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FORTY-SEVENTH YEAR

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Table of Contents

News of the Trade :

	PAGE.
A Year of Unprecedented Events.....	5
Banquet of American Pulp and Paper Association.....	6
A view of the National Paper Trade Dinner.....	10
News Print Has Unusual Year.....	13
Book Paper Market Has Peculiar Year.....	17
1918 a Big Year for Writing Paper.....	17
Pulp Market Has Unusual Year.....	19
New Whaler Pulp Mill at Port Alice.....	21
Epoch-Making Period in Paper Stock.....	23
Foreign Trade in Paper at Close of War.....	25
Improvements in Miami Valley Paper Mills.....	26
Paper and Pulp in France in 1918.....	35
W. Ralston & Co. Expand Plant.....	39
The Year in Paper in Wisconsin.....	43
Kalamazoo Valley Firms Prosperous.....	49
Ottawa is Stormy Center for Paper Industry.....	55
Perplexing Year in Quebec.....	63
Development Restricted in Ontario District.....	79
New Foundland Paper Industry Reviving.....	89
Transportation and Industry's Outlook.....	95
Philadelphia Has Active Year.....	105
Nekoosa Edwards Co. Makes Big Improvement.....	107
Pulp Mills of the United States.....	109
Ground Wood Mills in the United States.....	111
Sulphite Mills in the United States.....	113
Soda Pulp Mills in the United States.....	115
Sulphate Pulp Mills in the United States.....	121
Investigations of the Forest Product Laboratory.....	123
Manufacturers' Convention.....	137
Technical Association Meets.....	167
Standard Methods in Paper Making.....	175
American Paper Machines for Japanese Market.....	175
Annual Convention of Jobbers.....	191
Hubbs Houses Meet.....	221
Scott Paper Co. Improves Tissue Plant.....	257
Expansion in Industry at Monroe.....	261
A System of Laboratory Management.....	269
Work of the U. S. Paper Laboratory.....	275
Demand for Paper Is Better in Toronto.....	279

	PAGE.
Charles Beebe in Paper Trade Fifty Years.....	287
Method of Determining Cost of Drying Paper.....	289
Sutherland Paper Co. Expands Its Plant.....	291
The Wardco Club and Business Efficiency.....	297
Valuable By-Products of Sulphite Mills.....	301
Census of Canada's Water Power.....	309
Mills on Pacific Coast Run Almost at Capacity.....	311
Chicago Conditions Unchanged.....	313
Tennessee Paper Mills, Inc., Build Fine Plant.....	329
Manufacture of Asbestos Cardboards.....	333
Paper Statistical Work of Trade Commission.....	337
Kalamazoo Trade Notes.....	339
The Cornish China Clay Industry.....	345
H. S. Wilder Out of Remington Co.....	351
Container Club Is Formed in Chicago.....	355
Waste Material Dealers Have Enjoyable Banquet.....	363
Technical Association Has Big Banquet.....	367
National Paper Trade Association Dines.....	371
National Paper Products Co. Starts New Mill.....	375
Canadian Associations Meet.....	377
Traffic Association to Open Office.....	395
Imports and Exports of Paper and Paper Stock.....	396

Editorial:

The Annual Number.....	394
The Year in Review.....	394
A Successful Convention.....	394

Obituary:

Philip Hauck.....	303
-------------------	-----

Market Review:

New York Market Review.....	361
Market Quotations.....	405
Miscellaneous Markets.....	405

ALPHABETICAL LIST OF ADVERTISERS, PAGE 428

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YEAR OF UNPRECEDENTED EVENTS

Many Changes Brought About by the Government Regulations in Endeavor to Win the War—Period of Readjustment After Armistice

Questions of Fuel, Transportation, Labor, Etc., Seriously Handicap the Industry Until End of War Seems in Sight—Demand Declines Greatly Because of Government Regulations—Show Revival in Mid Summer, But Later Declines and Is Quiet at End of Year—Prices Hold Fairly Firm But Show Decline in Some Departments of the Market—Industry Optimistic About Future.

The year just ended was a year without precedent in the annals of the paper industry. It was a year which brought so many new conditions and changes that it will long be remembered as the most trying period that the men of the industry ever had to pass through. It was strictly a war year, and up until the last day of hostilities business was hampered by Government regulations concerning the winning of the war. The splendid spirit with which business responded to these regulations need not be mentioned in this brief review. That the regulations were all for the best, was decisively proved when the armistice was signed and our sacrifices were rewarded with victory.

The Question of Fuel

The first serious question to confront the trade at the beginning of 1918, was the question of fuel. There was so much need for coal for war purposes, and so much difficulty was experienced in mining and transporting coal that in many cases board and paper mills were unable to obtain fuel. Finally things came to such a pass that drastic action was made necessary, and the Government responded to this crisis when Dr. Harry A. Garfield, Fuel Administrator, issued his famous order which closed down all places of business east of the Mississippi River for four consecutive Mondays. The order was originally issued to cover a period of ten Mondays, but conditions became so relieved after the first four weeks that this drastic action was no longer necessary. The effect of this order on the paper industry was felt immediately. Production was curtailed to such an extent that the paper market stiffened with a jolt. Only the fact that consumption was also greatly reduced, by reason of the fact that other industries were also forced to shut down, saved the country from a paper famine. As it was, only the strictest conservation saved the country from this fate later.

Transportation was the next problem that confronted the trade. Under the directorship of William G. McAdoo, the railroads were being well managed. The Government naturally, however, looked out for war interests first, and food and ammunition were given priority over everything else. All other commodities were forced to wait their turn until available car space was obtained. Director McAdoo finally saw fit late in June to systematize the whole situation, and all industries were classified according to how essential they were to business, and the winning of the war, and were given priorities accordingly. That is, food and ammunition were given preference in shipping over everything else, and other industries were given priority in the order in which they ranked. Fortunately, the Government fully realized the importance of paper, and paper mills were all put in class C for priorities in production and shipments. The Government took great pains to ascertain just how the different industries should be classified, and the War Industries Board sent ques-

tionnaires to different manufacturers throughout the country.

Labor Troubles

Labor was also a most important factor all through the year 1918. At the beginning of the year the Selective Service law had made such inroads that the Government was again forced to take drastic action, and this action came in August when Provost Marshal General Crowder issued his "work or fight" order. By this order, all men who claimed exemption on the grounds of having dependents were made either to find employment in some essential industry, or fight. Under the same order exemptions were granted to men who were absolutely necessary to industries producing essential things. Thus a man who was absolutely needed in a paper mill was granted exemption regardless of everything else if his firm applied for such exemption. This was fortunate, as experienced men were thus able to remain at home and train the unskilled help who replaced men who had gone to war. It was this action alone which saved the country from a serious labor shortage.

The Matter of News Print

Strictly speaking from a paper point of view, 1918 was chiefly a news print year. The great news print controversy between the manufacturers and publishers, which began as far back as 1916, was continued, and after several long legal battles has not even as yet been finally settled. The news print investigation was begun in 1916, by invitation of George F. Steele, then secretary of the News Print Manufacturers' Association. Mr. Steele extended his invitation because of adverse criticism which appeared in the press of the country at that time. The Federal Trade Commission took up the work of investigation, and later seven manufacturers were indicted on a charge of violating the Sherman act. After several postponements these indictments came up for trial before Federal Judge Mayer. At this time an agreement was reached by both sides and the indicted manufacturers were fined \$11,000, after entering a plea of *nolo contendere*. Under the agreement made by the two parties the manufacturers agreed that a maximum price of 3 cents be charged from January 1, 1918, to April 1, 1918. This price was then to be reviewed by the Federal Trade Commission. The manufacturers were then to have the right of submitting the findings of the Federal Trade Commission to a review by four Circuit Court judges of the United States Circuit Court.

An Unsatisfactory Decision

In their review of the case the commission finally, after much argument, raised this maximum price to 3.10 cents. An advance as small as this was not, of course, satisfactory to the manufacturers, and the case was immediately appealed before the Circuit Court judges. These four judges, after very carefully



PICTURE TAKEN AT THE FORTY-SECOND ANNUAL BANQUET OF THE AMERICAN PAPER AND PULP

ASSOC



ASSOCIATION, THURSDAY EVENING, FEBRUARY 6, 1919, AT THE WALDORF-ASTORIA, NEW YORK.

considering all the evidence rendered in the case, finally handed down a decision, which all news print experts agreed was remarkable. The decision showed an expert knowledge of all the facts of the case and fixed a price of 3.50 cents for the sale of the paper. The manufacturers then again took the matter before the Federal Trade Commission, for the purpose of having that body consider the increased costs which the manufacturers had been forced to pay after April 1. This body rendered a decision which fixed a minimum price of 3.75 cents. This was, of course, entirely unsatisfactory to the publishers, and at the time that this is written they have placed an appeal in the hands of the attorney general to have the matter again reopened. February 11 has been set as the date for a preliminary hearing on this appeal.

In concluding a review of the news print market for the year 1918, it might be well to quote the words of one man prominent in the industry on the various phases of the situation: "The year 1918 will stand in the annals of the news print industry of the United States as the one, above all others, which included all harrassing and hampering conditions that a world war, Government interference, and a steadily rising level of costs could create."

The Wrapping Paper Market

Coarse paper was, perhaps, the next grade of paper to be considered in order of importance during 1918. For the first three weeks of the year the coarse paper market was very dull. The beginning of the fourth week showed a change for the better, however, and almost overnight quotations on No. 1 kraft jumped from 6 to 7½ cents, while No. 2 domestic kraft went from 5 to 6½ cents. Label screening and Manila papers were also quoted at higher prices, while a considerable advance was noted in the quotations on fibre papers, and bogus. From this time on the market continued to strengthen daily, and for a time prices became so uncertain that mills and jobbers withdrew all quotations. When jobbers and mills again began giving out prices, during the week of April 28, No. 1 domestic kraft was quoted at 8 cents, while all other coarse papers had made corresponding increases. From this time on quotations kept steadily advancing weekly until the price of No. 1 domestic kraft had gone as high as 10½@11½. After that the market began to decline, and the end of the year saw prices down almost as low as they were at the beginning. This was due, of course, to the ending of the war. The Government had been one of the largest users of coarse papers all through the war, and while this Government demand was felt, the market was very firm. With the coming of peace, however, the demand fell off anywhere from 15 to 20 per cent, and prices naturally had to come down. The high price of kraft pulp all through the summer was also a cause of high prices, but in the late summer and fall when kraft pulp became cheaper and easier to get prices for coarse papers again were affected. Below is given prices of several grades of coarse papers, as they were reported in the PAPER TRADE JOURNAL, at the first of each quarter of the year:

Grade	Jan. 3	May 2	Aug. 1	Oct. 31
*KRAFT:				
No. 1 Domestic.....	6	8	10 @11	10 @11
No. 2 Domestic.....	5	7.50	8.85@9.50	9 @10
MANILA:				
No. 1 Jute.....	9	**	**	**
No. 1 Wood.....	4.45@5	6	6	6.50@7
FIBRE PAPERS:				
No. 1 Fibre.....	5.25	6.25	6.50@6.75	6.50@6.75

*All prices f. o. b. New York.

**Quotations were withdrawn on this grade.

Board Papers

Board prices during the year showed a very wide range. At

the beginning of the year the board market was very dull. Prices on news board were as low as \$40 a ton, a figure which they had dropped to after attaining a height of \$80 a ton in January, 1917. The whole market was very inactive, and other grades of board were being quoted at prices correspondingly low. The two years previous had seen an unnatural boom in the board market, and when 1918 started the market was just beginning to readjust itself. The market had just about returned to normal, however, when fuel and transportation problems entered into the condition of the market. The Fuel Administrator closed down operations at all board mills for four weeks, from 7 A. M. Saturday to 7 A. M. the following Monday. At the same time board manufacturers found it hard to make rail deliveries to consumers, and straightway prices went up. Within a week quotations on news board advanced from \$40 a ton to \$60 a ton, while an increase of from \$12 to \$20 a ton was made in the price of all other grades of board. Prices hovered around these levels until the week of March 10, then an increase of \$5 a ton was made in the price of news board, while other grades remained steady. From that time on prices did not vary more than \$5 a ton from these levels, until the rush for board for the manufacture of Christmas boxes began. As the coal situation had not improved at this time board prices again attained levels as high as \$75@80 for news. These high prices continued until the coal situation cleared up and the Christmas rush ended. From that time on prices began to decline until at present they are almost down to former levels.

Writing Papers

The year 1918 was a most unusual one for writing papers. From the beginning of the year down to the time when the armistice was signed, conditions were so uncertain in the fine paper market that dealers were unable to issue price lists and quotations in the usual manner. No sooner would a dealer send a price list to his trade than mills would be forced to raise prices, and the dealer's price list would then be valueless. Production was hampered continually throughout the year by fuel problems, and in August things reached such a point that the War Trade Board made all mills receive a pledge from jobbers that the paper would be conserved, before they made a sale. Jobbers, in their turn, were forced to receive similar pledges from the people they sold to, and pledges were demanded from everyone down to the consumer. Prices reached unprecedented heights, and only these strict conservation measures saved the country from a paper famine. In addition to this, dealers were always uncertain as to whether their mills would be able to take care of their orders. In many cases jobbers found themselves with orders from retailers on their hands and they were unable to obtain paper from the mills to fill these orders. However, all these conditions have been adjusted now, and the market is again becoming normal.

In the tissue market practically the same conditions prevailed. At the start of the year tissues were very dull, but as the year progressed the demand became gradually stronger and prices advanced. Tissue mills were also hampered by the coal situation, and as was the case with fine papers jobbers often found themselves with orders on their hands which they were unable to fill because mills could not furnish the required paper. After the armistice was signed, however, the tissue market fell steadily off and it has not even as yet been anywhere near as active as it was during war times. Prices have come gradually down, and they are at present almost down to normal.

Sacrifices Rewarded with Victory

It may again be said, in view of the above facts, that 1918 was a year without precedent in the annals of the industry. During the year business was also held up by the fact that patriotic citizens devoted a good deal of valuable time to war work. Thus men devoted whole days to work on the Liberty Loans, the War Savings Stamp campaigns, the Red Cross drives, etc., all of which used up time that would usually have been spent in business.

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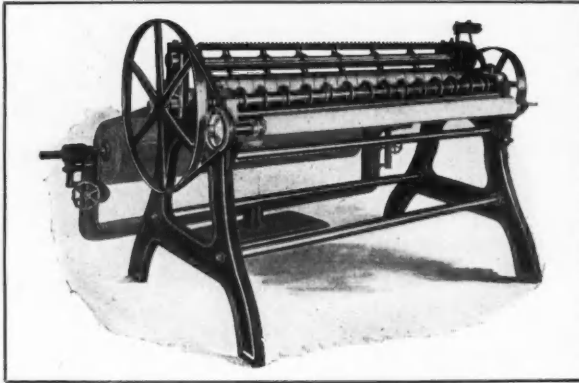
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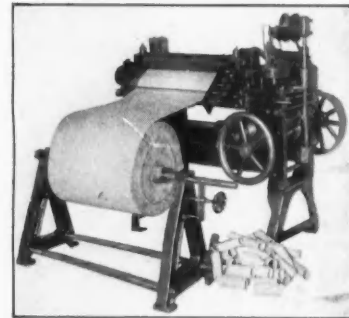
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News Print Experiences Unusual Year

Signal Defeat of Publishers' Attempt to Regulate the Paper Industry for Their Own Benefit—Decision of the Circuit Court Judges a Magna Charta for the News Print Mills' Productions in the United States Falls Off 113,000 Tons and Production in Canada Increases 94,000 Tons, Leaving a Net Loss of 19,000 Tons as Compared with 1917—Outlook for the Future.

Written Especially for the Annual Number of the Paper Trade Journal by a Prominent Manufacturer.

The past year saw more than one victory for right and justice. Not the least momentous was won by the news print manufacturers on this continent when the Federal Judges of the Second Circuit (New York) decided that these manufacturers were entitled to a fair return on their investment in a hazardous business.

In the summary of 1917, printed in the Convention Number of the PAPER TRADE JOURNAL of February 7, 1918, it was stated that the news print mills looked forward to a less troubled year as far as Government interference was concerned, and this proved accurate, notwithstanding "frigid Mondays" in January and February and War Industries Board activities during August, September and October.

Senator Smith's resolution to turn pulp and paper mills over to Government control was defeated in the U. S. Senate January 15, 1918. Intelligent publishers throughout the country opposed the move, in view of the disturbing effect of Government activities in other lines. Attempt to revive the plan during 1918 came to nothing on this account.

Federal Trade Commission hearings on price of news print to become effective after April 1, 1918, opened February 4 and continued until June 6. An immense amount of detailed information was demanded from manufacturers covering the industry from timberland investment to terms of selling contracts. The publishers' side of the case was confined to criticism, and they offered no constructive evidence except that of Wm. Scott, general manager of the Northcliffe Mill in Newfoundland. His testimony confirmed the investment figures claimed by the United States and Canadian mills, and showed manufacturing costs close to similar plants in Canada. Most of the alleged information given to the commission by the expert of the A. N. P. A. was shot to pieces by facts proven by manufacturers.

Price Waterhouse, Hagenau and Erickson, and other recognized experts proved actual investment in mill plants, and showed percentage of return required to keep industry in sound condition.

Manufacturers' Case Handled by Major Wise

The manufacturers' case was handled throughout by Maj. Henry A. Wise in a masterly way, and the Federal Trade Commission on June 18, 1918, handed down its findings, establishing a price of \$62 per ton for roll news in carlots f. o. b. mill as of April 1, 1918. The manufacturers at once appealed to the Federal Judges in keeping with terms of their agreement with U. S. Attorney-General.

Publishers tried to block this, but were overruled. Appeal was argued and briefs submitted in New York on August 14. The judges' decision on September 28 found that the Federal Trade Commission had erred on their price of \$62, and ordered this revised to \$70 as of April 1, 1918.

Manufacturers had meantime (July 29) formally requested the Trade Commission to add to April 1 price the increases in cost due to advance in wages, higher freight rates, and more costly pulpwood effective in May, June, July, 1918. Details of these

increases were agreed on and the Commission on October 25 added the labor and freight figures to the \$70 price found by the Federal Judges. The Commission refused to add the increased wood costs, claiming that the Judges had anticipated these in their findings as to cost as of April 1.

Publishers were disgruntled at this result of their efforts since 1915 to hamstring the print paper industry, and on December 14 they requested Attorney-General Gregory to reopen the matter before the Federal Trade Commission. They allege that figures now available show a reduction in costs since April, 1918, instead of the increases proven by manufacturers' reports. The Attorney-General accordingly has asked the Federal Trade Commission to reopen the matter, and the date for hearing will soon be set.

The news print industry in United States and Canada welcomed the Federal Judges' findings as a basis on which they could go ahead and do business safely. Judicial recognition of the hazards faced by the mills, of the huge investment required, and the decision that a return of 15 per cent on actual investment was fair, constitute a "Magna Charta" for the news mills and insure a sound future for the business. The benefits will extend to the newspapers also, in the assurance of a constant supply at all times at a price based on economic factors and regulated by supply and demand instead of biased "Commissions" and other self-appointed saviors.

Canadian Government Regulation

In Canada, Paper Controller Pringle had delayed decision on the repeated requests of mills for a price to Canadian publishers that would at least cover manufacturing costs. The matter drifted along until the position of most mills became intolerable. In September some of the manufacturers refused to continue operating at a loss and offered to allow the Paper Controller to operate their plants if he wanted to ascertain quickly that his price of \$52 per ton represented ruin to the mills. Mr. Pringle then found it necessary to act promptly, and revised the price in Canada to \$69 f.o.b. mill, retroactive to July 1, 1918. A howl of protest rose from the hitherto favored publishers, and they appealed to a specially constituted tribunal formed of three judges. Appeal was heard in January, 1919, and decision is expected shortly. It is not thought that any reduction will be made for the present. The Canadian publishers insist that they shall be presented with their supply at cost, or less, as long as the Canadian mills are allowed to charge a fair price to their United States customers. The feelings of the publishers on this side of the line regarding this theory can be imagined.

Production and Consumption

The 1918 production in the United States and Canada was close to 1,900,000 tons. United States mills fell off 113,000 tons and Canada increased production by 94,000 tons, leaving a net loss of 19,000,000 tons compared with 1917. Fuel troubles in January and February caused most of the loss in United States

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production. The Government commandeered the power at Niagara Falls early in 1918 and shut down four mills at that point. Some of the shortage was made up by importing 7,500 tons of Northcliffe's paper from Newfoundland, but this was again found to be too costly, and is not likely to continue.

Consumption was greater than in 1917 and kept up throughout the year. Advertising volume fell off slightly. Sixty large dailies in ten principal cities show a net loss of 3 per cent in advertising, compared with 1917. Some localities enjoyed big gains. Baltimore, 10 per cent; Philadelphia, 10 per cent; Cincinnati, 8 per cent; New York showed a net loss of 2 per cent; only one paper gaining over 1917. Los Angeles lost 10 per cent; St. Louis, 11 per cent, and Detroit, 12 per cent. This loss in advertising was more than balanced by increased circulation due to intense interest in war news and training camp activities.

The increase in selling price of newspapers became effective throughout the country, but this did not affect circulations adversely. The theory of some publishers that they were unable to pass their increased costs along to their readers was thoroughly exploded. New York papers advanced from 1c. to 2c. January 26; Washington and Rochester followed in February; Detroit in March; Minneapolis and Cleveland in July; Milwaukee in August; Baltimore, and Columbus, Ohio, in September; and Boston papers, with true New England conservatism, advanced prices in November, after the signing of the armistice.

One thousand nine hundred and fifty-four publications in all went out of business in 1918. Most of these were small weeklies and monthlies. Only 120 were daily papers. Of these, many consolidated with competing papers. Seven hundred and seventy-six new papers started during the year. Foreign language papers showed a heavy mortality. Out of 490 German language papers, only 327 lived through the year.

Stock on Hand

Stocks on hand at mills, in transit, and at destination, on December 31, 1918, in the United States and Canada totalled 272,000 tons—approximately 45 days' run. This would be a normal supply if it was equally distributed, but unfortunately this is not the case. Many of the larger newspapers, who were very active in counselling their neighbors not to accumulate unduly large stocks of paper, were found to have done that very thing themselves. The War Industries Board found it necessary, in October, to shut off shipments to several of these selfish publishers, in order to bring about a more equal distribution of the print paper available. One Chicago paper had 26,000 tons on hand and a Boston publication had over 6,000 tons. Many papers in the Middle West were found to have over four months' supply.

If these unusual hoards of paper are brought into use, as they should be, the supply situation would be noticeably easier.

Imports and Exports

We imported 593,000 tons of news print, an increase of 60,000 tons over 1917, and 126,000 tons over 1916. Canada supplied 586,000 tons of this enormous total.

Our exports approximated 98,000 tons—about 4,000 tons more than in 1917 and 22,000 more than 1916.

South America, South Africa and Australasia depended entirely upon the United States and Canada for their supply in 1918, but with the resumption of world trade and release of shipping it is felt that 1919 will show some falling off in United States exports.

A characteristically stupid effort to embargo all news print exports was made by the American Newspaper Publishers' Association in April, 1918. The War Trade Board in Washington fortunately was in possession of the facts, and declined to help the newspapers to play dog-in-the-manger.

Export prices mounted very high during 1918, but United States mills once more preferred to take care of home markets

first, and turned down offers of \$90 and \$100 per ton f.o.b. ports.

Ground Wood and Sulphite

Water conditions were unusually good throughout the East, but were unfavorable in Minnesota. Most of the mills in that district had to purchase ground wood pulp. Prices remained fairly steady throughout the year at \$30 to \$32 f.o.b. pulp mill. Reserve stocks at the end of 1918 was over 200,000 tons in United States and Canada, approximately seven weeks' supply. Sulphite was firm up to December 1, but has been in poor demand since. Prices held at \$75 to \$80 f.o.b. pulp mill through 1918, and are now \$4 to \$5 a ton lower for spot sales. In view of higher wood costs throughout 1919 the feeling is that sulphite will soon advance.

General

The industry mourns the untimely death in December, 1918, of one of its biggest men. John A. Davis had been for over 25 years a prominent figure in the manufacture and distribution of print paper, and he will be missed by every one who had the honor and pleasure of knowing him.

Prospects for 1919

The present news print capacity in United States and Canada is 6,600 tons per day, or over 2,000,000 tons yearly on a 308 working day basis. This capacity will be increased during 1919 by a new machine at East Angus, Quebec, adding 50 tons per day in July, and another machine at Kenogami, Quebec, adding 50 tons daily in November.

Capacity will be reduced by transfer of some machines in the United States to other and more profitable grades, and careful estimates of this trend indicate a reduction of 410 tons a day in the existing news print production.

Progressive interests here and in Canada feel that if the better feeling between mills and newspapers can be strengthened and extended, capital will be forthcoming for new mills and extensions to present plants. All of the new mills so confidently projected and "prospectused" by the publishers have come to nothing, chiefly because *capital will not venture into a business which is under continual attack from its principal customers.*

A careful review of the entire matter must convince every sensible publisher that the attack on the industry commenced by the late John Norris, carried on by the late Herman Ridder, and culminating in the costly and futile attempts since 1915 to force mills into selling at a loss, were wrongly conceived, venomously carried on, and of late have been used for selfish ends by a small group of interested publishers.

If 1919 brings a better understanding between the makers and users of news print, it will truly be a happy new year. While there is no immediate prospect of extension of the industry in the United States, there may be further investment of American capital in Canadian development, keeping pace with what must come in the way of increased consumption. The spread of education throughout the world, held up by tragic events since 1914, will be resumed and will make up for time lost. The news print industry on this continent must be ready to meet this demand. With their large and growing home market on a sound basis of mutual understanding and good will, the prospects of the industry are splendid and encouraging.

WALDORF PAPER CO. BUYS LAND

ST. PAUL, Minn., February 3, 1919.—Preparation for the expansion, foreseen as a result of the end of the world war, was made last week when the Waldorf Paper Products Company purchased a half block tract adjacent to their plant at Hampden and Wabash avenues.

The property was acquired from the Jefferson & Haard Land Company for \$30,000. It lies between Pillsbury avenue and Vandalia streets.

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Book Paper Market Has Unusual Year

In January of Last Year Prices Had Recorded Somewhat from Their High Level and During the First Three Months Business Was Almost Normal—Orders Were of Good Size and Consumers and Jobbers Seemed Satisfied with Conditions—About the Middle of the Year, However, Prices Were Forced to Top Notch, But a Severe Set Back Was Experienced in November with the Signing of the Armistice.

Written Especially for the Annual Number of the Paper Trade Journal by E. O. Dorman, New York Mgr. of the Champion Coated Paper Co.

What the New Year has in store for the paper market is even more problematical than almost any other line of manufacturing.

Past Years Offer No Basis for Judgment

We may look back over the year 1918 and even the years previous, from which we might naturally expect to secure some light on what might be anticipated during 1919, but the market was so erratic, with changes so unusual, that it is possible to deduce nothing positive from the situation of the past months.

In January of last year prices on book papers had receded somewhat from their high levels of the previous year, and during the first three months business was in general almost normal, orders were of good size, and the consumers and jobbers alike seem satisfied with the conditions existing.

Peak of High Prices Reached in July

All of a sudden, about the middle of the year, early in June to be more specific, the fear of shortage again became the predominant factor in the paper business, and purchasing in large quantities by all dealers in and users of paper forced the market prices rapidly upward until the peak was reached early in July.

During this time the mill also became more or less apprehensive of further advances in freight rates on account of the Government's attitude with the railroads, and most of the mills throughout the country went on to an "at mill" basis of price, not delivering to their customers as had been their custom in previous years. No reduction in price being made to offset this, it really was an advantage of anywhere from 25 to 75 cents per one hundred pounds in the cost of the stock.

Important Change of Policy

This change in policy on the part of the mills of the country is probably one of the most important that has happened during the last few years.

Qualities during the last year have materially improved and this has been brought about by the various processes of manufacture being more nearly stabilized and the war situation being overcome by American manufacturers.

Signing of Armistice Causes Set Back

In November when the armistice was signed the paper market, in line with almost all other markets, received a severe set-back. Buyers throughout the country felt that prices should be reduced in some cases as much as pre-war figures, and for the last two months of the year jobbers and mills alike have been using their best endeavors to show the consumer that material entering into the cost of manufacture is as expensive and labor is insisting on even higher rates of remuneration at the time of writing.

Only Slight Advantage to Mills and Jobbers

The year must then be summed up as one of a slight advantage gained by the mills in connection with the delivering of their product and the slight advantage for the jobbers in that their stocks of finished product purchased at high prices are probably not as great as the mill stocks of raw material also purchased at top figures.

Mills and Jobbers' Costs Not Reduced

The indications for the new year can probably be better forecasted from the past year's record, particularly the last three months of the year, than any of the previous years during the duration of the war; but caution must be taken, particularly with the consumer, to impress upon him the facts that the manufacturers' cost and the jobbers' distribution cost are not reduced by the simple act of the signing of the armistice in France.

1918 A BIG YEAR FOR WRITING PAPER

Written Especially for the Annual Number of the PAPER TRADE JOURNAL by D. C. Culbertson.

Writing paper—how much history it has helped to make in the last seven years?

The Treaty—"The scrap of paper"—was writing paper, and the results of the most important congress of peace delegates the world has ever known will be recorded on writing paper.

It, therefore, may be considered the De Luxe classification in the paper field.

More of it has been used in 1918 than in any other year. For nearly the entire year the mills enjoyed a large trade, due to the general prosperity of our country, the increased consumption by our own Government, and because foreign markets were depleted and bought their supplies from us.

Though the demand, most of the year, exceeded the production, the manufacturers generally upheld previously established qualities. This is exceedingly commendable, and much good will come in the future because of it.

As this article is being written—the middle of January—the demand is light, but there is too much prosperity in this country, and the world needs too much paper to have a light demand very long, and the writer thinks, therefore, that within a very short while, perhaps early spring, the sale of writing papers in all grades will equal, or nearly equal, the production.

BEAVER BOARD HEAD TO SAIL FOR EUROPE

[FROM OUR REGULAR CORRESPONDENT.]

NIAGARA FALLS, N. Y., February 3, 1919.—Last Saturday afternoon William F. MacGlashen, of Buffalo, president of the Beaver Board Company, sailed for Europe on an inspection trip and to plan for a campaign for foreign business. Mr. MacGlashen will watch the reconstruction of the Allied nations and the neutral countries, visiting the industrial centres of England, France, Belgium, Spain, Switzerland, Italy, the Netherlands and the Scandinavian countries. He will be followed next month by the company's export manager, William T. Buckley, who will leave for a business trip to the Orient, New Zealand and through Australia. He will sail for Australia on or about February 15, and his plans call for a most thorough campaign to make it possible to send Beaver board to every large industrial centre in the world.

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Pulp Market Has Unusual Year

Imports from Sweden, Cut Off by War Measures and By the Greatly Increased Cost of Manufacture—Scandinavian Mills Greatly Handicapped By Insurmountable Difficulties in the Way of Importation of Chemicals and Coal Needed to Continue Operations—Future of Imported Pulp Is Decidedly Uncertain, Owing to the Tremendously Increased Importation from Canada.

The beginning of 1918 brought with it very uncertain prospects for the continuation of the import of pulp from Scandinavia. We had been at war nearly a year. Germany had threatened Sweden with a declaration declaring wood pulp contraband. American exporters called the Swedish Government's attention to the gravity of this measure, pointing out that it would mean the cessation of all exports to the United States.

February, however, saw these shipments of wood pulp from the Swedish East Coast ports definitely suspended by the German order, declaring wood pulp contraband, thereby cutting off all shipments to America. This in itself, however, was not the deciding factor in preventing the import of pulp.

Increasing Cost in Sweden

The ever increasing cost of the manufacture of wood pulp in Sweden brought the price of Swedish sulphite up to 360 kronors a ton f. o. b. Gothenburg, which at normal exchange is equivalent to about \$4.30 per 100 pounds. At the same time the dollar in Sweden was fluctuating at an enormously high discount, at one time as high as 37 per cent., but on the average at a discount of 25 per cent. during the first eight months, thereby increasing the cost of pulp f. o. b. Swedish ports to nearly 5½c. To this would have to be added abnormally high ocean freight rates, excessive war risk insurance, to include coverage against the eventuality of capture, all of which would have resulted in a cost of 6½c. per 100 pounds landed American ports for Swedish sulphites or kraft pulp. These prices in themselves acted against a continuation of imports with a few small exceptions throughout the year just past.

Difficulties Over Chemicals and Coal

The Scandinavian sulphite mills at the same time were confronted with insurmountable difficulties in the way of the importation of chemicals and coal needed to continue operations. Scandinavia is dependent entirely upon the outside world for nearly everything with the exception of wood and some pyrites. Shipments of coal from England were stopped entirely. Sulphur from Italy was unobtainable. Chemicals from Germany were delivered in a very small way.

All of these conditions, with the added and most important factor, labor, which at all times was very uneasy owing to the extreme scarcity of food, finally brought about a serious curtailment in the production of pulp in Sweden. Many of the mills, with the exception of those that were operated by electric power were forced to shut down entirely, while others could only operate with a production reduced by an average of 60 per cent.

Small Stocks on Hand

The last few months of the year just passed found the Swedish mills with small stocks of pulp on hand produced at a tremendously high cost, markets for the disposition of the pulp were not available, contracts were not being made and the future was all but bright. Great Britain, Sweden's largest customer, for nearly a year, owing to disagreements with the Swedish Government, had

prohibited the import of Swedish pulp, and instead filled their wants with Norwegian pulp, taking nearly the entire output of those mills. The Norwegian paper makers during 1918 depended in a large way upon Sweden for wood pulp for their own use. Happily November saw the ending of hostilities. This caused an immediate demand for pulp from England.

France, Italy, Spain and Holland also came into the Swedish markets for their supplies. At the same time inquiries from the United States were also being received. This sudden demand caused a natural rise of price in Sweden amounting to between 10 and 15 per cent. The increased price, however, has not been felt by us for the reason that the conclusion of the war also brought about an improvement in the exchange on Scandinavia, which during November saw the dollar at a discount only as low as 5 per cent., compared to an average discount of 25 per cent. during the war. This, as can readily be seen, more than offset the advanced prices.

High Prices to Continue

The ending of the war and the resumption of shipment of food from the United States to Scandinavia placed at our disposal considerable Swedish tonnage, all of which is now available for import. Prices, however, at this writing remain at a figure only slightly below those which prevailed throughout the war. Six dollars per 100 pounds c. i. f. U. S. A., has been and is the average existing selling price for strong Swedish sulphite as well as kraft pulp.

With the ever decreasing stocks of available pulp in Sweden, and the fact that navigation in the Baltic is closed during the winter, not to re-open until the spring of 1919, a continuation of the above price for the time being is expected. In addition a marked reduction of the price of Scandinavian pulps cannot be expected until after the Scandinavian mills have gone back to peace-time working basis. This may be realized by the time navigation opens, if by that time the manufacturers of Scandinavia have been able to replenish their stocks of raw material which not only include coal and chemicals but also felts, wires and other machinery which is vitally needed.

Future of Imported Pulp

The future of imported pulp in the American market is exceedingly uncertain, due to the tremendously increased importations from Canada. Canadian pulp has to a great degree supplanted the imported pulp. The foreign manufacturers realize that their only hope for an increased business, or at least a normal business, is entirely a matter of price. Unquestionably many of the American paper mills will continue the use of American or Canadian pulp unless the price of foreign pulp is offered as an inducement to them to go back to their old source of supply, at least in part. On the other hand, many of our papermakers are looking forward to an increased supply of imported pulp.

The resumption of the import of pulp should be looked upon with satisfaction by the American paper industry if only for the

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reason that the foreign supply usually tends to stabilize the cost of pulp produced on this side of the Atlantic. Furthermore, the nature and quality of certain Scandinavian pulp makes its use necessary in many instances.

The resumption of imports of pulp from any of the other countries outside of Norway, Sweden and Finland is not to be considered or expected, the only exception would be the probable re-establishment of business with Finland provided order is established in that country within a short time. The quantity of pulp available for export from Finland, however, is not a very important factor.

American and Canadian Mills Prosper

The Canadian and American pulp mills during the past year have probably enjoyed the greatest prosperity ever known in the industry. In addition to the unprecedented demand from the mills in the United States, the Canadian and American manufacturers were called upon by our South American neighbors as well as Japan, Australia, England and Italy. The exports of pulp to these markets has increased many fold, but the ending of the war has already caused a curtailment in our exports, owing principally to the fact that these countries can obtain their supplies cheaper from Europe.

Shipments of wood pulp have already reached South America from Scandinavia. The American wood pulp exporters have, in

many instances, been asked to cancel or delay shipments of pulp contracted for by South America before the signing of the armistice.

The American paper manufacturer can look with confidence toward his future supply of pulp both from across the sea and from our neighbors.

Stocks of Imported Pulp

Finally, as to the stocks of imported pulps on hand here at present, there are available in warehouses about 10,000 tons of various grades of Swedish pulp. This is the remainder of about 60,000 tons of Swedish pulp imported during 1917. Ten thousand tons, however, is a very small quantity when we bear in mind the fact that the normal importation of pulp from all Europe averages 30,000 tons per month. The pulp on hand with small quantities that can now be expected from Sweden will barely carry the industry until navigation reopens.

Wood pulp manufacturers and the merchants anticipate a continued heavy demand for all grades of pulp throughout 1919. The world's production of pulp with the expected increase in the consumption of paper will be very readily taken up. The United States will undoubtedly be called upon to a great extent to assist in the rehabilitation of Europe. Our industries generally will flourish. The paper industry, it is expected, will be favorably affected and benefited by the activities in all other lines of trade.

NEW WHALEN PULP MILL AT PORT ALICE

The new pulp mill of the Whalen Pulp & Paper Mills, Ltd., at Port Alice, was completed in September last and now has a production of 60 tons a day of sulphite pulp. The mill is planned, however, with the intention of increasing this production at a later date to 120 tons a day.

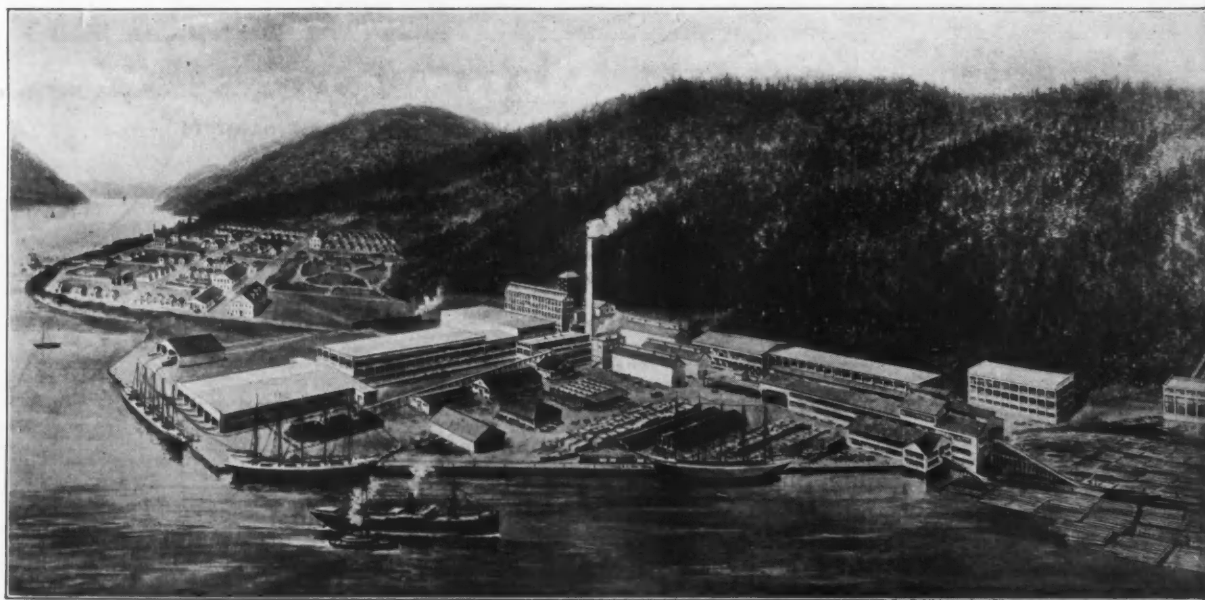
Just at the present, high grade easy bleaching sulphite is being manufactured, but it is expected to manufacture bleached sulphite.

This mill is modern in every respect, and situated as it is in the heart of the finest spruce belt in British Columbia, or, in fact, in the world, is in a position to turn out a production equal to anything on the market.

A modern sawmill, with a capacity of 200,000 feet a day, is also in full operation at this plant. This sawmill will not only take care of the firm's pulp wood requirements, but will also cut the higher grades of spruce and a very large quantity of fir lumber for export markets.

The company was fortunate in locating an exceptionally good town site and mill site with a large available water power close at hand. This water power will be fully developed at a later date.

At the present time the population of Port Alice is in the neighborhood of 600, and every effort has been put forth by the company toward the comfortable housing of its employees.



