxford University Press, Celtic, Liverpool, 5 cs.

### NEWS PRINT

Parsons & Whittemore, President Roosevelt, Bremen, 472 bls., 1,744 rolls.  
H. Reeve-Angel & Co., Inc., by same, 288 rolls, 141 bls.  
Chemical National Bank, Mar Negro, Hamburg, 174 rolls.  
Chemical National Bank, Orduna, Hamburg, 219 rolls.

### WRAPPING PAPER

Blauvelt-Wiley Paper Manufacturing Company, Columbia, Glasgow, 76 bds.  
Bankers Trust Company, Manchuria, Hamburg, 176 bls.

### PACKING PAPER

C. G. Keferstein, Mar Negro, Hamburg, 109 cs.  
Republic Bag & Paper Company, Brasilia, Hamburg, 1,478 bls.

### FILTER PAPER

E. Fougere & Co., Hemic, Bordeaux, 49 cs.  
H. Reeve-Angel & Co., Inc., Mesaba, London, 2 cs.  
H. Reeve-Angel & Co., Inc., Vardulia, London, 14 cs.  
H. Reeve-Angel & Co., Inc., Mauretania, Liverpool, 1 cs.

### PHOTO PAPER

J. J. Gaun, Celtic, Liverpool, 2 cs.

### TISSUE PAPER

H. Reeve-Angel & Co., Mount Clay, Hamburg, 24 cs.  
Meadows, Wye & Co., Colonial, Liverpool, 12 cs.  
F. C. Strype, by same, 11 cs.  
American Express Company, Celtic, Liverpool, 3 bls.  
C. H. Wyman Shipping Company, by same, 4 cs.

### DRAWING PAPER

E. Dietzgen & Co., Mesaba, London, 2 cs.  
E. Dietzgen & Co., Vardulia, London, 5 cs.

## WRITING PAPER

Bernard Judae & Co., Olen, Havre, 52 cs.

## FENESTRA PAPER

Birn & Wachenheim, Belgenland, Antwerp, 16 cs.

## SURFACE COATED PAPER

Gennert Company of America, Belgenland, Antwerp, 6 cs.

## PAPER

Republic Bag & Paper Company, Tyrrenia, Hamburg, 957 rolls.

D. S. Walton & Co., by same, 1,928 rolls.  
Hensel, Bruckman & Lorbacher, by same, 12 cs.  
International Acceptance Bank, Mar Negro, Hamburg, 96 bls.

C. Steiner, by same, 15 cs.  
Hudson Trading Company, by same, 8 cs.  
Wilkinson Brothers & Co., Orduna, Hamburg, 34 bls.

Fernstrom Paper Company, Inc., by same, 25 bls., 895 rolls.

Chemical National Bank, by same, 2,307 rolls, 10 bls.

Republic Bag & Paper Company, by same, 730 bls.

International Acceptance Bank, by same, 618 rolls.

Birn & Wachenheim, Brasilia, Hamburg, 260 bls.  
H. D. Catty Company, Roussillon, Havre, 3 cs.

Whiting & Patterson, by same, 3 cs.  
Erstein & Co., by same, 1 cs.

P. J. Schweitzer, by same, 32 cs.  
Hensel, Bruckman & Lorbacher, Manchuria, Hamburg, 49 cs.

Parsons Trading Company, Australind, Melbourne, 9 cs.

Melley, Kuttroff & Co., Bergensfjord, Kristiania, 22 rolls.

M. C. Lange, President Roosevelt, Bremen, 42 cs.

## RAGS, BAGGING, ETC.

Castle & Overton, Muensterland, Hamburg, 10 bls. rags.

Castle & Overton, Verbania, London, 50 bls. rags, 358 bls. waste paper.

Katzenstein & Keene, Inc., by same, 412 bls. paper stock.

M. O'Meara Company, by same, 106 bls. rags.  
Cincinnati Rag & Paper Company, by same, 83 bls. rags.

Castle & Overton, Tyrrenia, Hamburg, 22 bls. rags.

Reis & Co., Mar Negro, Hamburg, 114 bls. cotton waste.

E. J. Keller Company, Inc., by same, 123 bls. jute waste.

E. J. Keller Company, Inc., Anaconda, Antwerp, 14 bls. linen thread, 106 bls. bagging.

Wilkinson Brothers & Co., Inc., by same, 52 bls. rags.

E. Butterworth & Co., by same, 157 bls. bagging.

S. Birkenstein & Sons, by same, 72 bls. rags.  
H. Schimmel, by same, 109 bls. cotton waste.

Reis & Co., by same, 88 bls. cotton waste.  
American Wood Pulp Corporation, by same, 53 bls. rags.

E. Butterworth & Co., President Garfield, London, 180 bls. rags.

Katzenstein & Keene, Inc., Tanafjord, Genoa, 196 bls. rags.

Irving Bank Columbia Trust Company, Gasconier, Antwerp, 54 bls. rags, 261 bls. flax waste.

E. J. Keller Company, Inc., by same, 827 bls. flax waste.

Equitable Trust Company, by same, 59 bls. flax waste, 49 bls. new cuttings.

International Acceptance Bank, by same, 73 bls. new cuttings, 121 bls. rags.

Guaranty Trust Company, by same, 1,335 bls. rags, 48 bls. new cuttings, 210 bls. bagging.

Castle & Overton, by same, 176 bls. bagging.  
Equitable Trust Company, Marengo, Antwerp, 21 bls. flax waste.

E. J. Keller Company, Inc., by same, 91 bls. flax waste.

National City Bank, by same, 428 bls. rags.  
Castle & Overton, Roussillon, Havre, 51 bls. baggings, 151 bls. rags.

New York Trust Company, by same, 139 bls. rags.

E. J. Keller Company, Inc., by same, 149 bls. baggings, 151 bls. new cuttings.

Mechanics and Metals National Bank, by same, 122 bls. rags.