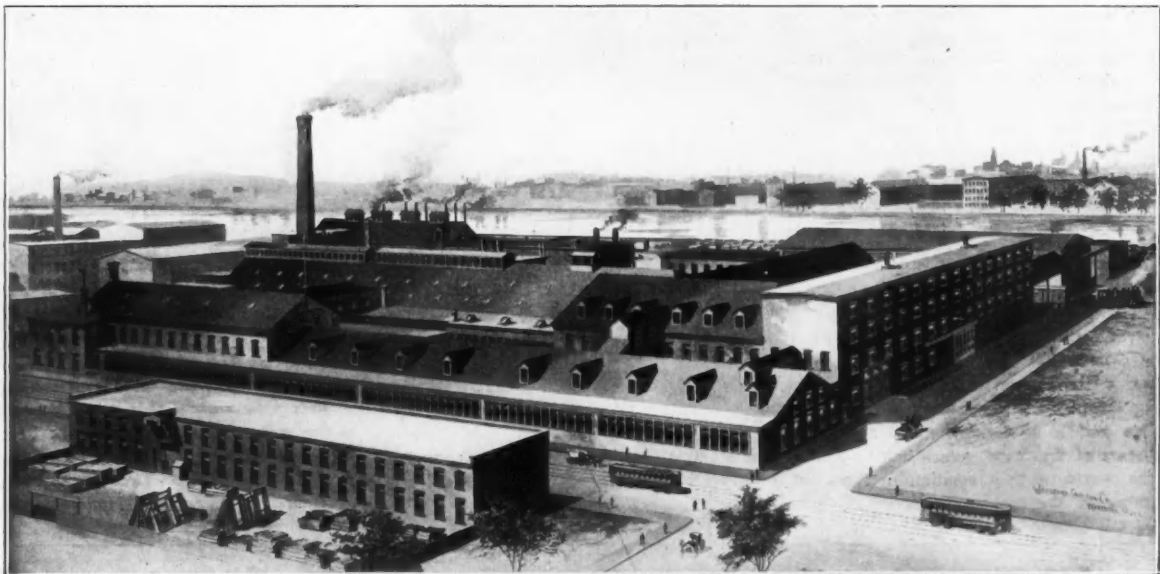
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Epoch Making Period in Paper Stock

Market Throughout 1918 One of the Most Unprecedented That the Trade Has Ever Experienced—Epidemic of Influenza and the Signing of the Armistice Which Practically Concluded the War Among the Most Important Factors That Tended to Disturb the Market—Except for Bagging and Rope Practically No Relief Was Had from Foreign Markets.

Written Especially for the Annual Number of the Paper Trade Journal by Walter R. Hicks, of Daniel M. Hicks, Inc.

We can diagnose whirlwinds, cyclones and tornadoes ; we can account for earthquakes, landslides and volcanic eruptions ; they are disturbances of natural laws. Markets too are governed by a natural law, as we all know, that of supply and demand. But the unprecedented market of 1918 was characterized by disturbances that eclipse anything in physiographic phenomena even unto cloudbursts. The New Year was ushered in upon a stage set for the great problematic play entitled "War," and beset with all the perils and uncertainties contingent thereto.

Epoch Making Period

It is not necessary to chronicle the incidents nor record the figures, for so indelibly are they stamped on our memories that they will serve as "stove league" topics for many years to come. It may be advisable, however, to martial these events in their natural sequence, with the idea of restoring "order out of chaos," so that we can, in a measure, determine just about where we are at. We require no hoary bearded sage to tell us that 1918 was another epoch making period in the history of the trade. It was an era of high prices and low qualities, when mills were driven to make virgin straw board out of dump mixed papers, and the paper from which is made the currency of the realm out of lowly cotton cuttings. A condition brought about by a shortage of labor and of stock, while, on the other hand, there was an ever-increasing demand for raw material, that sprung up early in the year and continued until the armistice negotiations were entered upon.

For the relative effect that the boom of 1916 had on last year's market, let us hastily glance over that period. The runaway market of that time was based on undue anxiety, a desire to stock up, anticipating a shortage that did not materialize until 1918. This was demonstrated by the fact that supplies were fairly plentiful throughout 1917 and prices softened considerably toward the close. The boom of '18 was based on actual scarcity. The dearth existed in all grades, while supplies kept decreasing, the demand kept increasing, and prices went skyward. The advent of '18 found prices nearer normal than they had been since early '16, having gradually declined to these levels during the readjustment to a war basis. January opened up with little or no business and the market was dead in all grades. Consumers, with few exceptions, decided to reduce the high priced raw material on hand, to do no buying until their stocks were depleted, and take their chances on the market at such time, while conditions were more definitely shaping up. From these ditches of despair, the market recovered and soared to pinnacles of dizzy heights, far beyond the expectation of the most optimistic. Government orders soon piled up and kept the mills humming. There was an ever increasing export demand, and there was plenty of business booked ahead, and practically no stock. Priority was given to freight consigned to paper mills, which up to that time had presented another great obstacle, to business.

The mills all came in at once, which precipitated another

scramble for stock. This condition existed until hostilities ceased, and with it there was a marked cessation to business. The market was in an accute state of stagnation. No one grade in particular, but all grades in general were affected. It was not a question of business at a price, but no business at any price. Again we enter upon readjustment. Again prices slumped. Again the mills reduced the high priced raw material on hand. Although the situation may resemble a crash, it is only a lull, and when things take on a definite trend, again the consumers will all come into the market, and then—but this is a review, not a prophecy.

Foreign Market

Outside of bagging and rope, there was little or no relief from foreign sources, the demand for stock being as critical in Europe as it was in this country. Such stocks as did come out were permitted only under certain guarantees, and this together with the lack of available bottoms, tended to further limit imports.

Quotations Compared

Below are given the quotations at the opening of '18, the high of that year and the opening figures of '19. It might be well to note that the prices for January of this year are one to two cents per pound higher on the better grades over January a year ago; while the lower grades are more in line. Also, that the high levels were maintained throughout the greater part of '18, reaching their zenith about midyear, and not wavering until September. The epidemic wrought havoc about this time among many mills, and occasioned the first setback. Then was announced the chlorine raid by the Government on an unmasked paper-making public, which was another blow, and the final jolt came with the armistice:

New Cotton Cuttings

	January, 1918	High of Year	January, 1919
No. 1 white shirt cuttings	9½ to 9¾	15½	12 to 12½
Washables	5½ to 6	10½	7½ to 8
Blue overall cuttings	6½ to 7	10½	8 to 8¼

Old Rags

No 1 whites	4½ to 5	8½	6 to 6½
Thirds & blues, repkd.	\$2.50 to 2.75	5½	3¼ to 3½
Roofing No. 1	1.90 to 2.00	3¾	1.90 to 2.00
Roofing No 2	1.80 to 1.90	3½	1.80 to 1.90

Rope and Bagging

Bagging No. 1 scrap	2¾ to 2¾	4¼	2¾ to 3
Rope	4½ to 5	8	5¼ to 5½

Waste Paper

No. 1 hard wht. shavings	\$.35 to 3.60	7	5½ to 5¾
No. 1 soft wht. shavings	2.50 to 2.75	5½	4.65 to 4¾
No. 1 book stock	1.25 to 1.35	2½	1.50 to 1.60
News	.60 to .65	1.50	.75 to .80
Mixed papers	.45 to .50	1.20	.50 to .55

The above prices are based on f. o. b. shipping point.

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Foreign Trade in Paper at Close of War

A Brief Survey of Its Present and Immediate Future and the Important Place It Must Assume in the American Mills' Reconstruction Plan—Outside of the Obligations That the War Has Forced Upon Us to Become World-wide Merchants, It Must Be Clear to Paper Men That It Will Not Only Afford Protection, but Will Pay Good Dividends in Addition—No Mysticism Today About Exporting Papers.

Written Especially for the Annual Number of The Paper Trade Journal by Benjamin La Bree, Jr., Manager Sales Promotion, Parsons Trading Company

The year 1918 will easily be recorded as the greatest year in history, not only by marking the end of the most decisive war of the ages, but by virtue of the economic changes it has wrought.

The chief of these changes of course concerns international trade which reached an approximate amount of \$50,000,000,000 for the year as compared with an entire world trade of \$2,000,000,000 a century ago. For the United States the country's excess of exports over imports ran over \$3,000,000,000. No other country ever had such foreign payments due it. From a debtor nation owing \$25,000,000,000 to a creditor nation having investments in its favor of over \$9,000,000,000 is the comfortable situation the United States finds itself in at this moment.

What These Figures Mean

Industrially, these figures mean far more than the fact the country has been able to pile up more gold than any other country ever had at one time. That point is interesting, but what is much more important is that they measure in no uncertain way the extent in which our manufactured goods have found distribution. They indicate that all parts of the world have been able to see and test the products of American mills and to estimate their worth in comparison with similar products of previous foreign make. They mean that for the fiscal year just closed such exported manufactured products amounted to nearly two billions and a half distributed in all parts of the world.

To the individual industries these figures have a very personal interest, indicating as they do to what extent each has been sharing in the great total. The paper industry claimed less than 2 per cent. of the entire amount, but even that was nearly three times as great as the last year before the war (speaking in terms of tons and not of value, since the latter would not be a fair indication). Also, it was sufficient to give a wide distribution to all grades and varieties of American made papers and to enable the world to know their merits. Printings of all kinds, writings, wrappings and boards have been exported in increasing quantities each sheet carrying the message of America, as well as that of the individual mill making it.

Have Entered World's Markets to Stay

What has been the result? Simply this: American papers have entered the world's markets to stay. While comparisons have not always been in their favor they have "made good" in the broadest sense, and will not readily be replaced by their former competitors, especially in the markets that are logically ours, unless, unless—

Why has it always been necessary to make these disquieting qualifications whenever paper is mentioned? What is there in the manufacturing and marketing of paper products that present so many unknown factors? And yet we know it is so. For instance, according to one authority, it was not until 1916 that the annual selling price of the products of the paper industry in the United States exceeded the cost of the investment in the plants, whereas the product of other leading manufacturing industries during the past 25 years has had a selling value of from three to six

times the investment. Also, it is well known that the paper industry has always been subject to varying good and bad years without any apparent reason, or because of conditions that could not readily be foretold. It was a situation accepted as part of the peculiar conditions affecting the consumption of paper, and was not considered applicable to other lines of production. Of course, when it came right down to a strict analysis, what was wrong in a bad year was simply over-production with no quick way of expanding the volume of sales; in other words, no extensive markets outside the country to absorb surplus and to keep up capacity production. Now an examination of the other industries having "a selling value of three to six times their investments" reveals in each case a large world volume that keeps the costs of operation consistently down and the net returns consistently up, regardless of the unsettled conditions that may exist in any one market at any one time. This condition is quite in contrast to that obtaining in the paper field, where no great amount of interest in establishing foreign outlets has ever been generally developed, and where in consequence the figures show a smaller relation of export business to the entire production than in any of the other big trades in the same group. To illustrate this a little more clearly according to Government figures of the last normal year ending June 30, 1914, of the entire production in this country of all manufactures ready for consumption—to which group paper belongs—31 per cent. was shipped to foreign markets, while the amount of paper itself exported was but 3 per cent. of its own entire production. Even for 1918, with the impetus of a world war, the amount of paper set aside by the American mills was not more than 7 or 8 per cent. Here, at last is one point of difference. Volume! There may be many explanations for this lack of trade expansion in paper, but the fact remains that its absence has been a serious menace to the welfare of the business in general, and if this is not the chief reason why "other manufacturing industries have a selling value of three to six times their investment," what is?

So it is that I say, American made papers are going to stay in foreign markets unless the home mills simply refuse to take it seriously or to withhold from it the necessary interest and support.

Competition to Be Expected

Of course, from now on there will be competition, but for a considerable period in the future it is likely to come principally from only one source—Scandinavia. The mills of England, France and Italy will have problems of internal reconstruction and consumption that will give them little opportunity or incentive to compete for outside markets, and as for those of Austria and Germany which previously were the most active in export trade, these can be safely eliminated from consideration, particularly in the markets where we are likely to seek to hold and extend our trade.

The Scandinavian mills, however, are already active, and though

they will have many of the post-war problems to face similar to those confronting our own mills, not to speak of their coal situation, they nevertheless are going to be serious competitors in the paper field. However, the amount of production with their 299 mills cannot begin to meet the world's needs, or even those of so-called non-manufacturing countries, and America, with her 1,020 mills, will find an obligation as well as an opportunity to become the leading source of supply.

Should Not Be Discouraging Factor

And even if the competition is keen, why should that be a discouraging factor? At home we ask no favor when we merchandise our goods. The harder the fight, the more determined we are to win. A little of the same spirit in foreign merchandising will accomplish the same end. In fact, this spirit, which has been the secret of our wonderful internal development, is typically American and compensates for many of the deficiencies we are continually being told we lack as a nation when we attempt to deal with foreign peoples. It is a force which is recognized the world over as being peculiarly ours and which, when properly adapted, is irresistible.

Is Plain Insurance

Outside of the obligation and duty the war has forced on us to become worldwide merchants, it must be clear to any group of industries, and particularly that of paper, that it is plain insurance, and life insurance at that, which, like all good life insurance, affords not only protection, but pays ample dividends in addition. Possibly the Webb Act, recently passed by Con-

gress, will give the paper manufacturers an added incentive to combine for export trade; possibly the present opportunity that the war has brought us will be sufficient to arouse the foresighted ones to more concerted action; but whatever the impulse, collectively or individually, this one fact stands out clear and sharp: a provision made now for the increased volume of paper sales abroad will not only establish the individual qualities of manufacture in the principal markets of the world, but will be the anchor to windward if and when needed.

No Mysticism About It

There is no mysticism about exporting paper. Technically it is in many respects less difficult to handle than domestic shipments. Banking facilities are now complete and ample for those manufacturers or groups of manufacturers who prefer to blaze their own trail, or there are existing sales agencies so complete and experienced in the field that they can find the customers, develop the trade, and handle every detail without sales, credit or other expenses to the producer.

But after all, the method used is a mere detail compared with the firm resolution of the American paper mills to "carry on" the work that has been so auspiciously started. If the group of manufacturers to which paper belongs is to continue to represent a stabilizing yearly export value of two and a half billion dollars, then American paper products must make its just contribution to maintain this record, and there is a rank due to it in the world's markets, as one of our best and most fundamental commodities, that must necessarily be withheld without this wider outlook and applied vision.

IMPROVEMENTS IN MIAMI VALLEY PAPER MILLS

While there have not been any large paper mill improvements or, strictly, new mills erected during the past year in the Miami Valley, substantial changes have been made in a number of mills, and the period has been a successful one from a business standpoint, despite war conditions.

Most of the mills have run at their full capacity, and the demand for all grades of paper manufactured in the Miami Valley, which includes practically everything but news print, has been keen with prices decidedly firm.

During the height of the war in 1918 Dayton was a pivotal point, and large Government contracts were turned out here. In some of these enterprises paper manufacturers were interested, and for the time they gave the greater part of their attention to Government work. Now that normal conditions are returning, these men find themselves in the regular trade, glad again to be wrestling with paper problems.

One of the large improvements has been made in Hamilton, where the Black-Clawson Company, manufacturer of paper mill machinery, has constructed an addition to its plant at an estimated cost of \$40,000. The company received several good-sized contracts which necessitated the enlargement of its plant. It was necessary for Frank C. Trowbridge, president of the company, to obtain authority from the Government to proceed with the work owing to war conditions.

At Hamilton, the old Sterling mill is being dismantled by a Dayton concern which is sending parts of the structure to the East and is disposing of the remainder of the mill to Miami Valley men. In the wrecking of the plant it has been found possible to utilize parts of the mill construction quite handily, and the art of demolition has advanced to such an extent that practically nothing is wasted. The G. H. Chartzer Company of this city has found a ready market for the building, while the machinery has been taken over, partly by the Black-Clawson Company. Some of the machinery has been sent to Hinckley,

N. Y., where the Sterling Company will build a new mill.

Among the concerns which have made improvements in a general way during the year were the Sorg Paper Company, Middletown; the Miami Paper Company, West Carrollton; the Oglesby Paper Company, Middletown; the Gardner-Harvey Paper Company, Middletown; the Champion Coated Paper Company, Hamilton; the Mead Pulp & Paper Company, Dayton; the Beckett Paper Company, Hamilton; the Aetna Paper Company, Dayton, and the Crystal, Oglesby, Sorg and Wrenn paper companies, Middletown. None have been of an especially extensive nature, yet the increased trade required alterations and changes which otherwise would not have been made. The increase in steam power plants has been found necessary in a good many mills.

The Terre Haute Paper Company, of which Edward B. Weston, of this city, is a controlling stockholder, increased its capital from \$100,000 to \$400,000 for the purpose of making extensive improvements. The Indiana mills of the company are among the most modern in the Middle West. In order to make improvements the Weston Paper Company of this city also increased its capital stock from \$50,000 to \$150,000.

Box and bucket manufacturers, paper bag makers and novelty men have invested a considerable sum in machinery and general equipment in Dayton mills, the war demand having resulted in such a remarkable increase in business that improvements were essential. Orders were turned down and traveling men recalled. Now the situation is slightly different, but it is a certainty that all of the new machinery installed in local plants will be used to advantage in the course of time, as it was during the period of world strife.

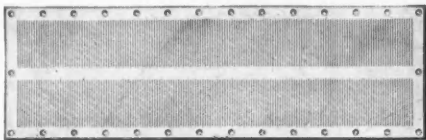
There are surface indications that further mill improvements will be made here in the not distant future, while local manufacturers may be interested in projects in other sections. Just how far these plans will go remains to be seen.

WILLIAM A. HARDY & SONS Co.

FITCHBURG, MASSACHUSETTS

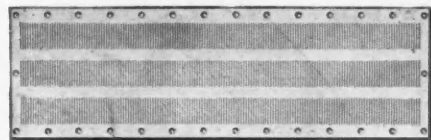


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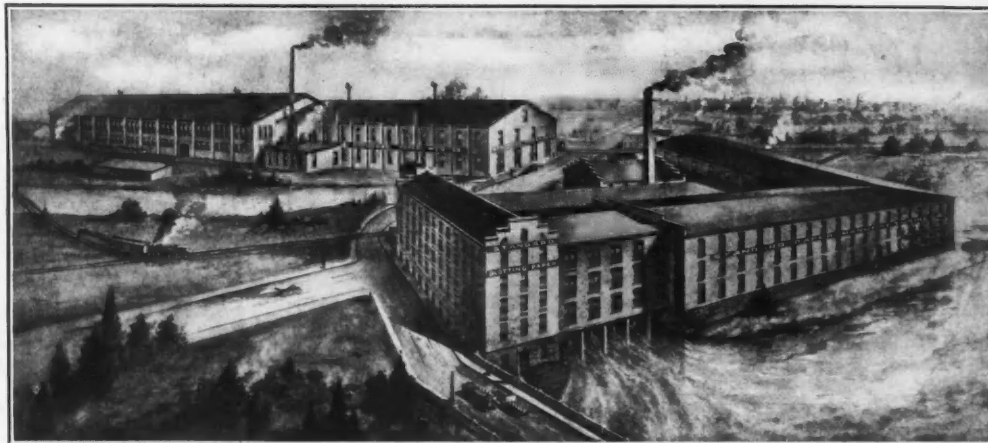


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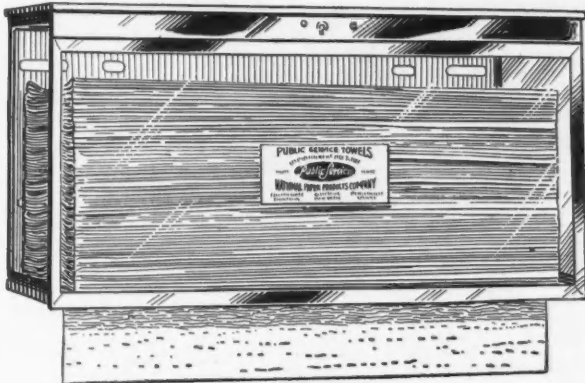
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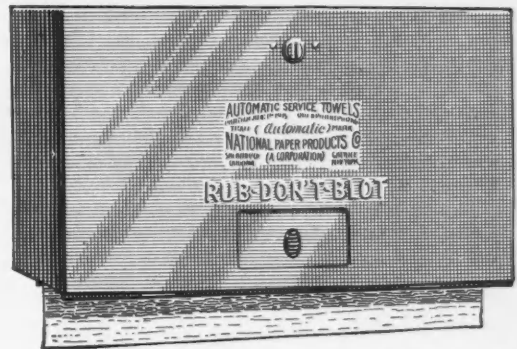


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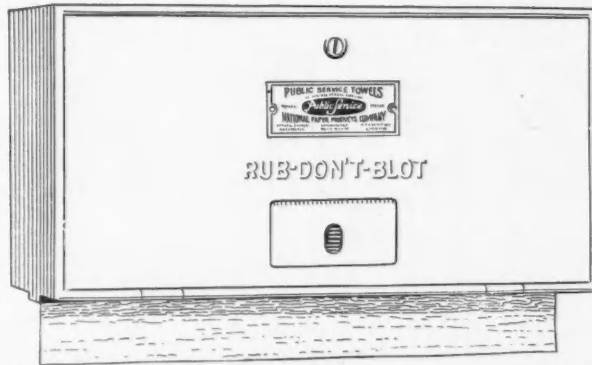
**CONTINENTAL
PAPER BAG CO.**



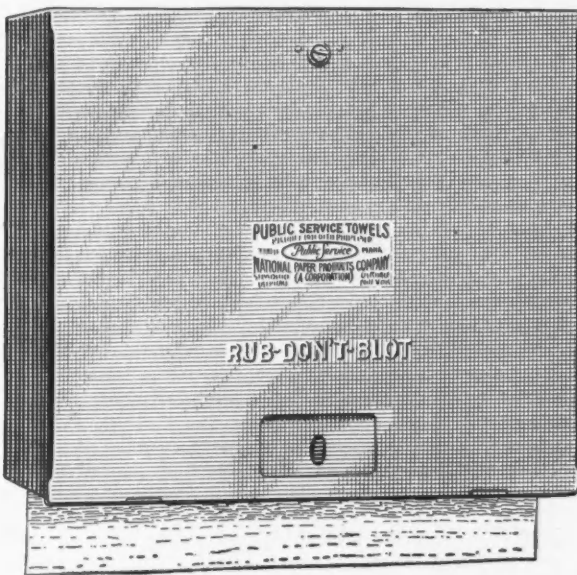
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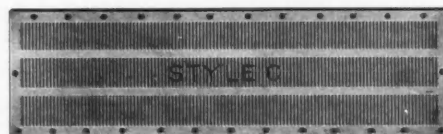
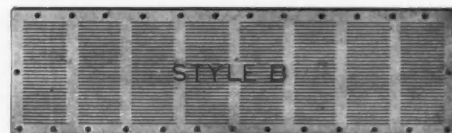
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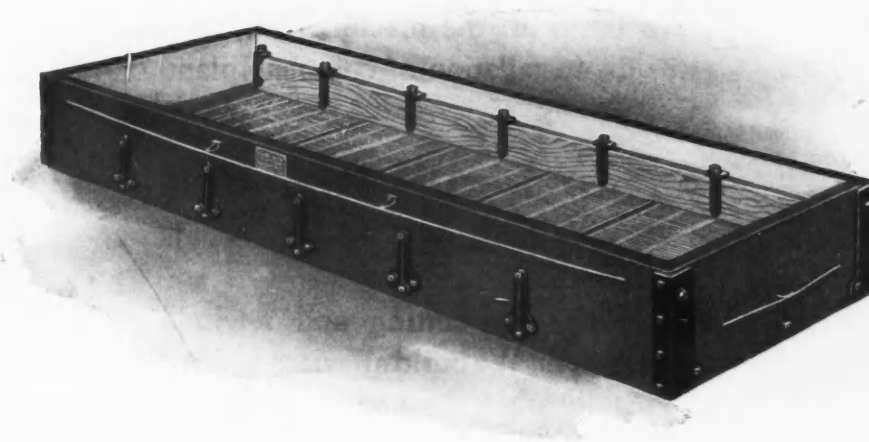
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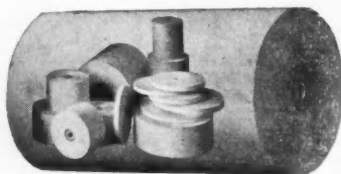
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Complete sets of machinery for making cans such as are used for packing oats, coffee, baking powder, tobacco, snuff and cleansing powder.



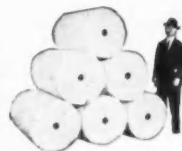
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Paper and Pulp in France in 1918

Production of the Mills Rather Showed a Decline Because of a Lack of Such Things as Raw Materials, Coal, Labor, etc.—Only News Print was Regarded as an Essential Industry—This Branch of the Industry Had All Transportation Facilities Placed at Its Disposal and Was Even Allowed to Call for a Special Class of Workmen—Import of Wood Pulp in Past Years Has Been Smaller Than Previously.

Written Especially for the Annual Number of The Paper Trade Journal by E. Bardet.

In France during the past year no appreciable difference was noted in the paper trade or in the manufacture of paper. Production of our mills rather declined because of the lack of a thousand things, such as raw materials, coal, means of transport and labor, for only the munition factories and those making the necessities of war and news print were assured of a supply of raw materials and coal, of transport and labor. The other mills, which manufactured other grades of paper, were therefore obliged by the force of circumstances to shut down for the greater part of the time. Owing to this fact and to various circumstances already mentioned, it is impossible to say much of the manufacture of paper in France in 1918, since the making of all grades has been very weak, and some sorts have not been manufactured at all.

News Print Alone Favored

News print, being privileged, has alone been manufactured in notable quantities. The reasons for this are the numerous facilities granted to the mills by the Government, such as supplies of all the materials required, all supplies of coal and fuel. Moreover, all transport facilities were put at their disposal, and even a call for a special class of workmen. But, as said above, there is nothing interesting to report of the other mills.

As regards imports, America has shipped important quantities of paper for the daily press, since only news print purchased by the National Bureau of the French Press for the use of the different publications has found a place on board cargo vessels and passenger ships making up the service between the United States and France. I must add that, if these grades of paper were not sold by the National Bureau of the French Press, their shipment would have been impossible. For what reason? That is the question.

Scandinavian Shipped Some News Print

The Scandinavian countries also shipped some grades for the newspapers, besides printing, wrapping and packing papers, but in all cases in very moderate quantities owing to the lack of transport, for the submarine warfare seriously reduced the number of cargo and passenger ships in service between Scandinavia and France. The grades of packing, printing and wrapping papers which we have received from Scandinavian countries include kraft papers, sulphite papers, sealings, caps, "laid" papers, vellum papers for typewriting and greaseproof papers.

Traders Took Their Cue

In the face of the lack of production and importation traders have taken their cue, and have seized the occasion offered by the dearth of what we need. As this scarcity has lasted some time, and still persists though in much smaller proportions, prices have been raised to unparalleled figures. As an example, I will cite the purchases of unsold daily papers, which sell as high as 120 francs for 100 kilos (220 pounds) for folded news, when these same grades of paper are quoted at \$8 to \$9 f. o. b. New York. The same thing is true of raw materials, and I will cite as an

instance old newspapers of the most ordinary quality which sell as high as 75 francs for 100 kilos (approximately 220 pounds).

At the beginning of the year England sent us a moderate quantity of papers for writings and impressions, but the supply was wholly insufficient, British manufacturers being in as unfavorable a position for production as we ourselves were in France. In fact, the tide of imports seemed to turn completely towards the Scandinavian countries, which alone were able to make freight shipments. Exchange has fallen considerably, transports are also more regular, insurance is not so high, and, in addition, the exacting terms of the mills have been greatly moderated in all respects. Prices, conditions of delivery, conditions of payment, all facilities, indeed, are easier for purchasers. On this account business transactions are smoothed out, and a very creditable amount of business has been transacted c. i. f. Rouen, Nantes and Bordeaux, payment being made against documentary drafts in these ports, and even payment on time drafts.

Business Chiefly in Kraft Papers

Business has been chiefly in kraft papers, sulphite papers, caps at prices of 88 kroner per 100 kilos for krafts, 69 for caps and 78 for sulphite papers, with a strength of 40 grams (1.3 ounces) to two square metres and more.

Would Give Preference to the United States

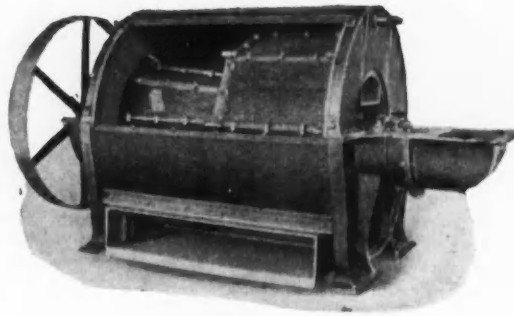
It is certain that French buyers would give the preference to products from the United States, but, unfortunately, difficulties of transportation render all transactions impossible. From this circumstance it happens that the Scandinavian industry is, little by little, seizing the market of supplies of the numerous sorts of paper urgently needed in France.

As a final conclusion concerning importation in 1918, I may state that, with the exception of news print papers, there has not been any great amount of import business. For the coming year what can be said? It is by no means easy to give an opinion. It is certain that French industry will gradually develop with victory and resume its progress, but how, and under what conditions, is the question which everyone is asking himself. It is a question most difficult to answer. As regards our import trade, it will be directed to Scandinavia, unless the United States with their great and immense resources find a way to obtain it; that is, find the means of transportation of the sorts of paper which we need, the products to which our preference will be given for the sake of their origin.

Wood Pulp in France During 1918

During the current year imports of wood pulps into France have been much smaller in all departments than those of previous years, and this state of things is linked up with several factors, principally the long delays in obtaining authority to import, the high cost of f. o. b. of freight, of war insurance, of exchange, and, on the other hand, the penury of available tonnage.

The principal ports of importation remain the same—Rouen,



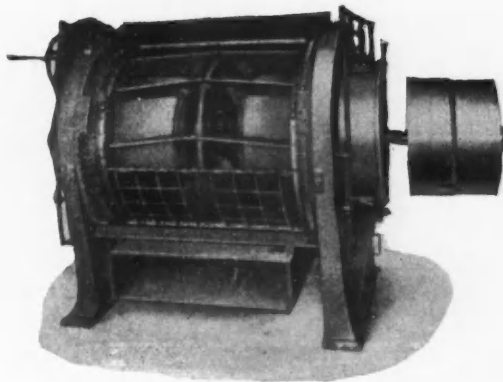
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60 PEARL STREET NEW YORK.

A decorative banner with a scalloped border, containing the text "AGENCIES in all PROMINENT CITIES". The banner is held by two scroll-like ends.

AGENCIES
in all
PROMINENT CITIES

ALL GRADES PAPER AND BOARDS

Bordeaux and Nantes. The shortage of labor in French mills has likewise operated to cause a falling off in production. Taking these factors into account, it may be said that the greatest volume of business has been in the direction of mechanical fir pulps and strong, unbleached bisulphite pulps for the manufacture of news print, although our region, which manufactures large quantities of paper of fine and medium grades, has imported via Bordeaux as usual a very large proportion of bleached bisulphite pulp.

Range of Prices Elusive

The range of prices from one end of the year to the other eludes analysis, owing to abnormally wide fluctuations produced by events. Actually, f. o. b. rates have reacted slightly, but the reaction will be accentuated as it goes. All the other factors are undergoing distinct modifications, and are destined to suffer much greater changes still. Exchange seems to have a desire to stabilize itself, with an improving tendency. The cost of freights from Sweden to Bordeaux for chemical pulp, which was 274 kroner per ton, is actually negotiated at 160 kroner. It is about the same

for the other sorts. An important fact is the arrangement that purchases can be made against bills (documentary drafts) on the arrival of the steamer at the port of delivery in France, while offers of credit on time drafts have already been received here.

Offers of American Pulp

In the course of the present year offers of American pulps have been received in France, but the volume of transactions has remained at a minimum. The metric system, which is not in general use in America, would facilitate business; so, too, would payment against bills (documentary drafts) at the port of delivery in France.

First Shipment of Norwegian Pulp

The *World's Paper Trade Review* of December 6, 1918, says: "A large cargo of cellulose, 4,500 tons, from A. S. Borregard, has been shipped for the United States. It is the first shipment of Norwegian cellulose to the United States since America went into the war."

W. RALSTON & CO. Ltd., EXPAND PLANT

The manufacture of waterproof papers and case linings was first established by Walter Ralston in Manchester, England, in the year 1881, and after 35 years' experience of specializing in these papers a branch works was built at Niagara Falls, N. Y. in the year 1916. This was designed and built on the experience gained during the past 35 years, and is said to be the most modern and up-to-date plant in the world for this class of work, specializing on waterproof papers, case linings, waxed papers, oiled papers and waterproof contained boards for cans and boxes.

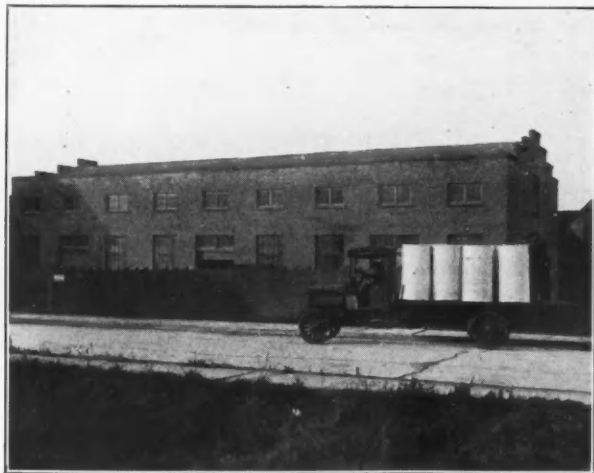
The method of manufacture is the latest and best possible, the compositions used in the manufacture of the waterproof papers are heated by means of electricity, controlled automatically by thermostats, which means that a perfectly uniform and evenly coated paper is always produced, which is guaranteed to stand all the tests laid down by the United States Government. The motive power in this plant is entirely electric.

During 1917 this firm was making 10 tons a week, since then the papers produced have given such satisfaction that the demand became so great the plant had to be enlarged, until at the present time the production is 250 tons a week.

In January, 1918, this concern was made into a domestic cor-



PLANT OF W. RALSTON & CO. LTD.



PLANT OF W. RALSTON & CO. LTD.

poration with a capital of \$200,000, with a paid-up capital of \$100,000.

The plant is equipped with three 65-inch waterproofing paper machines, one waxing machine and one oiling machine. Its capacity is 120,000 pounds per 24 hours.

The officers of the company are George Chadwick, president, treasurer and manager; Charles J. Smith, secretary and superintendent.

PAPER AND STATIONERY SECTIONS COMBINE

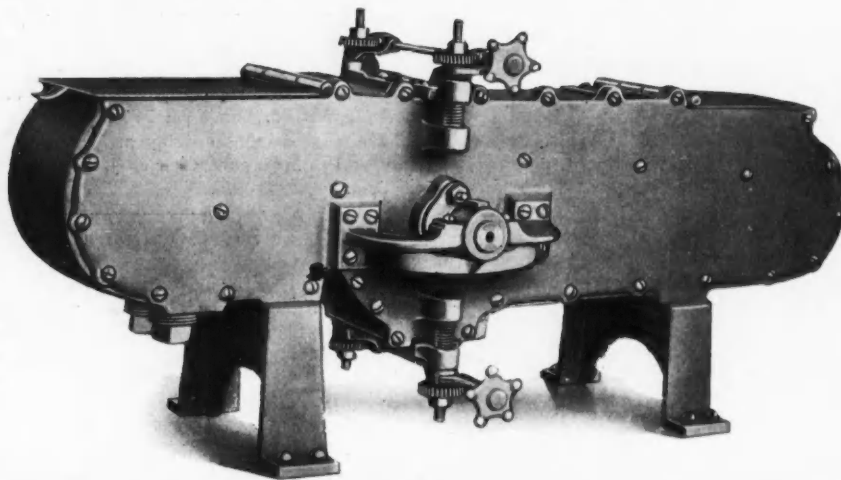
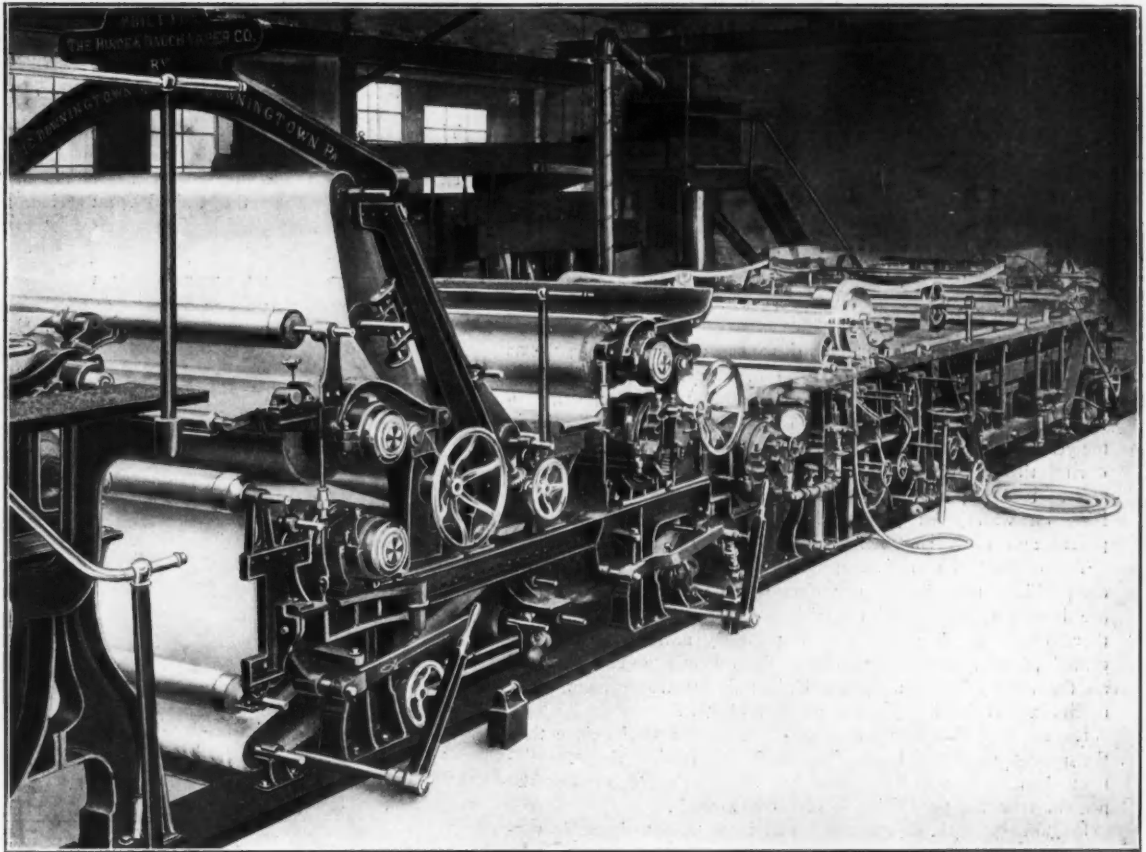
[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., February 3, 1919.—The paper and stationery sections of the Merchants' and Manufacturers' Association here have been combined and Charles G. Stott, of the Charles G. Stott Paper & Stationery Company, has been chosen chairman of the section for 1919.

The membership committee of the section, composed of Mr. Stott, R. P. Andrews, of the R. P. Andrews Paper Company, and Milton Baum, of the Baum Stationery Company, will conduct a canvass to increase the size of the paper section 100 per cent. before the annual meeting of the association early next month.

DOWNINGTOWN MANU

EAST DOWNINGTOWN,



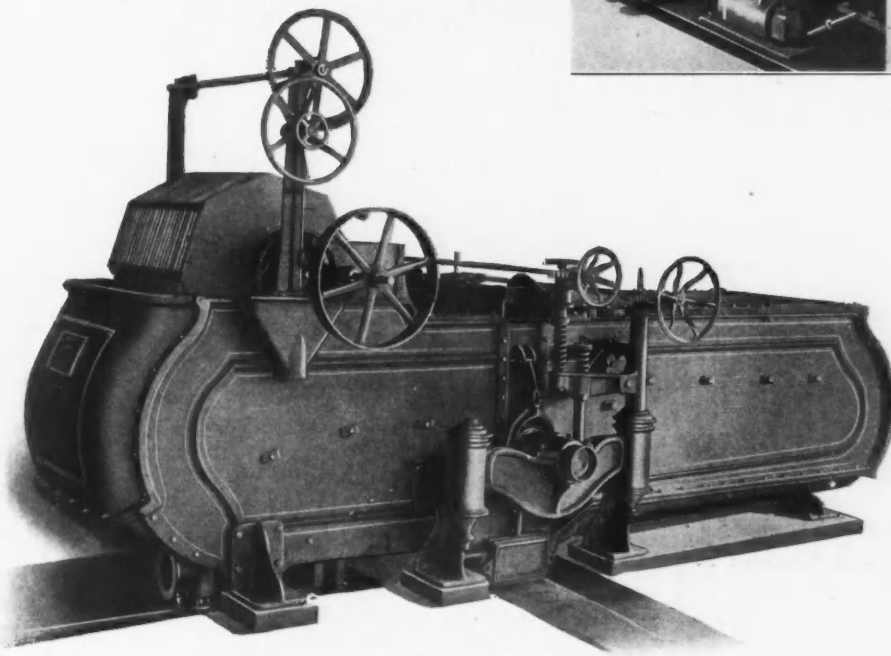
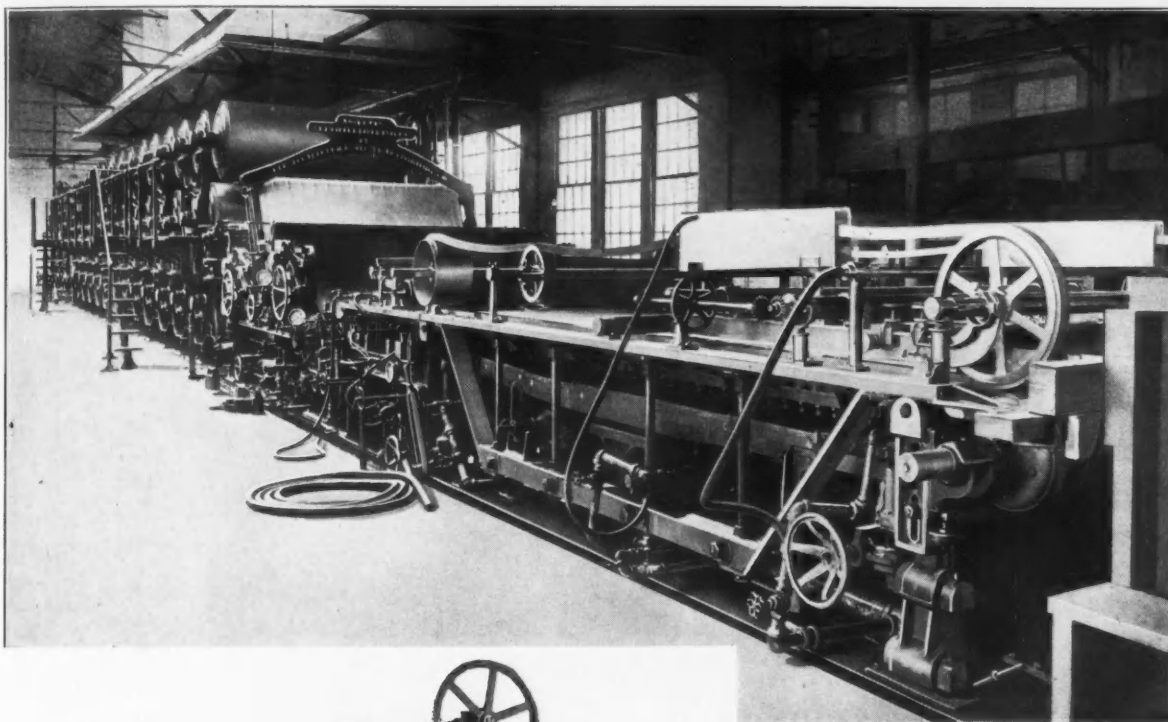
**Laboratory
Duplex Beater**

**Bronze Tub
21" long**

**Capacity
Two Quarts**

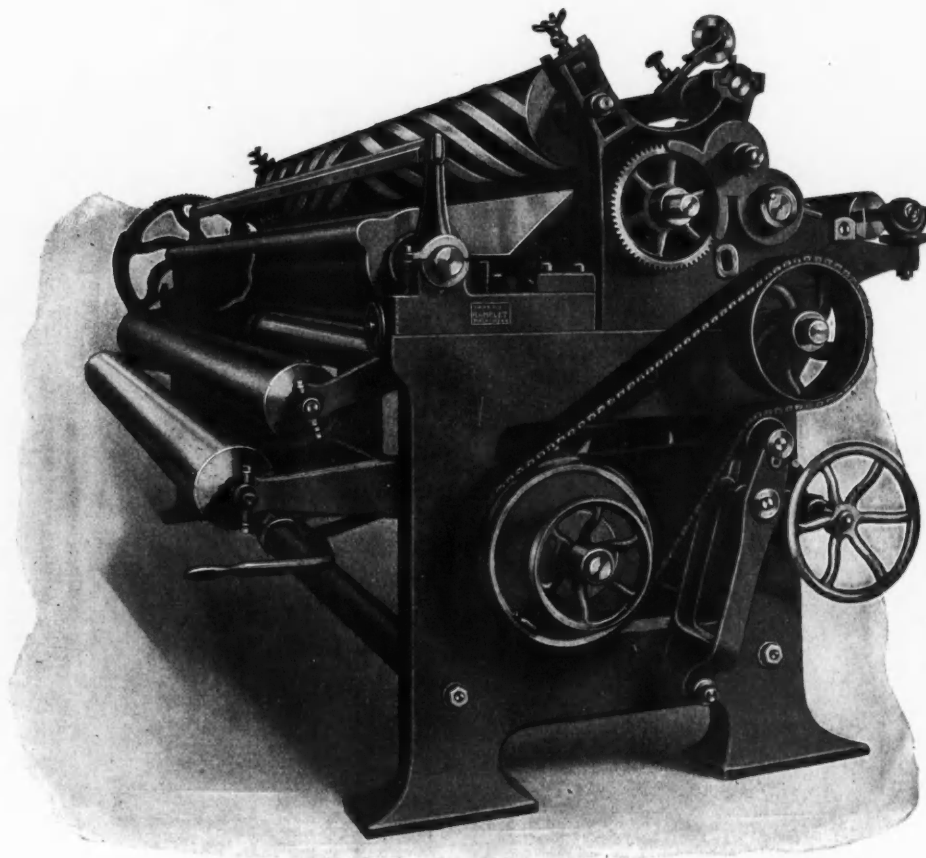
FACTURING COMPANY

PENNSYLVANIA, U. S. A.



The Miller Duplex Beater.

Extra Heavy Type Cutter



Single or Duplex

HAMBLET MACHINE COMPANY

LAWRENCE, MASS.

The Year in Paper in Wisconsin

Past Twelve Months Have Been Among the Most Successful in the History of the Paper Business of the State, Production Having Exceeded Even That of 1916—Owing to War Taxes and Other Reasons Profits, However, Were Not as Large as in 1916—Orders for Paper Have Fallen Off Considerably and Just Now There Is a Disposition on the Part of Mills to Run Easily.

Written Especially for the Annual Number of The Paper Trade Journal by B. A. Sinnen.

January 1, 1919, found the paper manufacturers of Wisconsin facing a period of uncertainty after a year of unprecedented business. The year just completed was one of the most successful in the history of the paper business in Wisconsin, the volume of business even exceeding that of 1916.

The coming year, however, is fraught with possibilities of either good or evil for paper manufacturers. Conditions in the future are uncertain, and while the manufacturers are optimistic, they are "laying low" and are waiting developments.

Larger Production, But Less Profits

The year 1918, while unprecedented in the amount of business transacted and the quantity of paper sold, was not as productive of large dividends as 1916. This was due largely to the war taxes exacted by the Government. The profits were large, but the tax payments absorbed a large proportion of the wealth which, under ordinary conditions, would have gone to stockholders in the form of dividends.

Prosperity attended paper manufacturers of Wisconsin almost immediately after the beginning of the year. The year 1917 was not good for the business, but a general improvement was noted near the close of that year, and before 1918 had progressed many weeks the paper business had embarked on an era of prosperity.

Orders, however, have fallen off to a large extent so far in 1919, and there is a disposition to run easily for a while. Manufacturers are not laying up stocks of paper because of uncertainty concerning the market. They are not disposed to have a large stock of paper made of high priced materials if there should be a drop in the market.

Conditions in the raw material market were not as bad as might be expected. True there was difficulty in obtaining raw materials because of a shortage of labor and because of transportation difficulties, yet production was not impaired. Many manufacturers were required to lay up large stocks of material, larger than they needed in fact, because they could not be certain of getting the material when it would be needed.

Mills Make Repairs

Several mills took advantage of the period of temporary depression to close down for a few weeks to make necessary repairs. A majority of plants have been in steady operation for a year or more, and it was found that some machinery needed replacement and general overhauling was necessary.

The most extensive repairs were made at the Whiting-Plover Company's mill at Plover, where work involving about \$20,000 has recently been completed. That company installed a new loft drying system at a cost of about \$10,000; repaired several machines; put in new boilers and did other necessary repair work. In several mills repair work was carried on while the mills were in operation.

The year was marked by an absence of fires of a serious nature. Small blazes broke out in a few plants, but nowhere were the results serious. A small fire at Green Bay early in the year

threatened to do damage, but was easily quenched. At Appleton a fire broke out in the Fox River mill, but caused a loss of only a few hundred dollars.

The Riverside Paper Company experienced two or three fires, but the losses were nominal in all but the most recent blaze. About \$1,000 damage was caused by that fire.

Water Supply Adequate

Mills in the Fox River Valley experienced little difficulty because of low water during the last year. The supply was adequate nearly the entire summer, and it is believed that improvements contemplated will provide an adequate water supply in the future.

Early in the year it was proposed to deepen the channel in the Fox River at Menasha for a considerable distance so that it would be possible to take more water out of Lake Winnebago, which serves as a huge natural reservoir. It was proposed that the Government and the industries using the water power share the cost of this improvement, but the bill was stricken out when it reached Congress, and the matter now lies dormant. It is planned, however, to revive it soon, and in all probability work will be started next summer.

Little Building Operations

Building operations in Wisconsin were comparatively small during the year, due largely to the difficulty encountered in obtaining materials. The only item of construction work was the building of a new plant by the Oneida Paper Company at Stevens Point, which is now rushing the factory to completion.

Work was started on the structure several months ago, but the company incorporated only recently with George Mead, D. R. Mead and G. L. Giddings as incorporators. The plant is modern in every respect and especial attention was paid to convenience of operation. This mill will manufacture paper specialties largely. Provision has been made for considerable extensions when conditions warrant.

Early in the year capitalists of the Fox River Valley acquired control of the site of an old saw mill at Peshtigo with the view of constructing a large sulphate and paper mill. Plans for the buildings were prepared but construction work was hampered by the difficulty of obtaining building material. It is planned, however, to renew the work in the spring and to rush the buildings to completion as rapidly as possible. No announcement has been made of the new company's plans, nor has it been given a name. It is reported, however, that the plans are rather ambitious, and that a mill of considerable magnitude will be built.

At Marinette the Victory Bag & Paper Company started operations during the year, and is now about ready to begin production of paper bags on a large scale. Machinery now installed or about to be installed will give the plant a capacity of about 2,000,000 bags a day.

It was reported that a paper bag factory is also to be built at Peshtigo, but plans for the new industry have not been completed. This new enterprise is to be backed by Chicago capital.



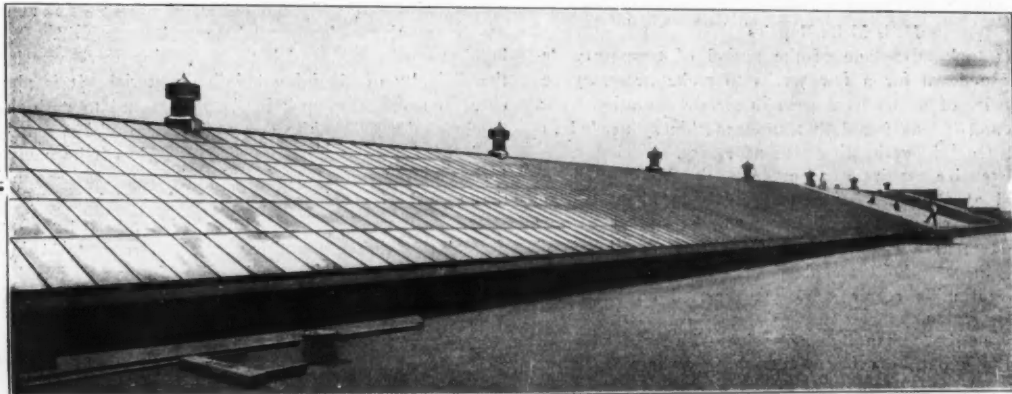
WITH the reconstruction period in progress, the demand for American-made goods on the part of the Allies will be greater than ever before.

No greater incentive to perfection and speed of output can be found than good working light. Manufacturers throughout the country have come to a realization of this fact and that is one of the many reasons for the tremendous vogue of "DAY-LITE" skylights.

By a simple readjustment of your roofing you can double the lighting capacity of your plant, and add immeasurably to the efficiency and accuracy of your employees.

Isn't it worth while investigating? Write for details.

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it is said. The plans contemplate the installation of several machines manufactured by the Standard Paper Bag Company. It is not known when actual construction work will be started.

Some months ago the Riverside Fibre & Paper Company of Appleton announced its intention of building a new paper mill either at Appleton or at Little Rapids. S. W. Murphy, general manager, announced that the mill would be built at Appleton on condition that the city refuse to issue liquor licenses to places near the proposed structure. The proposition caused a good deal of discussion, and resulted in the city refusing to promise this action.

Mr. Murphy has made no further announcement of his plans, and it is not known whether the mill is to be constructed.

Recently announcement was made that William M. Gilbert, president of the Riverside Fibre & Paper Company, had sold his stock in the company to Judge J. C. Kerwin, of Neenah, a member of the Wisconsin Supreme Court. Herman Erb, of Appleton, also sold his stock in the company to Judge Kerwin. The company will hold its annual election in a few weeks, and at that time an announcement of policy will probably be made.

Paper for War Purposes

Since America's entrance in the war the Kimberly-Clark Company devoted much attention to the manufacture of an absorbent material from wood pulp which is used for bandaging wounds, taking the place of absorbent cotton. The product was placed on the market under the name of "Cellu-cotton," and it is reported the Government took the company's entire output. The product is said to be excellent for the use for which it was designed, and the company expects a ready market when the needs of the Government are filled. The product is manufactured at a new plant in Neenah, equipped in the most sanitary manner. "Cellu-cotton" can't be distinguished from the ordinary absorbent cotton except by chemical tests, and for some purposes it is said to be far superior to the cotton.

Contemplated Improvements

Among the largest building operations contemplated for the new year is a \$2,000,000 dam and powerhouse to be constructed by the Consolidated Waterpower & Paper Company at Stevens Point. This plant will develop an immense amount of power, and lines will transmit it to mills on each side of the city for many miles, as far north as Merrill and as far south as Grand Rapids, where the company now has large mills.

Another \$2,000,000 operation contemplated is a dam and powerhouse at Ladysmith by the Ashland Power Company. This plant will supply power to several mills in and near Ashland. The Wisconsin Valley Electric Company is contemplating the erection of a \$700,000 dam and power plant near Wausau.

A new power plant is also contemplated by the Gilbert Paper Company of Menasha, and it is said the new structure will cost approximately \$75,000. During the last year the company erected a new office, and several extensive improvements were made in the plant.

Plans That Were Discontinued

The war put an end to plans for a large factory to manufacture paper mill machinery in Appleton. The company has sold \$200,000 worth of stock, but delayed building operations because of inability to secure a suitable site. When it was practically determined to locate in Appleton the restrictions on buildings were imposed and it was found necessary to suspend further operation. It is said the plans will be resurrected in the spring and construction work started.

The war also put a quietus to plans for building a new wire-weaving plant in Appleton, to be known as the Graef Wire & Manufacturing Company. This concern had acquired a site and awarded contracts for the building when the War Industries Board announced it would be impossible to obtain building ma-

terial. The matter was taken up with the Board on several occasions in an effort to get a permit to begin building, but to no avail. Plans are ready, however, for beginning operations early in the spring. The company contemplates installing several looms of an improved design, invented by John Graef, one of the promoters, and will also install machinery for manufacturing the looms and other paper mill machinery. The company is capitalized at \$50,000, and its agreement with Appleton men who donated the site for the plant is that the building, exclusive of the machinery must cost not less than \$30,000.

Another wire-weaving plant was opened up at Green Bay during the year, and is known as the Green Bay Wire Company. In spite of its infantile size, as compared with the other wire establishments in Appleton, it experienced a prosperous year, and the promoters are confident of a big business in 1919.

Changes in Personnel

Several changes in the personnel were made during the year. G. L. Giddings, employed as sales manager by the Tuttle Press for many years, is now general manager of the new Oneida Paper Company at Stevens Point. Major W. H. Zuehlke has been taken into employment by the Fox River Paper Company, and Prof. F. P. Young, formerly head of a school system in Appleton, is employed in an official capacity by the Interlake Pulp & Paper Company in Appleton.

Paper Men Become Prominent

Among the paper mill men who leaped to fame during the war is Judson G. Rosebush, president of the Patten Paper Company, who, as head of the Wisconsin Loyalty Legion, became a State figure, and his renown as a speaker and a thinker has spread all over the Middle West. Mr. Rosebush has labored unceasingly to promote better Americanism in Wisconsin. He has been mentioned as a possible candidate for United States Senator, but he asserts he has no aspirations for that office.

Another paper mill man who has received more than passing notice is John Strange, of Menasha. Mr. Strange has been and is still an ardent prohibition advocate, and has delivered many addresses in behalf of the causes of the "drys." He became involved in a libel suit with a Milwaukee brewer as a result of one of his addresses, but the litigation has been dropped. Walter Alexander, of Wausau, also came in for a good deal of prominence during the war, and at one time was being groomed as a candidate for governor of Wisconsin. The boom fell through, however, long before the primary election, due largely, it is said, to his own insistence that he would not be a candidate.

Death of Samuel Cook

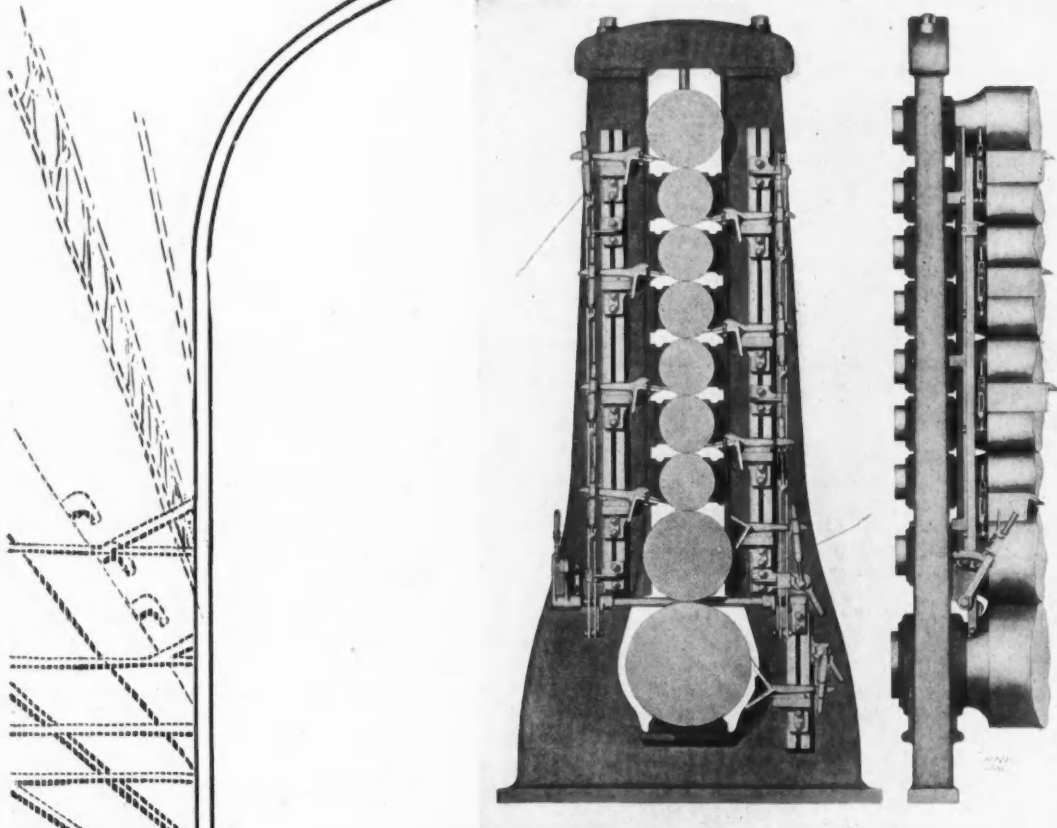
Among the prominent paper mill men to die during the year was Samuel Cook, of Neenah, head of the Alexandria Paper Company of Alexandria, Ind. Mr. Cook was a prominent Grand Army of the Republic man, and was one of the most beloved citizens of Neenah. The Cook Armory at Neenah is a lasting memorial to his generosity and civic interest. The death of John Fogarty at Green Bay also removed one of the most prominent paper men of Wisconsin. Mr. Fogarty's death was sudden and caused a great shock to Green Bay people, who respected him as their leading citizen. Mr. Fogarty was identified with nearly every movement of public interest in the city, and his influence was felt wherever he took a hand.

A Prosperous Year

All in all the year 1918 was one of prosperity for Wisconsin paper mill men, and they have great hopes for 1919. True, profits were not as large as in some previous years, but production was large and sales were enormous. It was a year of unbounded prosperity for the workmen. Wages were at the highest mark in history, and there was no unemployment in the paper mill districts.

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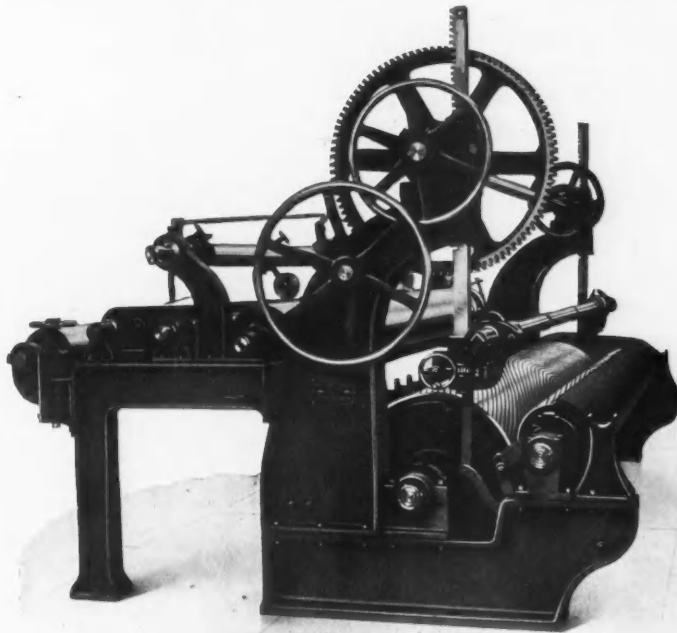
The Doctors can be operated into or off working position by limited rocking motion controlled by hand lever which locks all Doctors by latching into adjustable quadrant. The pressure applied on Doctors is evenly distributed over every inch of every Doctor by means of universal connection with adjustable quadrant and hand lever, the Doctors being properly balanced so as to assure easy operation. The flexible blades conform to the rolls giving perfect doctoring effect with minimum pressure. Doctors may be operated on continuously without scoring or injuring the polished surface of the rolls. Individual Doctors may be unlatched and rocked away from the rolls for cleaning purposes without universal control of other doctors. Doctors are constructed of steel, light and strong, and may be fitted to any type of paper machine calender.

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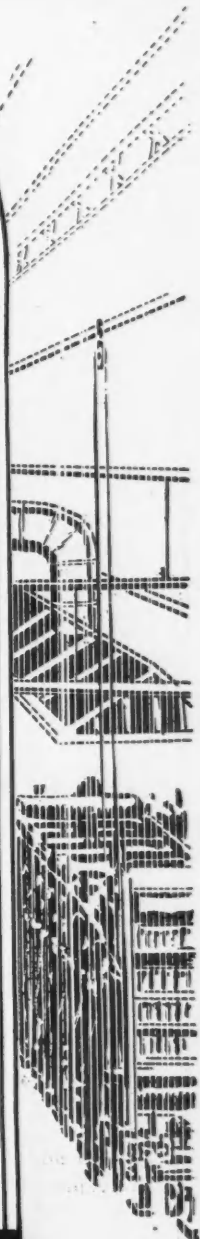
Patent Ball Valve Hydrant Stock Circulating System used in furnishing any number of Beaters with liquid stock. Stock kept in constant motion, either supplying Beaters or circulating back to storage chest.

Cylinder and Vat for the purpose of thickening stock to uniform consistency.

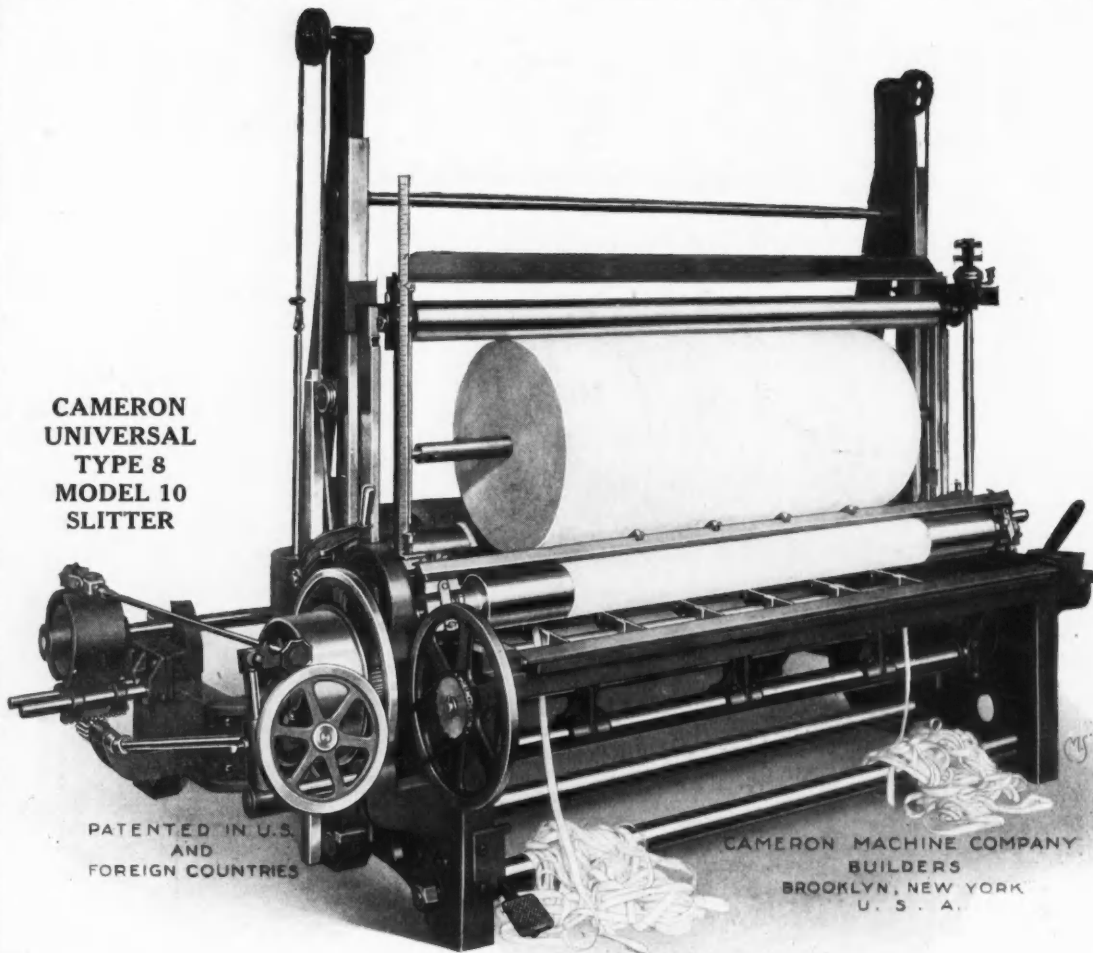
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Kalamazoo Valley Firms Prosperous

Paper Manufacturers Are Optimistic Regarding the Future and Freely Predict a Return to Rush Conditions Soon—New Mills Are Contemplated, While in Other Cases the Present Plants Will Have the Capacities Greatly Increased—What Some of the More Important Paper Concerns Have Been Doing in the Way of Making Improvements.

Written Especially for the Annual Number of The Paper Trade Journal by Howard P. Hall.

The numerous paper companies in the Kalamazoo valley district have emerged from the great war in an unusually prosperous and healthy state. Adverse conditions that arose during the period of the struggle have been met and successfully surmounted. In common with all other industries not on a regular war or ordnance production the paper mills have suffered from extremely high prices of raw material, belated shipments of supplies and a shortage of labor. Particularly interesting has been the solution of the labor problem. These difficulties have been materially overcome by cordial co-operation on the part of employers and employees. Concessions have been made by both sides. Wages have mounted rapidly and workers have at times worked long shifts, thus piling up individual pay envelopes and keeping up production to the highest point possible. Women have been used successfully in all departments, taking positions formerly held by men exclusively.

Conditions Since the Armistice

Since the signing of the armistice rush orders have fallen off and help is plentiful. Men are slowly returning from service in the army and navy and most of them will likely take up their old positions in the mills. Employers have assured the boys that their jobs are awaiting them. It is the intention so far as possible to retain men who have been hired since these boys entered service. This can be done quite generally by resuming the daily three tour systems and limiting each man to his prescribed working period of eight hours a day.

Paper Mill Men Optimistic

Local paper mill magnates are optimistic regarding the future. They freely predict a return to rush conditions within the next 60 days. A large amount of help will then be required.

In looking ahead for two years it is possible to predict a great advancement in the industry in this valley. These predictions are almost certain to come true. In many instances new mills will be erected, while in other cases the present plants will have their capacity greatly enlarged and increased.

Some of the Improvements

Project No. 1, that of the Constantine Board & Paper Company, is well on toward completion. The new plant is designed to replace the one destroyed by fire last fall. The buildings are about finished and the installation of the machinery will begin in a few days.

The Eddy Paper Company has authorized the erection of a fine board mill and box factory, one of the largest plants of its kind in Michigan. It will be a two machine mill and details are now being worked out by the officers and engineers engaged for the purpose. The structures and equipment will represent an outlay of over a million dollars.

W. M. Loveland, president of the Watervleit Paper Company, Watervleit, announces that it is the intention of his company to double the capacity of the present plant by the installation of a second machine and auxiliary equipment. The work will be done as soon as satisfactory deliveries of material are assured.

An important project that was held up by the declaration of war by the United States was the erection of a two machine mill by the Bardeen Paper Company, of Otsego. The stockholders had authorized the erection of such a plant and it was the intention of the directors to go ahead. In the intervening period of 18 months the No. 3 mill of this concern, a small one machine mill, has been destroyed by fire. That makes more imperative than ever the early erection of the proposed two machine mill.

Another expansion undertaking that the war checked was the erection of a two machine addition to the Milham division of the Bryant Paper Company. Frank H. Milham, president of the company, had his plans drawn for this structure and was about ready to begin operations in the building line when all supplies were peremptorily shut off. He has simply tucked those plans away for future consideration. They are likely to be made useful before 1920 passes away.

The No. 3 mill of the Kalamazoo Paper Company, which started during 1918, was built to accommodate two machines. To date but one machine has been installed. The next step in the physical development of that great institution is almost certain to be the addition of the machinery to completely equip this division. F. M. Hodge, president of the company, admits as much, though he has set no date when the improvements are to be made.

The Sutherland Paper Company, which started its new parchment mill last fall is already considering the advisability of building for a second parchmentizing machine within the next twelve months. The capacity of this plant is already overcrowded by the orders on hand.

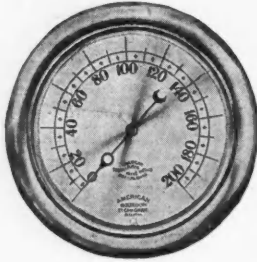
Improvements by Allied Firms

Several companies connected directly with the paper industry are also planning to make important extensions. The Kalamazoo Trading Company, capital \$30,000, dealing in paper stock, will have its new warehouses in operation this month. D. Graff & Sons, also paper stock dealers, are preparing to erect another structure that will increase their floor space from 55,000 square feet to 160,000 square feet and more than triple their present capacity for sorting and packing all kinds of stock. M. Fisher & Son, a third paper stock concern, announces that it will build a structure to cover a site 160 by 60 feet in dimensions.

Despite the existence of war during 1918, it must not be inferred that the past year was a dull one in the matter of expansions and betterments among the papermaking concerns of this valley. It was decidedly otherwise. True, the most important improvements made were described in the 1918 PAPER TRADE JOURNAL ANNUAL and need not be more than recalled at this time. The summary shows that three paper machines were added to the total in operation in the valley. Six more coating machines also started, while in the case of the Rex Paper Company, five coating machines have been installed and they will be started as soon as trade conditions seem to warrant it.

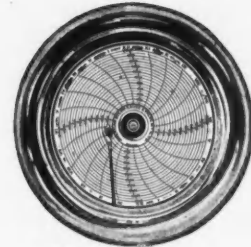
Those concerns in the valley that have not erected new mills have engaged in extensive campaigns of betterment and upkeep. These

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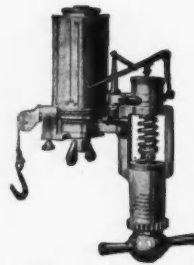


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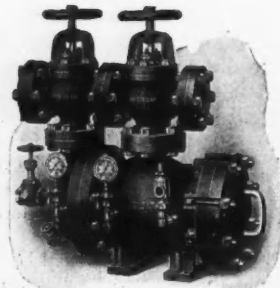
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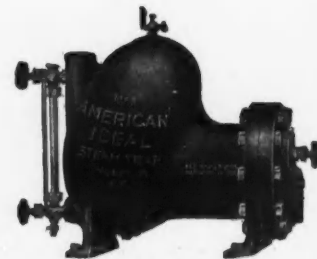
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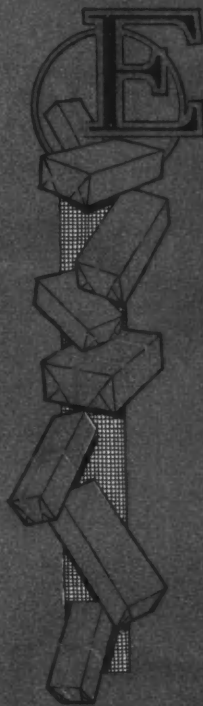
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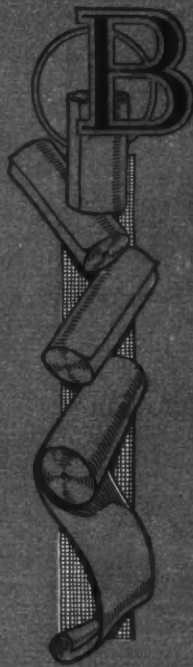


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improvements of a widely varied nature, represent an outlay of between \$600,000 and \$700,000. It can truly be said that never in the history of the industry have the Kalamazoo valley mills been in as fit physical condition as at the present time.

During the past twelve months two paper concerns have gone out of business by being absorbed by other companies. One new concern, the Sutherland Paper Company, has come into existence. The total increase in the authorized capital of the various companies has been \$3,115,000. Going more into details the activities of the past year are shown in the summaries that follow:

Business Changes

Kalamazoo Paper Company: Capital increased from \$540,000 to \$1,080,000, then to \$1,605,000.

Sutherland Paper Company: Capital, \$200,000.

Riverview Coated Paper Company: Absorbed by the Kalamazoo Paper Company.

Western Papermakers' Chemical Company: Capital increased from \$100,000 to \$200,000.

Eddy Paper Company: Capital increased from \$500,000 to \$1,000,000, authorized. Two hundred thousand common stock sold and bonds retired. Capital now authorized, \$2,250,000.

Kalamazoo Carton Company absorbed by Sutherland Paper Company.

Saniwax Paper Company sold interests in Bartlett Label Company to S. E. Sproul and associates.

L. W. and F. W. Sutherland sold Kalamazoo Label Company to M. E. McGuire and associates.

Value of Improvements in 1918

Bryant Paper Company, \$100,000.

Kalamazoo Paper Company, \$1,000,000.

Kalamazoo Vegetable Parchment Company, \$1,000,000.

King Paper Company, \$75,000.

Monarch Paper Company, \$200,000.

Standard Paper Company, \$75,000.

Western Board & Paper Company, \$25,000.

MacSimBar Paper Company, \$50,000.

Michigan Paper Company, \$25,000.

Lee Paper Company, \$25,000.

Fires and Other Losses

Constantine Board & Paper Company mill destroyed by fire; loss, \$200,000.

Rex Paper Company: Roof of stock house dismantled by tornado; fly wheel of constant speed engine burst.

Sutherland Paper Company: Flood damage, \$10,000.

Deaths

Col. Joseph B. Westledge, commander of 126th Infantry, died in hospital at Nantes, France. In private life he was assistant manager of the Western Board & Paper Company.

John J. Knight, director of the Kalamazoo Vegetable Parchment Company.

John H. Gilkey, secretary and general manager of the Michigan Paper Company, Plainwell.

Ralph Emery, director of the Provincial Paper Company and Interlake Tissue Mills, Canada.

Important Improvements

Among the important improvements and enlargements carried out in the valley in 1918 can be mentioned the following:

Kalamazoo Paper Company: Completion of the No. 3 mill, equipped with a 146 inch Fourdrinier; erection of a six machine coating plant; building a new turbine power plant; reconstruction of the general offices; addition to the finishing room and to the storage and stock room of No. 2 mill and the sinking of eight artesian wells with a daily capacity of 7,500,000 gallons.

Western Board & Paper Company: Addition of 26 dryers to the cylinder machine; the installation of an induced draft system in the power plant by the use of a fan, manufactured by the Clarage Fan Company, Kalamazoo; sinking two artesian wells, with a daily

flowage capacity of 1,500,000 gallons.

Michigan Paper Company, Plainwell: Increased capacity of the boiler house by installing two additional boilers.

Lee Paper Company, Vicksburg: Coal handling system now being erected.

Kalamazoo Vegetable Parchment Company: Completion of a two machine paper mill, popularly known as "The house that Jake built." Sinking eight artesian wells, pumping 5,000,000 gallons daily; the erection of several comfortable homes for employes of the big concern.

Standard Paper Company: Erection of a stock house; boiler house remodelled and second concrete stack added; coal handling system installed; entire plant and outlying property overhauled and improved.

Bryant Paper Company: Erection of a new power house to use the water that now passes from the large ponds through the mill race. Will supply 150 to 200 horse-power, sufficient to operate the twelve artesian wells, also sunk this past year and capable of a daily flowage of 10,000,000 to 12,000,000 gallons. Erection of concrete walls for the mill race, thus doing away with future dangers of flood damage.

Monarch Paper Company: Erection of a four story stock house, slow burning construction, and a brick and concrete bleach house; complete reconstruction of the cooker room and the installation of six rotary cookers; re-arrangement and consolidation of the finishing department; capacity for handling sorted stock doubled; four artesian wells sunk, daily capacity, 3,000,000 gallons.

King Paper Company: Eight 12 inch artesian wells sunk with a daily capacity of 8,000,000 gallons; erection of a new pumping station; all wooden leading docks removed and replaced by concrete platforms.

Western Papermakers Chemical Company: Erection of two largest rosin plants in the world at Pensacola and Goulding, Fla. This work was done under the direct supervision of William J. Lawrence, general manager of the company's Kalamazoo plant.

PAPER FROM THE WOOD OF VINES

(Translated for the PAPER TRADE JOURNAL from Wochenschrift für den Papier- und Schreibwaren Handel, June 2, 1918.)

"France as well as Italy must import paper from foreign countries, because the necessary raw materials are lacking. To meet its consumption of 670,000 tons of pulp and paper yearly, the French industry is obliged to obtain from America and Scandinavia 500,000 tons of wood cellulose in the raw state or in the form of paper at an annual cost of 80,000,000 francs. In addition to this, Germany up to the outbreak of the war delivered to France about 20,000,000 francs' worth of paper and paper materials yearly. When the French industry began the attempt to meet its requirements from native timbers, in order to free itself from foreign imports, the forest products of France were thereby threatened with complete destruction. More recent investigations, however, have now established the fact that the wood of the vine, including branches and tendrils, is admirably adapted for the manufacture of paper materials, and especially for the manufacturing of packing paper. The use of the wood of vines is the more notable, as a great deal of French capital is invested in the vineyards; it also affords a new field of labor for the wine-growers and a profitable means of utilizing a raw material that hitherto has been wasted. Already several French mills have manufactured the wood of vines into an excellent grade of paper with the admixture of poplar, fir and pine wood. In these processes the wood was cooked in sulphite liquor, since it has been shown that the wood of vines is better suited to this method of treatment than fir, and for the following reasons: First, because the longer fibers of the vine increase the durability of the paper, and, secondly, because the wood contains numerous hollow spaces between its fibers and is, therefore, more easily disintegrated by the cooking liquor.

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EDEN MILLS NO. 3
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TELEPHONE CONNECTION

Ottawa Is Stormy Center for Paper Industry

Trouble Caused by Government in Arbitrarily Fixing the Selling Price of News Print Without a Preliminary Investigation as to the Reasonableness of the Price—Controversy, in Course of Time, Became a Most Acrimonious One and Had Very Unsettling Effect on What Has Become the Most Important Export Manufacturing Industry in the Dominion.

Written Especially for the Annual Number of The Paper Trade Journal by C. L. Sibley.

Ottawa has been a regular storm centre for the pulp and paper industry throughout the year. The trouble arose through the action of the Government in arbitrarily fixing the selling price for news print in Canada without a preliminary investigation as to the reasonableness of the price, and then ordering the exporting mills to make up between them the loss the other mills sustained on the domestic trade. This action was taken because of the political pressure brought to bear on the ministers by the newspaper publishers of Canada, acting through their organization, the Canadian Press Association. Naturally the news print manufacturers protested vigorously against this injustice, and a perfect orgy of investigation ensued, lasting throughout most of the year, and interspersed occasionally by deputations waiting upon the Government, in both the interests of the publishers and of the manufacturers. The price originally fixed by the Government was 2½ cents per pound. This was later raised to \$2.85 per hundred, and later, after the manufacturers had presented something like an ultimatum, to the present price of \$69 per ton, which both sides still maintain as so unsatisfactory that both have appealed against it.

The controversy has been a most acrimonious one, and because of this, and because of the most unsettling effect which it has had on what has become the most important export manufacturing industry in the Dominion, it is safe to say that the members of the Government, without exception, are heartily sorry that they ever interfered.

Price Less Than Cost

At the beginning of the year an investigation was in progress, under the direction of Paper Controller Pringle, to ascertain whether the temporary price of 2½ cents per pound was just. After going into the matter of costs thoroughly in various mills, the Government's own auditors found that it cost \$57.70 per ton to produce news print, so that the manufacturers were being compelled to supply Canadian publishers at \$7.70 per ton less than cost, and were expected to make up the difference from the sale of news print to American publishers. The Paper Controller thereupon increased the price to \$2.85 for three months from February 1, with the proviso that should further investigation show the justice of a revision, that a revision would be made. Even this measure of justice, however, was qualified by another condition added by the Government that the manufacturers should not receive more than \$2.50, the balance of 35 cents being paid into the bank to be returned to the publishers if it was subsequently established that \$2.85 was too high a price.

Meanwhile the publishers had withdrawn from the Government investigations in a state of high indignation at what they alleged to be the unfair methods adopted. They particularly objected to the stumpage allowance of \$2 allowed by the Controller in the investigation. It was argued that the paper manufacturing companies paid far less than \$2 for their limits, and thus capitalized at many million of dollars timber on public limits on which there ought to be no capitalization whatever by private concerns. As against this it was argued that timber limits were

not worth one dollar until millions of dollars had been spent on them by private concerns in the erection of mills, and the new value ought to go to the people who put in the money, especially as at any time a fire might destroy the value of the money invested, either partially or wholly. This view was upheld by the Paper Controller.