Katzenstein & Keene, Inc., Olen, Havre, 55 bls. rags, 122 bls. new cuttings, 222 bls. bagging.

E. J. Keller Company, Inc., by same, 261 bls. bagging.  
P. Berlowitz, by same, 114 bls. bagging.

## OLD ROPE

Castle & Overton, Roussillon, Havre, 22 coils.  
W. H. Cummings & Son, Olen, Havre, 52 coils.  
Brown Brothers & Co., Marengo, Hull, 268 coils.  
Brown Brothers & Co., Vardulia, London, 340 coils.

Brown Brothers & Co., Bergensfjord, Kristiania, 56 coils.

Brown Brothers & Co., Belgenland, Antwerp, 116 coils.

Brown Brothers & Co., Mesaba, London, 99 coils.

American Exchange National Bank, Tyrrenia, Hamburg, 39 coils.

M. O'Meara Company, Anaconda, Antwerp, 43 coils.

## WOOD FLOUR

B. L. Soberaki, Bergensfjord, Fredkstad, 1,500 bags.

Inves, Spieden & Co., Mar Negro, Hamburg, 793 bags.

## WOOD PULP

American Wood Pulp Corporation, Orduna, Hamburg, 300 bls.

H. Hollesen, by same, 262 bls.

H. Hollesen, York, Bremen, 2,625 bls.

H. Hollesen, President Roosevelt, Hamburg, 2,600 bls., 520 tons.

Castle & Overton, York, Bremen, 498 bls.

Irving Bank Columbia Trust Company, W. Loquassuck, Hango, 5,837 bls., 1,014 tons.

M. Gottesman & Co., Inc., President Harding, Bremen, 300 bls.

J. Andersen & Co., Bergensfjord, Sarsborg, 1,680 bls.

Perkins, Goodwin & Co., Bergensfjord, Kristiania, 300 bls.

P. L. Sogerski, by same, 120 bls.

Nilsen, Lync & Co., Inc., by same, 300 bls.

## BOSTON IMPORTS

WEEK ENDING APRIL 14, 1923

T. M. Duche & Sons, T. Fagelund, Buenos Aires, 1,501 bags casein.

J. A. & W. Bird & Co., Halesius, Buenos Aires, 584 bags casein.

J. A. & W. Bird & Co., Australind, Melbourne, 1,000 bags casein.

Lagerloef Trading Company, W. Loquassuck, Hango, 616 bls., 101 tons wood pulp.

Irving Bank Columbia Trust Company, by same, 6,862 bls., 1,038 tons wood pulp.

Castle & Overton, W. Kebar, Hamburg, 264 bls. wood pulp.

Castle & Overton, Verentia, London, 581 bls. waste paper.

Crocker, Burbank Company, Scythian, Liverpool, 28 bls. waste paper.

Furnise, Withy & Co., by same, 9 bls. rags.

Train Smith Company, by same, 93 bls. waste paper.

Katzenstein & Keene, Inc., Winefredian, Liverpool, 191 bls. rags.

E. Butterworth & Co., Edgehill, Antwerp, 48 bls. rags.

Train Smith Company, by same, 662 bls. rags.

Train Smith Company, West Helix, Antwerp, 243 bls. rags.

Train Smith Company, Scythian, Liverpool, 29 coils old rope.

International Purchasing Company, Winefredian, Liverpool, 146 coils old rope.

## PHILADELPHIA IMPORTS

WEEK ENDING APRIL 14, 1923

Castle & Overton, Brasilia, Hamburg, 550 bls. wood pulp.

American Wood Pulp Corporation, by same, 275 bls., 55 tons wood pulp.

Irving Bank Columbia Trust Company, Anaconda, Antwerp, 196 bls. rags.

E. J. Keller Company, Inc., by same, 1,652 bls. rags, 49 bls. bagging, 23 bls. cotton waste.

Katzenstein & Keene, Inc., by same, 502 bls. rags.

Castle & Overton, by same, 993 bls. rags, 250 bls. bagging.

D. J. Murphy, by same, 170 bls. rags.

American Wood Pulp Corporation, by same, 353 bls. rags.

Waste Material Trading Corporation, by same, 123 bls. rags.

(Continued on page 64)

Spray is uniform  
and soft and  
the nozzles

**WILL  
NOT  
CLOG**

**BUFFALO FORGE  
COMPANY**

182 Mortimer Street, Buffalo, N. Y.

**Buffalo Spray Nozzles  
Keep Down Foam  
Bubbles on  
Wet End  
of  
Paper Machines**

*Full data on request*



## THE VORTEX SELLING SEASON IS ALWAYS ON

Wherever Vortex Service is used—and the demand for VORTEX service is continually growing—there is an active steady market for VORTEX drinking cups.

Theatres, dispensaries, hotels, clubs, banks and offices are complying with state health laws or acceding to public opinion by installing VORTEX Sanitary Drinking Service. The VORTEX cup is better, and you can sell it for less.

**THE VORTEX MFG. CO.**

421-431 N. Western Avenue  
Chicago, Ill.

*Canadian William A. Rogers, Ltd., Toronto, Manufacturer  
and Distributor for Canada*

**Vortex**  
Drinking Cups

## New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,  
WEDNESDAY, April 18, 1923.

During the first few days of the current week perhaps the chief topic of conversation among the trade was the settlement of the Swedish pulp strike. Domestic manufacturers depending upon foreign pulp to a large extent were, naturally, greatly relieved at the news of a complete arbitration and were inclined to underestimate the seriousness of the situation as it stands today. While there will, undoubtedly, be a speedy resumption of pulp manufacturing in Sweden, it will take many months before the deficit of nearly 200,000 tons brought about by the strike will be wiped out. Importers have, of course, emphasized this point and though they, too, are considerably relieved at the turn of affairs in Scandinavia, they do not want to sow seeds for any false optimism in view of the fact that the pulp markets abroad are still in a very critical state. Prices on nearly all grades of chemical pulp, they believe, will continue to strengthen throughout the spring, and will probably not ease off at all until the summer quietude sets in.