Press Published Biased Reports

The publishers not only made the investigation more difficult by withdrawing from it, but they increased the acrimony of the controversy by a press campaign against the manufacturers, and by publishing biased reports of the investigation. Controller Pringle on more than one occasion protested against the attitude of the press. In one statement that he gave out, for instance, he said: "With regard to the assistance given me in the inquiry,

I will say that the manufacturers have come forward loyally with evidence when required and have brought witnesses long distances to testify, asking no compensation. On the other hand the press has given me no assistance. The press retired from the inquiry because I could not see where an investigation of an alleged combination in the United States would assist me in arriving at the cost of news print in the Dominion of Canada." He further stated that the comments of the press on the evidence at the inquiry was not in accordance with the facts, and that this was too big a matter to play politics with, adding, "We have never had, since these proceedings started, a fair report of the evidence that has come before the commission."

While the press was thus bitterly complaining, the Canadian Pulp and Paper Association was carrying on a campaign by means of bulletins and other means, also complaining against the unfair treatment which they alleged they were getting from the Government. One bulletin, issued in May, said, "After submitting for over a year to a general probe of their business, the manufacturers appear to be little nearer to getting an adequate return for their product. They are still being used as pawns in the game of politics."

Another bulletin complaining of the unfair treatment by the Canadian Government, pointed out that in their appearances before the Federal Trade Commission in Washington the Canadian manufacturers had been confronted repeatedly with the fact that the Canadian Government had already established as a fair price for news print an amount much below the American price. "Not alone that," it was stated, "but the representatives of Canadian newspaper publishers, who had a hand in reducing the price in Canada, have also appeared in Washington, where they have consulted with and assisted the American interests who are concerned in keeping down the price of this important Canadian product. The record also shows that in one instance at least an employee of the Canadian Government appeared as a witness in Washington and gave evidence detrimental to his own country."

Thus the situation dragged on in Canada until the end of June, when dissatisfaction on the part of the manufacturers was brought to a head by the Paper Controller issuing another order continuing until September 1 the price of \$2.85 per hundred for

LINDSAY FOURDRINIER WIRES

GIVE

SERVICE THAT SATISFIES

*Also Cylinder Covers and Other
Paper Machine Wire Cloth*

THE LINDSAY WIRE WEAVING CO.

Cleveland, Ohio

Collinwood Station

news print. Were it not for the fact that that was a saving clause to the effect that when a new price was fixed it would take effect from May 1, 1918, it is probable that there would have been open revolt on the part of the manufacturers. As it was they began to speak even more plainly to the Government, and at length obtained from Sir Robert Borden himself a promise that they should have the right to appeal to a judicial court against the price finally fixed. This promise was later fulfilled by the appointment of a Judicial Court.

About this time the anxieties of the situation were increased by the action of the Federal Trade Commission in fixing the selling price in the United States at \$62 per ton. It was stated by F. J. Campbell, the general manager of the Canada Paper Company, and president of the Canadian Pulp and Paper Association that as a result of the Federal Trade Commission's finding the Canadian Paper-making industry would lose \$10,660,000 a year. He based his statement on the fact that the manufacturers asked \$80 a ton, were allowed only \$62. Under the former price Canada's news print exports would be worth \$46,000,000 a year, while under the price allowed they would reach only \$35,340,000. He further remarked that it looked as though the Federal Trade Commission had simply taken the price arbitrarily fixed by the Canadian Government, and added \$5 to represent what was supposed to be the higher cost of news print manufacture in the United States. If that was the method of arriving at the price in the United States, he said, then the Canadian Government's interference with the industry had reduced the export value by \$10,000,000.

Manufacturers Deliver Ultimatum

One of the promises which the manufacturers managed to wring from the Government was the promise that the inquiry, which had been "postponed" for months, would be resumed on September 12 and carried through to a conclusion. The Canadian Press Association, however, asked for further adjournment, and Controller Pringle acceded. Thereupon J. R. Booth, of Ottawa, with the backing of the association, announced that his company would sell no more news print at the Government price. Controller Pringle replied that the Company would either continue to supply Canadian customers at the interim price, or its export license would be revoked. As the Booth Company refused to budge, the Controller gave instructions to the War Trade Board to revoke the Company's license—a demand which was flatly refused by J. P. Jones, the chairman of the board, who announced that he would not be a party to any political squabble. Thereupon the Controller decided to proceed with the inquiry on the date originally fixed, for it was evident that other manufacturers would follow the Booth Company's lead, some of them already having threatened to ignore the Government and conduct their business in their own way. When the inquiry was resumed the publishers still absented themselves, but they had already published a letter alleging unfair treatment on the part of the Controller and claiming that they could not pass along the increase in the cost of news print to the public. Referring to this, Controller Pringle said, "If I am right in my information, they are receiving five or six million dollars more, and their increase in the cost of news print paper has not been more than one million."

New Price Fixed

Promptly upon the conclusion of the inquiry, Controller Pringle issued a new order fixing the price of news print in Canada at \$69 a ton. The publishers immediately announced their decision to appeal against this price, and asked the Paper Controller to allow the new price to remain in abeyance until the appeal had been heard. This latter the Controller refused. The publishers also announced their intention to appeal against the price. A

preliminary sitting of the Appeal Court was held in November, when the publishers asked to be allowed to put in new evidence in regard to the cost of manufacture—a request which the court disallowed. The court set December 14 as the date for filing briefs and January 6, 1919, as the date for hearing oral arguments, reserving the right to admit or call new evidence should it appear to be necessary or desirable. The personnel of the court consists of Judge Archer, of the Supreme Court, Montreal; Justice White, of the Supreme Court of New Brunswick; and Justice Middleton, of the Supreme Court of Ontario. Here the controversy over prices rests for the time being, although probably by the time this appears in print the Judicial Court will have at least heard the arguments, if indeed it has not rendered a decision.

The New Price in the United States

Although not so much as the manufacturers contended they were entitled to, the price of \$69 fixed in Canada caused a much brighter outlook in the trade towards the end of the year, while the fixing of the price of \$75.05 per ton in the United States gave further relief. The manufacturers were not entirely satisfied with this price, contending they were entitled to at least \$78 per ton.

Progress of the Industry

Despite the hampering conditions imposed on the manufacturers, the pulp and paper industry has expanded in a remarkable degree during the past year. At the present time there are 91 incorporated and other companies in Canada engaged in the manufacture of pulp or paper. Their combined capital is estimated at \$200,000,000, which is a greater amount of capital than is invested in any other industry, with the exception of hydro-electric power development. The total annual output of the industry for the year 1918 amounted in rough figures to \$100,000,000. It gives employment to 25,000 individuals, and its annual pay-roll exceeds \$15,000,000. The rapid growth in Canada's export trade in pulp and paper products alone in 1917 exceeded in value that of Canada's total exports of all classes of manufactured commodities five years earlier. The extent and ratio of this remarkable increase is best illustrated by the following figures, compiled from the returns furnished by the Department of Trade and Commerce:

Exports of Paper, Pulp and Pulp Wood

Year Ending March 31	Paper	Chemical Pulp	Mechanical Pulp	Pulp Wood	Total
1912.....	\$3,867,119	\$1,587,535	\$3,506,700	\$5,697,901	\$14,659,325
1913.....	6,324,810	2,100,842	3,408,702	6,806,445	17,640,781
1914.....	12,675,036	2,923,083	3,441,741	7,388,770	26,428,630
1915.....	15,478,388	4,806,622	4,459,539	6,817,311	31,561,810
1916.....	20,021,270	6,801,011	3,575,537	5,743,847	36,141,665
1917.....	26,072,646	14,032,920	6,371,133	6,448,189	52,924,888
1918.....	37,742,697	19,185,371	6,487,979	8,339,278	71,755,325
Increase 1918 over 1917..	\$11,670,051	\$5,152,451	\$116,746	\$1,891,089	\$18,830,437

The returns are not complete for the months since the fiscal year closed on March 31 to December, but preliminary figures show that the total exports of pulp and paper for the calendar year will be in the neighborhood of \$100,000,000.

The Outlook for the Future

All the best authorities in the industry in Canada agree that Canada has immense opportunities for the development of overseas trade in pulp and paper, and extensive plans are now under way for securing this trade. As regards the possibilities of development in the exports to the United States, the following statement from George H. Mead, president of the Spanish River Pulp & Paper Mill, Ltd., and a leading authority on the industry in the United States and Canada, makes the following remarkable statement:

"I think a careful analysis of the figures will show that not less than fifteen hundred tons of the production of news print paper of the United States today is from mills lacking modern equip-

Marathon Paper Mills Company

Manufacturers of

Special Papers for Remanufacture

Equipment of this mill is the most complete of any in the United States for the manufacture of special papers for special purposes.

Super Calendered, Machine Finish and Machine Glazed Papers

combining

Strength, Quality and Appearance

Marathon Bond for Regular or Offset Printing pleases every customer.

Papers from 24x36-20 lb.—480 to 24x36-300 lb.—480

DAILY CAPACITY

Unbleached Sulphite 200,000 lbs.
Bleached Sulphite 150,000 lbs.
Ground Wood Pulp 60,000 lbs.
Paper 200,000 lbs.

EQUIPMENT

1 Cylinder Machine Trim 100"
1 Fourdrinier Machine Trim 120"
2 M. G. Yankee Machines 120"
2 Super Calenders 60"

Mills and General Office, Rothschild, Wis.
Sales Office, 1126 Conway Bldg., Chicago, Ill.

ment or practically without future wood supply of sufficient quantity and within competitive transportation haul. These mills have had an opportunity in the last year or two to accumulate a reasonable financial surplus, and with proper foresight are now preparing themselves for manufacture in the future of other lines of paper than news print. Therefore, it is incumbent upon Canada (or some other country with similar resources) to develop as rapidly as can economically be done a fifteen hundred-ton output of news print in addition to the present output, to take care of the necessary demands of the United States alone.

"The natural average increase in consumption of paper on this continent, is perhaps four hundred tons a year, which added to the fifteen hundred tons above mentioned demand, indicates a necessity for further production. Therefore, as the present output of Canadian mills is approximately two thousand tons, it would seem fair to say that within the next few years Canada should look forward to a development of double the present capacity of news print paper. The situation with regard to chemical pulp is, I believe, entirely similar."

Robert A. Pringle, K. C., Paper Controller of Canada, in a report made to the Minister of Finance, January 18, 1918, says:

"The pulp and paper industry is one of Canada's greatest industries. I do not think it is too much to say that Canada is destined to become one of the leading countries in the world in the manufacture of pulp and paper products. Possibly the chief reason for the large investment that has taken place in this industry in late years is the fact that the United States market is an open market, and that owing to our extensive water power and suitable tree species for paper-making, also for the making of soda pulp, large amounts of capital have been drawn to Canada. While not having the largest timber areas in the world, Russia being first, the United States second and Canada third, Canada has the largest timber areas in the British Empire."

International Questions Raised Over Power

One of the developments of the year has been the remarkable public interest aroused in the question of utilizing the immense water powers now running to waste on the St. Lawrence. In face of the fuel and power shortages, this question has become acute. It is estimated that the available undeveloped horse power in Eastern Canada is no less than 7,000,000 h. p., estimated to be capable of supplying the needs of over 30,000,000 inhabitants of manufacturing centres. Of this power 3,000,000 is Canada's share of St. Lawrence water powers, 2,000,000 Canada's share at Niagara, while on the Ottawa and St. Maurice there are 1,000,000 h. p. each.

The whole question of harnessing the St. Lawrence was raised by the application of the St. Lawrence River Power Company in August to be allowed to dam the south channel of the Long Sault rapids. At a special meeting of the International Waterways Commission to hear the application it was stated that the dam was necessary to enable the Aluminum Company of America to produce aluminum for the Allies uninterruptedly during the winter months. The Canadian Government opposed the application, on the ground that the matter was purely one of treaty rights, to be arranged by conference direct between the two governments. It was argued that if the dam was built and became private property it would never be taken out, and the whole case for the international development of the powers of the great river might be prejudiced.

The Commission granted the application, however, on the grounds of war needs, and the dam was built in record time. A condition was imposed that the dam should be merely for a term of five years, or until the termination of the war, and the company was obliged to give an undertaking to remove the dam at the end of the period specified.

The incident has aroused the authorities to the importance of

settling an international policy for developing the water powers of the river, and it is probable that at an early date, the Canadian Government will approach the United States Government with a view to deciding on a permanent policy, so that the power now running to waste may be utilized under the best possible conditions for safeguarding the national interests.

Labor Troubles

In April last a strike was threatened in the pulp and paper industry unless demands of the International Union of Mill Workers for increased wages and better working conditions were granted. The situation for a time looked serious, as the manufacturers found themselves unable to meet the demands, which would result in a difference of \$3 to \$5.50 per ton in the manufacture of paper. Ultimately a strike was avoided.

In November, however, the matter again came to a head as regards the Booth mills in Ottawa. Six hundred employees of the mills went on strike for substantial increases in wages. The wages asked were: Sulphite cooks, increase from 50 cents to 60 cents an hour; helpers increase from 37½ cents to 45; machine runners, increase from 46½ to 50 cents; cutters, increase from 37½ to 42; beaters and boilermen, increase from 37½ to 42. The company contended that because the price of news print had been fixed at \$69 by the Government, there was not sufficient surplus to allow of the men being paid the wages they asked.

After the strike had lasted for three weeks, a compromise was effected, and the men returned to work. On behalf of the company it was stated that the trouble was really due to positive inefficiency in the mills, the production having been decreased from 140 tons a day to less than 120, while the paper, instead of being of the highest quality, as it formerly was, had been inferior. It is understood that under the new arrangement, the men promised more efficiency.

HISTORY OF HARTFORD PAPER COMPANY

HARTFORD, Conn., February 3, 1919.—With regard to the recent purchase by the Stanley Works of New Britain and the Farmington River Power Company of paper mill interests in Windsor, Amariah Brainard, president of the Hartford Paper Company, has recalled some of the events in the history of the property in the last half century.

The mill at Rainbow was formerly known, as Mr. Brainard recalls, as the George L. Hodge mill, sold by Mr. Hodge in October, 1864, to Newton Case and Leverett Brainard, then of the Hartford firm of Case, Lockwood & Brainard. The firm name of the partnership formed by the purchasing parties was L. Brainard & Co.

There were a considerable number of book publishers in Hartford at that time, for whom Case, Lockwood & Brainard did the printing. A large supply of print paper was demanded by this book work, and the mill at Rainbow had not the facilities adequate to meet the demand.

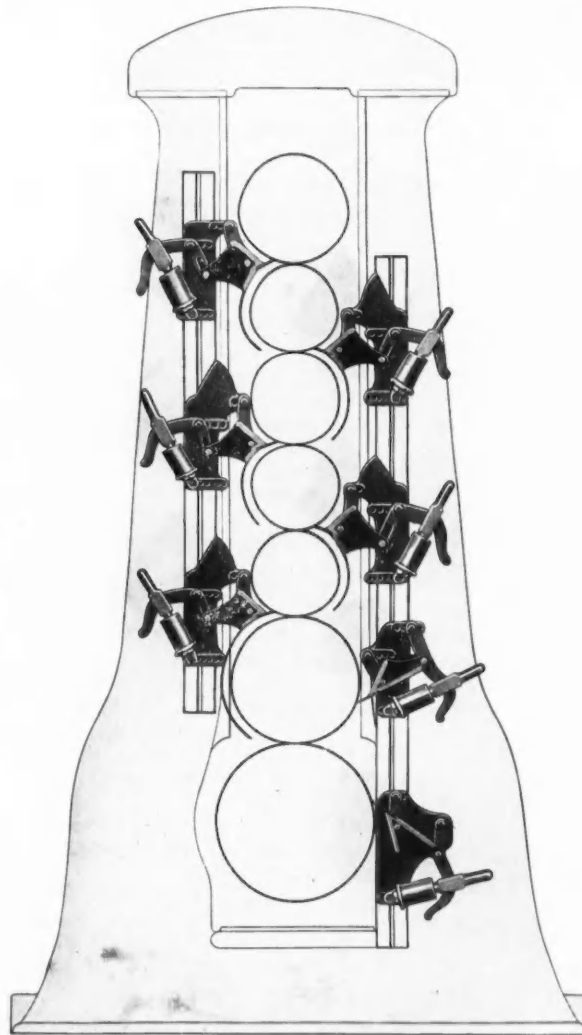
The Poquonock mill, which figured in the recent sale as the Hartford Paper Company's No. 2 mill, was then owned by Hollingsworth & Whitney, paper makers, of Boston. The original mill of those days burned, and the Boston firm preferred to sell the remaining interest than to rebuild. They sold it to the new firm of the Rainbow purchase, which then formed another company and took the name of the Hartford Paper Company.

This company was able to carry on an augmented business immediately, because with its two mills it could, and did, supply the Hartford publishing market with paper. When the company was organized, Albert Brainard, brother of the late Leverett Brainard, was made treasurer. Upon his death in June, 1878, Amariah Brainard was made his successor.

DILLON MA

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PAPER MILL



DILLON CALENDER DOCTORS *and* FEEDS

CHINE CO.

MASSACHUSETTS

MACHINERY

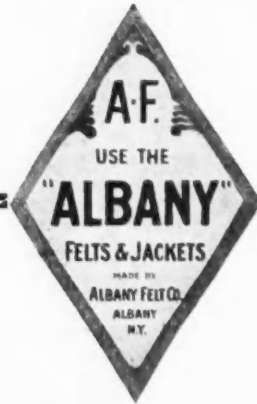
DILLION DOCTORS will cure all your Calender troubles. They are regular equipment in a great many of the Paper Mills in this Country and Canada, and large numbers of them have been furnished for machines in the mills of Europe.

The Dillon Doctors are hung up to the rolls by means of steel levers and links, and, owing to their construction, they are self-adjusting and will follow the rolls in any position. THIS IS THE ONLY DOCTOR WHICH HAS THIS FEATURE. By means of springs, these Dillon Doctors can be set at any tension desired.

Our Doctors are also fitted with an automatic feed attachment which feeds the paper down through the calender rolls. These feeds will prevent the many accidents which are bound to occur when the paper has to be fed into the rolls by hand.

Descriptive circular furnished upon request.

SEND FOR ONE NOW.



The Importance of Good

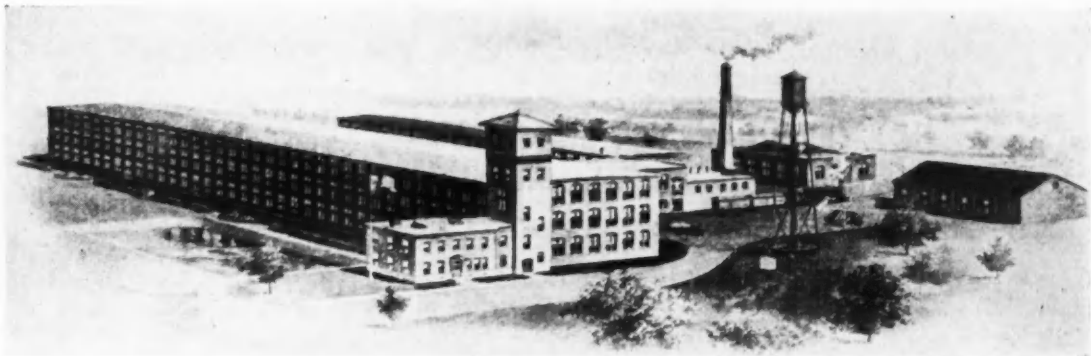
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is fully recognized in the making of paper. The more moisture removed from the paper, the less coal is consumed and a stronger sheet of paper produced.

OUR "DUBLIN" FELT

is specially designed to take water out of paper quickly and to filter water freely at high speed. They are made to stay **SOFT, STRONG** and **SMOOTH**, and to give the freedom so necessary for **SPEED** and **FINISH**. They are real **ECONOMY FELTS**.



Where Felts of Service and Satisfaction Are Made.

ALBANY FELT CO.

Albany, N. Y.

Perplexing Year in Quebec and Maritime Provinces

While the Pulp and Paper Industry Has Had Many Difficult Problems to Contend with, the Year at the Same Time Has Been One of the Most Successful Ever Experienced—Traffic Congestion, Labor Shortage and Scarcity of Raw Materials Among Other Factors All Help to Have a Most Disheartening Effect on Paper Manufacturers—At the Same Time Orders Poured in From All Over the World.

Written Especially for The Annual Number of The Paper Trade Journal by C. L. Sibley.

The pulp and paper industry in the Province of Quebec and the Maritime Provinces of Canada has had the most difficult and most perplexing year in its history, and at the same time the most successful.

The obstacles to be met and overcome have been manifold. The year started out with the greatest traffic congestion and car shortage the country had ever known. Owing to the war the labor shortage was acute, and every day was getting worse. Raw materials, new machinery and renewals of equipment that ordinarily had to be imported were most difficult to get. The Government interfered arbitrarily in the matter of the selling price, and imposed restrictions which had a most disheartening effect on manufacturers struggling against most serious handicaps. Labor demands threatened to tie up the mills. Something like a state of open warfare broke out between the publishers and the news print manufacturers. Spanish influenza worked havoc among the men engaged in the industry.

These are some of the disadvantages against which the industry has had to contend.

On the other hand, demands for Canadian pulp and paper products poured in not only from the United States, but from all over the world, and there was a ready market for every ounce that could be produced. The manufacturers rose to the occasion. Every handicap was combated with a courage and determination beyond praise, and the result has been the biggest and most successful year the industry has ever known.

How the American Government Helped

In connection with the car shortage, the principal difficulty at the beginning of the year was the fact that the American railroads had been keeping a large proportion of the cars sent into the United States loaded with paper and pulp, and appropriating them to their own use. This situation was soon straightened out under the Government control of railroads in the United States. Realizing the crippling effect on international trade of the selfish policy which had been pursued, A. H. Smith, as assistant director general of the United States railroads east of the Mississippi, early in the year ordered 2,000 box cars to Canada for use of the paper mills in Quebec Province, and although these were somewhat delayed by the exceptionally stormy weather which prevailed, they were sent to Canada as rapidly as possible.

Meanwhile the Canadian mills were being flooded with telegrams from the United States calling for paper. The mills had paper and pulp stacked up in every conceivable place ready for shipment. Skating rinks, warehouses and even some of the sheds of the Montreal harbor were piled high with news print, and some of the mills, having no place left for storage, were compelled to shut down for a time.

Every car that came in was immediately loaded up and sent back to the United States. Some of the big American papers several times reported that they only just missed publication owing

to lack of news print by the narrowest margin. Drastic methods had to be adopted to keep them supplied. Both the authorities in Canada and in the United States woke up to the fact that it was necessary to keep up the supply of news print not only for the sake of the publishers and advertisers, who exercise such a potent influence on business and distribution, but also because newspapers are recognized as a potent medium for keeping the public informed and preserving the morale of the population. It was, therefore, ordered that the various classes of freight which should take precedence over all others should be the following in the order mentioned: 1, grain; 2, flour; 3, coal; 4, news print.

The congestion was gradually straightened out, but not until the snow had disappeared in April did the various interests begin to breathe freely again. Not till then did Canada get back the bulk of the 22,000 Canadian cars which had been detained in the United States.

Work of the Pulp and Paper Association

The controversy over price fixing centered in Ottawa, and, therefore, does not call for any detailed mention in this review. But the work of the Canadian Pulp and Paper Association, whose headquarters are at Montreal, bulked large in that connection, and no review of the industry in this province would be complete without reference to it. The association was fortunate in having as its president for this year a man like F. J. Campbell, whose initiative, determination and self-sacrificing efforts in the cause of the industry as a whole have placed his fellow members under a deep debt of gratitude to him.

Mr. Campbell had an able board of directors to second his efforts and was splendidly assisted by A. L. Dawe, the energetic and devoted secretary of the association, and Edward Beck, one of the best newspaper men in Canada, who organized a publicity bureau that did magnificent work. The conditions which the association had to meet were as disheartening as they could well be. The newspaper publishers, in control of the main arteries of publicity in the Dominion throughout their organization, the Canadian Press Association, carried on a determined war against bearing their fair share of the rapidly rising costs of manufacturing news print, and they wielded a political bludgeon at Ottawa that for a time appeared to be influencing the Government to an extraordinary extent. It was undoubtedly due to this bludgeon held over the heads of the Government that the price of news print had been arbitrarily fixed at a figure considerably below that allowed by the authorities in the United States, with the extremely irksome provision that the loss thus occasioned on domestic trade should be made up on a pro rata plan by all the mills in Canada.

To counteract these conditions, the association, under Mr. Campbell's direction, launched an extensive scheme of propaganda. Every argument brought forward by the publishers was met and answered; the unfairness of the position was vividly portrayed; and unanswerable facts, figures and arguments were put forth to

To the American Paper Manufacturer:

Have you solved the problem of placing your increased production?

Have you decided on your export policy, now that the war is over?

What measures are you taking to have your product developed in foreign countries?

Do you know that the HUDSON TRADING COMPANY has sold thousands of tons of paper in foreign markets, including newsprint—book—bond—writing—wrapping and specialties.

The HUDSON TRADING COMPANY is organized to perform an international export service for American Paper Manufacturers—to advertise American-made Paper in foreign markets—to give American Manufacturers the benefit of its staff of field men and exclusive agents throughout the world.

Why not allow us to discuss with you the prospects of selling your paper abroad? Communicate with us today.

HUDSON TRADING COMPANY

Specialists in Overseas Trade

18 East 41st Street

NEW YORK

*Established 1886
Incorporated 1911*

*Cable Address:
Hudtraco, New York*

show that the policy of the Government was working irreparable injury to the biggest exporting manufacturing industry in the Dominion at a most critical period in its career.

It was undoubtedly due to this vigorous campaign that the Government gradually modified its attitude and ultimately forced the publishers to bear a fairer share of the war costs.

Canadian Export Trade

Another organization which has exercised a marked influence on the industry in the province of Quebec during the past year is the Canadian Export Paper Company, Ltd., whose headquarters are in Montreal. This company transacts the foreign business of five of the larger news print producers, namely, Laurentide, Belgo-Canadian, Price Bros., Brompton, and St. Maurice, and of several of the book paper producers, such as the Provincial and the Howard Smith mills. It is organized exclusively for the foreign field on the principle recognized by the Webb law of the United States, that while combinations of competitors in the domestic field are prohibited, combinations for the improvement of export trade are not only permitted but encouraged.

This company has been hard at work during the year building up markets not only in the United States, but all over the world, its plans having largely in view after-the-war conditions. The company has established its own trading organizations in Australasia, Latin America and other countries and has laid plans for a remarkable extension of the Canadian paper trade in overseas countries.

Developments of the Industry

While the high costs of materials and the unsettled conditions generally have prevented many big plans for the development of the industry from being put into force, there has been considerable development during the year.

The most notable is the project launched by the Riordon Pulp Paper Company, which early in the year started active operations on the biggest new pulp-making concern put forward in Canada since the war broke out. This scheme was inaugurated under the auspices of a subsidiary company known as the Kipawa Fibre Company, with a capitalization of \$12,500,000. The company started building a mill at Temiskaming, Que., to produce 100 tons of the highest grade bleached sulphite per day. Most of the necessary machinery for this mill was purchased in 1916, before prices rose to their present high level, and excellent progress has been made in the construction. The estimated initial capital outlay is \$5,400,000.

Already 20,000 horse power developed from water powers owned by the company is available, and another 15,000 can be added. There are 20,000 square miles of timber from which the company can draw its supply, and the wood in this district is stated to be the best for pulp manufacturing, yielding more pulp per cord than any other wood in Canada. In addition to the pulp mill, a sawmill with a capacity of 30,000,000 f.b.m. is being established, as well as a machine shop, electric light plant, a model town, and steamboats on the lake. The town and mill sites will occupy 10 square miles. The plant will start producing in the fall of 1919.

Other extensions in the industry in this end of the Dominion are a new sulphite plant in Nova Scotia, built by the Davidson Lumber Company, of Bridgewater, N. S., and a large new bleached sulphite mill erected at Edmundston, N. B., by the Fraser companies. During the year the Crabtree mill, formerly producing news print, has been equipped by the Howard Smith Paper Mills, which owns it, for producing book and writing paper, of which it is now producing 20 tons per day.

The Abitibi Power & Paper Company, of Montreal, during the year issued \$1,000,000 in bonds to finance extensions for increasing the production of the plant at Iroquois Falls from 62,000 tons

of news print per annum to 120,000 tons, with 6,000 tons surplus sulphite and 3,900 tons surplus wrapping paper.

There was a good deal of talk during the year about the International Paper Company erecting a huge new mill in Canada for the manufacture of news print. It is stated that the company has secured an admirable site at Three Rivers, Que., and has plans for an outlay on the plant of \$6,000,000. Nothing was done during the year, however, though it is expected that now the war is over the project will be put into force at an early date.

There was a rumor during the latter part of the summer that the Brown Corporation contemplated an extension of its mills at La Tuque that would involve the expenditure of many millions, but this was authoritatively denied.

The New Brunswick Sulphite Fibre Company, of Millerton, N. B., which was incorporated in 1917, with a capital stock of \$200,000, was taken over by a company of the same name, formed of Montreal capitalists, among whom were C. Howard Smith, William D. Robb, Harold Crabtree, William D. Hutchins, and Joseph J. Meagher. The company's plant has a capacity of 40,000 pounds of sulphite every 24 hours.

The Jonquieres mill of Price Brothers started the year by putting a new Fourdrinier machine into operation, which increased the capacity by 50 tons a day to 240 tons.

The formation of the Quebec-Saguenay Pulp Company, Limited, with headquarters in Montreal, was announced in June. The promoter was David R. Cameron, of Montreal, and the directors Dr. M. J. Mooney, Quebec; W. T. Robinson, New York; Richard Wolston, exporter, Montreal; M. J. Cashman, Boston; and L. P. Forest, Montreal. The company took over the mills and limits at Balmas, on the Peribonca River, in the Lake St. John region. The company has 12,000 horse power developed and undeveloped on the river, and a large area of excellent timber limits. The present capacity of the mill was increased from 30 tons of ground wood per day to 60 tons.

There was a change of control in the National Paper Company, Limited, Valleyfield, Que., and under the reorganization T. B. Little, of T. B. Little & Co., Montreal, was chosen president. J. P. Morrow continued as vice-president and general manager.

The business of the Canadian Leatherboard Company, at Chambly Canton, Que., was taken over by a new organization known as Bennett, Limited, which also took over the business of the Dominion Counter Company.

A charter was granted to G. & J. Esplin, Limited, of Montreal, to carry on a general lumbering business, and manufacture and deal in paper board, pulp, pulpwood and paper. The capitalization is \$400,000.

The Bathurst Lumber Company, of Bathurst, N. B., took over the Houpt Paper Mills, at Camden East, Ont., and is now producing there 15 tons of wrappings per day.

The Thompson & Norris Company, Limited, which operates large paper box and container factories at Niagara Falls, Ont., and Montreal, was incorporated with a capital stock of \$600,000, and bought out the business of the Martin Corrugated Paper Company, Toronto.

Other New Charters

New Charters during the year were also granted to:

National Publicity, Limited, headquarters Montreal, capital \$49,000, for buying and selling posters and designs and organizing publicity campaigns.

The Valcartier Lumber & Pulp Company, Limited, capital \$150,000, business to sell and deal in timber and timber lands and manufacture lumber, pulp, and pulpwood.

The Pulp & Paper Mills Supply Company, Limited, Montreal, capital \$150,000.

The Continental Wood Products Company, Limited, capital \$200,000, headquarters Montreal, timber limits in Portneuf County, Que.

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 { 2075 }

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OF ALL KINDS

AND

PAPER MILL SUPPLIES

The J. H. A. Acer Company, Montreal, capital \$100,000, business to deal in pulp and paper and other products.

Quebec Paper Sales Company, Limited, Montreal, capital \$50,000.

United Paper Box Company, Montreal, capital \$50,000.

Brompton Company's Big Development

The Brompton Pulp & Paper Company, Limited, has branched out considerably during the year. This company is a considerable producer of kraft papers, boards, manila, and news print. It is now installing a new 50-ton news print machine which will be operating in April. Early in the year the company secured control of the Claremont and Wyman Flint Mills, in the United States. These mills have no pulp plant of their own, but now provide an outlet for Brompton's entire surplus of sulphate pulp as well as a large tonnage of ground wood pulp. The Claremont mills produce approximately 70 tons of paper a day. The company also acquired the plant of the Howland Pulp & Paper Company, of Howland, Me. This mill has a capacity of 50 tons of sulphate pulp and 50 tons of sulphite pulp per day, as well as an output of 25 tons of bag paper. The company also purchased the Odell Manufacturing Company, of Groveton, N. H., which has 31,000 acres of timber limits, and an output per day of 100 tons of sulphite pulp, 60 tons of which is bleached, 40 tons of bond papers, and 60 tons of fibre papers. With the acquisition of these mills, the Brompton Company's production is the most varied of any large pulp and paper manufacturing concern on the continent.

North American Company's Changes

There were considerable changes in connection with the North American Pulp & Paper Corporation during the year. In January last the Company sold the Tidewater mill to the *New York Times*, and announced that it was definitely out of the news print field, because it did not want to be connected with a business which the publishers were allowed to run. In June it was announced that the company, through one of its subsidiaries, the Chicoutimi Pulp Company, had acquired a controlling interest in the Saguenay Light & Power Company, which has valuable power rights and operates an electric light and power system in the town of Chicoutimi and district. The corporation further expanded by acquiring the Battle Island properties adjacent to its timber limits, consisting of 26,000 acres of freehold timber limits and 100,000 acres of leasehold timber limits, making a total holding of 561,000 acres of freehold and 700,000 acres of leasehold timber limits. In August it was reported that Northcliffe interests, operating through the firm of Becker & Co., London, together with an American concern and the Molson's Bank of Montreal, had acquired control of the Corporation. J. E. Houseman, for many years on the staff of the Molson's Bank, was appointed vice-president of the concern and general manager of the Chicoutimi Pulp Company, the St. Lawrence Pulp & Lumber Company, and the Roberval & Saguenay Railway, the leading subsidiaries of the Company. Lewis Chabel, a representative of the International Paper Company, was appointed to the board of trustees.

Big Schemes Under Consideration

After the close of hostilities, many big concerns in connection with the pulp and paper industry were under consideration in the province, and it is possible that 1919 will see big developments. The various projects being considered seriously will call for an expenditure in new plants of from \$30,000,000 to \$50,000,000. They include ground wood mills, sulphate and sulphite plants, bleaching mills, and kraft and news print mills.

The Quebec & Saguenay Railway

During the year the Federal Government took over the Quebec & Saguenay Railway, and incorporated it in the national system. This line, the completion of which was rapidly pushed ahead, gives the first railway communication from Quebec City to Murray Bay, where the plant of the Nairn Falls & Paper Company is situ-

ated. Many thousands of cords of pulpwood are already being brought out of the district served by the line.

The Canadian Government also took over the transcontinental railways system of the Canadian Northern Railway, which, by the way, is the principal railway for pulp and paper enterprises in Quebec province.

A Remarkable Scheme

One of the most remarkable schemes announced during the year was that of a newly-organized Company, named Manson's Limited, which was organized with a capital of \$300,000, to pump sulphite screenings from the bed of the river at Hawkesbury, where there are large sulphite mills, and sell them as a lower grade of sulphite pulp.

Paper Trade Branch for Quebec

A branch of the Canadian Paper Trade Association has been formed for the province of Quebec, with Peter Rolland, of the Rolland Paper Company, as chairman.

New Developments in Manufacture

During the year the Forest Products Laboratories of Montreal, demonstrated that pine oil can be produced on a commercial scale from Canadian trees. This is important to the metal mining industry, as this oil is used for the famous flotation process for the extraction of ore.

Under the direction of the Advisory Council of Scientific Research for Canada, Dr. V. J. Kriebel demonstrated that the waste liquors from sulphite mills can be economically used for the manufacture of alcohol.

The Laurentide Company carried out an experiment in its mills at Grand Mere by which 10 per cent of birch was used in the manufacture of pulp with good results in the making of news print. This company and the River Quelle Pulp & Lumber Company also carried out successful experiments in using motor tractors for logging on the ice roads in the woods.

Water Power Developments

The province of Quebec is now beginning to see the fruits of the progressive policy of the Provincial Government for the conservation of water. Early in the year the great Government dam at the head waters of the St. Maurice River was completed, and throughout the year the surplus water from a vast watershed has been accumulating in an artificial lake 300 square miles in extent and with a capacity of 160 billion cubic feet of water. By the way, the pulpwood on the land to be flooded, estimated at 30,000 cords, was sold to the Brown Corporation at La Tuque for \$8 per cord, only half the ordinary stumpage duties being collected owing to the difficulties of cutting, which could only be carried out in February, or in the latter part of the summer, when the water was low. The dam cost \$1,661,000 without the accessory works, but the revenues produced from the sale of the extra power to existing establishments alone will suffice to pay the interest and sinking fund of the capital. The scheme increases the water power to falls already developed by about 175,000 h. p. As the most important pulp and paper projects in the province are supplied with power from the river St. Maurice, the conservation scheme will be of considerable benefit to the industry. The pulp and paper mills affected include the pulp mill of the Brown Corporation at La Tuque, the Belgo-Canadian mills at Shawinigan Falls, the Laurentide Company at Grand Mere, and some others supplied by the Shawinigan Water & Power Company.

Another storage dam coming into operation during the year is that built by the Provincial Government on the St. Francis River, which increases the water power available for some important increases, including the Brompton Pulp & Paper Company's plant at East Angus, the plant at Bromptonville, and the Windsor Paper Mill's plant.

The pulp mills on the Chicoutimi river will benefit by a storage dam being built by the Provincial Government for raising the

water levels of Lake Kenogami, at the headwaters of the Chicoutimi river.

The Provincial Government is also building a storage dam on the Jacques Cartier river, from which power is supplied to the Donnacona Paper Company, which makes news print for the *New York Times*.

In the Maritime Provinces the most important water power development has been the preparation of plans for a scheme to harness the tides of the Bay of Fundy. The originators of this scheme are Professors Archibald and Clarkson, of Acadia College. Professor Clarkson has invented a motor which it is claimed makes the scheme commercially practicable. Already \$25,000 has been spent in experiments, and detailed plans are now before the New Brunswick and Nova Scotia Governments for a tidewater plant at Cape Split, to cost \$2,495,000. It is stated that electricity can be supplied from this tidewater plant at 1c. per kilowatt hour for manufacturing purposes, and that for private purposes the cost will be only one-third the present cost of electricity.

Scientific Forestry Claiming Much Attention

A feature of the year has been a general awakening to the absolute need of a widespread adoption of scientific forestry, owing to the rapid depletion of the forests. In official reports prepared during the year by experts, it was declared that the forest wealth of Eastern Canada has been grossly exaggerated, and that at the present rate of exploitation, without counting for the natural increase in the pulp and paper industry, there is only enough pulpwood to supply the needs of the next fifty years. It has generally been assumed that spruce will grow to pulpwood size in Eastern Canada in 30 years, but careful investigations lead to the conclusion that it takes the ordinary spruce tree 150 years to reach the minimum diameter limit of 12 inches established by the cutting regulations in the province of Quebec. This, of course, is in the ordinary forest, under conditions in which each tree has a fight for its life and kills many others before it has room to develop. Perhaps under scientific thinning out the growth would be more rapid. Another point brought out is that spruce has been largely cut for years and the less valuable balsam, as well as the "weed" trees, left standing, with the result that spruce is declared on the point of exhaustion.

With regard to the pulpwood resources of Canada as a whole, the following estimate was prepared during the year, but it should be remembered that a considerable portion of the quantities named are so far removed from transportation as not to represent commercial possibilities at present.

	Cords.	
Nova Scotia	30,000,000	spruce and balsam.
New Brunswick	33,000,000	spruce and balsam.
Quebec	300,000,000	spruce and balsam.
Ontario	200,000,000	spruce and balsam.
Total for Eastern Canada.....	563,000,000	cords
Prairie provinces	85,000,000	spruce and balsam.
Prairie provinces	100,000,000	poplar.
British Columbia	285,370,000	Sitka spruce, western hemlock, balsam and cottonwood.
Total for Western Canada.....	470,370,000	cords.
Total for all Canada.....	1,033,370,000	

The Provincial Government of Quebec has entered upon an active campaign for educating the public in the needs of forest conservation and tree cultivation and preserving wood lots on farms. The Government is rapidly coming around to the opinion of the forest experts that it is necessary to revolutionize the methods of cutting. It is argued by the experts that the methods of operation should be changed from a cost of \$5 or \$10 a cord to one of \$15 or \$20. The idea is to cut only such trees as are mature, or nearly so, thus encouraging the greatest volume of growth on a given area, as trees grow by the accretion of the outer rings, so that the larger the tree naturally the greater is

the volume of increment. Other methods of scientific forestry are seeding and planting, as well as thinning-out processes, and much attention is now being paid to these methods.

Something of what is being done in this direction was demonstrated to members of the News Print Service Bureau, after its annual meeting in Montreal in August. Members were taken on a trip to the Government nursery at Berthier and the Laurentide Company's nursery at Grand Mere. The size of the Government's nursery may be gathered from the fact that during the present year it has sent out 2,000,000 trees of three years' growth. The production will shortly reach 5,000,000 trees a year. Practically all the seedlings are spruce, the seed of which comes from Denmark. The trees in the nursery are making a growth of 18 inches per annum in their fifth year. All farmers and holders of timber limits who need advice are invited by the Government to write to the Chief of the Forest Service at Quebec. The Government then furnishes freely the necessary advice. The Forest Service pays the salary of an expert to visit and advise, and all the expense the forest owner is put to is providing board and transportation. The necessary young trees are furnished at a nominal price. During the year sixty public meetings were held in the Province under Government auspices to arouse interest in the preservation of the forests. Besides this good work, the Government nursery affords practical education for a group of students every year, and the whole work will soon be self-sustaining.

In the nursery of the Laurentide Company there are now over 1,000,000 trees. The effects of the soil, climatic conditions and environment are being closely studied, and the work at the two nurseries will eventually result in exact data on many forest problems now imperfectly understood, and have a great influence on the adoption of better methods of tree production.

New Forest Pests

Much anxiety has been caused by a new forest pest attacking spruce in Quebec timber limits. It is a dark beetle which has not yet been identified, and which seems to thrive on the spruce of cut-over lands. Large numbers of trees have been destroyed by it, and whole sections of forest have trees that are riddled by the pest. Needless to say, scientists are actively engaged in methods to combat the pest.

Another new and highly destructive enemy that has appeared has been attacking the white birch in the province. In some sections it has killed trees in all directions, and of the living trees probably 50 per cent are already badly diseased, and show the characteristic dying branches in the upper part of the crown. The injury is caused by a small bronze-black beetle, known as the Bronze Birch Borer, *Agrilus anizus*.

Forest Fires

Owing no doubt largely to the excellent fire preventive methods now generally followed, forest fires in Quebec and the Maritime Provinces have not done much damage during the year. The most serious fires occurred early in the year in New Brunswick and in the region of Lake Temiskaming in Quebec. Thousands of dollars' worth of lumber and pulpwood were destroyed in Restigouche County, the most important Crown land section in New Brunswick, but in all cases the fires were extinguished before they got beyond control.

Many plans are under way for improving fire preventive methods. The most notable is the decision of the St. Maurice Forest Protective Association to start a hydro-aeroplane patrol of the forests in the St. Maurice watershed next spring. Another plan which may have large results was suggested to the Quebec Forest Protective Association at a meeting in Montreal by J. B. Harkin, Dominion Parks Commissioner. He said: "I may be a visionary, but I think it possible to manufacture a gas that could smother a forest fire. I have visions of aeroplanes dropping bombs on forest fires in the not far distant future."

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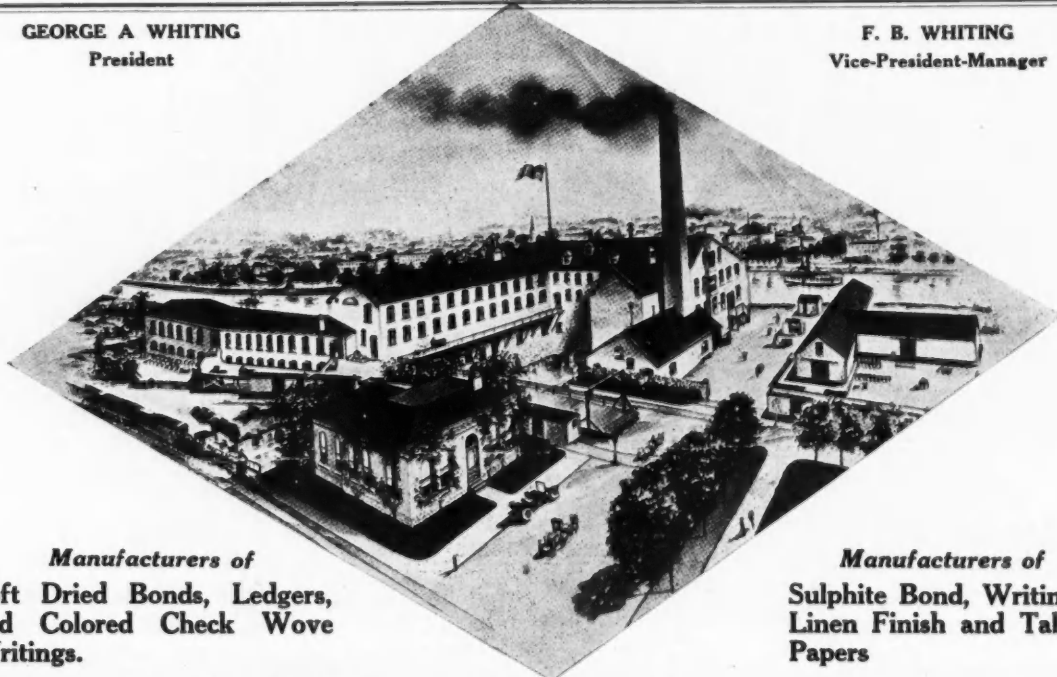
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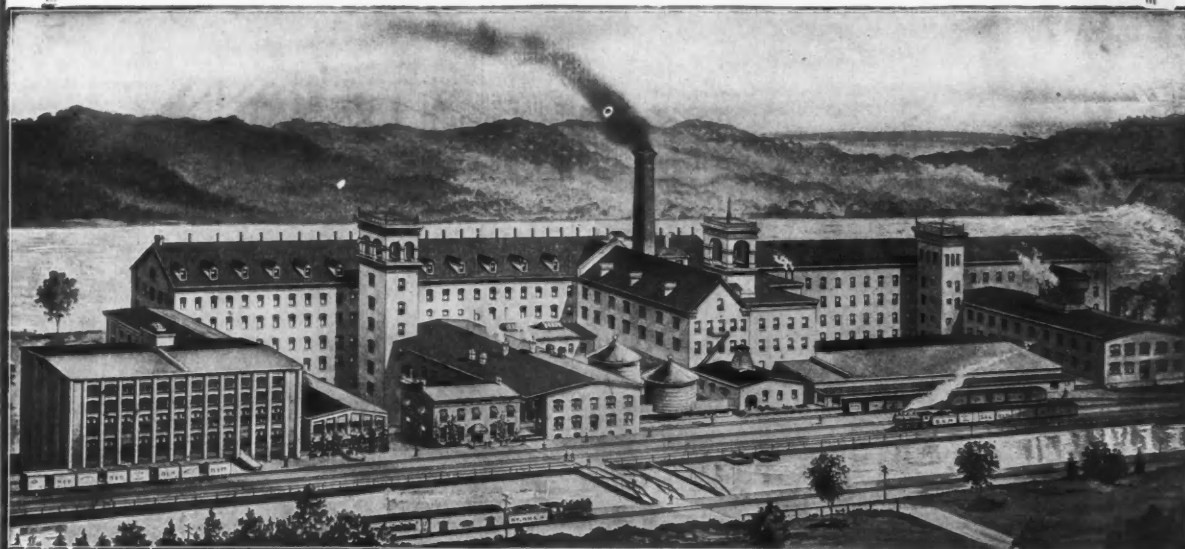
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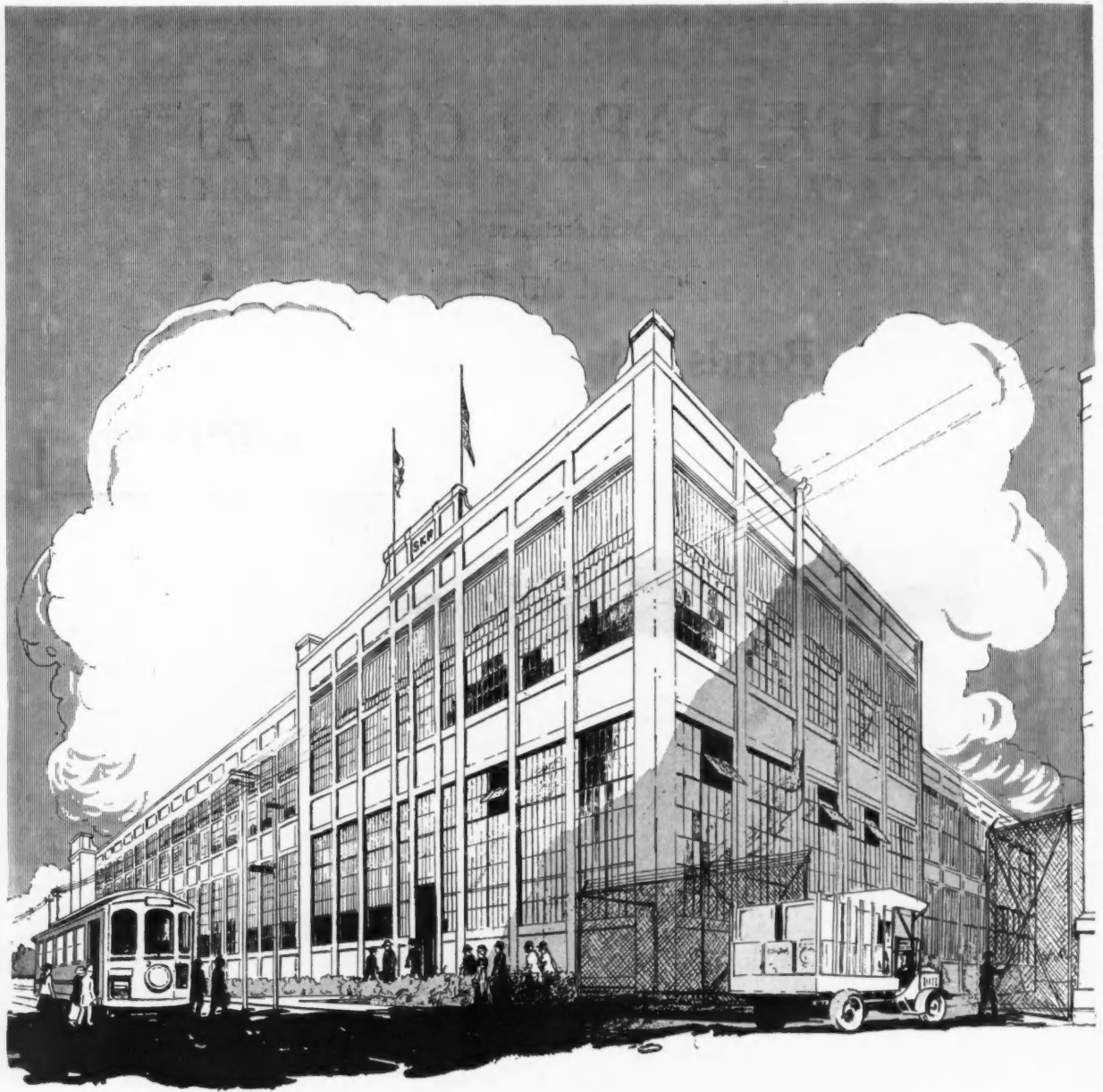
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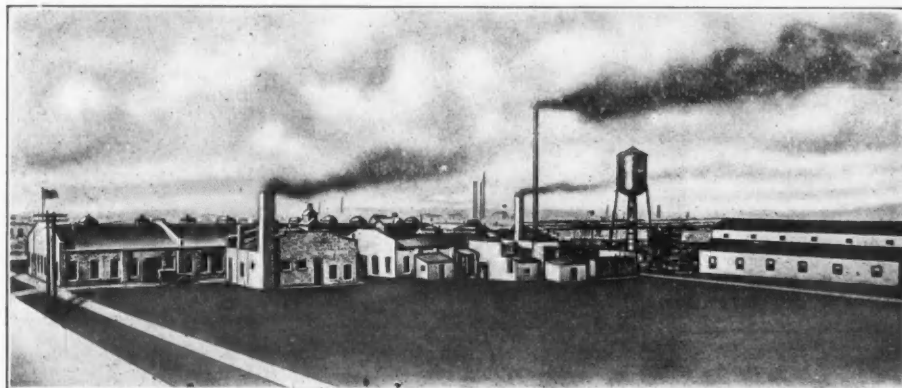
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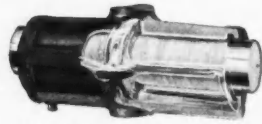
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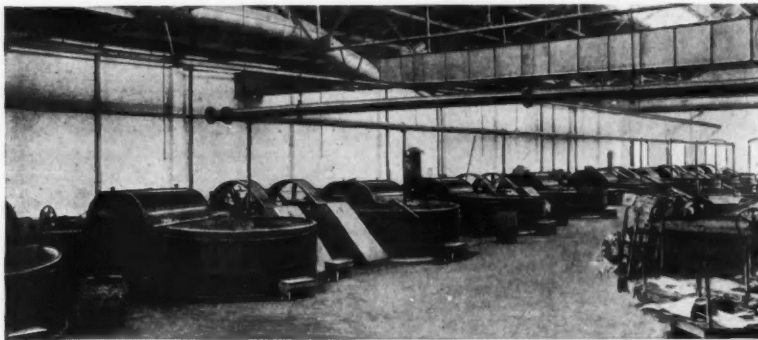
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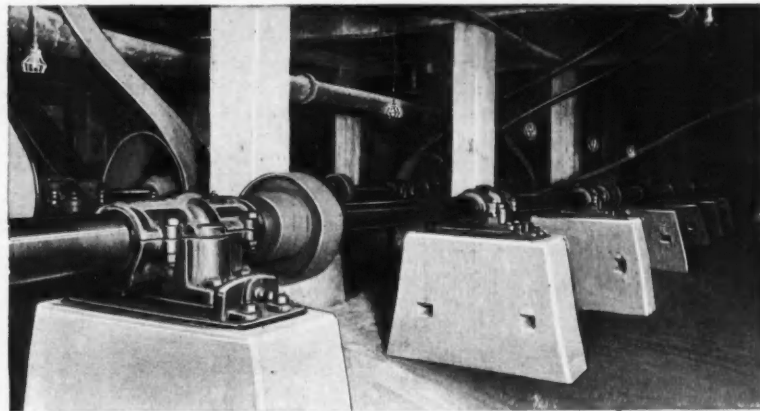
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Numerous Troubles That Were Experienced Had Effect of Decreasing Productive Efficiency of the Mills Very Considerably—Up to the Time That Prospects for Peace Began to Be Taken Seriously, However, Prices for Pulp and All Lines of Paper Were Constantly Growing Firmer—Formation of Canadian Paper Trade Association.

Written Especially for the Annual Number of The Paper Journal, by George A. Green.

Conditions in the Ontario district during 1918 were very similar to those in other fields. There were the same difficulties with respect to labor, transportation, power, coal and other materials which were experienced elsewhere. In the early months of the year, the congestion of shipping which led to the establishment of frequent and irritating embargoes, was the principal obstacle to efficient operation. This affected both the shipping of the finished product and the receipt of coal, pulpwood and other materials. There was, in Northern Ontario particularly, an acute car shortage which hampered the movement of pulpwood from the yards of the pulpwood companies to the mills of the paper manufacturers. With the opening up of the spring, these transportation difficulties were gradually relieved, they being due very largely to the severity of the winter weather.

Another source of trouble in the early months of the year, also arising from the long, cold winter, was the ice which blocked watercourses and put power plants out of business. One mill was actually tied up for two months from this cause. Floods were particularly bad in the spring and interfered with the continuous operation of several plants.

Shortage of Labor

Following these troubles, which were climatic in origin, came difficulties due to the shortage of labor and the demands made for higher wages. Conscription came into force early in the year and this took away from the mills, already short-handed, still more of their most efficient men. The formation of forestry battalions proved attractive to woodsmen and left pulpwood operators with reduced gangs of less efficient men. This shortage of help became more and more acute as the year advanced and led to the introduction of female labor as far as this was possible. The net result was to reduce the efficiency of mill staffs very considerably.

In the autumn months the ravages of the influenza epidemic increased the difficulties of manufacturers and the trade in general. Several mills had to close down entirely; others ran to only part capacity; all experienced the utmost difficulty in filling orders. Fortunately the termination of the war and the gradual release of munition workers in November and December gave some relief to a situation which otherwise might have become exceedingly serious.

Prices Firmer Before Prospects of Peace

Up to the time when the prospect of peace began to be taken seriously, prices for pulp and all lines of paper were getting firmer and firmer. The rise, unlike the advance which took place in 1916-1917, was based on actual increases in the cost of manufacturing and distribution. The demand all along was strong; mills found it exceedingly difficult to keep up with orders and, as costs were mounting, there was no recourse but to put up prices. At the first of the year easy bleaching sulphite was commanding from \$65 to \$70 and bleached sulphite from \$105 to \$110. Kraft pulp brought about \$80. By February easy

bleaching was up to \$75 and very firm, while kraft was quoted at \$85. Notwithstanding that the product of two news mills came on the market in the spring, sulphite continued strong. By April, kraft pulp was bringing \$100 with all mills rushed with orders; at the same time easy bleaching sulphite advanced to \$80, with bleached selling as high as \$120. July saw easy bleaching at \$90. In August easy bleaching touched \$95 and bleached went to \$130. In September the former sold up to \$100 and the latter \$135, while the practice of quoting for three months was discontinued. Kraft was exceedingly strong at \$105. October saw bleached sulphite soaring, prices going as high as \$180, and in isolated cases to \$190.

Advances in Practically All Lines

Practically all lines of paper advanced during this period. Prices were very firm during January and February and in March quotations on book papers were marked up from $\frac{1}{2}$ to 1 cent per pound. Wrappings moved up from 25 to 35 cents per hundred, while the discount on board was cut from 20 to 10 per cent. In April the discount on all kinds of toilets was reduced 10 per cent. In May book papers were again boosted, advances averaging about 5 per cent. Writings, bonds and ledgers advanced about 10 per cent. Wrappings went up another 25 cents per hundred. The 10 per cent discount on board was withdrawn. In June paper bag prices were advanced about 20 per cent and from $\frac{1}{2}$ to 3 cents per pound was added to the price of cover papers, bristols, tag and envelope manillas. In July there was an increase of $\frac{1}{4}$ cent on wrappings and $\frac{1}{2}$ cent on kraft, with another 5 per cent advance in toilets. September witnessed another $\frac{1}{2}$ cent advance in kraft; $\frac{1}{4}$ cent in wrappings and $\frac{1}{2}$ cent in writings and bonds.

From the signing of the armistice until the end of the year prices have held. There has been a falling off in orders, due to the expectation of buyers that lower prices may soon come but there is nothing in the general situation to warrant any reductions for some time to come. Wood will be scarcer; wages are not coming down and materials are very little, if any, lower than before. Moreover the development of an export trade is becoming an important factor and, as there will be no early increase in the productive capacity of the industry, the entire output of Canadian mills will be readily absorbed. Neither European pulp or paper will have any influence on the market for some time to come.

Comparison of Prices

A comparison of prices as they were at the beginning and end of the year may prove of interest:

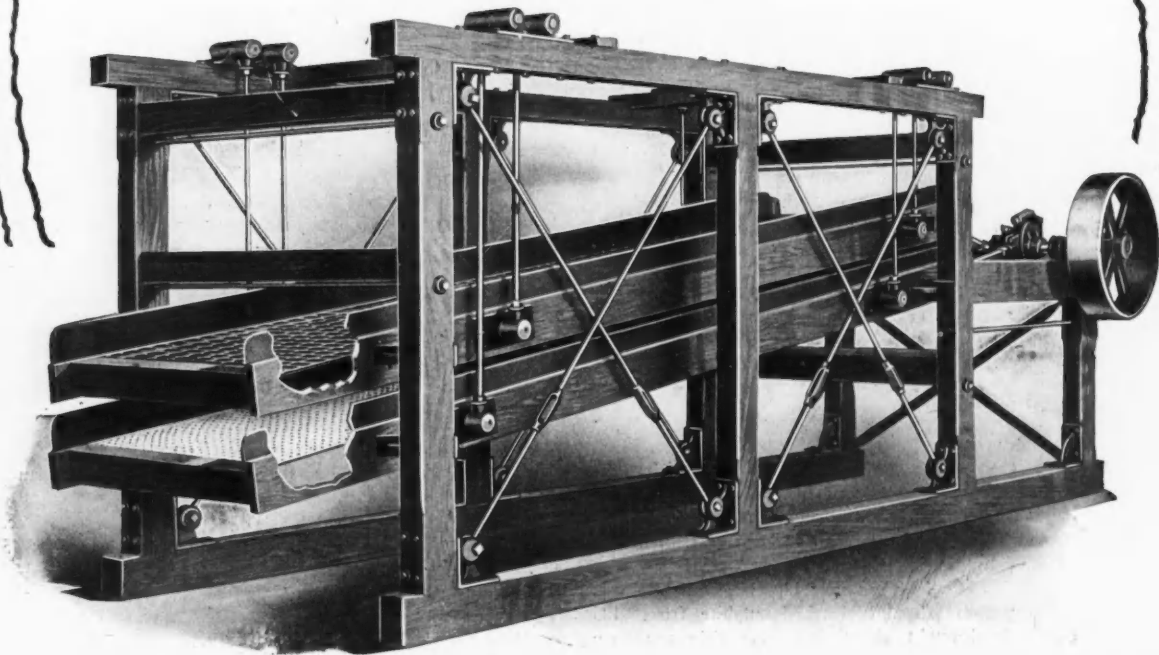
	Jan.	Dec.
News (rolls) F.O.B. Mill in carloads....	\$2.50	\$3.45
News (sheets) F.O.B. Mill, carloads....	3.25	3.80
Book papers No. 1 carloads.....	9.25	9.75
Book papers No. 2 carloads.....	9.00	9.50
Book papers No. 3 carloads.....	7.00	8.25

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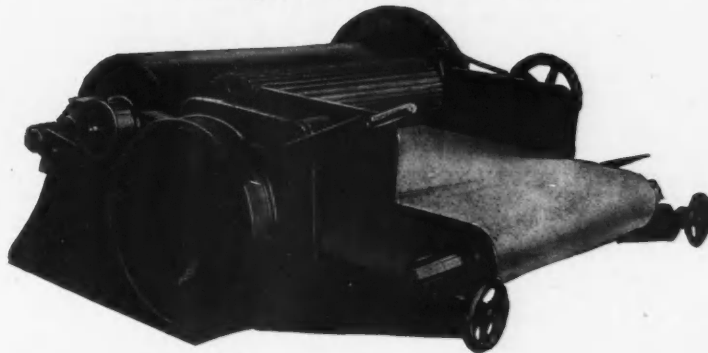
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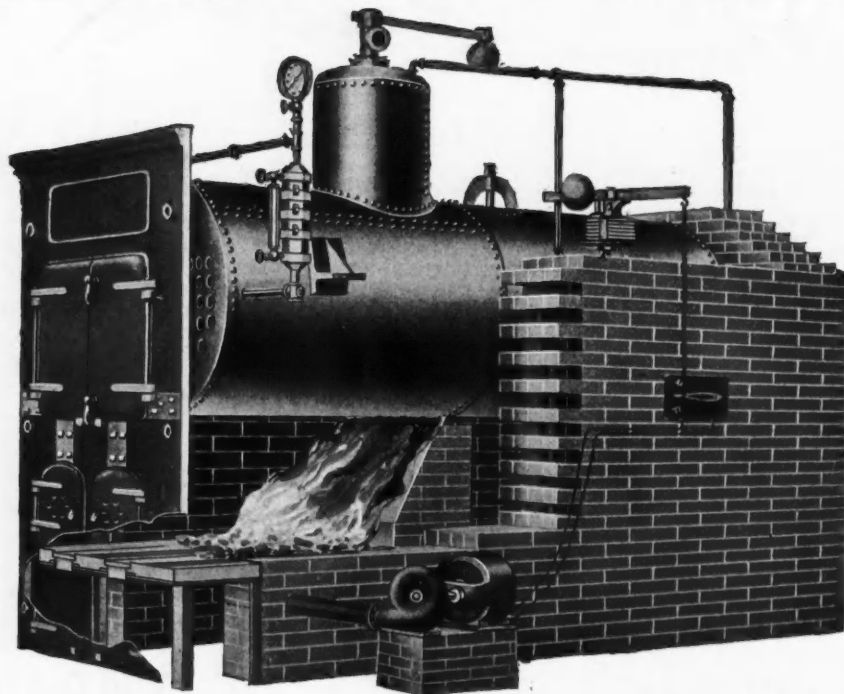
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J. R. S. Low and High Grade Coal Burner

It insures consumption of highest percentage of combustible material in your coal; increasing efficiency of boiler; reducing ash to minimum.

Burns Kulm, Silt, Buckwheat and Low-Grade Fuels containing as little as 40% combustibles; also the better grades of fuel.



TYPICAL INSTANCES

Heated a large office building perfectly through 1917-18 cold winter burning only the WASTE ASH from a mill using ordinary grates. Has been in constant use at the Mechanicville Pumping Station running 24 hours per day for three years and nine months on low grade fuel with no repairs or replacements.

FREE TEST OFFER—That you may prove the efficiency of this burner to your own satisfaction, we will install a J. R. S. Low and High Grade Fuel Burner in your own plant, give you 30 days' trial use by your own Engineers, and remove at the expiration of that period if found unsatisfactory, replacing grate in the same condition as found, all AT OUR OWN EXPENSE. Installation and removal will be made at such times as may least interfere with operation requirements. Can you ask for a better demonstration of our belief in the efficiency of this Burner?

WE CAN REFER YOU TO NUMEROUS SATISFIED USERS.

For full particulars address

THOMAS H. SAVERY, Jr.

Exclusive Representative, PULP AND PAPER TRADE

1718 Republic Bldg.

Chicago, Ill.

PLATE OF BOILER

With J. R. S. Low and High Grade Coal Burner in Position. The draft pressure is constant at any desired head resulting in so perfect a mixture of oxygen and fuel that practically all the heat units ordinarily passed off in smoke and gas are consumed. This gives a full bodied flame above the fuel that completely fills the combustion chamber.

Ledgers	15.00 up	18.00 up
Sulphite bonds	11.50	13.50
Light tinted bonds.....	12.50	14.50
Dark tinted bonds.....	13.50	16.00
Writings No. 1 (S.C.).....	11.00	13.00
Writings No. 2 (M.F.).....	10.50	12.50
Coated book and litho No. 1.....	12.25	12.25
Coated book and litho No. 2.....	11.25	11.25
Coated book and litho No. 3.....	10.50	10.50
Grey Brown Wrapping.....	4.25	5.25
White Wrapping.....	4.25	5.25
Fibre	6.75	7.35
Manilla No. 1.....	6.75	7.35
Manilla B.....	4.50	5.60
Tag Manilla	6.25	7.00
Kraft	8.25	9.25
Tissues, bleached	1.25 up	1.55 up
Tissues (unbleached)	1.20 up	1.35 up
Tissues, manilla .....	.70 up	.90 up
Straw boards	70.00	75.00

Book Paper Investigation

As a result of the representations of the Trade and Class Section of the Canadian Press Association, the powers of the Paper Commissioner were enlarged to include book paper and halftone news print, as well as ordinary news print. One or two hearings took place and the Commissioner's auditor was instructed to examine and report on the costs in the book paper mills. A staff of men spent considerable time going over the books of the Provincial Paper Mills, Limited, during the spring and summer and costs for the past three years were ascertained. This appears to have been as far as the inquiry went, since no further hearings took place nor were the books of other companies examined. It was the opinion among paper men that the result of the auditing to date was such as to convince the Commissioner that no order fixing the price of book paper was justified.

Form Paper Trade Association

An outstanding event of the year in Canadian paper trade circles was the formation of the new Canadian Paper Trade Association. The need of such an organization to serve the needs of the wholesale paper dealers of the Dominion had long been felt and abortive attempts had been made from time to time to establish such a body. However, it was not until last spring that the paper dealers actually got together and formed an association on solid and comprehensive lines.

The movement originated in Winnipeg, where in March a preliminary meeting was held attended by representatives of western houses. John Martin, of the John Martin Paper Company, Winnipeg, was appointed provisional chairman and committees were appointed to take steps to launch a Dominion association. The following month the organization of the Canadian Paper Trade Association was effected at a well-attended meeting held in Toronto. John F. Ellis, of Barber-Ellis, Limited, Toronto, was elected president; John Martin, first vice-president, and H. B. Donovan, Canada Paper Company, second vice-president. The services of N. L. Martin, Toronto, was secured as permanent secretary.

During the spring and summer, an aggressive membership campaign was conducted and provincial branches were formed in the Maritime Provinces, Quebec, Ontario, the Prairie Provinces and British Columbia. Each branch thereupon resolved itself into sections to look after the particular needs of the different divisions of the trade. All this preliminary work was completed during the year and the organization of the Paper Trade Association may be said to be most complete.

Some effective work has already been accomplished by the Association working through its various sections. Possibly the

most valuable work has been accomplished in the direction of working out standard trade customs and establishing standard substance bases for the different lines of paper. The Association has been acting in co-operation with the Canadian Pulp and Paper Association and as a result of their mutual efforts, economies in production have been introduced and many of the little differences which have occasioned friction between manufacturers and jobbers have been removed. The formation of the Canadian Paper Trade Association has been abundantly justified by the results obtained to date.

Dryden Paper Co. Reorganized

During 1918 a reorganization of the Dryden Timber & Power Company, Limited, of Dryden, Ont., took place, the business being taken over by the newly incorporated Dryden Pulp & Paper Company, Limited. There was, however, no change in the mill organization, J. B. Beveridge, who has been in charge for several years as general manager, continues as vice-president and general manager of the new company. H. Humphreys is secretary-treasurer and F. N. Beveridge is general superintendent.

During the war various extensions have been made and improvements carried out, with a view to securing increased efficiency both as regards quality and quantity of output. The capacity of the Dryden plant is now sixty tons of kraft pulp per day, of which twenty tons will be converted into kraft wrapping and builders' sheathing paper. The mill is equipped with one 110-inch Fourdrinier paper machine and one 140-inch cylinder board machine.

In addition to the alterations that have been made to the mill at Dryden, the company has under construction a re-inforced concrete dam on the Eagle River, eighteen miles west of Dryden, the Eagle River being the outlet from Eagle Lake, to which several hundred square miles of the Company's pulpwood holdings are tributary. This concrete dam is being built to create a storage pond for logs. In connection therewith will be a hydro-electric development, a pulpwood cutting-up plant comprising a five-saw slasher table, and a pulpwood stacker for piling the pulpwood blocks. A railway spur is being put in from the main line of the C. P. R. and the wood will be shipped to the Dryden mill as required. Through the new facilities afforded the Dryden mill is placed in a very advantageous position in regard to pulpwood supply, while the construction of the new dam will make available several hundred horse power for future developments.

The company have also recently purchased the largest hall in the town of Dryden and are converting it into a club building for their employees. It will be equipped with bowling alleys, billiard room, reading room, shower baths, etc.

Beaver Fibre Wood Co. Improvements

Important developments have taken place during 1918 at the mill of the Beaver Wood Fibre Company, Limited, Thorold, Ont. At a cost of one million dollars a new board machine with all its accompanying equipment, supplies, buildings, etc., has been installed, thereby greatly increasing the company's capacity.

Nine additional grinders were added to the grinding equipment of the mill in the fall of 1917 and three more 1,200 horse power direct connected motors were installed early in 1918. Seven wet presses were put in to lap stock in order that an emergency supply might be maintained for the two board machines. Two new beaters were also placed in operation.

The increase in grinders naturally called for the installation of additional screens and refiners, three of the latter and four of the former being required. A special grinder pocket was also installed for the purpose of reducing the chips and long splinters that formerly were discarded after the ground pulp passed through the screens.

The new board machine required two new steam engines of

Eagle Knife and Bar Works

JOHN W. BOLTON & SONS, Inc.



High-Grade



KNIVES, BARS, PLATES

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JORDAN FILLINGS

OF EVERY DESCRIPTION

*High Grade Steel Products
for Use in Paper Mills*

LAWRENCE, MASS.

160 horse power each and fourteen additional pumps were set to work to handle the wet stock required by the machines. In order to have sufficient water a 24-inch line was laid to the mill from the Welland Canal, a distance of 3,500 feet. Two 300 horse power boilers were added to the power equipment with a new automatic stoker furnace.

Parts of the new board machine were received in April and the work of erection began in June. The machine was set up by August 15, and produced board for the first time on October 1. Its erection was carried on in such a way as not to interfere with the operation of No. 1 machine.

To provide needed storage space for roll stock, etc., an addition 160x90 feet, three stories high, has been erected at a cost of \$100,000. The storage space which it will provide amounts to 36,000 square feet. A raw stock storage house, 160x40 and two stories high, has also been erected, as well as a pump house. The new board machine has been equipped with a Sturtevant vapor absorbing system which blows hot air on the board as it passes over the revolving dryers, thereby hastening the drying of the board.

Haupt Paper Mills Sold

During the early months of the year the Haupt Paper Mills, Limited, East Camden, Ontario, manufacturers of various specialties, made an assignment. This was due to inability to complete the mill, delay in obtaining machinery and transportation difficulties, all of which combined to hinder the company from getting into the market with profitable lines. Liabilities amounted to \$259,784 and assets to \$233,895. A sale of the assets was authorized and in July the property was disposed of to the Bathurst Lumber Company, one of the largest creditors, for \$67,500. The purchasers organized the Camden Paper Mills, Limited, and toward the end of the year re-opened the plant. The mill is now making various grades of manillas for which a good market is being obtained. George B. Thompson, who was interested in the mill prior to the formation of the Haupt Paper Mills, Limited, is superintendent and the plant is turning out about 15 tons a day.

Extensions and Improvements

At Frankford, Ont., the plant of the Canada Boxboard Company, Limited, has witnessed several improvements during the year. An additional press and Millsbaugh suction roll were installed; calendars were added to; the loading and unloading platforms were extended and the beater room enlarged.

The Northumberland Paper & Electric Company, Limited, Campbellford, Ont., whose storage room was burned, has replaced it with a larger building, in which electrically operated cranes to handle waste paper have been installed. A sprinkler system has also been installed in the mill.

There was completed during the year at the Toronto Paper Mfg. Company's mill at Cornwall, Ont., a new finishing room. The main portion of the room measures 40x104 feet and there is a wing 22x37 feet in size. The building, which is of brick and concrete construction, with a slate roof, and equipped with sprinkler system, elevator, etc., consists of three stories and basement and provides much additional space. The company has also contracted for additional hydro-electric power and a sub-station has been erected at the plant by the Hydro-Electric Power Commission.

The Don Valley Paper Company, Limited, Toronto, installed a water supply system for use during the winter months when their raceway is liable to become completely choked with ice.

At Georgetown, the Barber Division Mill of the Provincial Paper Mills, Limited, has been the scene of some improvements following the fire of October, 1917. The beater room where the principal damage was done has been rebuilt; two new 1,200 pound beaters have been installed and a recovery system for

reclaiming soda ash has been introduced, increasing the output of soda pulp by about nine tons daily.

Frontier Paper Co. Burnt

In July the plant of the Frontier Pulp & Paper Company at Thorold, Ont., was completely destroyed by fire, with a loss of about \$100,000. The mill, which was operated by the Peerless Pulp Co., Limited, made a specialty of bleaching mechanical pulp, and had a capacity of 60,000 pounds per day. It will not likely be rebuilt.

The mill of the Interlake Tissue Mills, Limited, Merriton, Ont., has been considerably improved during the year and brought up to a high pitch of efficiency. A new crepe machine was installed; the sizing system was rebuilt and the system of vapor extraction was improved. The capacity in all lines was increased.

The Garden City Mills Company, Limited, St. Catharines, added a plant for the manufacture of waxed paper, which was put into operation during the summer.

The Port Arthur Pulp & Paper Company, which started its mill at Port Arthur, Ont., early in 1918, has since made some additions to its plant. These have consisted of a slasher mill with log hauling equipment capable of handling 400 cords per day and a second bleaching unit increasing the capacity of the mill to 35 tons of bleached pulp per day. It will probably be some time before the plan to build a paper mill in connection with the pulp mill will be carried out.

The Mattagami Pulp & Paper Company, Smooth Rock Falls, Ont., have been installing a third digester, 19x64 feet in size, during the year and this brings the capacity of the mill up to 150 tons per day. The company has also installed two barking drums, 10x30 feet; have erected a large brick storage and shipping shed and have built several workingmen's cottages for employees.

PACIFIC COAST TRADE NOTES

[FROM OUR REGULAR CORRESPONDENT.]

SAN FRANCISCO, Cal., January 25, 1919.—The Kaas-Hopkins Company of this city had a very good year and satisfied the mills served as Pacific Coast and export agents. Inquiries and orders are now coming in from everywhere. Stephen Hopkins says he agrees with the recent editorials in THE PAPER TRADE JOURNAL regarding good prospects for business this year. Everybody is waiting for modifications in prices. He does not expect much reduction, however, with prospects that labor costs will stay up and materials high. The Japanese quit buying, after the armistice was signed, and held off for some time. Now there are renewed inquiries and some buying.

W. B. Reynolds, who had charge of promotion of sales of the products of the Cascade Paper Company, of Tacoma, Wash., is no longer connected with the company which recently completed its plant on Chambers Creek. The starting up was delayed by the big strike of electrical workers in the Northwest. Mr. Reynolds is now devoting all of his time to the California Bag and Paper Company of Emeryville, Cal., with offices in the Balboa building, San Francisco. The capacity of the plant was increased during the past year, and it has been running full. Prices have been satisfactory, with a good Pacific Coast demand. The removal of Government restrictions means increased consumption.

C. J. Batedo, who came here from Port Angeles, Wash., on a visit during the holidays, has just recovered from the influenza, with which he was stricken soon after his arrival. He is resident manager of the Crescent Box Board Company, whose modern plant at Port Angeles was recently completed.

Louis Bloch, vice-president and general manager of the Crown Willamette Paper Company, is again at his desk in the San Francisco office, after having been laid up with the influenza for several weeks.

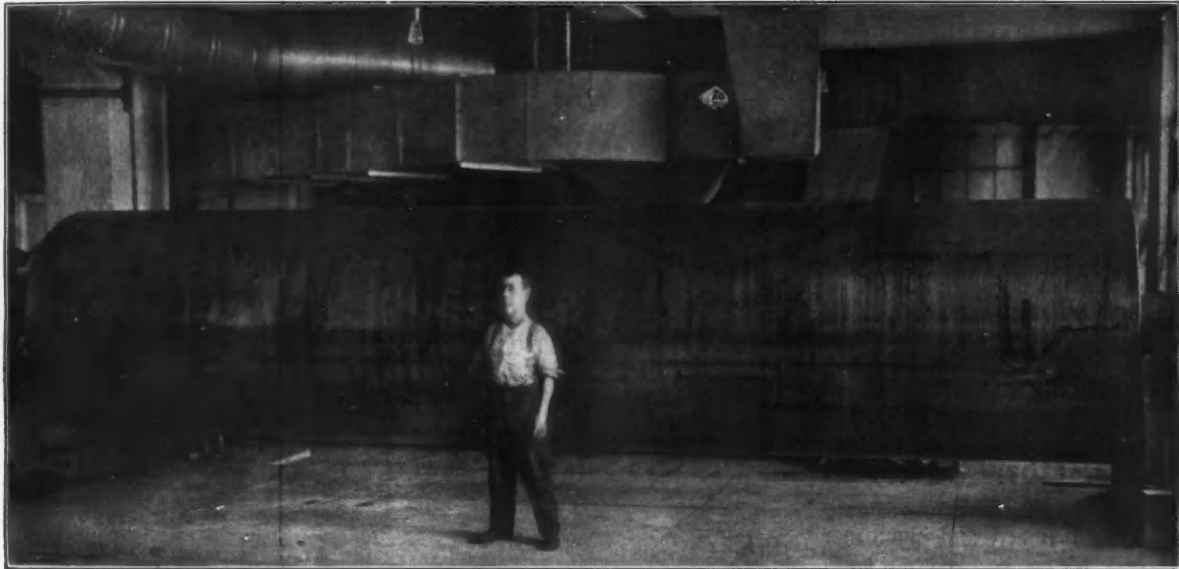
Kenwood Felts



New Wool Scouring Plant

WWE have tried to meet the increased demand for our Felts and Jackets by additional buildings and by new equipment and machinery in all departments. Delays in delivery have been discouraging but part of the new

Kenwood Jackets



New Felt Drying Cylinder

Length 264 in. Diameter 5 ft. Wgt. 18000 lbs.

machinery is now in operation, some is being installed, some is in transit and the remainder will be delivered during the next few months, on orders placed more than one year ago.

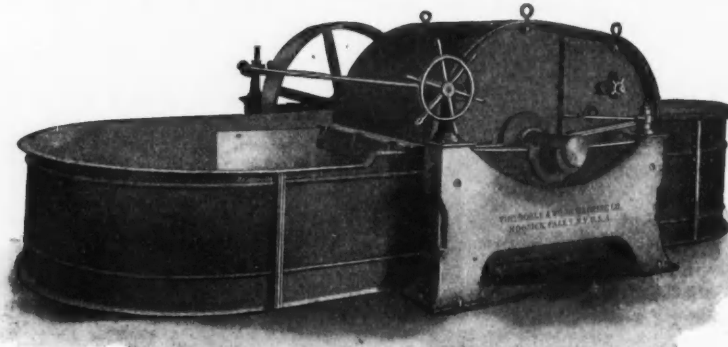
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Special machines for
Fibre Board
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Leather Board

Two Patterns, one for ordinary sizes of Board and the other extra heavy for making large sheets for special markets.

Paper Pulping Engine

The most economical process for reducing old paper, ground-wood and sulphite stock. Eliminates Beaters, reduces time. Investigate.

Laboratory Equipments

Experimental Beaters

5 Sizes

Experimental Jordan

1 Size

These are not "toys" but practical working machines.

The U. S. Government are using 11 of our machines in their experimental stations, as well as a number of Paper Mills and Chemists.

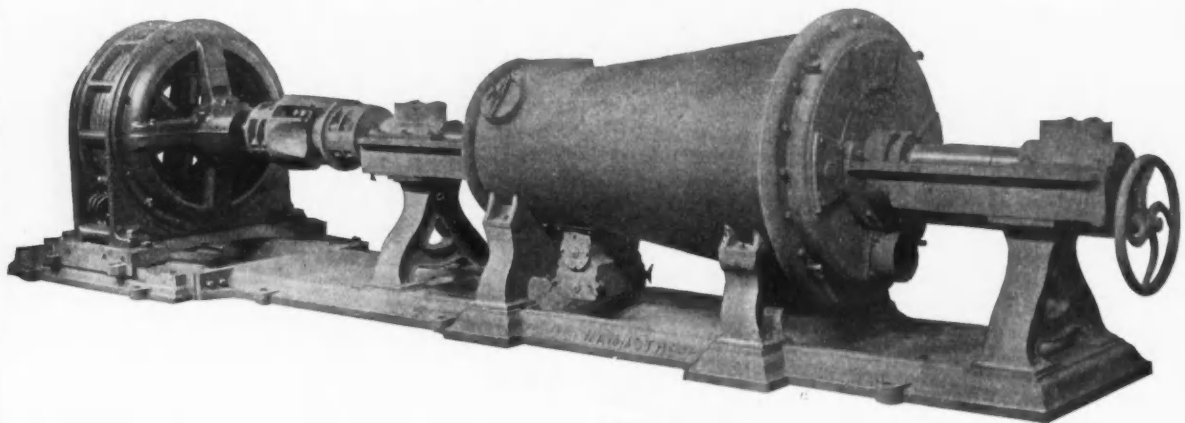
These machines are money makers in any Paper Mill.