Consignments of all grades of finished paper were pushed through in the course of the week with normal rapidity, and despite the temporary laxity in buying demand, prices gave no evidence of softening even momentarily. News print continued firm; book and fine papers were in steady call; wrappings held steady; board continued to demonstrate a firm tone, and with the exception of the lower grades of waste paper, the paper stock markets were regular in their activity. Ground wood dropped no further, from its berth just below the \$40 mark, and a note of firmness crept into the market as buying was resumed on a broad scale early this week.

News print added one more week to its uninterrupted swing of prosperity and several large producers ventured the prediction that the current year would outstrip all others in point of consuming demand. At the convention nothing but optimism was radiated by representatives of the news print industry, and with the possible exception of the fact that freight car conditions might be better and the pulp markets perhaps in a more settled condition, there is nothing to mar the capacity production which this trade is now enjoying.

In the book paper field conditions are settling down to a steady, capacity business, according to the officials of several large New York concerns. Manufacturers are booking future orders with caution and the sentiment of the trade is rather against the institution of higher prices than now prevail, than for it. One prominent producer stated that his company would, in no event, advance the cost of finished book paper simply because of the excessive demand, but would continue the wise and conservative policy of governing upward revisions solely by the cost of manufacture. Advances, however, were almost certain to come within the course of a few months, he said.

Fine paper houses of New York were back in the running again this week after a slight relaxation during the Convention. Mills are running to capacity and have been for several months, but the books of one or two large concerns of the city show that they were oversold by 20 or 25 per cent last month alone. The combination of increased export demand with the strongest call in many months from the consumers of fine paper in the United States has served to place this market in an unusually firm position.

Tissues braced up slightly in the first few days of the current week. The slight softening in tone which occurred last week was attributed to the easier price tone in the ground wood markets as well as the slackened call from the consuming trade of Manhattan and vicinity during Convention Week. The spring demands of the textile, shoe and kindred industries, it is confidently believed, will effect a complete resurrection in the undertone of this market.

Wrapping paper showed practically no diminution in consuming call in the course of the week and both imported and domestic

qualities were reported to have moved in goodly volume. Kraft manufacturers were considerably relieved by the news of the Swedish pulp settlement, as the source supplies of kraft pulp for the summer and fall months of this year was a matter of no little speculation.

The lower level of ground wood prices, board producers say, is having some effect in the maintenance of equitable prices on those grades of board depending largely upon mechanical pulp. While boxboard prices have been rather erratic in recent weeks, business has held consistently good and the prospects for the balance of the spring are exceptionally bright.

### Mechanical Pulp

Despite the periodical price lowerings which have occurred in this market during the past month, from grinding regions come reports stating that production is being carried on at capacity to meet the excessive demands of the consuming trade. This steady call from consuming quarters is having the effect of giving the ground wood market a firm undertone and dealers expect prices to stabilize not far from their present levels. Prime fresh cut spruce wood, F. O. B. New York is now listed at \$40 and \$41.

### Chemical Pulp

Demand in chemical pulp circles has continued to increase and no let-up in the buying tension was noted as a result of the reported strike settlement in Sweden. Though actual quotational increases have been slow in coming to the various markets for foreign pulps, several grades now appear to be on the verge of upward markings. Both bleached sulphite and kraft pulp have remained in consistently heavy call and dealers state that the shortage both here and abroad in these two grades is acute. One prominent importer stated last week that the advances which have been made in the domestic market prices up to this time were warranted wholly by the increased production costs, to say nothing of the growing pulp shortage. Increases resulting from the Swedish strike, in his estimation, have not yet affected the New York market to any appreciable extent.

### Waste Paper

Continuing to display a softer tendency, the lower grades of waste paper remained practically at a standstill during the week, as far as consuming demand was concerned. Mills appeared to be holding off in anticipation of further drops in the bulkier listings, but in few instances did mixed papers fall below their previous level of \$.90 to \$1.00 per hundred pounds. Other board-making grades were correspondingly easy, while the intermediate grades remained steady and the better grades fairly firm.

### Old Rope and Bagging

The movement of old manila rope picked up somewhat the first few days of the present week, but in the main, was sluggish. The No. 1 Domestic grade was in heaviest demand and prices ruled steady.

Bagging continued sluggish and there were no changes one way or the other in prices. Tissue mills absorbed nominal lots of No. 1 scrap throughout the week, but demand was generally hand-to-mouth.

### Rags

Dealers state that paper making rags are in a stronger position than they have been in some time. This they attribute to the embargoes which have been placed on rags in several foreign countries as well as to the strong domestic call. Prices have been steadily on the incline for several weeks and the undertone of the market is decidedly bullish.

### Twine

Twine prices remained steady during the week and though raw jute costs have been higher for some time, advances in the finished product have been slow in coming. Demand has been of a humdrum type.

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# Market Quotations

## PAPER COMPANY SECURITIES

New York Stock Exchange closing quotations April 17, 1923:

	BID	ASKED
American Writing Paper Company pref.	25 3/4	26 3/4
International Paper Company, com.	45 3/4	46 3/4
International Paper Company, pref., stamped.	68 3/4	69
Union Bag & Paper Corporation	72 1/2	73