Bull Dog Grinder

Made for Hard Knocks

This machine is built for Roofing and other rough stocks, where a Jordan is not strong enough to stand up to the work. It is invaluable in this kind of a mill.

Pays for itself quickly by reducing Beating time.



Jordan Engines—Six sizes—3, 10, 24, 30, 40 and 60 tons capacity. Belt or Motor Drive.

Newfoundland Paper Industry Reviving

Anglo Newfoundland Development Co. Is Preparing to Resume Operations to Its Full Capacity—New Paper Machine 250 Inches Wide Is Being Constructed for the Firm in England—Company Also Is Preparing to Expand in Other Ways—Was Greatly Handicapped During the War by Difficulty in Obtaining Ships—Plans for Erection of Big Kraft Mill—Other Developments.

Written Especially for the Annual Number of The Paper Trade Journal by P. T. McGrath.

During this year the Anglo Newfoundland Development (Northcliffe) Company's Mills at Grand Falls, Newfoundland, were reduced in their output to barely enough paper to retain the trained employees. The output really was not more than 100 tons per week for the latter half of the year against a full output of 1,200 tons weekly in normal times. Shortly after the war beginning four years ago, the reducing of staff and output at the mills had to faced, and as the difficulties of procuring tonnage for conveyances to Europe increased, one by one the paper making machines were stopped, until this year only one was working for the greater part of the time. Indeed not a ton of paper was shipped from Grand Falls to Europe for the past eighteen months, the last cargo to England being despatched in June, 1917.

Mills Soon to Run Full Time Again

With the signing of the armistice, however, preparations were made to resume work to the full capacity of the installation, and it is hoped by February or March to have the mills running whole-time again. Incidentally, it may be mentioned that an eight-hour shift has been introduced at the mills since the beginning of 1917 and this, applied to full-time operation, will involve the immediate erection of about 30 new houses in which to install expert operatives, five paper making machines requiring five such men apiece for each of the three shifts daily. In preparation for this increased operation, which was decided upon some two years ago, a new paper machine is now being constructed by the Walmsley Company, England, which will be the widest in the world, making a roll of 250 inches. The Abitibi machine is 204 inches. This machine will be housed in a new concrete and steel building, and may, in time, be followed by another of similar construction, as it is believed the market at present enjoyed will be greatly increased ere long. The smallest paper making machine now employed at Grand Falls is 136 inches wide, and the largest one 164 inches, and two machines of 250 inches each would enable the output to be virtually doubled. The increased operation will also call for more storage capacity, which will be provided in the shape of a large concrete building to take about 7,000 tons of paper. The sulphite plant was increased two years ago by the erection of four new digesters, with this very object in view.

To Erect Large Office Building

A large office building, three stories high, constructed of reinforced concrete, is also about to be erected, and will contain all the offices of the various departments connected with the mills, including the engineering, railroad-running, etc., and one feature will be an underground passage leading from the lower flat of this building directly into the mills, being an extension of the hallway through which the operatives will pass and register their time on the clocks and other appliances provided for that purpose.

The Company is planning a big lumber operation the present

winter. It has enough logs cut and in reserve for one year's requirements, and during the war has been compelled to reduce its annual output through the scarcity of men for the lumber woods, owing to the military and naval demands of the country, but now that the war is over it is expected that large numbers will return to lumbering again. In this connection a large building program is in contemplation for the housing of the increased number of workmen to be engaged, some two hundred more houses being about to be built in addition to the 350 now making up the village of Grand Falls.

Difficulty in Obtaining Ships

Before hostilities terminated there was great difficulty experienced in getting ships to convey overseas the output of the mills, and today there are some 20,000 tons of paper in storage, awaiting an opportunity to be transferred to England. During the past few weeks five steamers, each carrying about 1,000 tons, have left for American ports and two cargoes have been shipped to Australia in sailing vessels with auxiliary power, which have proceeded there via the Panama Canal. Other shipments have been made to Brazil and Argentina by auxiliary schooners, as an experiment, and the paper has proved so satisfactory that the Company is assured of a market in these countries for its total output of 1,200 tons a week, if such could be made available there, and for its surplus sulphite pulp as well. Moreover in the last days of December the Company secured a trial order for 3,000 tons of paper for Chili, with the assurance that if the product realizes expectations large additional orders will follow. Finally, it is understood that a representative of the leading journal in Buenos Aires, the largest newspaper in South America, who has recently been in Canada looking over the situation there, is to visit Newfoundland with the idea of ascertaining its possibilities of supplying, in part at any rate, the needs of that concern and the paper trade of Argentina generally. The possibilities in the way of opening up a trade in paper with South America are illustrated by the fact that Brazil's annual consumption of news print is valued at about seven million dollars, and that before the war Germany sold about one-third of this quantity, a trade that has been completely lost to her since, and which it is believed she can be prevented from recovering by active measures on the part of the United States and Canada including Newfoundland.

Reserve Supply of Paper

In the autumn of last year the reserve supply of paper in Newfoundland was about 20,000 tons, exactly the same as that in the United States, and this fact was the subject of much comment at the time, it being regarded as a very remarkable circumstance that the whole of the American Republic, with the wide extent of its paper industry, had only about the same quantity of paper available for emergencies that held on this island, and the same condition is believed to prevail, to a large extent, at the present time as well.

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Last winter when an inquiry into the news print question was being undertaken by the United States Congress, William Scott, the Vice-President and Manager of the Grand Falls Mills, was called to Washington to testify and he furnished evidence which made a sensation at the time; it being to the effect, that under conditions less favorable than in the United States, the concern in Newfoundland could produce news print paper at a cost running from \$43 to \$45 a ton, or about \$10 to \$15 below the production costs claimed by American manufacturers. This result was achieved through cheaper labor and more efficient management and despite the fact that many of the essential items of equipment used in the manufacture of paper had to be secured from America, and pay duty of 30 per cent under the Newfoundland tariff. Further evidence of the possibilities in this direction were afforded by the fact that in the latter part of 1917, and in the early months of the present year, substantial shipments of Newfoundland paper were made to the United States and sold to mills throughout the country at prices below those demanded by the domestic mills for their product.

At the end of the year just closed the Northcliffe Company had 5,000 tons of paper at Heart's Content, which it is hoped will be got out this winter, and 7,000 tons at Grand Falls, part of which it is intended to bring to St. John's by rail and ship from there by steamer, the remainder being held until the opening of navigation next spring. In the first half of December two steamers, the *Lake Govan* and the *Agamak*, left Botwood, the Company's shipping port in Notre Dame Bay, with full cargoes for American ports, but this harbor gets frozen up about New Year's and is not accessible again until April or May, and then St. John's has to be used.

The company hopes to get back during the winter the *Cranley* and the *Alconda*, two steamers owned by itself and purchased for paper-carrying some four years ago, but requisitioned by the British Government two years back and used for military and naval purposes since then; and it will probably charter additional steamers as well.

On Christmas Eve, 1918, the steamer *West Eagle* arrived at St. John's from New York to load paper for France to be used in getting out the "Stars and Stripes," the official organ of the American Army in Europe. The selection of Newfoundland paper for this purpose was due to the fact that scarcity of supplies in America prevented the stocks there being drawn upon for the purpose, and Lord Northcliffe in recognition of the services of the American troops in France, placed at the disposal of the United States Government, for the purposes of continuing the paper, the news print which would be required for this purpose.

Coal Shortage a Serious Menace

Coal shortage for the past two years threatened, at the outset, to be a serious menace to the success of the Grand Falls Mills, but by using wood the danger was averted. The mills have been run entirely since the beginning of 1918 by burning wood, no coal whatever being used. For the past two years very little coal was employed, and this year it was cut out altogether. Some 400 men, with about 80 horses, have been engaged in woodcutting, and they have thoroughly cleaned up a large section of the forest between Botwood (the shipping port) and Grand Falls, and a goodly area up the river beyond the latter section, this wood being then used in heating the mills. There was nothing included that was suitable for pulp making and all that was cut was moved to the side of the railway track and conveyed by train to the mills. This insured many advantages—tonnage otherwise necessary for bringing in coal has been saved, the coal supply has been conserved (about 16,000 tons being now available, or enough to meet all requirements until next spring) and much of this material, which would otherwise go to waste, has been turned to useful purposes. Of course, this

would not be a possible venture with coal at normal prices, but it has been rendered possible by the fact that today coal in these regions costs about four times as much as what it did before the war.

The Company has latterly been engaged in developing a deposit of coal known to exist in Newfoundland for many years, but never previously properly prospected. It lies at a point called Howley, some 70 miles west of Grand Falls, at a point on the transinsular railroad conveniently situated for its distribution to all parts of the Island. Gratifying progress has already been made in developing it. Tests show that it is more suitable to the requirements of the paper mills than the coal from Cape Breton, Nova Scotia, hitherto used, and it is expected that the mine, even in its rudimentary development, can produce about thirty tons a day, and that by using, to draw it to the railway line, horses otherwise used in the lumber woods, it can be produced at a cost of about \$10 a ton as against about \$20 for imported coal at present. To convey this coal to Grand Falls the Reid's Company's main line of railroad has to be used, but rates of freight are provided for in that Company's operating contract, so that the paper mills know where they stand in relation thereto. In its collection of wood to operate the Grand Falls enterprise the Northcliffe Company has been working on its own land and along the line of its own railroad and, of course, has enjoyed great advantages thereby. But for the facilities thus secured the Mills, it is believed, could not have been operated latterly, whereas now there is enough coal available to keep them going until next spring, by which time the shipping situation will probably have improved sufficiently to enable the mills to obtain a full supply either from England or from Nova Scotia.

Gives Workmen Land for Homes

The Company has inaugurated the past two years the policy of giving its workmen land in and about Grand Falls in which to build their own houses. Half-acre lots have been leased to dependable men at a rental of one cent a year, and advances of lumber and other materials to the extent of two-thirds of the requirements have been made to intending residents on monthly installments, not much higher than the rent they would have to pay if they hired the houses, and on this basis each man will own his own homestead at the end of five years. Some skilled mechanics have already availed of this opportunity, and it is believed that twice the number would have done so but that the war intervened and suggested some doubt in the minds of the men as to whether the mills would continue running or not. Now, however, that peace has come, and this danger is removed, it is believed that very many will embrace this chance of owning their own homes, and establish themselves in the town as permanent residents.

The industrial situation at Grand Falls today is that the paper mills were put on an eight hour day on January 1, with wages on the basis of the Canadian mills, and that on October 1 a nine-hour day was put in force for all outside services, with the same pay as previously given for ten hours. This decision was made as the result of an exhaustive inquiry instituted by the Company in the winter of 1917 into the cost of living in the Canadian Mills. The accountant of the A. N. D. Co., last winter travelled four thousand miles in Northern Canada investigating the problem of the cost of living in the mills there, and found that on comparing the cost of living in representative Canadian mills, on the same basis as the Labor Bureau at Ottawa made its calculations, the cost of living was lower in Newfoundland than in Canada. The mills selected were those at Abitibi, Thorold, Ont., and Kenogami at Jonquiere, in the Lake St. John region of Quebec. The average family budget, it was learned, at Grand Falls did not exceed that of the lowest of these Canadian Mills. Food prices were higher, but rents, fuel, milk, etc., were lower. The

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Grand Falls Mills have been supplying their operatives with coal, milk, and house rent at pre-war prices though this has naturally involved a heavy monetary loss.

To Make Large Cut of Logs

The Company is planning to make a specially large cut of logs this winter and next, felling trees suitable for conversion into lumber as well as into pulp wood, the idea being to help meet the demand for lumber in Europe which the rebuilding of the devastated sections of France and Belgium will occasion. It has recently been intimated in Canada that British commercial interests would welcome a large production of timber by Canadian lumber-men so that the excessive prices which Scandinavia and Finland are demanding for the stocks of this material they have on hand might be reduced, and an end put to the enormous sums, far in excess of the real value of this material which it is alleged these countries have forced the Allied Nations to pay for supplies of wood during the past four years. The Grand Falls Mills, it is thought, can by reason of the nearness of Newfoundland to Europe, and the abundance of its supplies of small timber, furnish very great quantities of suitable material for the early phases of the reconstruction of the ravaged territories in the war zone, and these also prove a valuable agency for salvaging the problems of the employment of the soldiers of Newfoundland returning from the battle-area in the near future.

Other Contemplated Projects

Among other projects contemplated by the Company in the near future is the electrifying of the railroad, 22 miles long, between Grand Falls and Botwood. It is believed that this can be made a practical proposition with comparatively little cost. At present the Company is heating its Office building, Hospital, and other places at Grand Falls by electricity and obtaining very satisfactory results. Indeed, it is so far advanced in this respect, that recently Canadian electrical concerns, when invited by other industrial enterprises to supply information regarding this method of heating, have referred inquirers to the A. N. D. Company. Similarly, the steel-making companies of Cape Breton, though possessing large supplies of coal, have asked this Company to make electrical appliances for them to be employed in heating sections of their works.

Now that the war is over operations by a group of Norwegian capitalists are contemplated on the Terra Nova River, Newfoundland.

To Erect Big Craft Mill

They propose to erect at tide-water, probably at Cambo, a splendid deep water inlet, a plant to produce a hundred tons of kraft paper per day. They will first make sulphite and then paper. The plant will cost three million dollars and the promoters are now endeavoring to secure control of about one thousand square miles of forests in that section. Water-powers to develop five thousand horse power are available, and the location is sufficiently southerly to give an extra two months of open water each year, by comparison with Grand Falls. This mill, like the above, will be on the northeast coast of the Island and will be blocked by ice for some periods of the year, but in open seasons it is expected that it will be accessible for the greater part of the winter. It is planned to have about 200 men at the mills, 500 men in the lumber woods, and 100 men at the shipping point, but further extensions are in contemplation. Building operations are expected to start next spring, and two years will probably be occupied in erecting wharves, dams and other essential preliminaries, as well as the mills themselves, by which time the machinery will be available and then production will be undertaken.

Other Mill Projects in the Air

Other projects, more or less tentative, for the establishment

of pulp and paper mills, are in the air just now, and it is probable that the next year or two may see comprehensive developments in this regard. In the same way, large plans are being matured for the development of timber properties, the product from which is designed to be exported to Europe to help satisfy the shortage in building materials during the next decade, and the reorganization of several lumbering companies is expected as an outcome of this. But meanwhile interest will mainly center in and about the Grand Falls mills, these being in a position to absorb most, if not all, the labor available until the whole of Newfoundland's military and naval forces are demobilized, and probably another few months should see these mills running at full capacity again and work well under way for the installation of the fifth paper-making machine. When this is completed these machines, which, at the time of their construction ten years ago were the largest of their kind in the world, will again exceed anything in Canada in the magnitude of their daily output, and in the facilities which they afford for further development. Today only one mill in Canada—the Eddy mill at Ottawa—has five machines, but they are relatively small and produce only 200 tons daily, whereas the addition of the new machine at the Northcliffe mill will increase its daily output to 260 tons.

Export of Pulp Wood

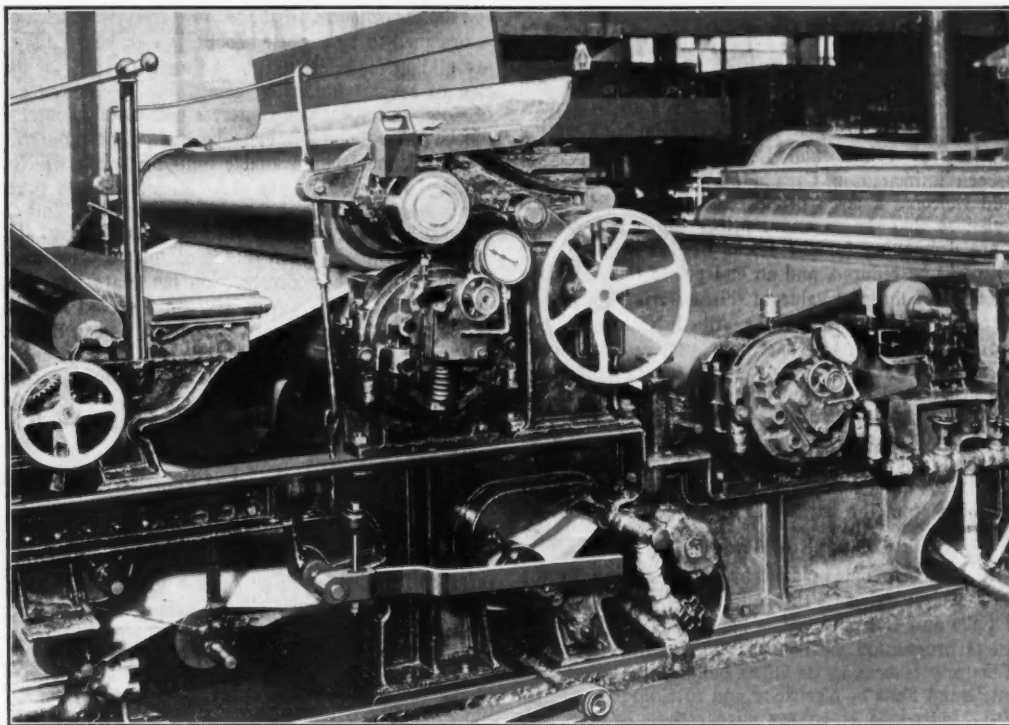
Renewed shipping intercourse with the British Isles following upon the cessation of hostilities in Europe will likely result in raising shortly the question of Newfoundland's future policy with respect to cutting pit-props for use in the collieries of the British Isles. Before the war Newfoundland had laws forbidding the export of manufactured wood, but these were relaxed after the struggle began, at the request of the British and French Governments, when these found it impossible to obtain supplies from Baltic ports. As a result of this, operations were begun substantially in Newfoundland in the cutting of pit-props, but before any considerable quantity could be sent out the shipping situation became acute, tonnage could not be obtained, and much of this material has since lain useless on the banks of the streams or at shipping ports throughout the island. Such of it as is suitable for export will probably be sent away now, so that those who invested their money in the material may not meet with a total loss, but whether any further concessions in the same direction will be permitted after the present stocks have been shipped away is at present uncertain. There are two views advocated in the island regarding this—one being that if the export of pit-wood and pulpwood (for this material is frequently identical) is permitted there will never be any more paper mills established in the island, while the other is that it is as well to ship away this material and realize on it as to have it destroyed by forest fires, as frequently happens.

NEW FORESTRY SYSTEM IN NEW BRUNSWICK

The Province of Quebec has come into line with other provinces as regards forestry laws. Under the new system a provincial forester is in charge of the administration of scaling, enforcement of cutting regulations on Crown lands, continuation of the forest survey, forest fire protection and the enforcement of the forestry laws generally. A system for protecting forests from fire, based on the most advanced legislation in Canada and the United States, has been adopted. A fire tax of one-half cent per acre is being collected from the licensees to help defray the expenses.

MERGING OF LUMBER ASSOCIATIONS

The Canadian Lumbermen's Association and the Eastern Spruce Association was merged at a joint meeting held in Montreal, over which Sir William Price, head of Price Bros. & Co., presided.



ON new paper machines our Suction Rolls have practically become standard equipment. Their advantages are fully recognized by leading engineers, who are careful to include them in their specifications. The illustration above shows a new machine with the standard Suction Couch and Suction Press roll equipment. To any paper-maker the advantages of such an installation of Suction Rolls are at once apparent.

Likewise many old machines could be given a new lease of life by the addition of our Suction Rolls. Unless your machines have such modern equipment, you cannot expect to compete successfully with those mills who have that advantage.

Prices on Suction rolls are not abnormal and present conditions argue more than ever before the immediate need of any equipment and improvements that will effect economies in the cost of production.

*May we make you a proposal?
Prompt deliveries are available.*

The Sandusky Foundry & Machine Co.
SANDUSKY, OHIO

Transportation and Industry's Outlook

During Trying Experiences of the Past Year When Transportation and Terminal Facilities Meant So Much, the Poverty and Lack of Equipment of the Railroads Became a National Scandal—Treatment by Government from the Beginning of Federal Control Has Tended Toward Government Ownership—News Print Industry Has Been Harassed by A. N. P. A. for Years.

Written Especially for the Annual Number of The Paper Trade Journal by Martin L. Griffin.

Educational processes are at work in this country to an extent never before known. Methods of industrial, business and social life which we have been accustomed to, have changed and are still changing. We are living in a great transitional period whose limits we cannot foresee. Doctrines are being disseminated throughout the world that are destructive of the rights of property and detrimental to society. We have witnessed the building up of an autocratic state by a propaganda of "Might Makes Right," and it has been only possible to destroy this selfish monster by a tremendous sacrifice of blood and treasure. After such an experience, shall we fail to discern and prevent the spread of doctrines detrimental to our American institutions? Shall we permit our government to acquire autocratic powers which are subversive of the interests of true democracy, under the guise of paternalism? Shall we not rather hold aloft those ideals and principles of Americanism, and encourage individual initiative which together have won the admiration of the world?

It seems very necessary that steps be taken to present the facts to the people as we go along, to cultivate an educated citizenship in the fundamental relations of society, to strengthen the weak, to guide the strong, to encourage and reward individual initiative and to give as far as possible equal opportunity to all.

Development of Large Corporations

With the growth of our country in population and industry as a whole, there have developed the large corporations, sometimes from the time of organization, often by a process of absorption of small companies. We have grown out of the period of the small shop, small mill, railroad and "Jack of All Trades" into the great department stores, corporations employing large units of production and thousands of employees, into railroad systems which gird the continent, into specialized journeymen and trained experts.

It is but natural that there should have appeared some unhealthy spots and growths in such a rapid transformation needing salutary treatment. The Sherman anti-trust legislation was perhaps the first notable instance of an attempt to apply such a treatment. During the period when its application might have been beneficial, it was a dead letter and finally, when revived, became a detriment to the nation's welfare in an attempt to disorganize many industries into small competitive units. The shortsightedness of the government in this matter has been made apparent by the exposure of our enemies' methods to secure the trade of foreign countries against all fair competition. If we expect to enjoy our share of the world's foreign trade and commerce our government must build up, strengthen and support those who are willing to make the venture, rather than disorganize and discourage by hostile treatment, under the pretense of restoring competition and protecting society against "swollen dividends" and profits. The inconsistency of the Government has been completely exposed by its operation of the railroads. The very acts which it has complained of and tried out before the courts and sought to regulate

by the Interstate Commerce Commission, it has committed. What combination of railroad magnates and bankers could by any possibility have had the temerity to attempt or even suggest the ruthless disregard and sacrifice of the rights of small roads in order to build up a continental system as the Government has done. So long as the one object has been to "win the war" at all costs, no complaint has been made; on the contrary, all have joined in hearty support of the President and the Administration.

Policy of Steady Construction

For thirty years the Interstate Commerce Commission has been in existence with the power to regulate rates, and for twenty years at least its policy has been one of steady constriction, of increasing service demanded, and decreasing sustenance granted. During the trying experiences of the past year, when transportation and terminal facilities meant so much to the welfare of our overseas army and our allies, the poverty and lack of equipment of the roads became a national scandal. Has the commission been held responsible for this condition? Not at all. The Government has stamped the management of the roads incompetent and inefficient and seized control of them, nominally for a period of twenty-one months "after the war." Their experienced managers have been thrust aside, and they have been ordered to pay largely increased wages. Pooling and consolidation, which have been held up for years, as the climax of wrong, and forbidden by statute, have been ordered for greater efficiency. To meet the demands of labor and other increasing costs; and to show a balance of net revenue, the rate-making power was taken away from the Interstate Commerce Commission and placed in the hands of the President, who arbitrarily raised all rates 25 per cent, effective June 25, 1918.

The Act of Congress, enabling the President to "take over" the railroads, assumed that the properties, as systems of transportation, would be returned to the owners at the end of Federal control, substantially in the same condition in which they were handed over, plus a rental which should represent a fair return for their use. The administration of this Act is directly in the hands of the President and his agents, who have proceeded to translate its meaning in terms of contracts with the road individually, and to place their own interpretation upon them.

An Unfortunate Situation

In dealing with this matter, the unfortunate situation is this: These contracts must be negotiated with the executive heads of the railroads, who are chosen by the directors, and who in turn are elected by the stockholders, who are only the nominal owners of the properties, while the real owners, the security holders, must stand aside and have no voice in the matters which so vitally affect them. Meanwhile, the executive heads and counsel of the railroads have become Government employees. Therefore, when these contracts, containing many provisions tending to absorb the rental and preclude any possibility of redress for loss of business and disorganization came before them, they refrained

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F. D. Haskell, Manager

Holyoke, Mass.
J. B. Woodruff, Inc.

Dayton, Ohio
R. R. Reed, Manager

from making an issue in respect to these and other fundamental provisions for fear, as they said, that if a positive stand were taken by the railroads, all negotiations would be broken off by the Government.

Trend Toward Government Ownership

The treatment of the railroads from the beginning of Federal control has tended toward Government ownership, by making it appear that under private ownership the operation of the roads was inefficient and their service inadequate. The insensibility of the public to a realization of the fact that the roads are private property just as much as a piece of real estate, a mortgage, an insurance policy, or the savings of a bank depositor, is marvelous. The common people still cling to the fiction of ownership by a few rich men, and do not realize that they themselves are the owners of the roads to whatever extent their savings are bound up in life insurance, deposits in banks or any other institutions which hold either stocks or bonds of the railroads bought with their money.

Do the people of the United States want to change the constitution of their Government and exchange their heritage of freedom and individual initiative for paternalism and centralized authority? Governor Percival W. Clement of Vermont in his recent inaugural address made particular reference to some of these matters when he said: "The hand of the Federal Government rests heavily upon all the business of the United States. Already the States have surrendered important revenues. How far shall they permit the Federal Government to sequester their sources of income? I do not deem it improper at this time to remind you of the danger which lies in a too complaisant surrender of the rights and powers inherent in our sovereign state and our people."

Do we want to live as fellow-citizens under conditions of amity and good will, dealing with each other as neighbors, or do we prefer to live under the control of that impersonal absentee thing we call the government, in the ordinary affairs of life and in which the individual can exert no influence except through unions, associations and political parties? The nation has spoken in unmistakable terms at the most critical period of the war, that Democracy shall live and the people rule themselves. We must therefore ever cary on a campaign of education to insure right thinking and to counteract those adverse tendencies in civilization which are continually cropping out.

I have made this lengthy introduction to the particular matter I am about to discuss relative to the paper and pulp industry because there are many points of similarity and because the Government's treatment of the railroads is nearly a closed chapter.

Paper Business Has Grown Enormously

The manufacture of paper, always an important industry, a leader and a creator of a train of other industries and an index of progress in civilization, has now reached the "parting of the ways." Since the advent of wood pulp the business has grown enormously. It has made possible the great newspapers, publishing houses and printing establishments. It is almost the sole vehicle of recording the thoughts of mankind, whether they be war-time orders or peace-time transactions in business, or the ephemeral record of the daily newspaper now found in every household. So universally indispensable has paper become that it may be classed with the public utilities. As far back as 1776 several of the States exempted the master workmen and two attendants from military service, and the Continental Congress went still further in taking measures to prevent them from joining the volunteers. At the close of the war for independence, the business expanded to such an extent that there was a rag famine. The postmaster of Troy, N. Y., issued a special plea, "Please save your rags. The press contributes more to the diffusion of knowledge and information than any other medium. Rags are the

primary requisite in the manufacture of paper, and without paper the newspapers of our country, those cheap, useful and agreeable companions of the citizen and the farmer, which in a political and moral view are of the highest national importance, must decline."

The Boston *News Letter* exclaimed in quaint old rhyme:

"Rags are as beauties which concealed lie,
But when in paper, charming to the eye!
Pray save your rags, new beauties to discover,
For of paper truly every one's a lover;
By the pen and press such knowledge is displayed
As would not exist if paper were not made."

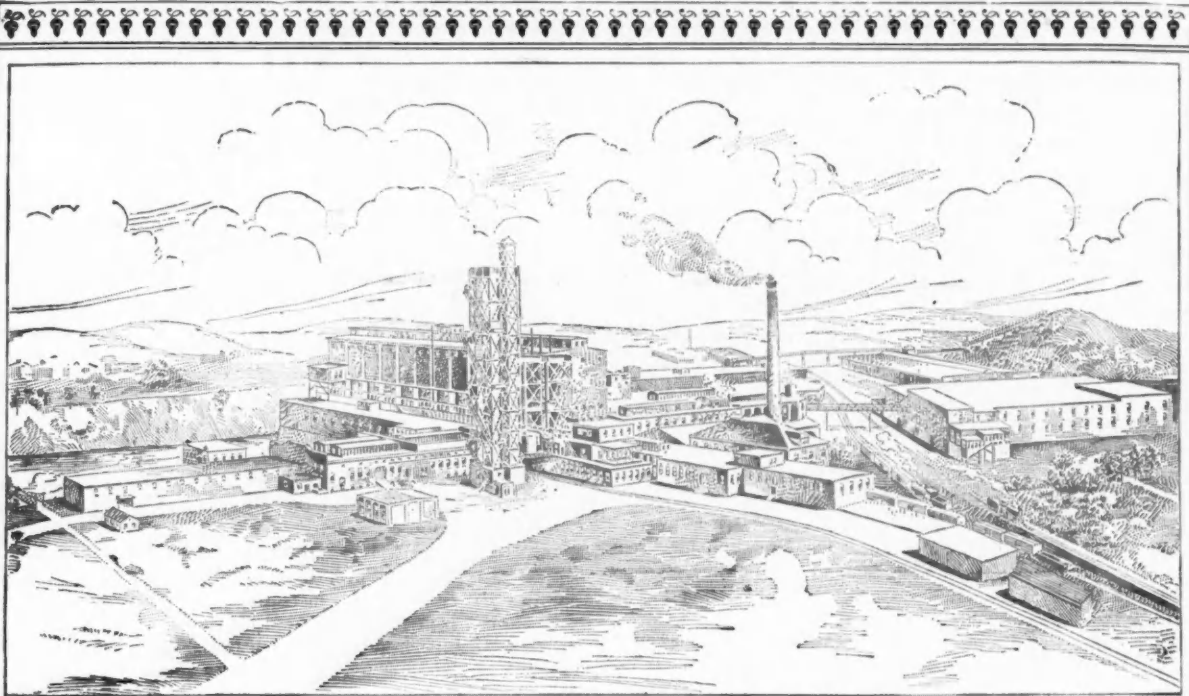
During the past year the great importance of an adequate supply of paper, and the industry itself, has received special consideration by the War Industries Board. Such is the regard in which paper has been held from the very beginning of its manufacture.

Early Uses of Paper Limited

Originally, it was a very simple mechanical process, and the uses to which paper was put in the early days were very much limited as compared with the present. The daily newspaper and the printing press were small affairs then. Typewriting and stenography were unknown. With the expansion of business after the Civil War, and the discovery of wood pulp, the foundations were laid for a phenomenal growth in the manufacture and use of paper. The price declined, the mills increased greatly in size and the processes became increasingly complex, requiring specially trained men for particular departments, till now engineers, electricians and chemists are indispensable to the successful operation of our great plants, and we are entering a period when other specially skilled and trained men will be needed. Again, the industry is confronted with a diminishing supply of raw material as the forests recede to the vanishing point. There is no adequate substitute for wood, and its conservation and cultivation must be taken up vigorously or the industry as we know it will decline. Trained foresters can do little till public opinion is aroused to enact legislation and support a policy of reforestation. Never before has there been such a campaign to reduce the consumption of paper as we have seen the past year. This scarcity has been due more to the increasing difficulties of getting the wood than to the necessities of the war, and the situation is becoming increasingly acute. The persistent propaganda of the American Newspaper Publishers' Association to keep down the price of news print paper in the face of the rising costs of wood, labor, transportation and supplies of all kinds has produced a depressing effect. The manufacture of book papers, made almost wholly from wood, is involved in much the same situation. Strange as it may seem the very sources of public thought and opinion, the very eyes of the peoples' welfare have been indifferent and blind to all but their own selfish interests. In 1908 this association secured a hearing before a Select Committee of the House of Representatives, and through one John Norris, a paid propagandist, made bombastic accusations of lawless acts against the manufacturers of news print paper, and demanded punishment, regulation of prices, fines for illegal restraints of trade and the abolition of import duties on wood pulp and news print paper. None of these charges were sustained by the committee at the time.

Essential to Maintain Mills in United States

Among other things which the committee said in its preliminary report were: "A low or even moderate price for print paper in the future is dependent mainly upon the future supply and cost of pulp wood,"; also, "It would seem that for the American publishers to be assured of low prices for his paper, it is essential to maintain paper mills in the United States. Any policy that would give the Canadian mills a preferential advantage over American mills in obtaining the raw material at a lower price must inevitably result in the dismantling of American paper



Daily Capacity of 600 Air-Dry Tons
Highest Grade

BLEACHED
Sulphite Fibre



BROWN COMPANY
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TO our contract customers for *Bleached Sulphite Fibre*, who have so loyally and considerately co-operated with us in meeting the abnormal war emergency conditions of the past year, we wish to extend our sincere thanks for the consideration they have shown us; and to express the hope and belief that the year 1919 promises a return of more normal conditions, and our ability to better serve our customers than ever before.

machines and the ultimate dependence of American publishers on Canadian mills. Under such conditions Canada could levy duties on print paper that would result in enhanced prices without the presence of competition from American paper manufacturers."

Harassing Attitude of A. N. P. A.

Ten years have passed, and during all this time the American Newspaper Association has maintained a harassing attitude toward the manufacturers and has showed no loyalty whatever to the home industry. They have failed utterly to use their great influence to enlighten the people as to the declining resources of pulp wood and have encouraged the belief that cornstalks, bagasse and waste straws, old papers and the like are adequate substitutes for wood.

In spite of the great influence wielded by the Publishers' Association and their efforts to reduce or keep down the price of news print from about two cents delivered in 1906 and 1907, it has increased to approximately four cents in ten years.

Circuit Court Findings

It is important to note right here the findings of the judges of the Second Circuit Court at New York last October in the appeal from the decision of the Federal Trade Commission relating to news print prices. The judges in their decision stated in part:

"The fair present value as depreciated and at pre-war prices of an integrated paper mill plant per ton of daily capacity is \$39,500.

"A fair maximum return on such capital in the business of the hazards proven, is 15 per cent. per annum, or a profit of \$19.75 per ton.

"It is therefore ordered that the award of the Federal Trade Commission be varied so as to read as follows:

"The fair and reasonable maximum prices for sales of standard news print paper to customers in the United States are, f. o. b. mill:

"Roll news in car lots.....	\$3.75	per 100 lbs.
Roll news in less than car lots.....	3.87	" " "
Sheet news in car lots.....	4.15 $\frac{1}{4}$	" " "
Sheet news in less than car lots.....	4.27	" " "

The judges also declare that manufacturers in the United States are at a disadvantage of more than \$5 per ton as compared with Canadian manufacturers. Thus we see that the contentions of the manufacturers have been justified, but the end is not yet.

Railroads and the Paper Industry

It will be illuminating to compare the Government's treatment of the railroads and the paper industry. For twenty years the Interstate Commerce Commission has persistently refused to grant the roads the sustenance needed for expansion and increasing costs. It has favored the shipper. The Federal Trade Commission has granted the demands of labor. The Government has "taken over" the roads under the emergency of war, and the people are brought face to face with the momentous question of surrendering their own property rights to Government ownership.

For ten years the paper industry has been hampered by Government agencies chiefly in fixing the price and granting the demands of labor, and for what it has not done and should have done long ago, namely, making some provision to safeguard the industry in the future by compulsory reforestation. The inevitable issue of all of which is the decline of the wood pulp paper industry in the United States and our dependency upon Canada.

Public Sentiment Must Be Educated

Thus we are confronted with the issue of Government ownership of our railroads by Government instrumentalities and processes, and by the decline in our third largest industry, surrendering our own great markets to foreign domination. Have not the people intelligence and vitality enough to preserve the insti-

tutions under which our nation has prospered? Are not the men who have developed this great industry in the United States loyal enough to it to defend and preserve its future against those narrow selfish interests which seek to exploit the present regardless of the future? Public sentiment must be educated to realize what the curtailment and embarrassment of the paper industry means to the nation's welfare. If the public press will not deal fairly and intelligently with the situation and support a plan to foster and sustain the industry, and if the Government's attitude be one of suspicion and unjust interference with it, if it fails to realize that it has a vital duty to perform, not only to aid in preserving the industry for itself but for the nation's welfare by conserving what remains of our forests and taking steps to aid in restoring them, manufacturers must join in a campaign of education by popularizing their trade papers so as to reach a larger number of people. They should adopt a well-matured plan of publicity and put it into execution to be continued indefinitely. Our vocational schools should teach, as a preliminary to the study of any industry, business or calling, a brief history of the vocation, its utility and importance, its relations with the Government and to society. Our secondary public schools should include particular reference to those utilities and industries which pertain to civic welfare, and among these the paper industry and the uses of paper should be given a prominent place. Some progress has been made by a few schools of technology by organizing courses in paper and pulp, and there are a few instances in paper-making centres where the public schools have included particular reference to paper-making.

The Technical Associations of the Pulp and Paper Industry, both in the United States and Canada, have committees on vocational schools with particular reference to paper. All of this public instruction, however, has to do with the training of men for skilled service in the mills.

The Government has for many years maintained a paper laboratory in the Bureau of Chemistry and a Forest Products Laboratory, which, as such, have done good work, though their influence has not been important.

The Technical Association

Four years ago the American Paper and Pulp Association organized a technical division, which has since been separately reorganized as the Technical Association of the Pulp and Paper Industry. The objects of this association are to stimulate interest in the science of pulp and paper making; to provide means for the interchange of ideas among the members, and to encourage research. It has grown rapidly, and now numbers several hundred members, and has held many important meetings. With ample encouragement and support by the parent association it will surely prove of the greatest assistance. It should be regarded as the scientific mouthpiece of this industry, fit to furnish the most competent evidence and advice pertaining to certain parts of the business, such as raw materials, forestry, processes, by-products and problems dealing with labor, statistics and vocational education. The association for its part must win this regard and high position by deserving endeavor. It should qualify by a record of worthy achievements to receive the Government's recognition whenever any knowledge of paper making or the uses of paper or personal service are required. It should cultivate a passion to be on the alert to detect any evidences of acts inimical to the industry and speak out and publicly combat them. Only by so doing can it justify its existence or save its members. We should reflect that as the industry has grown to be very large and complex, necessitating scientifically trained men, so if it declines their personal interests will be jeopardized.

The evolution of the paper industry began with small units of production, and its processes were mechanical and simple. The pioneer was architect, builder, operator and principal owner. The

THE BIGGS BOILER WORKS

PLANT HYDRAULICALLY EQUIPPED

Builders of Spec ROTARY BLEACH

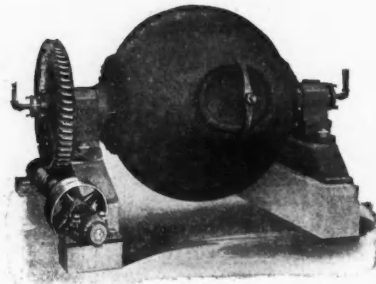


FIG. K.

Figure K Illustrates our Experimental Type Globe Rotary Bleaching Boiler with Welded Joints, and Worm Wheel Drive. This type is usually furnished in sizes from 3' to 5' diameters.

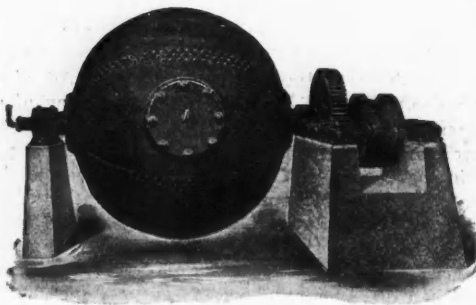


FIG. S.

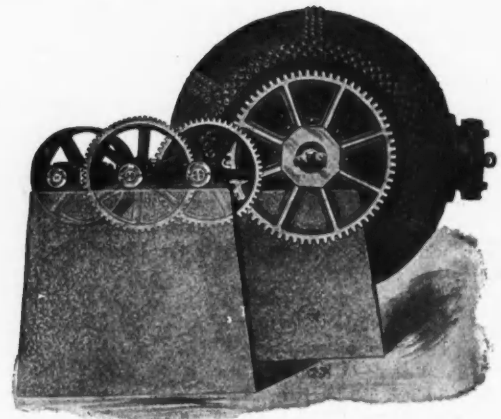


FIG. S-1.

Figures S and S-1 show one of our Globe Rotary Bleachers with Riveted Joints and Spur Gear Drive. We furnish this Rotary in 6'-8' and 10' diameter with either Worm or Spur Gear Drive. This type is commonly used for Special or Experimental Work, but is not too small for practical purposes.

Fig. B is the Baby. Furnished in such sizes as 6" dia. x 18" (or larger) long. Just the thing for your Laboratory. Complete equipment ready to operate.

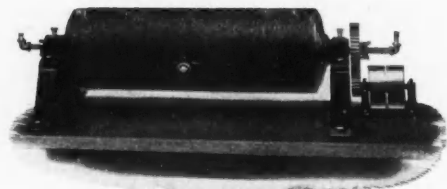


FIG. B.

LIGHT AND HEAVY PLATE CONST PIPE. STEEL TANKS O

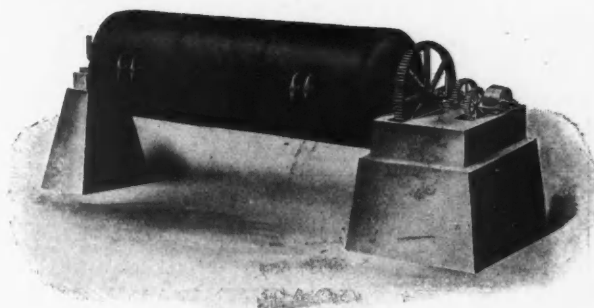
COMPANY, Akron, Ohio, U.S.A.

ESTABLISHED 1887

ial and Standard HING BOILERS

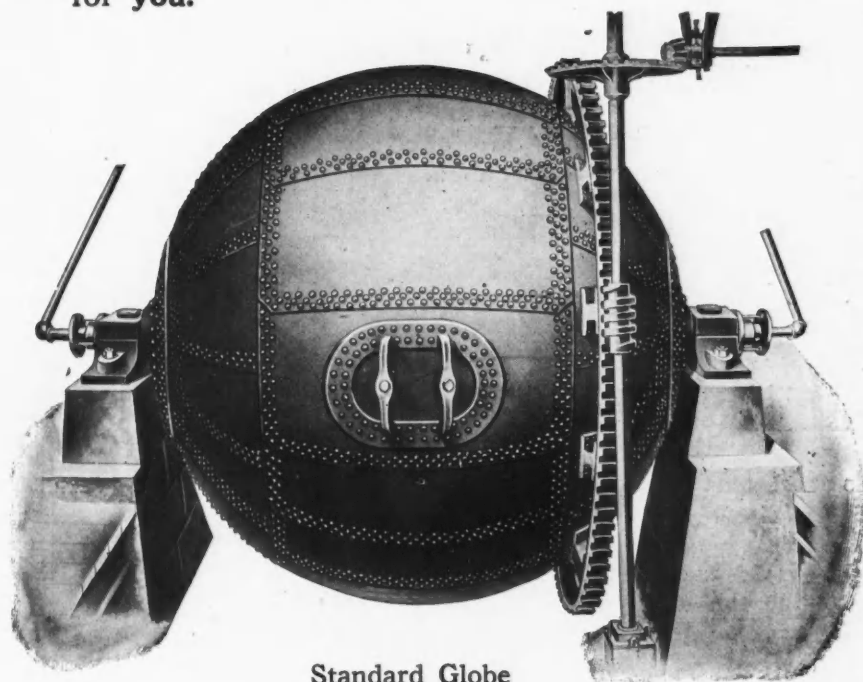
Our Cylinder Rotary Bleaching Boilers are furnished with Worm or Spur drive and in all sizes.

They are the acme of perfection in Rotary designing.



8' x 24' High Pressure Cylinder Rotary

Large Journals, Babbitted Journal Boxes and Expansion bearings save power for you.



Standard Globe

Our 11 ft. and 14 ft. dia. Globes with Worm and Segment Drive need no introduction. They are the Standard Rotary Bleaching Boiler of today.

Furnished in any type of drive, and for any pressure.

Let us figure on your Rotary Requirements.

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“Under the Nashua Triangle”

Our Seven Leading Lines

COATED PAPERS OF EVERY KIND

RHINO BOX STAY

INDIAN BRAND GUMMED PAPERS

CAMBRICS & HOLLANDS GUMMED CLOTH-
LINED PAPER

SILFOIL & SILPAK

The wonderful substitute for tin foil.

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Mills and Home Office: NASHUA, N. H.

BRANCH OFFICES:

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CHICAGO, ILL.
1813 Conway Bldg.

CLEVELAND, O.
343 Engineers' Bldg.

SAN FRANCISCO, CAL.
444 Market St.

PORTLAND, ORE
517 Couch Bldg.

plant was built with capital fully paid in cash. Today the business is conducted with large units of production, requiring experienced architects, builders, chemists and engineers. Raw materials, processes, products, labor, transportation and the business policy must be supervised by men trained for the particular departments. The ownership is vested in stocks and bonds held by the public at large.

Paper Men Must Realize Responsibility

The American Paper and Pulp Association as the representative of this great public utility should take painstaking account of the trend of events in its history. Its members must not lose that touch of individual responsibility to the immediate owners of the properties and to the welfare of the nation, because in the expansion of the business their individual responsibility is relatively less, or limited to their salaries. They cannot drift into any "laissez faire" attitude without endangering not along these interests but also the public welfare. If they do, they will be sowing the seed of further governmental interference, regulation and possibly ownership, or decline of the industry as pointed out, and give aid to the growing tendency of the times to centralize more authority in Washington, able to bring irresistible political pressure by its mastery of communication and its domination of what it elects to class as a public utility. How insidious these tendencies are, is the President's "taking over" the railroads as a *war emergency* for 21 months after the close of the war, and Director-General McAdoo's plea for "holding them for five years of Government operation to provide a fair test of unified direction." Thus it appears that the object for holding them for five years has nothing to do with the object for which they were "taken over" a year ago, and to continue to hold them is a gross breach of a great trust.

There is a growing tendency to change our government into a centralized socialistic state which must be forestalled and beaten if we are to preserve democracy. If a firm resistance is not made to the beginnings of permanent Government interference and control of our railroads and other utilities, all other indus-

tries will sooner or later be scooped in one by one until an autocratic Federal State shall have swallowed up local and individual initiative and energy.

OSCAR GUMBINSKY MADE CHAIRMAN

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., February 3, 1919.—Oscar Gumbinsky, of the firm of Oscar Gumbinsky & Bros., has been named by Chairman Edward A. Stone, of the National War Service Committee to cooperate with the surplus property division of the War Department in the disposal of surplus materials and supplies.

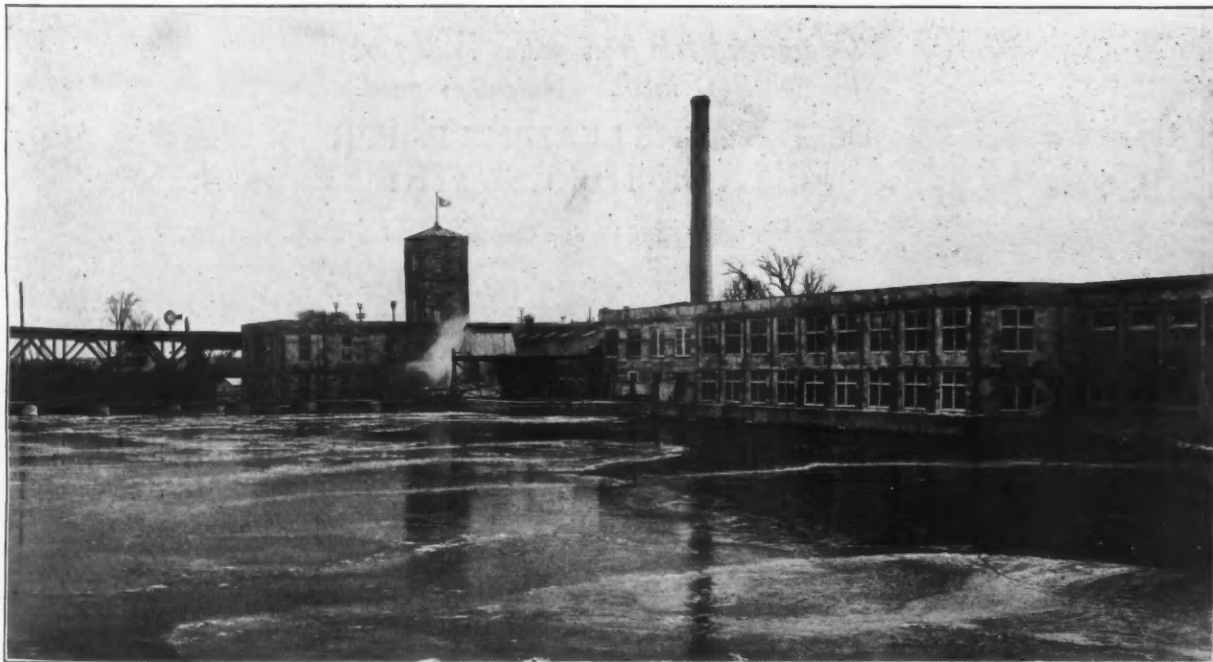
Mr. Gumbinsky's headquarters in this work will be in Chicago, where a quartermaster's office is located. Mr. Gumbinsky has already given the Government material aid in matters pertaining to war material, and it is believed that his advice in the disposal of surplus supplies will be of great value.

A new commodity has recently been added to the general line handled by Gumbinsky & Bros. It is known as the "Snow Flake" brand of parchment waste. It consists of shredded parchment paper, pure white, and is a fine substitute for excelsior in packing.

The Gumbinsky concern also comprises the Sanitary Rag Company, which has been in successful operation for a number of years and does an immense business. Although Kalamazoo is the parent home of this organization, the branch in Chicago is the largest plant of its kind in the world, and there is also another branch in New York City. These three houses handle thousands of tons of washed cotton wiping cloths annually. Between 60 and 75 tons of these cloths are shipped from this city each week.

Orders for the sanitary cloths are received from practically every large concern in the United States, while nearly every municipality in the country as well as departments of the Government are regular customers. The entire interests of the Gumbinskys give an output of several million dollars annually.

The officers of the concern, which also includes Overseas Trading Company, are Oscar Gumbinsky, president; Harry Gumbinsky, vice-president; Herman Gumbinsky, treasurer, and Charles F. Neilson, secretary.



CRABTREE DIVISION HOWARD SMITH PAPER MILLS, LTD., WHICH HAS BEEN RECENTLY TURNED INTO A WRITING PAPER MILL.

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UNEXCELLED AS A FILLER FOR

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CHICAGO, ILL.
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Philadelphia Has Active Year

Important Developments Include New Plant of the Fibre Container Co., an Outgrowth of the Philadelphia Paper Manufacturing Co., and the Unusual Requirements and Opportunities of the War—Concern Makes Containers Which Are Used for a Wide Variety of Purposes—Other Activities Include Sale of the Old Flat Rock Mills on Venice Island to the Dill & Collins Co.

Written Especially for the Annual Number of The Paper Trade Journal by G. Carr.

The heart of the paper manufacturing industry in Philadelphia is Venice Island in the upper or Manayunk section of the city, and the life artery of this busy place of manufacture is the Schuylkill River on one side and the canal on the other.

It's always a busy place—is Venice Island, but in the war days of last year it was really bustling, and egress and ingress was frequently blocked up. There is a Bridge of Sighs in Venice—there are several bridges, but none of them of size whereby Venice Island may be reached from the main land. Some of the foot bridges are so narrow that one cannot pass a broad remark going over them. Nor is there much of the picturesque about this little island of but several hundred feet in width, save when the hills of the Schuylkill Valley become verdure-covered in the springtime. But there is on Venice Island opportunity—to several big firms which have made fortunes there in the past, and still are making them with exports which, during war days at least, went as far as Venice itself and even beyond, and there is in the congeries of mills which stretch from the upper end of the island, where is located the new home of the Fibre Container Company, to the southernmost reaches where is the time-honored McDowell mill and Chic McDowell, employment for many hundreds of men and women representing all the lands of the Allies and constituting a large proportion of the residents of Manayunk, Roxborough, Falls of Schuylkill, little communities, all, however, tied in with the big corporation Philadelphia and dependent on the paper industries of Venice Island.

The Fibre Container Co.

The very newest development is the Philadelphia Fibre Container Company, an enterprise which in a sense is the outgrowth first of all of the Philadelphia Paper Manufacturing Company nearby, and then of the unusual requirements and opportunities of the war.

The Fibre Container plant is housed in four one-story brick buildings approximately 250 feet long by 150 feet wide, their lowness, of course, being due to the immense weight of the products handled. Some of the rolls of board worked up weigh as much as 5,000 pounds and units of the auto fleet in service have as many as six rolls on main machine and trailer. In buildings and equipment, combining, cutting, printing, slotting, creasing, stitching machines and others, there is represented a capital investment of more than \$500,000. Principal of the firms which made the machinery is Moore & White, of Philadelphia.

Product of the Company

The product is a line of containers which covers practically every possibility, and some very unusual ones during the war days. For instance, a little illustration is afforded by an output of 22,000,000 board discs for U. S. howitzers. Then there were tube containers with steel bottoms for enclosing in an airtight package powder and shells. Also there were triangular containers, the Fibre Company turning out the flat sheets for easy ship-

ping, but so creased that they could in a second be converted into containers for shells giving an encasement with but three points of contact, each, however, a cushion of board 200 points thick. Experiments were conducted successfully in the manufacture of containers in barrel and keg form, so that board might replace wood and freight charges for bulky wood and steel be lowered. And then, of course, were the ordinary commercial output, containers for tobacco, candy, sugar and the like, supplanting packing boxes and bags. The raw material consumption is about 1,000 tons a month or, say, one-sixth the output of the Philadelphia Paper Manufacturing Company. Officers of the Fibre Company are John Jacobs, president; G. A. Bisler, vice-president, and Edward J. Stoesser, secretary and treasurer. The manager is John M. Connor, formerly with the Kron Scale Company, and there are approximately 150 employees under him.

Philadelphia Paper Mfg. Co. Busy

The year brought so much business to the Philadelphia Paper Manufacturing Company, whose plant adjoins the container mill, that, though additions and extensions were desired to meet increased output, the firm was not able to suspend operations to do this work. Two new machines added, a new beam scale and additional stock sheds are the sum total of the material extensions.

But the output was extended to practically every part of the world. The shutdown of the German mills left unsupplied the field they ordinarily covered. The Philadelphia Company did its part in making up the deficit. There were exports to China, South American countries and elsewhere where "Made in Germany" hitherto held undisputed sway. Secretary-Treasurer Stoesser is not so confident that export opportunities will continue good save, perhaps, for South America. The determining factor, of course, are freight rates and ability to secure ocean carriers. The aggregate of export trade during the war year was about 6,000 to 8,000 tons.

Flat Rock Mills Change Hands

The change in the personnel of the management of the old Flat Rock Mills on Venice Island, just below the Philadelphia paper plant, was the most important of the year's development. Structurally there were but few changes—a refurbishing all around and the installation of a complete sprinkler system being the only notable events of the twelve month. The Flat Rock Mills were for decades under the management of Martin and William H. Nixon, but in July of last year they were taken over by Dill & Collins Company. At the Flat Rock Mills are made books, bonds and writing, the specialty in the bond line being the Flat Rock text. Supercalendered papers formerly made at Flat Rock henceforth will be produced at the Richmond and Tioga streets mills of the Dill & Collins Company.

One addition to the Flat Rock Mill is conspicuous as you enter the doorway—and it is most directly related to the memor-

able year just passed. It is a handsome bronze tablet—the Honor Roll of the Flat Rock boys who went with the Colors, some of them to remain there, one at least, to stay for all time in the land from which a great menace now has been removed. The twenty-five names in bronze attest to the Dill & Collins' contribution to the Nation's defenders. Gold stars are to go opposite a few of the names—the men who fell. Charles Kenworthy was killed in battle, William Gallagher was wounded severely, William Leary was gassed. Those are the known casualties at the time of writing, but Paymaster Lewis Birkire, who has in charge the official compilation of the Honor Roll, has not yet completed his labor of love and affection.

Extension to Dill & Collins Mill

The Tioga and Richmond street branch—original Dill & Col-

lins' mill—had during the year a very extensive addition. But during war days—and the story can now first be told—it was used for war, not paper-making, purposes. With peace, however, its activities will continue, and its products be used in paper making.

The addition was begun in May and completed just about the time the armistice was signed. It is a one-story building covering about an acre of ground, and its output was chlorine gas shipped to the Edgewood Arsenal, and there combined with other gases for the poison-gas content of shells, and caustic soda also utilized by the Government. The gas and caustic were electrolytic cell products. Nine and ten tons a day, respectively, was the output. Now that war requirements have passed the Dill & Collins mill will continue its manufacture of chlorine for bleaching and caustic for cooking wood.

NEKOOSA-EDWARDS CO. MAKE BIG IMPROVEMENTS

Despite the conditions produced by the war, plans for making certain improvements at the plants of the Nekoosa-Edwards Paper Company, whose principal office is at Port Edwards, Wis., with groups of mills at Nekoosa, Wis.; Port Edwards, Wis., and Grand Rapids (South Centralia), Wis., have been carried out the same as if the war had not existed.

The principal of these improvements has been the installation of the 5,600 horsepower hydro-electric development, by which all of the powers at the three different plants have been joined together and synchronized, so that they are interchangeable and can be adapted to any one of the places at any time where most needed.

Notice of the Developments

The development of the hydro-electric plant at the South Side includes four units of 750 horsepower each, and at the Nekoosa plant two units of 1,250 horsepower each, all made by the Allis-Chalmers Manufacturing Company of Milwaukee.

An entirely new unit for the manufacturing of sulphate pulp and kraft paper from the product of this pulp, has been built at Nekoosa, and, on account of the dove-tailing of it in with the other buildings, required a great deal of remodeling. The capacity of this plant will be about 50 tons of sulphate pulp per day.

One of the paper machines has been entirely re-built, for the purpose of making kraft paper exclusively, which will produce about 30 tons of standard weights of kraft daily.

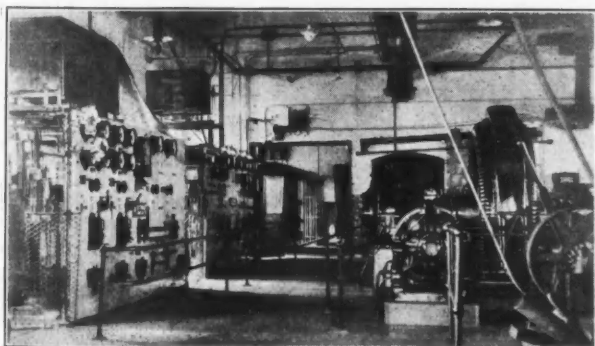
pected to be in operation about the first of the year. The building over of the steam boiler plant involved the installation of six new water tube boilers of about 3,000 horsepower, of the B. & W. type, at the Nekoosa plant, and three Wickes water



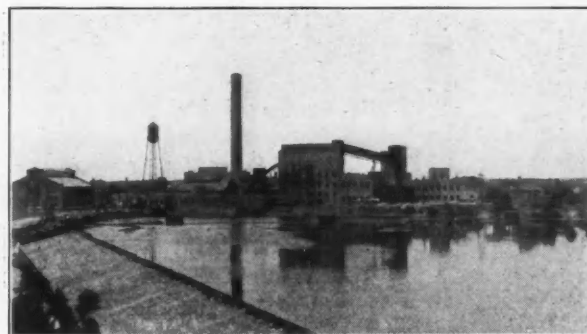
CLOCKHOUSE AT MAIN ENTRANCE TO NEKOOSA MILLS

tube boilers at the Port Edwards group of mills, aggregating about 1,500 horsepower.

The capacity of the paper will be increased but very little, but the production of sulphite pulp will be increased about 40



PART OF SWITCHBOARD OF NEW HYDROELECTRIC PLANT, NEKOOSA MILLS

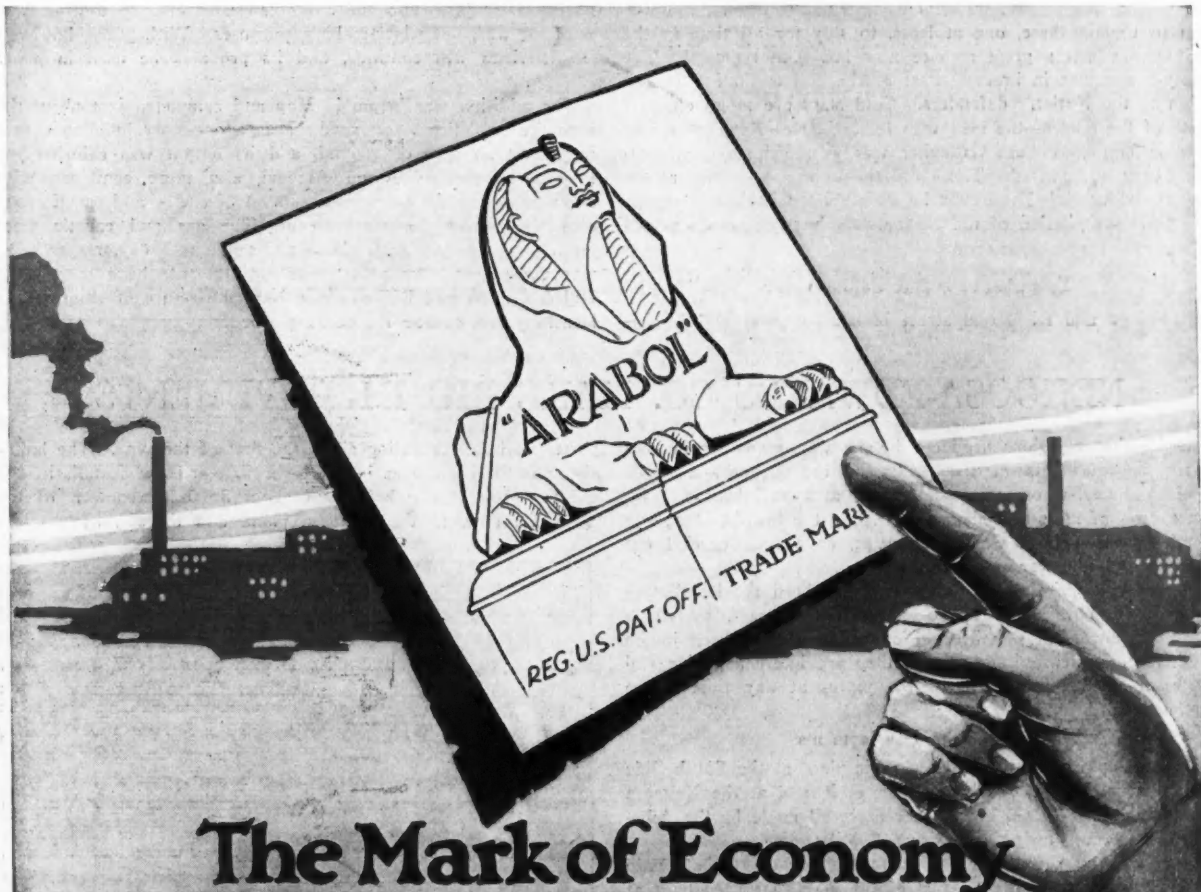


NEKOOSA MILLS, OF NEKOOSA

Nekoosa-Edwards Paper Co. Hydraulic Plant at Left; New Digesters and Wood Rooms at Right.

The original machine was made and remodeling was done by the Rice-Barton & Fales Machine & Iron Company, and is ex-

tons per day and sulphate 50 tons per day, all of the former and one-half of the latter being available to sell on the open market.



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Here's the only Dry Rosin Size that will dissolve absolutely in hot water. No recocking or soda ash is needed. It takes less than one hour to dissolve.

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THE ARABOL MANUFACTURING COMPANY
100 William Street NEW YORK

DRY ROSIN SIZE

Pulp Mills of the United States

Maps Showing the Locations and Relative Capacities of the Ground Wood, Sulphite, Sulphate and Soda Pulp Mills in the Country, Originally Prepared in Connection with Certain Defense Investigations, but Having Served Their Purpose in This Respect, They Are Now Given Out for Publication in Order That the Business Public May Have the Compilation for Convenient Use and Reference.

Prepared by Henry E. Surface, Engineer in Forest Products, and Franklin H. Smith, Statistician in Forest Products, Forest Service

The accompanying four maps with typical title, "Sulphite Pulp Mills of the United States, 1917," and similar titles for the soda, the sulphate, and the ground wood pulp mills, were prepared by the Forest Service, U. S. Department of Agriculture, in connection with certain national defense investigations. Having served their immediate purposes, they are now released for publication in order that the business public may have the compilation for convenient use and reference. Aside from affording a "birdseye" perspective of the American industry as a whole, they will be found particularly useful to numerous individuals who find need for knowing the geographic and economic relationships of their own undertakings to the existing pulpwood using and wood pulp producing establishments. The mills for 1918 would afford but few changes of minor importance from what is shown on the 1917 map.

Mills and Relative Capacities

The maps themselves show locations of individual mills and their relative installed capacities. Such data and the town names, together with one of the paper trade directories, will afford the general public sufficient key to the manufacturing concerns, so that it is not necessary to give here the reference list to the key numbers appearing beside the town names.

The numbers and locations of mills were carefully plotted from Forest Service original records of current date and checked

against the latest and most reliable public and private lists. The capacities are not of Forest Service origin, but were accepted as reliable after similar checking. In those cases where one concern operates more than one mill of one kind only, e. g., ground wood, at a given location as a joint establishment in business they have been considered here as one mill only with consolidated capacities.

Not all of the mills are wood consumers, the following exceptions being noted without violation of any confidence:

1. New Iberia, La., Sugar Cane By-Products Company, having both sulphite and soda pulp equipment and using sugar cane bagasse.
2. Camden, N. J., Macandrews & Forbes Company, having soda pulp equipment and using licorice root.
3. Memphis, Tenn., Tennessee Fibre Company, having soda pulp equipment and using cotton hulls.

A summary of the actual tabulated figures for the number and rated or installed capacities (pounds of pulp per 24 hours) of mills of each kind, grouped by States, is given in Table 1. The "total" columns cover the recently defined individual mills of each kind. This distinction should be noted in view of the custom, often, of designating one or more pulp mills of different kinds under a single establishment or roof as a single pulp mill.

(See pages 111, 113, 115, 121)

TABLE I.—United States Pulp Mills—Grouped by States; Number and Rated or Installed Capacities by Kinds.
(Units of Capacity are pounds per 24 hours.)

State	CHEMICAL PULP										Ground Wood Pulp	
	Total Pulp		Chemical Pulp		Sulphite (1)		Soda (2)		Sulphate (1)		No.	Capacities, Lbs.
	No.	Capacities, Lbs.	No.	Capacities, Lbs.	No.	Capacities, Lbs.	No.	Capacities, Lbs.	No.	Capacities, Lbs.		
Total	328	30,777,000	148	15,983,000	97	11,093,000	32	3,417,000	19	1,473,000	180	14,794,000
California	2	90,000	1	50,000	1	50,000	..	..	..	..	1	40,000
Delaware	1	135,000	1	135,000	..	..	1	135,000	..	..	..	..
District of Columbia	1	70,000	1	70,000	..	..	1	70,000	..	..	..	..
Georgia	2	165,000	2	165,000	..	..	1	45,000	1	120,000	..	..
Louisiana	5	380,000	5	380,000	1	30,000	1	70,000	3	280,000	..	..
Maine	48	6,520,000	23	3,145,000	16	2,130,000	5	835,000	2	180,000	25	3,375,000
Maryland	2	240,000	2	240,000	..	..	2	240,000	..	..	..	..
Massachusetts	5	254,000	3	162,000	2	140,000	1	22,000	..	..	2	92,000
Michigan	15	860,000	10	610,000	8	520,000	..	..	2	90,000	5	250,000
Minnesota	8	1,244,000	2	420,000	2	420,000	..	..	..	..	6	824,000
Mississippi	1	80,000	1	80,000	..	..	..	..	1	80,000	..	..
New Hampshire	13	2,152,000	5	1,640,000	5	1,640,000	..	..	..	..	8	512,000
New Jersey	1	40,000	1	40,000	..	..	1	40,000	..	..	..	..
New York	105	7,962,000	27	2,631,000	24	2,251,000	3	380,000	..	..	78	5,331,000
North Carolina	5	544,000	3	500,000	1	200,000	1	250,000	1	50,000	2	44,000
Ohio	4	254,000	2	150,000	1	100,000	1	50,000	..	..	2	104,000
Oregon	6	1,155,000	3	385,000	3	385,000	..	..	..	..	3	770,000
Pennsylvania	17	1,665,000	15	1,637,000	5	602,000	9	985,000	1	150,000	2	28,000
South Carolina	2	48,000	1	30,000	1	30,000	..	..	..	..	1	18,000
Tennessee	2	200,000	2	200,000	..	..	2	200,000	..	..	..	..
Texas	1	75,000	1	75,000	..	..	..	..	1	75,000	..	..
Vermont	11	780,000	2	130,000	1	70,000	..	..	1	60,000	9	650,000
Virginia	7	549,000	5	483,000	1	240,000	2	135,000	2	108,000	2	66,000
Washington	5	640,000	3	300,000	2	240,000	1	60,000	..	..	3	340,000
West Virginia	2	426,000	3	330,000	3	330,000	..	..	..	..	2	96,000
Wisconsin	53	4,249,000	24	1,995,000	20	1,715,000	..	..	4	280,000	29	2,254,000

(1) Data principally from Lockwood's Directory of the Paper, Stationery and Allied Trades: 1918, supplemented by other reliable sources.
 (2) Data principally from Post's Paper Mill Directory: 1918, supplemented by other reliable sources.



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 AUTOMATIC REGISTERS**

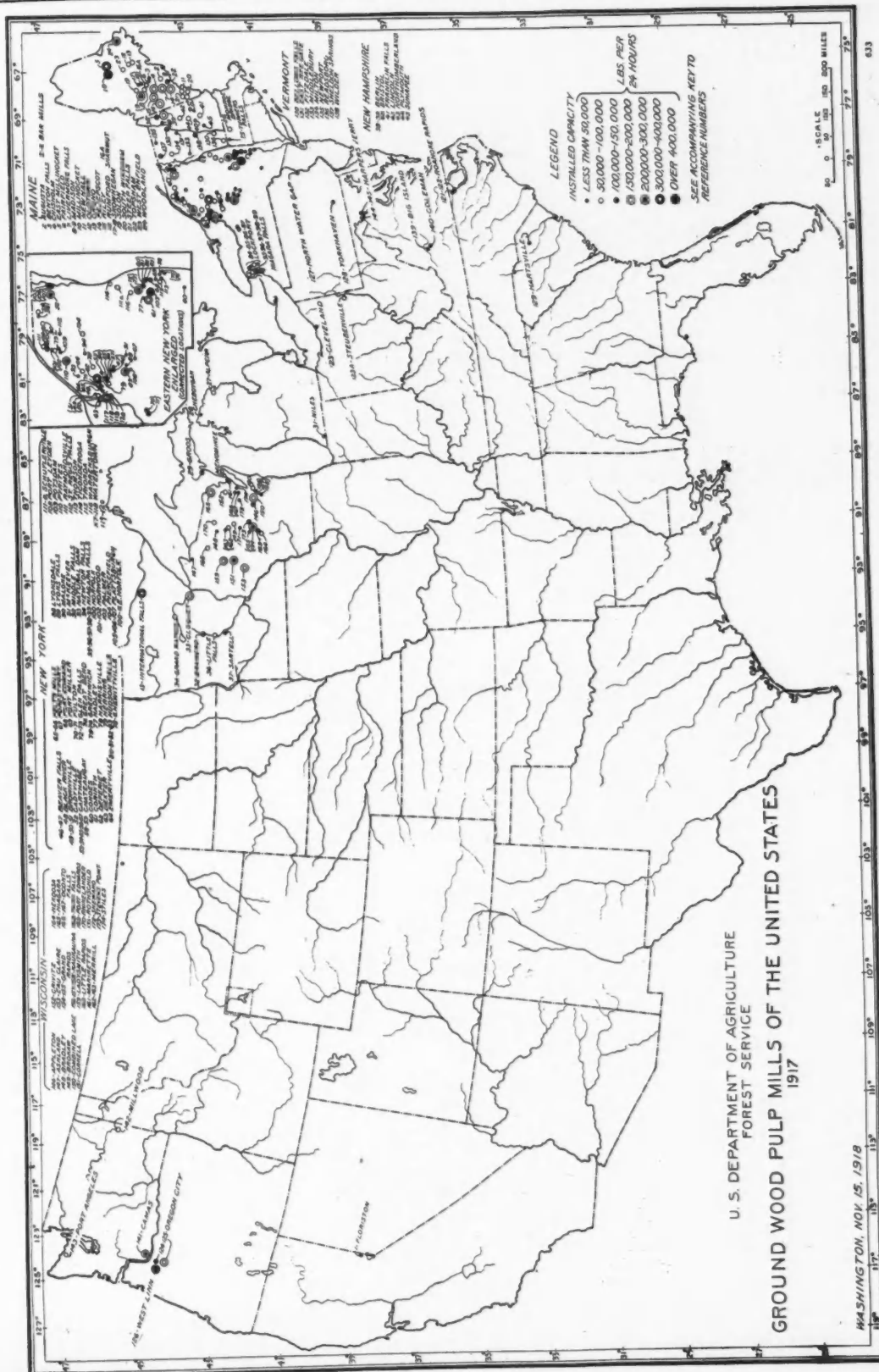
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PHILADELPHIA



(Continued from page 109.)

single map of all United States pulp mills (in 1916) without distinction as to kinds or capacities is given on page 9 of a similarly entitled bulletin for 1916, prepared by the Forest Service in co-operation with the News Print Manufacturers' Association, now the News Print Service Bureau, New York City.

Comparative data on pulpwood consumed and the pulp produced by these mills during 1917 is afforded by United States Department of Agriculture Bulletin 758, a contribution from the Forest Service, entitled "Pulpwood Consumption and Wood Pulp Production, 1917," by Franklin H. Smith, statistician in forest products. A

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Capacity Sixty Tons Daily.

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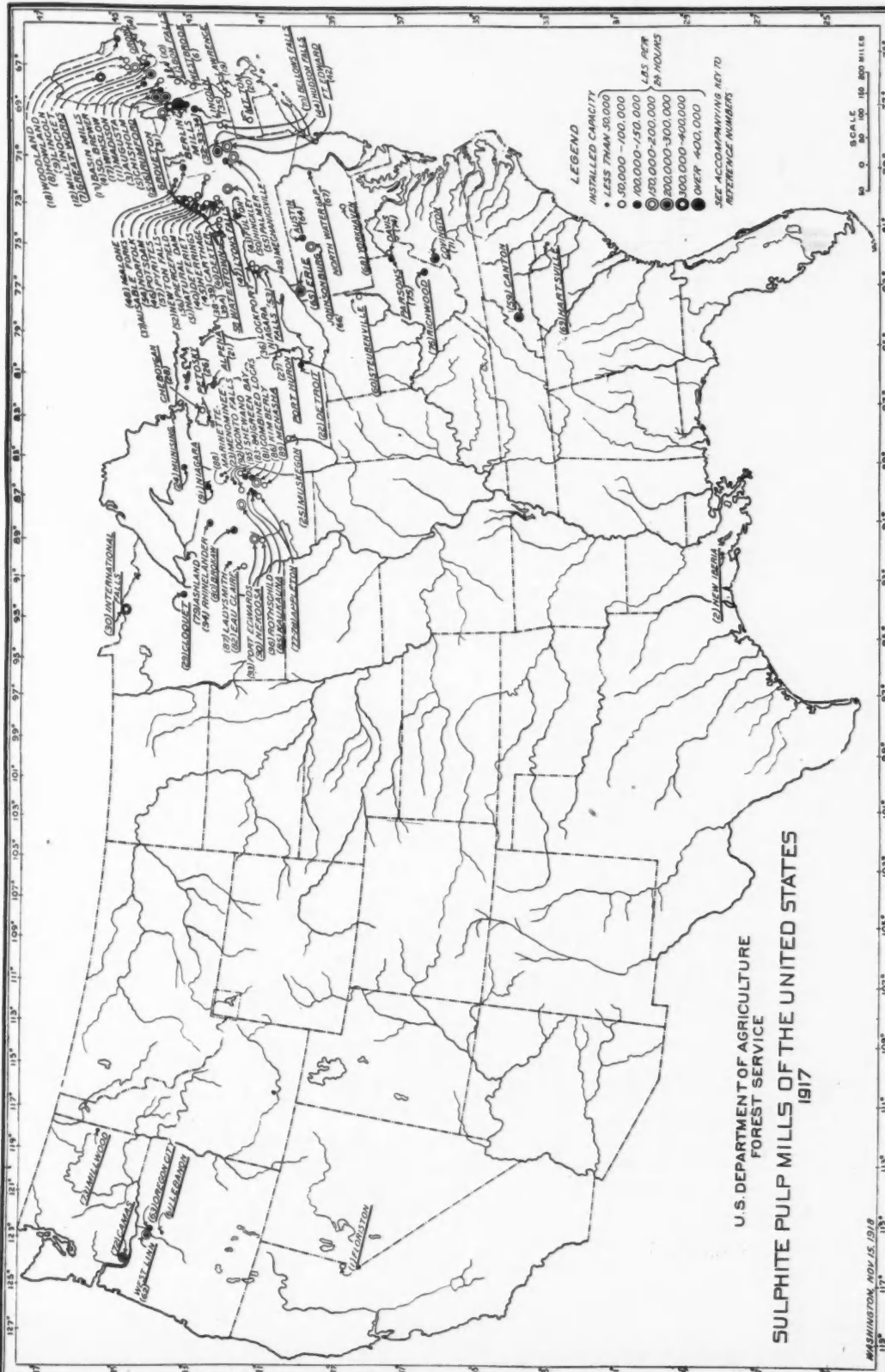
MOSSPOINT, MISS.