## Paper

F. o. b. Mill	@38.00
Ledgers	@11.00
Bonds	@55.00
Writings—	
Extra Superfine	16.00 @35.00
Superfine	14.00 @30.00
Tub Sized	10.00 @15.00
Engine Sized	8.50 @11.00
News—f. o. b. Mill—	
Rolls, contract	3.80 @ 4.00
Rolls, transit	4.00 @ 4.25
Sheets	4.25 @ 4.50
Side Run	3.50 @ 4.15
Book, Cased—f. o. b. Mill	
S. & S. C.	7.50 @ 14.00
M. F.	7.00 @ 10.00
Coated and Enamel	9.00 @ 14.00
Lithograph	9.00 @ 14.00
Tissues—f. o. b. Mill	
White No. 1	.85 @ —
White No. 2	.80 @ —
Colored	1.10 @ —
Anti-Tarnish	1.40 @ —
Kraft	.90 @ .95
Manila	.80 @ —
Kraft—f. o. b. Mill—	
No. 1 Domestic	7.00 @ 7.50
No. 2 Domestic	6.75 @ 7.00
Imported	7.00 @ 7.50
Screenings	3.25 @ 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
Fibre Papers—	
No. 1 Fibre	6.00 @ 6.25
No. 2 Fibre	5.25 @ 5.50
Common Bogus	3.50 @ —
Card Middies	4.00 @ 5.00
Boards—per ton—	
News	67.50 @ —
Straw	65.00 @ —
Chip	67.50 @ —
Binders' Board	85.00 @ —
Spl. M.L. Chip	85.00 @ —
Wood Pulp	80.00 @ —
Container	87.50 @ —
Wax Paper—	
Self Sealing White	
28 and 30 lb.	
basis	10.50 @ 11.50
Waxed Tissue	1.50 @ 1.60
Glassine—	
Bleached, basis 25	
lb.	15.00 @ 16.00
Bleached, basis 30	
lb.	17.00 @ 18.00
Papermakers' Felts per ton—	
Dry	75.00 @ 85.00
Saturated	65.00 @ 75.00
Sheathing Paper, per ton—	
Rosin Sized (red and gray, 30 lbs. per 500 sq. ft.)	55.00 @ 65.00

## Mechanical Pulp

(Ex-Dock)	
No. 1 imported	40.00 @ 41.00
(F. o. b. Mill)	
No. 1 Domestic	41.00 @ 42.00

## Chemical Pulp

(Ex-Dock, Atlantic Ports.)	
Sulphite (Imported)—	
Bleached	4.60 @ 5.10
Easy Bleaching	3.25 @ 3.50
No. 1 strong unbleached	3.00 @ 3.25
No. 2 Strong unbleached	2.85 @ 3.10
No. 1 Kraft	3.00 @ 3.25
Sulphate—	
Bleached	4.00 @ 4.25
(F. o. b. Pulp Mill.)	
Sulphite (Domestic)—	
Bleached	4.50 @ 5.00
Strong unbleached	3.00 @ 3.25

Easy Bleaching	
Sulphite	3.00 @ 3.50
New Sulphite	2.75 @ 3.00
Mitscherlich	3.10 @ 3.40
Kraft (Domestic)	3.05 @ 3.30
Soda Bleached	4.25 @ 4.50

## Domestic Rags

Prices to Mill, f. o. b. N. Y.	
Shirt Cuttings—	
New White, No. 1	1.13.25 @ 13.50
New White, No. 2	6.80 @ 7.20
Silesias, No. 1	7.60 @ 8.10
New Unbleached	9.50 @ 10.00
Washables	4.50 @ 5.00
Fancy	6.25 @ 6.75
Cotton—according to Grades—	
Blue Overall	6.75 @ 7.25
New Blue	4.95 @ 5.20
New Black Soft	5.00 @ 5.50
New Light Sec-	
onds	2.90 @ 3.15
O. D. Khaki Cut-	
tings	4.25 @ 4.75
Men's Corduroy	3.15 @ 3.40
New Canvas	6.75 @ 7.10
New Black Mixed	2.50 @ 2.75
Old	
White, No. 1—	
Repacked	6.00 @ 6.50
Miscellaneous	5.25 @ 5.50
White, No. 2—	
Repacked	3.25 @ 3.50
Miscellaneous	2.85 @ 3.10
St. Soiled White	1.90 @ 2.00
Thirds and Blues—	
Repacked	2.00 @ 2.25
Miscellaneous	1.65 @ 1.75
Black Stockings	2.90 @ 3.25
Roofing Rags—	
Cloth Strippings	1.75 @ 1.85
No. 1	1.75 @ 1.85
No. 2	1.65 @ 1.75
No. 3	1.25 @ 1.35
No. 4	1.25 @ 1.35
No. 5A	1.30 @ 1.40

## Foreign Rags

New Light Silesias	6.00 nominal
Light Flannelettes	6.75 nominal
Unbleached Cottons	7.50 nominal
New White Cut-	
tings	9.50 nominal
New Light Oxfords	6.00 nominal
New Light Prints	4.50 nominal
New Mixed Cut-	
tings	2.00 @ 2.50
New Dark Cuttings	1.90 @ 2.10
No. 1 White Linens	10.00 nominal
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 Cot-	
tons	1.65 nominal
Ger. Blue Linens	3.50 nominal
Checks and Blues	1.50 nominal
Dark Cottons	1.30 @ 1.35
Shoppery	1.00 @ 1.05
French Blues	1.75 @ 2.00

## Bagging

Prices to Mill F. o. b. N. Y.	
Gunny No. 1—	
Foreign	1.00 @ 1.10
Domestic	1.00 @ 1.10
Wool, Tares, light	1.45 @ 1.55
Wool, Tares, heavy	1.45 @ 1.50
Bright Bagging	1.05 @ 1.20
No. 1 Scrap	1.05 @ .95
Sound Bagging	.85 @ .95
Manila Rope—	
Foreign	6.25 @ 6.50
Domestic	6.50 @ 6.75
New Bu. Cut.	2.15 @ 2.25
Hessian Jute Threads—	
Foreign	5.95 @ 6.25
Domestic	2.20 @ 2.40
Mixed Strings	.90 @ 1.00

## Twines

Cotton—(F. o. b. Mill)	
No. 1	.35 @ .37
No. 2	.31 @ .33
No. 3	.37 @ .39
India, No. 6 basis—	
Light	.20 @ .21
Dark	.19 @ .20
A. B. Italian, 18	.41 @ .42
Basis	.51 @ .61
Finished Jute—	
Dark, 18 basis	.29 @ .30
Light, 18 basis	.26 @ .27
Jute Wrapping, 3-6 Ply—	
No. 1	.23 @ .24
No. 2	.21 @ .22
Tube Rope—	
4-ply and larger	.15 @ .17
Fine Tube Yarn—	
5-ply and larger	.19 @ .21
4-ply	.20 @ .22
3-ply	.20 @ .22
Unfinished India—	
Basis	.16 @ .17
Paper Makers Twine	
Balls	.13 @ .15
Box Twine, 2-3 ply	.18 @ .19
Jute Rope	.17 @ .20
Amer. Hemp	.33 @ .35
Sisal Hay Rope—	
No. 1 Basis	.15 @ .17
No. 2 Basis	.13 @ .15

## Sisal Lath Yarn—

No. 1	.14 @ .15
No. 2	.11 @ .13
Manila Rope	.18 @ .19

## Old Waste Papers

(F. o. b. New York)

Shavings—	
Hard, White, No. 1	4.25 @ 4.50
Hard, White, No. 2	3.75 @ 4.00
Soft, White, No. 1	3.60 @ 3.80
Flat Stock—	
Stitchless	2.50 @ 2.60
Over Issue Mag.	2.50 @ 2.60
Solid Flat Book	2.40 @ 2.50
Crumpled No. 1	2.10 @ 2.22
Solid Book Ledger	3.00 @ 3.20
Ledger Stock	2.60 @ 2.70
New B. B. Chips	1.10 @ 1.20
Manilas—	
New Env. Cut.	2.50 @ 2.75
New Cut No. 1	2.00 @ 2.25
Extra No. 1 Old	1.80 @ 1.90
Print	1.45 @ 1.55
Container Board	1.35 @ 1.45
Bogus Wrapper	1.20 @ 1.30
Old Krafts, machine compressed	
Bales	2.10 @ 2.20
News—	
No. 1 White News	2.85 @ 2.20
Strictly Overseas	1.30 @ 1.40
Strictly Folded	1.10 @ 1.15
No. 1 Mixed Paper	.85 @ .95
Common paper	.60 @ .65

## PHILADELPHIA

[FROM OUR REGULAR CORRESPONDENT.]

Bonds	.10 @ .60	No. 2, Hard	
Ledgers	.15 @ .40	White	3.50 @ 3.75
Writings—		No. 1 Soft White	3.60 @ 3.75
Superfine	.15 @ .20	No. 2 Soft White	2.00 @ 2.25
Extra fine	.12 @ .22	No. 1 Mixed	1.60 @ 1.75
Fine	.20 @ .30	No. 2 Mixed	1.25 @ 1.50
Fine, No. 2	.20 @ .25	Solid Ledger Stock	2.75 @ 3.00
Fine, No. 3	.15 @ .20	Writing Paper	2.50 @ 2.75
Book, M. F.	.06 @ .11	No. 1 Books, heavy	2.25 @ 2.50
Book, S. S. & C.	.08 @ .15	No. 2 Books, light	1.40 @ 1.50
Book, Coated	.08 @ .15	No. 1 New Manila	2.75 @ 3.00
Coated Lithograph	.10 @ .15	No. 1 Old Manila	1.50 @ 1.75
Label	.08 @ .15	Container Manila	1.35 @ 1.50
News	.05 @ .07	Old Kraft	2.25 @ 2.50
No. 1 Jute Manila	.12 @ .13	Overissue News	1.50 @ 1.60
Manila Sul, No. 1	.08 @ .10	Old Newspaper	1.20 @ 1.25
Manila No. 2	.07 @ .08	No. 1 Mixed Paper	1.10 @ 1.15
No. 2 Kraft	.11 @ .11	Common Paper	1.00 @ 1.10
No. 1 Kraft	.11 @ .11	Straw Board, Chip	1.00 @ 1.10
Common Bogus	.02 1/2 @ .03	Binders Bd., Chip	1.00 @ 1.10
Straw Board	.75 @ .85	Domestic Rags—New	
News Board	.65 @ .70	Price to Mill, f. o. b. Phila.	
Chip Board	.62 @ .67	Shirt Cuttings—	
Wood Pulp Board	1.25 @ 1.50	New White, No. 1	.12 @ .12 1/2
(Carload Lots)		New White, No. 2	.07 @ .07 1/2
Binder Boards—		Silesias, No. 1	.07 1/2 @ .07 1/2
Per ton	75.00 @ 80.00	New unbleached	.10 @ .11
Carload lots	75.00 @ 80.00	Washables	.04 1/2 @ .05 1/2
Tarred Felts—		Fancy	.05 1/2 @ .05 1/2
Regular	48.00 @ 50.00	Cottons—according to grades—	
Slaters	54.00 @ 56.00	Blue Overall	.05 1/2 @ .05 1/2
Best Tarred, 1-ply		New Blue	.02 1/2 @ .02 1/2
(per roll)	1.35 @ 1.50	New Black Soft	.06 1/2 @ .06 1/2
Best Tarred, 2-ply		New Light Sec-	
(per roll)	1.00 @ 1.15	onds	.02 1/2 @ .02 1/2
Best Tarred, 3-ply	1.50 @ 1.65	Khaki Cuttings	.11 @ .04 1/2
Bagging		Corduroy	.03 1/2 @ .04
F. o. b. Phila.		New Canvas	.08 1/2 @ .08 1/2
Gunny No. 1—		New Black Mixed	.04 @ .04
Foreign	1.25 @ 1.25	Old	
Domestic	1.20 @ 1.25	White, No. 1—	
Manila Rope	5.00 @ 6.25	Repacked	.06 @ .06 1/2
Sisal Rope	.75 @ .80	Miscellaneous	.04 1/2 @ .04 1/2
Mixed Rope	.75 @ .80	White, No. 2—	
Scrap Burlaps	1.00 @ 1.25	Repacked	.03 1/2 @ .04
Wool Tares, heavy	2.50 @ 2.75	Miscellaneous	.03 @ .03 1/2
Mixed Strings	.75 @ .80	Thirds and Blues—	
No. 1, New Lt. Bur-		Repacked	2.00 @ 2.25
lap	1.75 @ 2.00	Miscellaneous	1.85 @ 1.90
New Burlap Cut-		Black Stockings	2.75 @ 3.00
tings	1.75 @ 2.10	Roofing Stock—	
Old Papers		No. 1	1.35 @ 1.40
F. o. b. Phila.		No. 2	1.25 @ 1.30
Shavings—		No. 3	1.15 @ 1.20
No. 1, Hard		No. 4	1.15 @ 1.20
White	4.00 @ 4.25	No. 5A	1.10 @ .
		B	nominal
		C	nominal

## BOSTON

[FROM OUR REGULAR CORRESPONDENT.]

Bonds	.09 1/2 @ .63	Books, coated	.09 @ .15
Ledgers	.09 1/2 @ .55	Label	.09 @ .13
Writings	.08 1/2 @ .42	News, sheets	4.75 @ 6.00
Superfine	.16 @ .26	News, rolls	4.50 @ 5.75
Fine	.15 @ .18	Manilas—	
Books, S. & S. C.	.07 1/2 @ .12	No. 1 Manila	\$6.00 @ 7.00
Books, M. F.	.06 1/2 @ .09 1/2	No. 1 Fibre	.06 1/2 @ .07
		No. 1 Jute	9.00 @ 10.50

(Continued on page 66)

## Imports and Exports of Paper and Paper Stock

(Continued from page 60)

Waste Material Trading Corporation, Olen, Havre, 309 bls. rags.  
 Mechanics & Metals National Bank, by same, 289 bls. rags.  
 E. J. Keller Company, by same, 171 bls. rags.  
 American Wood Pulp Corporation, by same, 126 bls. rags.  
 Katzenstein & Keene, Inc., by same, 158 bls. rags.  
 Castle & Overton, Brasilia, Hamburg, 232 bls. rags.  
 E. J. Keller Company, Inc., Cardigan, Rouen, 373 bls. rags.  
 E. J. Keller Company, Inc., Cardigan, Havre, 230 bls. rags.  
 E. J. Keller Company, Inc., Cardigan, Bordeaux, 562 bls. rags.

E. J. Keller Company, Inc., Manchester Merchant, Manchester, 34 bls. rags.  
 E. J. Keller Company, Inc., Olen, Havre, 71 coils old rope.

### BALTIMORE IMPORTS

WEEK ENDING APRIL 14, 1923

American Mills Company, Mar Negro, Hamburg, 1,215 rolls wrapping paper.  
 J. Andersen & Co., by same, 1,025 bls. wood pulp.  
 American Wood Pulp Corporation, by same, 200 bls. wood pulp.  
 E. J. Keller Company, Inc., W. Elcasco, Antwerp, 43 bls. bagging, 584 bls. rags.

### NORFOLK IMPORTS

WEEK ENDING APRIL 14, 1923

Parsons & Whittemore, Brasilia, Hamburg, 263 bls. news print.  
 M. Gottesman & Co., Inc., Puget Sound, Gothenburg, 250 bls. wood pulp.

### PORTLAND (MAINE) IMPORTS

WEEK ENDING APRIL 14, 1923

Irving Bank Columbia Trust Company, W. Loquassuck, Hango, 10,189 bls., 1,453 tons wood pulp.

## BIDS AND AWARDS FOR GOVERNMENT PAPER

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., April 18, 1923.—The purchasing officer of the Government Printing Office has received the following bids:

40,000 pounds 24 x 36—80 high finish sulphite manila paper, in 18 inch rolls: R. P. Andrews Paper Company at \$.078 per pound; Maurice O'Meara Company, \$.0649; Old Dominion Paper Company, \$.0949; Wilkinson Bros. & Co., \$.06345; The Broderick Paper Company, \$.0665; Samuel S. Aleorn, \$.064; Mathers-Lamm Paper Company, \$.062; The Champion Fibre Company, \$.0666; Reese & Reese, \$.0713; The Whitaker Paper Company, \$.0777.

50,000 pounds 26 x 38—No. 50 chip board: Republic Bag and Paper Company, at \$.03185 per pound; F. T. Parsons Paper Company, \$.029; United Paperboard Company, \$.0294; Reese & Reese, \$.02779; R. P. Andrews Paper Company, \$.02875; Dobler & Mudge, \$.02878; The Whitaker Paper Company, \$.028795; The Broderick Paper Company, \$.0285; Mathers-Lamm Paper Company, \$.029175; Philip Rudolph & Son, Inc., \$.02875; Manhattan Paper Company, \$.03.

1,000 sheets 20 x 31—brown paperoid: R. P. Andrews Paper Company, at \$70.00; The Whitaker Paper Company, \$56.60; Mathers-Lamm Paper Company, \$138.00; Alvah Bushnell Company, \$105.00.

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

20,800 pounds 26½ x 41—102 pounds India tint and light green coated cover paper: R. P. Andrews Paper Company, at \$105 per pound; Mathers-Lamm Paper Company, \$.108; Dobler & Mudge, \$.094; The Whitaker Paper Company, \$.1025; Reese & Reese, \$.1049; Geo. W. Millar & Co., Inc., \$.1105; The Broderick Paper Company, \$.1019; Allied Paper Mills, \$.135.

The purchasing officer of the Government Printing Office has received the following bids: 41,410 pounds various sizes and weights, white ledger paper and 20,100 pounds 20½ x 30½—100½ No 60, heavy white ledger paper: R. P. Andrews Paper Company, at \$.35 per pound; The Whitaker Paper Company, \$.3274; Dobler & Mudge, \$.28; Reese & Reese, \$.2698.

The Government Printing Office will open bids on April 20 for 50,000 pounds of bristol board in 20 inch rolls. Bids will be opened on the same date at the printing office for 30,000 pounds (300 reams) of buff and Quaker drab 21 x 31—102 pounds flat bristol board.

Bids will be opened at the Government Printing Office on April 20 for 58,000 pounds (1,000 reams) of 38 x 48—58 high M. F. opaque printing paper.

The printing office will open bids on April 23 for 78,000 pounds (2,000 reams) of 24 x 38—No. 16, 39 pounds high M. F. yellow writing paper.

The Government Printing Office will open bids on April 25 for 55 reams of 19 x 24—100 brown paperoid.

The Bureau of Supplies and Accounts, Navy Department, will open bids on May 15 for 15,000 rolls of paper towels.

The Champion Fibre Company has been awarded the contract for furnishing the Government Printing Office with 1,000,000 pounds of U. S. postal card cream bristol board in 44½ inch rolls at \$.082925 per pound, bids for which were opened on April 4.

Other paper awards just announced include one to the Carter-Rice Corporation for furnishing 35,700 pounds (350 reams) of various colors 21 x 31—102, bristol board at \$.06125 per pound and 85,000 pounds of same in 20 inch rolls to the same firm at \$.06. Bids for these items were opened on March 21.

The Whitaker Paper Company will furnish 2,500 pounds of back lining paper in 24 inch rolls at \$.0449 per pound, bids for which were opened on March 28 and the Carter-Rice Corporation will also furnish 9,800 reams of 22 x 28—196, white China board at \$17.00 per ream bids for which were opened on April 2.

### Fox River Navigation Opening Late

Navigation of the Fox river this year will be opened much later than in former years because of the continued cold weather and the large quantities of snow in the north. In other years the river was in high flood stage at this time and navigation was opened about the middle of April. It probably will be near May 1 this year before the first boats pass through the locks.

River transportation is important to the papermills of the valley. Two years ago about 175,000 tons of coal was transported up river from the docks in Green Bay and most of this was for paper mills. Last year a flood in June washed out the locks at Little Rapids and navigation was held up for more than two months, causing a considerable loss to mill owners. It is quite probable that 200,000 tons of coal will be transported on the river this year if conditions are favorable.

### Second Receiver for Hartje Co.

On petition of William J. Alexander of Steubenville, Ohio, a second receiver for the Hartje Paper Manufacturing Company, was appointed in the United States District court, at Pittsburgh last week. The Peoples Savings & Trust Company was appointed the auxiliary receiver.

Mr. Alexander's petition charges the Monongahela National Bank with negligence in allowing \$75,000 of the company's funds to be deposited to the credit of the officers of the organization. It further states that the defunct organization owes Alexander the sum of \$5,000 and his other obligations in excess of \$1,000,000. George E. Wisner of Steubenville was appointed receiver of the firm Feb. 11, 1921, under bond of \$100,000.



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## Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,  
TUESDAY, APRIL 17, 1923.

**BLEACHING POWDER.**—The tone of the bleach market throughout the past week held consistently firm and no alterations were apparent from the quoted level of 1.90 to 2.00 cents a pound, the bulk of transactions being consummated at the latter figure.

**BLANC FIXE.**—Ruling quotations on blanc fixe in the course of the week were \$85 to \$90 per ton for the dry commodity and \$45 to \$50 for blanc fixe pulp. A slight enhancement in mill demand was noted as purchasing agents returned from the convention and buying again resumed full vigor.

**CAUSTIC SODA.**—Caustic soda, of 56 per cent basis, was quoted at the schedule listing of 2.50 cents a pound during the week and from all appearances this price will obtain for some time to come. Supplies are fairly closely held and the regularity of consuming demand makes for stabilized market conditions.

**CASEIN.**—The rebound of casein prices, which took effect last week following a falling off of two or three cents a pound coincident with unusually heavy imports of the Argentinian commodity, was sustained throughout the current week, quotations holding in the neighborhood of 21 to 22 cents a pound, New York, duty to be paid by purchaser.

**LIQUID CHLORINE.**—100-pound cylinder lots of liquid chlorine continue to be quoted on the average, at 6.00 to 6.20 cents a pound. Dealers state that the demand has strengthened materially in recent weeks and look for firmer prices soon.

**PAPERMAKERS' GLUE.**—Hide glue, used by the paper manufacturing trade for tub sizing, had held at steady quoted levels, the various consistencies ranging in price from 13 to 19 cents a pound. Increasingly larger amounts of this commodity have come into use by the trade in consequence of the high prices and acute shortage which have prevailed in the casein market during recent months.

**ROSIN.**—Grades E, F and G of rosin have evidenced almost daily fluctuations in the course of the past week, but prices, f. o. b. New York have settled to an average quotation of 6.15 to 6.30 cents a pound, representing a slight advance over the price quoted a week ago.

**SALTCAKE.**—Standard saltcake continues in strong demand by the consuming trade and the price of \$26 per ton rules exceptionally firm, showing a disposition at times to exceed this quoted level. Demand, dealers say, considerably outstrips the supply at the present time.

**SATIN WHITE.**—This whitening agent has held in average call during the week, although buying was necessarily restrained to a certain extent by reason of the conflict of convention week. Satin white has held at the average of 1.50 to 2.00 cents a pound, prices being firm.

**SODA ASH.**—Alkalies continue unchanged in price and moving forward at their schedule listings in substantial volume. Soda ash was held at the old quotation of 1.20 cents a pound during the week and no tendency to deviate from this price was unearthed.

**STARCH.**—With papermakers' starch quoted at 2.97 cents a pound in bags and 3.15 cents in barrels, and powdered starch listed at 2.97 and 3.25 cents for these respective amounts, the starch market registered slight quotational advances during the week. Demand is strong and bids fair to continue in intensity.

**SULPHATE OF ALUMINA.**—While quotations in the West are considerably lower than those prevailing along the Atlantic seaboard, sulphate of alumina prices are generally regarded as steady-to-firm. Current listings are in the neighborhood of 1.43 to 1.60 cents a pound on commercial sulphate, while the iron free has held in the vicinity of 2.55 to 2.75 cents.

**SULPHUR.**—Eighteen to twenty dollars a ton is still the schedule price at which the bulk of sulphur commitments are made. Producers do not anticipate any price change in the immediate future

due to the fact that the consuming call is very steady and supplies are usually held closely.

**TALC.**—A steady demand from paper mills accrued to talc dealers in the course of the week and the increased activity of the manufacturing trade has considerably enlivened the call for the American grade. Prices have ruled firm at \$14 to \$16 per ton.

### Crocker-McElwain Improvements

The Casper Ranger Construction Company has received the contract for remodelling the former Holyoke factory of the United States Envelope Company recently bought by the Crocker-McElwain and Chemical Paper Manufacturing Company, into offices and storage for the firms. The machinery of the envelope concern has been moved to other branches, and most of its 150 employees have found work elsewhere.

There will be about 13 offices and conference rooms fashioned out of the second floor. There is also a large blue print room and other conveniences and a private branch telephone is to be installed. The larger part of the building will be used for the storage of the manufactured products of the Chemical Paper Manufacturing Company. The change will cost upwards of \$20,000.

## Market Quotations

(Continued from page 63)

Boards		Old Papers	
(Per Ton Destination)		Shavings—	
Kraft Wrapping ..	.07 @	No. 1 Hard White	4.25 @ 4.40
Common Bogus ...	3.50 @ 3.85	No. 1 Soft White	3.50 @ 3.75
Chip .....	\$60.00 @ 65.00	No. 1 Mixed .....	1.00 @ —
News, Vat Lined..	60.00 @ 65.00	Ledgers & Writing	2.50 @ 2.75
Wood, Vat Lined.	70.00 @ 75.00	Solid Books .....	2.25 @ 2.55
Filed News Board	60.00 @ 65.00	Blanks .....	1.50 @ 1.65
Solid News Board.	75.00 @ 80.00	No. 2 Light Books.	1.75 @ 1.90
S. Manila Chip...	75.00 @ 80.00	Folded News, over-	
Pat. Coated .....	90.00 @ 100.00	issues .....	1.25 @ 1.30
		Gunny Bagging....	1.50 @ 1.65
		Manila Rope.....	6.75 @ 7.00
		Common Paper ....	.75 @ .90
		Old News .....	1.00 @ 1.15
		Old Kraft .....	1.90 @ 2.00

### TORONTO

[FROM OUR REGULAR CORRESPONDENT.]

Paper		Sulphite, bleached..		Sulphate	
(Mill Prices to Jobbers f. o. b. Mill)		.90.00 @ 100.00		.65.00 @	
<b>Bond—</b>					
Sulphite .....	.11 @ .12½				
Light tinted.....	.12 @ .13½				
Dark Tinted.....	.13½ @ .15				
Ledgers (sulphite) ..	@ .13				
Writing .....	.09½ @ .12				
<b>News, f. o. b. Mills—</b>					
Rolls (carloads)..	3.75 @				
Sheets (carloads)..	@ 4.50				
Sheets (2 tons or over) .....	@ 4.75				
<b>Book—</b>					
No. 1 M. F. (carloads) .....	9.00 @				
No. 2 M. F. (carloads) .....	8.00 @				
No. 3 M. F. (carloads) .....	7.50 @				
No. 1 S. C. (carloads) .....	9.50 @				
No. 2 S. C. (carloads) .....	8.50 @				
No. 1 Coated and litho. ....	14.00 @				
No. 2 Coated and litho. ....	13.00 @				
No. 3 Coated and litho. ....	12.25 @				
Coated and litho., colored .....	14.25 @				
<b>Wrapping—</b>					
Grey .....	5.00 @				
White Wrap .....	5.75 @				
"B" Manila.....	6.00 @				
No. 1 Manila.....	7.25 @				
Fiber .....	7.25 @				
Kraft, M. F. ....	8.00 @				
M. G. ....	8.15 @				
<b>Pulp</b>					
(F. o. b. Mill)					
Ground wood.....	\$35.00 @ 38.00				
Sulphite easy bleach	70.00 @ 75.00				
Imp .....	70.00 @ 75.00				
Sulphite news grade.	55.00 @ 60.00				
<b>Old Waste Papers</b>					
(In carload lots, f. o. b. Toronto)					
<b>Shavings—</b>					
White Env. Cut ..	3.90 @				
Soft White Book shavings .....	3.60 @				
White Blk. News	2.20 @				
Book and Ledger—					
Flat Magazine and Book Stock(Old)	2.30 @				
Light and Crumpled Book Stock	2.15 @				
Ledgers and Writings .....	2.50 @				
Solid Ledgers....	2.50 @				
<b>Manilas—</b>					
New Manila Cut.	2.30 @				
Printed Manilas.	1.85 @				
Kraft .....	2.50 @				
<b>News and Scrap—</b>					
Strictly Overissue	1.60 @				
Folded News....	1.50 @				
No. 1 Mixed Papers .....	1.20 @				
<b>Domestic Rags—</b>					
Price to mills, f. o. b. Toronto Per lb.					
No. 1 White shirt cuttings .....	.13 @ .13½				
No. 2 White shirt cuttings .....	.06½ @ .07				
Fancy shirt cuttings .....	.06½ @ .06¾				
No. 1 Old whites	.04½ @ .05				
Third and blues.	.02¼ @ .03				
<b>Per cwt.</b>					
Black stockings..	.03 @				
<b>Roofing stock:</b>					
No. 1 .....	— @ —				
No. 2 .....	— @ —				
<b>Roofing stock:</b>					
Manila rope .....	.06¼ @ .06¾				
No. 2 .....	1.55 @				
Gunny bagging ....	.01¼ @				