Makers of Machine Glazed and Fourdrinier
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BATHURST LUMBER COMPANY

BATHURST, N. B., CANADA

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533

(See page 109)

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Incorporated 1887

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FOURDRINIER WIRES

DANDY ROLLS

CYLINDER MOULDS

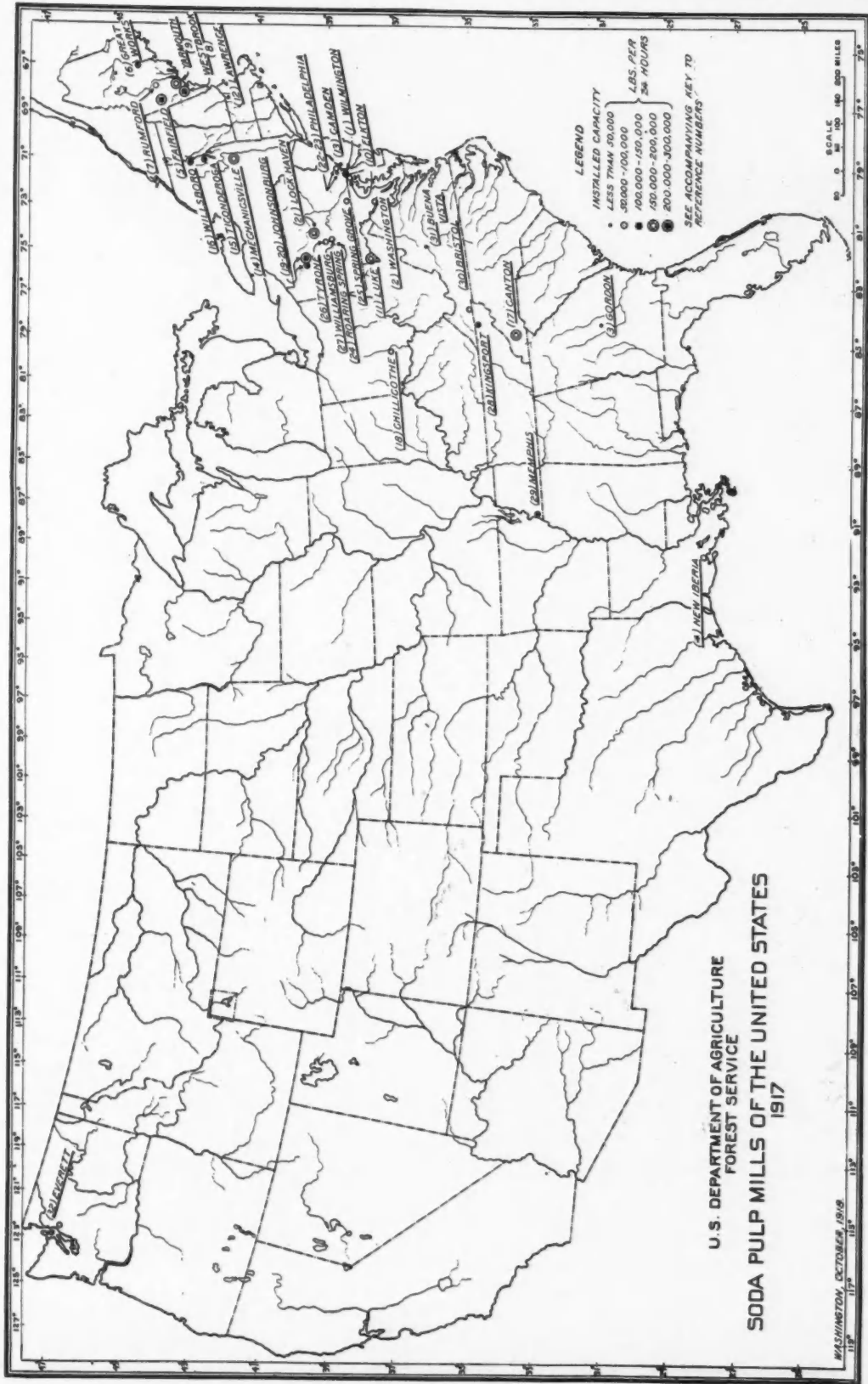
CYLINDER COVERING A SPECIALTY

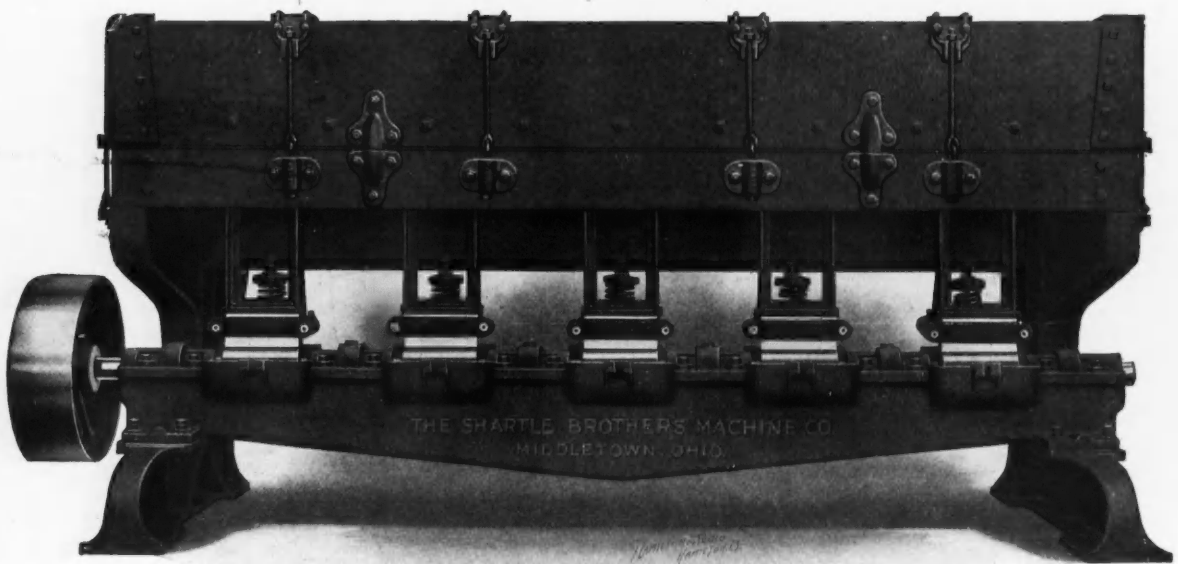
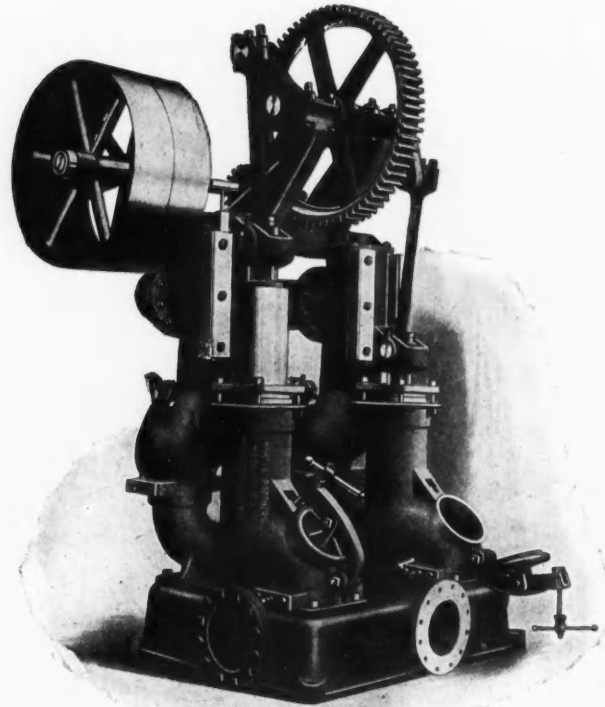
Large Wire Signs for Mill Roofs

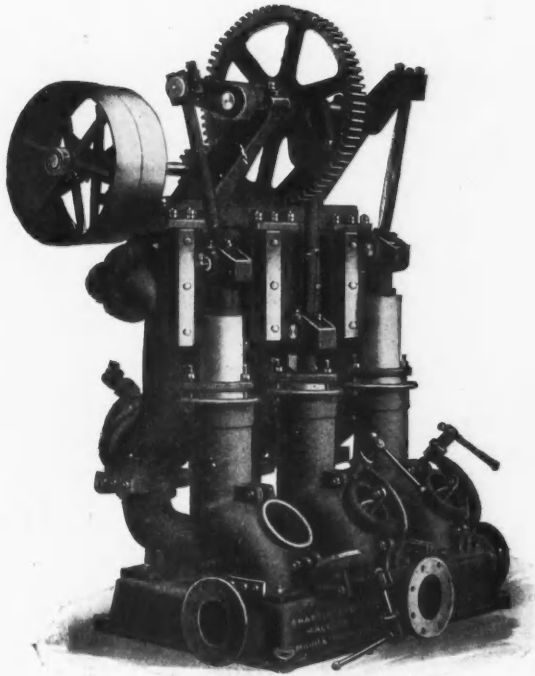
BRASS, COPPER AND
IRON WIRE CLOTH

OFFICE RAILINGS AND
GRILL WORK

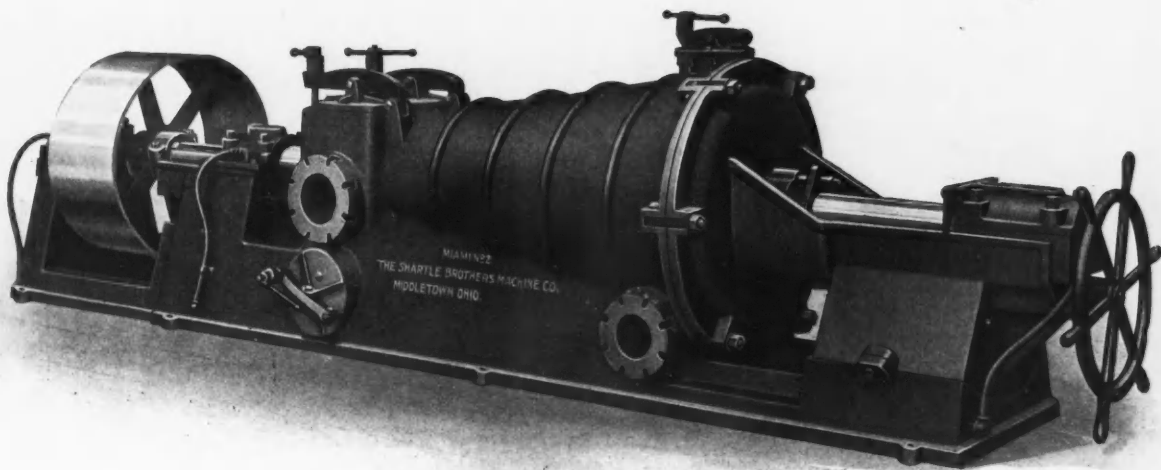
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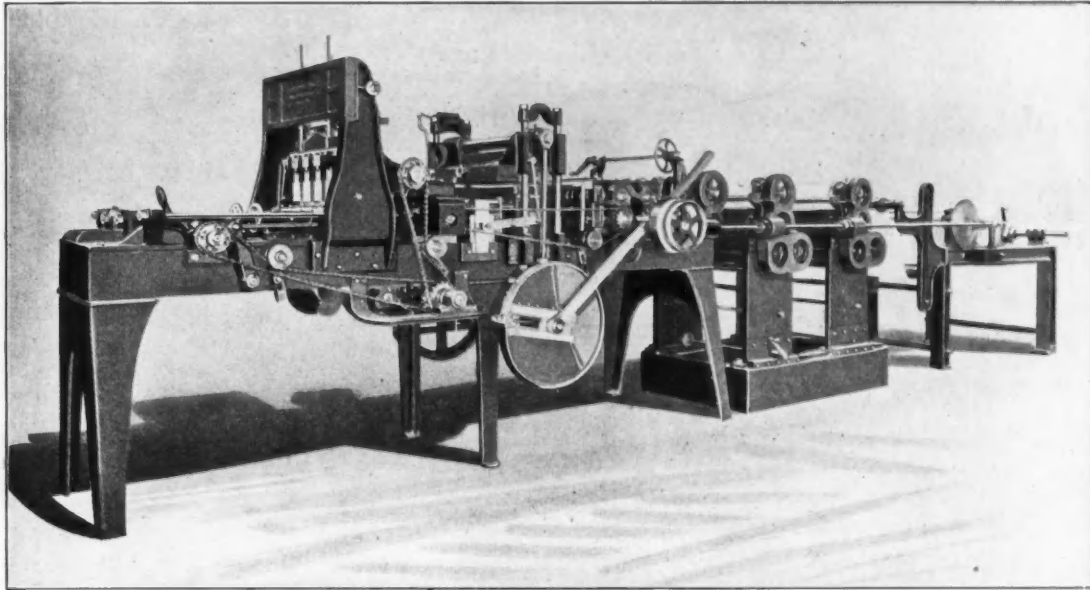
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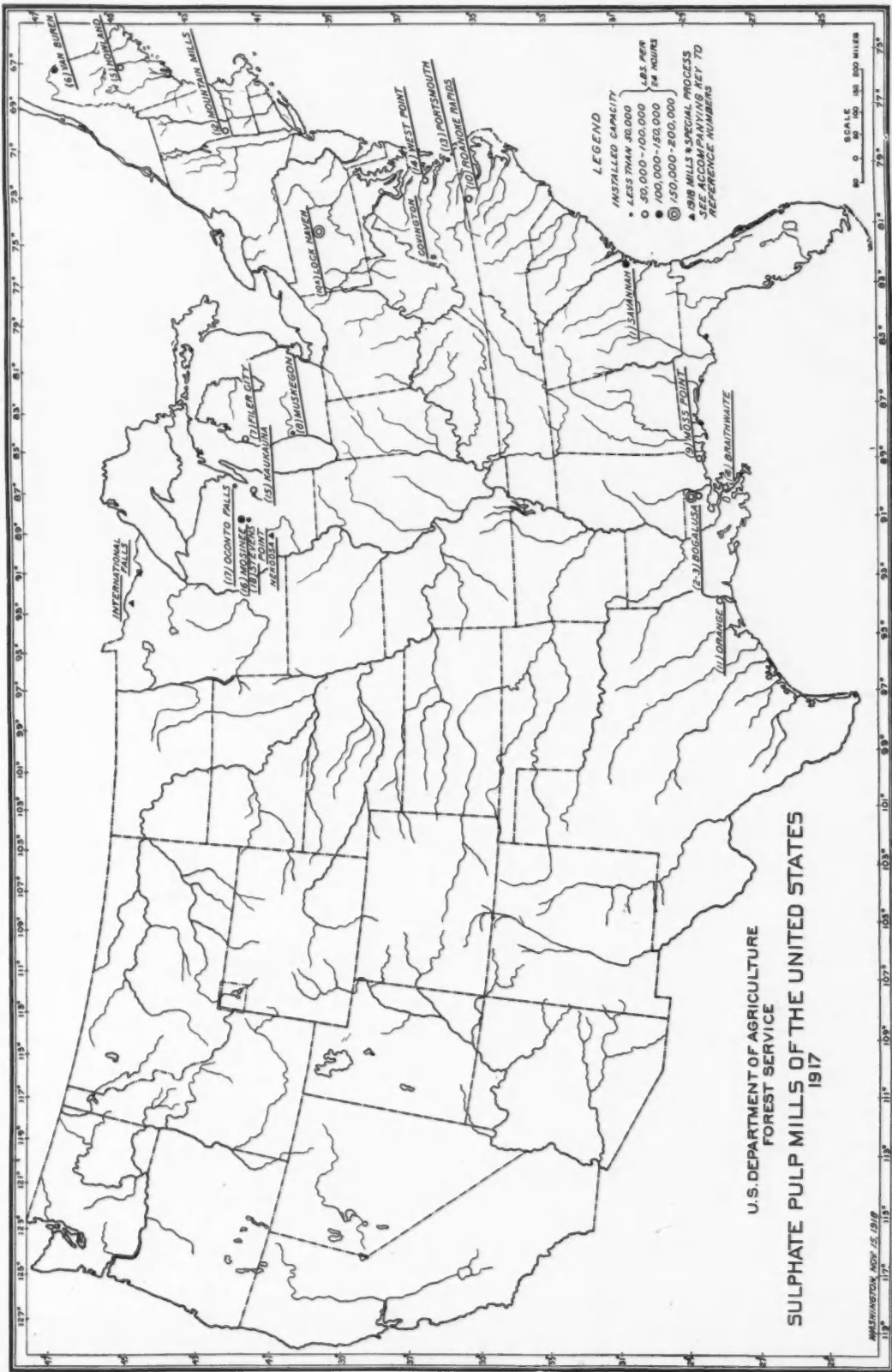
American Steel & Wire Co.
American Sugar Refining Co.
Atlas Tack Co.
Capewell Horse Nail Co.
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General Electric Co.
Griffin Mfg. Co.
H. C. Tack Co.
Japan Government
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Liggett & Myers Tobacco Co.
Macbeth Evans Glass Co.
Nat. Screw & Tack Co.
Nat. Cloak & Suit Co.
P. & F. Corbin Corp.
Penn. Hdw. Co.
Peters Cartridge Co.
Reed & Prince Mfg. Co.
Sears, Roebuck & Co.
Stanley Works

Shredded Wheat Co.
Standard Oil Co.
Sargent & Co.
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Welsbach Co.
Victor Talking Mch. Co.
Western Cartridge Co.
Winchester Repeating Arms Co.

Inman Manufacturing Company, Inc.

AMSTERDAM, N. Y., U. S. A.



(See page 109)

Stebbins

Reinforced Concrete Tile
Lined Acid Absorption
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Reinforced Concrete Tile
Lined Acid Tower Sys-
tems.

Reinforced Tile Lined Re-
covery Tower System.

Oxidizing Rotary Sulphur
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Acid Proof Acid Storage
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Acid Proof Acid Tower Lin-
ing

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er Equipment

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in the Design and
Construction of
Chemical Apparatus
for
Sulphite Mills*

**STEBBINS ENGINEERING &
MANUFACTURING COMPANY
WATERTOWN, NEW YORK, U.S.A.**

Pulp and Paper Investigations of the Forest Products Laboratory in 1918

Activities During the Past Year Have Been Given Over Largely to an Intensive Study of the Various Uses to Which Paper Could Be Put for War Purposes—With the Ending of the War an Opportunity Is Afforded to Incorporate in the Peace Program of the Laboratory Various Projects for the Further Study of Certain Problems Taken Up First Because of the War.

Written for the Annual Number of the Paper Trade Journal by Vance P. Edwardes, Engineer in Forest Products.

The general scope of the work carried on by the Forest Products Laboratory is, doubtless, familiar to the great majority of the technical members of the pulp and paper industry. The laboratory was established in 1910, at Madison, Wis., by the United States Forest Service in co-operation with the University of Wisconsin, and is a research institution for study of the best means of utilizing our forests and forest products. Its work includes the whole field of wood technology. It comprises the sections of timber tests, timber physics and kiln drying, pathology and wood preservation, chemistry and derived products, and pulp and paper. The bulk of the investigative work is conducted at the laboratory, which is well equipped with semi-commercial sized apparatus, but the ultimate aim with each problem is a practical mill demonstration on a commercial scale, if the experimental results obtained warrant it.

The laboratory of the Pulp and Paper Section is completely equipped with all necessary apparatus for the production of chemical and mechanical pulps on a semi-commercial scale, and for their conversion into paper.

Paper for War Purposes

At the beginning of 1918, nearly all work on the earlier problems in the Pulp and Paper Section had given way to an intensive study of the various uses to which paper could be put for war purposes. One important peace time problem, however, remained on the program. This was the commercial demonstration of the modified method of sulphate pulping as developed by Dr. Kress and Mr. Wells of this section. This work was reported on at the Dayton meeting of the Technical Association and has aroused considerable interest. The results obtained were of decided significance, for it was demonstrated that 30 per cent less steam, less liquor and less actual cooking time was required than when the regular procedure was followed. Mill conditions, however, made it impossible to obtain reliable yield figures. During the demonstration it developed that, because of the smaller amount of liquor required, the black liquor was of sufficient gravity so that it could be sent at once to the disc evaporators without being put through the vacuum pans. Now that the press of war problems is over, it is hoped to demonstrate more fully this method of pulping, under conditions which will be conclusive.

Fiber Containers

In connection with the study of fiber containers, an investigation was made on the effect of varying humidities on the strength of the fiber board and its component plies. Very interesting data were obtained, showing that in certain boards a variation in strength of over 50 per cent occurred under a change in relative humidity from 48 to 97 per cent. This report was read at the Dayton meeting of the Technical Association. It is planned to continue this very interesting investigation in connection with the program on shipping containers outlined for

the Box Section of this laboratory. The question of waterproofing is a vital one and at present is a factor in limiting a more universal use of fiber shipping containers.

Waterproof Plug for Shells

After many attempts to develop a waterproof plug for shrapnel shells, a satisfactory molded article of a mixture of asphalt and wood pulp was prepared which had many advantages over the paraffined wooden plug. Shearing and impact tests indicated beyond a doubt that the fiber plug could withstand more severe usage than the wooden. Tentative specifications were drawn up and submitted to the various manufacturers of molded articles, who were advised to get in touch with the shellmakers requiring the plug. Patents in the name of the people of the United States, covering this process, have been applied for by Messrs. Laing and Boling of this laboratory. Such a mixture as asphalt and wood pulp, of course, can find application in the industries where a waterproof and heat-resistant molded article is required.

Wood Pulp for Nitrocellulose

At the request of the War Department the laboratory undertook to investigate the possibilities of wood pulp for the manufacture of nitrocellulose. Shortly after this work started a co-operative arrangement was made with a large ammunition producing company, which assigned a chemist to this laboratory for a short period. The problem presented was of great interest from both the theoretical and the practical standpoint, but particularly from the practical in view of the anticipated shortage of cotton linters. Work was continued independently by this laboratory for several months. As a result, a pulp believed to meet all of the requirements for cellulose for manufacture into cannon powder was secured. Semi-commercial cooks representing the various types of pulps developed have been nitrated and made into cannon powder. While it is too soon to make a definite statement regarding the adaptability of the pulps tested, every indication points to a successful solution of this problem. Aside from the manufacture of nitrocellulose for cannon powder, wood pulp prepared after the manner developed at this laboratory can be used in the preparation of various other cellulose derivatives, and the material is believed to have great promise.

Waterproofing Paper

An extremely important phase of the shipment of goods overseas was the development of a more suitable means of waterproofing various papers. Because of the limited cargo space, bales were adopted wherever possible, and, owing to the shortage of burlap, satisfactory papers had to be found. The Forest Products Laboratory made a number of tests on the various papers submitted to the Ordnance Department, as a result of which specifications for this class of material were drawn up.

Development of a waterproof label might also be mentioned in connection with overseas shipment. A label believed to be satis-

factory consists of a heavy sheet of kraft which is pasted to the box by any good hide or bone glue and shortly afterward painted over with a solution of formaldehyde. The most serious objection to this method of waterproofing comes from the fact that the formaldehyde is supposed to turn the glue dark after a lapse of several months, in which case it might obscure the label. While sufficient time has not elapsed to allow the completion of these tests, it is believed that, with a sufficiently thick paper, the darkening will not be noticed.

Wall Board Tests

In the late summer of 1917 the Forest Products Laboratory was requested to undertake tests to determine the suitability of various wall boards for temporary structures, such as huts and hangars. Although boards are not primarily intended to withstand such usage, it was felt that such a study would be highly desirable from many standpoints. Accordingly, about 30 pulp panels were purchased from various manufacturers for testing. Two panels of each make were used; one was given a coating of asphalt paint while the other was untreated. These panels were placed in two fences and sprinkled on one side daily for over a month. The most common failures was pulling away from the nails. For some time after this contraction, which took place in the first week, many boards underwent but slight changes, although, naturally, at the time of writing—16 months after they were put in the fence—there are boards in all conditions. Some, in fact, have been completely destroyed. On the whole, considering the object for which wall pulp boards are made and the test to which they were subjected, the makers of this class of material have reason to congratulate themselves upon the manner in which the great majority of pulp boards stood the test. This does not mean that wall boards are recommended for exterior construction but in an emergency they might be used.

Hemlock Bark as Source of Tannin

Completed experiments on a commercial scale indicate that the hemlock bark, wood free, obtained in paper mill operations, can be successfully dried and used as a source of tannin. These experiments were made in June last, in co-operation with a group of three Wisconsin companies. In 1915 similar work was initiated by the Forest Service, but conditions at that time were not favorable to a successful working out of the problem. The utilization of this waste bark is particularly important in view of the possible shortage of tanning materials as a consequence of the scarcity of labor in the woods, the gradual exhaustion of hemlock trees suitable for peeling and the high freight rates to the tanning centres.

It is hoped that a plant operating on a commercial scale will soon be converting this former waste into a valuable product at a cost affording the paper mill owner a satisfactory margin of profit.

Filter for Gas Protection

Last February an officer who had just returned from Europe brought information to the laboratory that the Germans were using a gas which was particularly difficult to remove by any means then employed. Preparation of a filter which would fulfill the requirements was at once attempted. The problem proved difficult. An ideal filter would, of course, afford absolute protection combined with zero resistance to the passage of air. While such a result is impossible of attainment, it can be approximated by increasing the filtering capacity and developing a material of special composition. We are happy that the need of such a filter for military purposes has passed, but the problem of affording ample protection, together with low resistance, was satisfactorily solved. The result of this investigation can be very well applied to problems in peace times, and plans are now under way looking toward the adaptation of the gas mask of warfare to industrial uses. Such a mask would be far less burdensome and expensive

than the oxygen helmet generally used in mine rescue work, and would greatly add to the efficiency of the wearer. It would also find application in many smelters, foundries and chemical plants, where injury is caused by the inhalation of various fumes and gases.

Prospective Work of the Laboratory

It is hoped that the work done by the Forest Products Laboratory in connection with war problems has brought home the value of industrial research to larger numbers of the American people. Now that the war is over, an opportunity is afforded to incorporate in the peace program of the laboratory various projects for the further study of certain problems first taken up solely because of war needs. Among these are the utilization for cellulose derivatives other than nitrocellulose of the pulp developed for powder making, and the utilization of paper mill waste bark for tanning purposes. Other problems which will probably be attacked include a comprehensive study of the effect of various cooking conditions upon the sugar content of waste sulphite liquor, and an attempt to obviate the difficulty now being experienced in the sulphite pulping of resinous woods. The problem connected with the recovery of soda in the sulphate process and the economic distillation of the black liquors of the soda and sulphate process for the recovery of alcohol, acetone, etc., will be considered. Doubtless many other important problems will present themselves during the year, and the laboratory will always welcome any opportunity to assist the profession with which it is so closely allied in solving such problems as may be brought to its attention.

NEWS OF THE WESTERN NEW YORK TRADE

[FROM OUR REGULAR CORRESPONDENT.]

NIAGARA FALLS, N. Y., February 3, 1919.—The recent protests on the part of paper and other concerns in the Niagara district that they were not being supplied with sufficient power to keep their mills going continuously has brought forth an order from Chief Engineer Gaby of the Hydro-Electric Commission of Ontario that a new block of 50,000 horsepower will be available on March 1. This amount, it is believed, will be sufficient for all the present needs of the manufacturers who made protests.

Work is progressing on the wheelplit of the Falls plant of the International Paper Company, which has kept the mill from being operated. The company is changing the method of producing electric power so that in the future there will be little chance of a shut down. The Defiance, the Pettebone-Cataract and the W. Ralston Company mills are running full time. The Cliff mill is being put in shape for operation early in the spring, when operating conditions improve.

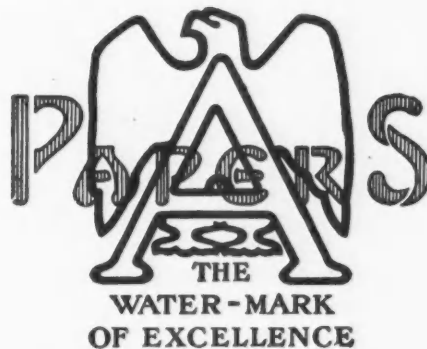
FRANK H. PREBLE NEW SALES MANAGER

ROCHESTER, N. Y., February 3, 1919.—Announcement is made by the Flower City Tissue Mills Company of the appointment of Frank H. Preble as sales manager.

Mr. Preble is well acquainted with the jobbing trade having represented various mills in the past. For the last year he has represented the American Paper Goods Company, covering Pennsylvania and the South Eastern States but resigned to accept the larger position. He entered upon his duties January 1, 1919.

APPOINTED MANAGER OF STOCK CONTROL

Friends of Frank H. Palmer, former Canadian representative for the Eaton, Crane & Pike Company, will be interested to know that he has been appointed manager of stock control at the factory of the company in Pittsfield, Mass. Mr. Palmer's successor as Canadian representative, Herbert G. Popham, has assumed his new duties after some time spent at the factory.



The World has been born anew.

Out of the most stupendous sacrifice in history has been born a new era—and it is the era of Service.

From this time on Institutions, Individuals, and Nations will be judged by the Service they are able and disposed to render mankind.

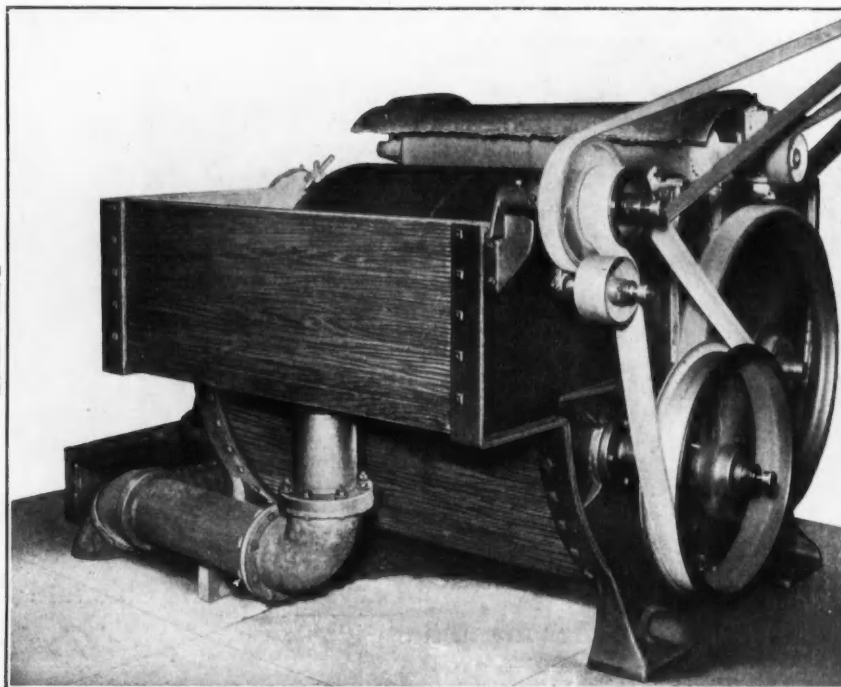
The American Writing Paper Company faces this future with confidence, firmly resolved to maintain itself on the solid foundation of service to its customers, equality to its employees, and of fair dealing with its competitors.

On the platform of honest values and efficient service to all, this Company solicits a substantial share of your business during 1919.

Keep in touch with us.

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Makers of "EAGLE·A" Papers
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BIRD SAVE-ALLS



Save White Water—It Contains Much Valuable Stock

YOUR waste water problem is an important factor for increasing profits. The stock which is lost by going "down the river" in the waste white water is valuable and should be recovered not only because of quantity, but also because it is the same quality as the stock going to your paper machine. Send your waste water to a Bird Save-All. It is designed with a mould of fine mesh which takes out a very large proportion of the solids—the long fibres. The Bird Save-All is simple in construction and operation, no complicated parts; requires no labor cost—upkeep practically nothing.

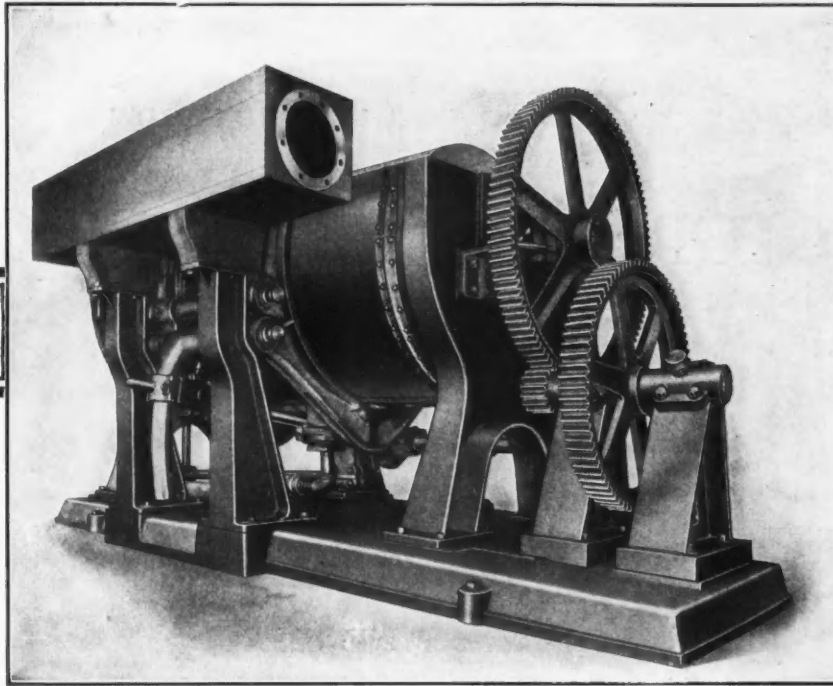
Write for our Catalog 2A. It gives complete details and shows you why you cannot afford to be without BIRD SAVE-ALLS.

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BIRD MACHINE CO., East Walpole, Mass.

General Sales Representative,
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BIRD INWARD FLOW ROTARY SCREENS



Eliminate Shut-Downs for Washing—and Keep Production Going Without a Break

YOU cannot afford to bother with a screen that requires washing every few days, causing breaks in paper making—holding up production, losing valuable time—hence, money.

The Bird Inward Flow Rotary Screen, because it has a large screen surface, moderate shake and a continuous shower which keeps screen slots clear, makes shutdowns for washing unnecessary and always produces *clean paper*—all the time, day in and day out.

The Bird Screen is strong, durable and simple. Made in sizes for 20 to 40 tons capacity, sufficient for almost any paper machine. Two screens will supply the largest paper machine.

Write for Catalog 1A. Describes in detail all the superior features of the Bird Rotary Screens.

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IN U. S. A. WE BREATHE THE SPIRIT OF VICTORY AND SUCCESS—OUR BUSINESS
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Forest Planting Work of Laurentide Co., Ltd.

While the Company's Holdings Were Larger Than Those of Most Mills It Was Ascertained After Careful Estimation That it Did Not Have Sufficient Raw Material to Suffice for a Long Period—Experiments Were Therefore Begun to See What Prospects Were Offered by Planting of Forest Lands—Experiments Have Proved Fully Satisfactory—Quality of Wood Will Be Better.

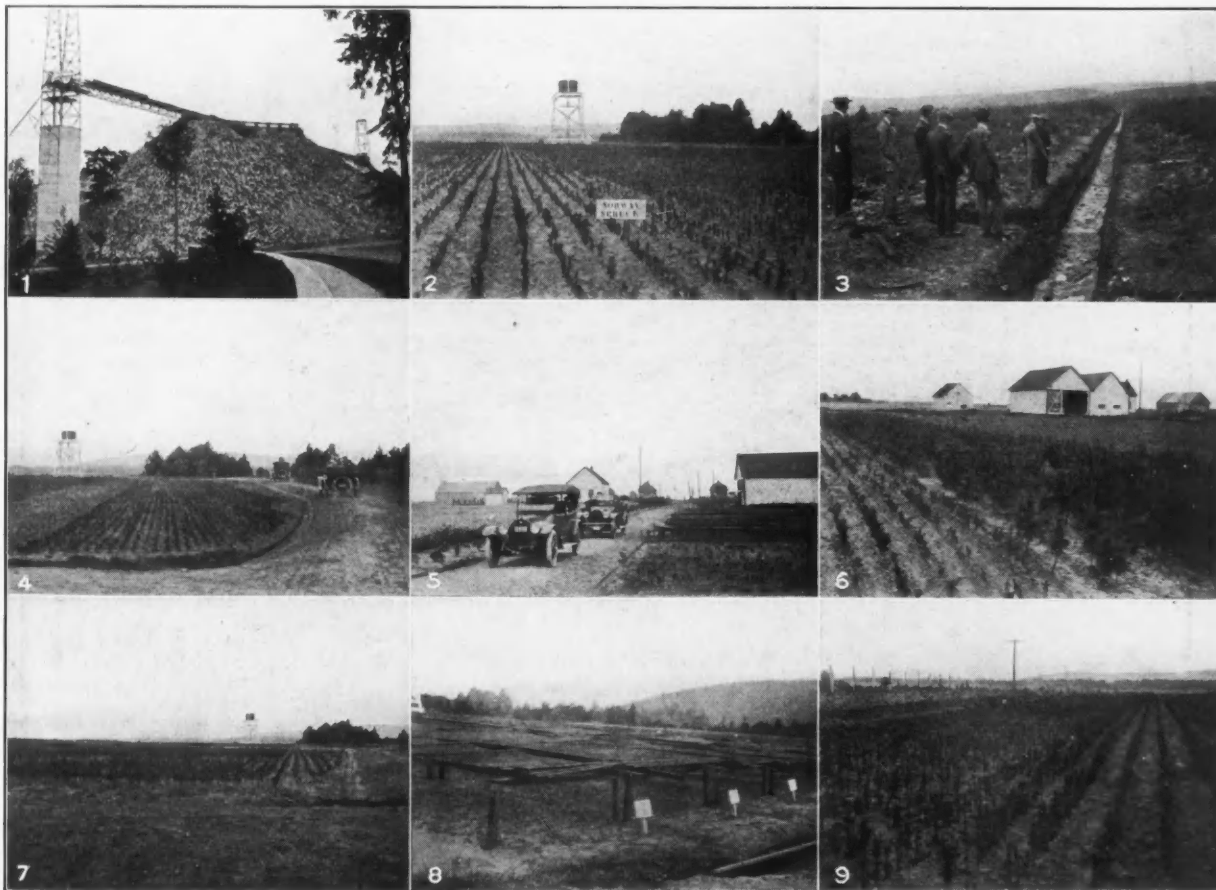
Written Especially for the Annual Number of the Paper Trade Journal by Elwood Wilson, Forester

After careful mapping and estimation of its timber holdings between the years 1905 and 1908, it became evident that this company did not have sufficient timber to provide it with raw material for a long enough period of time to be satisfactory to its careful and conservative management, especially should any expansion of output take place. While the Company's holdings were larger than those of most other mills and in as good condition as the average, it was thought by the Manager, George Chahoon, Jr., that experiments should be begun to see what prospects planting of forest lands offered.

In 1908 five thousand trees were planted, the stock being a

present from the Ontario Forest Service. These trees have now attained a height of fifteen feet and are about 4½ inches in diameter on the stump. In the spring of 1910 a very small nursery was started which has gradually been enlarged until now it contains thirty acres, and in 1922 will produce at the rate of two million trees per annum. This nursery is devoted almost entirely to the growing of spruce, Norway, white and red, and will produce practically nothing else.

Some pine for planting on lands too poor for spruce or where cover is wanted early is grown and a small amount of ornamental stock for landscape work. But the whole idea is to produce



GENERAL VIEW OF THE NURSERIES OF THE LAURENTIDE CO., LTD., GRAND MERE, QUE.


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Makers of Jobber's
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Individuality and Character in jobber brands! These are the first essentials in building up a steady repeat business on your special brands. We know because since 1887 we have studied the Jobber's problem—we have achieved the products which have enabled jobbers to sell under their own trade names papers of the character, individuality, quality, and uniformity with which the jobber can win and hold business-bringing goodwill and crystalize it in his own trade name.

A great number of jobbers have bought the same paper from us for over twenty years, and their brand names have become a tremendous goodwill asset.

Our products embrace tab-sized and air-dried bonds, ledgers and fine writing papers—super-quality at prices which make them superior values. Write us.



Menasha
Wisconsin
United States
of America

pulpwood for the mill and every effort will be made gradually to produce a more rapid growing variety than at present exists. Seed selection and possibly hybridization will be the methods employed and will of course take a long period of time to bring results. In producing stock for forest planting on a large scale new methods have had to be developed and the use of machinery is gradually increasing as the work develops. The cost of stock will be kept down as far as is consistent with quality, but experience has already shown that the original cost of planting should not be the only factor considered.

Trees Must Be of Thrifty Growth

As it takes about thirty years to bring the average spruce to an economical size for pulpwood cutting, it is first of all necessary to see that planted areas are well and fully stocked with trees of the most thrifty growth and best quality. An area planted with cheap stock, which has a high mortality and which is likely to be of slow growth and finally of poor quality and the time will have been more or less wasted. We plan to use only the very best stock from good seed, carefully planted and to use enough to insure a full crop at maturity.

Plantations Watched and Studied

Plantations have already been made under all sorts of different conditions and these are being watched and studied. Trees have been planted on different kinds of soils, by various methods and under various shade and drainage conditions. The mortality has been less than one per cent and the trees have shown satisfactory growth. The oldest spruce plantations were made in 1913 and the trees are now nearly five feet in height and have begun to grow fifteen to eighteen inches per annum. The usual

number planted per acre is from 1,500 to 1,700, which means a spacing of about five feet each way.

Plantations Promise Well

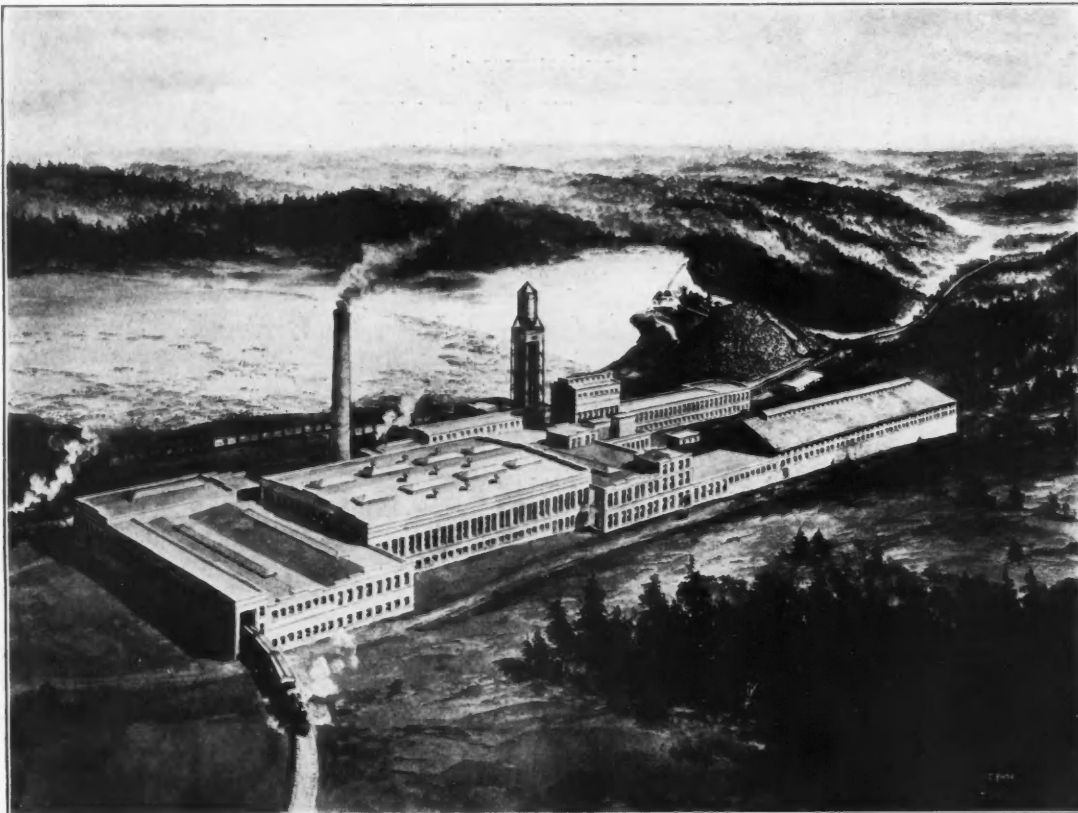
Native spruce, which has grown in the district now being planted, has attained a growth of forty feet in height and twelve inches in diameter one foot from the ground, in twenty-nine years, and there is reason to believe that our plantations will slightly exceed this.

Area Will Be Increased Rapidly

An area of more than six square miles is being prepared for planting and it is hoped to increase this rapidly. Our plan calls for from one to two square miles a year, that is one to two million trees annually. Thinnings will be commenced as soon as the trees are large enough to make pulpwood, that is about six to seven inches on the stump and only the poorest trees will be taken in thinning, leaving the best stock to develop.

Lower Cost of Raw Material

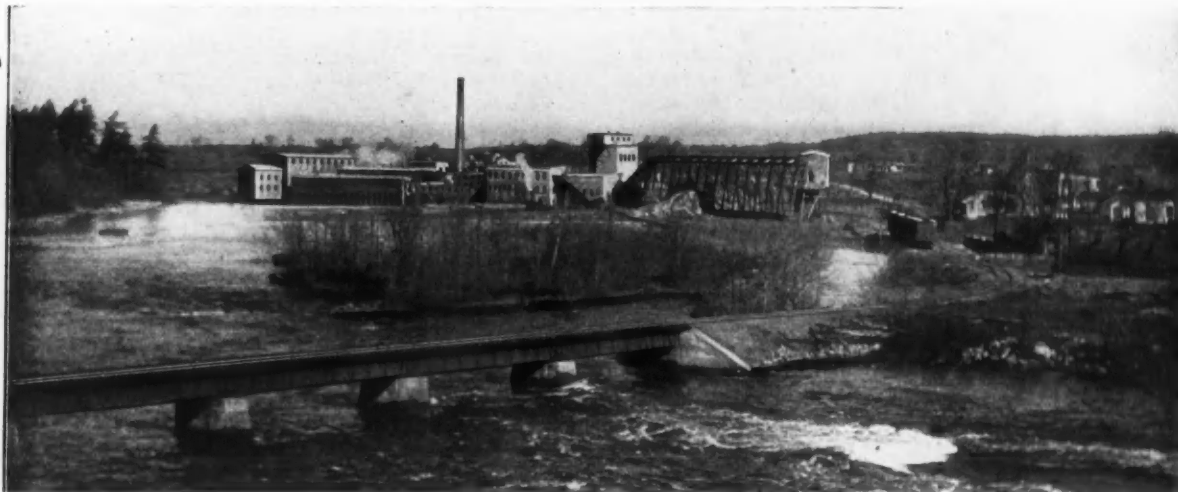
As the plantations are near the mill it will be possible to build light railroads into the woods and deliver the wood from the stump to the mill without river driving or storing. This will very materially lower the cost of raw material and eliminate the loss now experienced in river driving, which is variously estimated at from 8 to 15 per cent of all the wood cut. As the distances will be short the cost of provisions and labor will be much reduced, and sorting costs and scaling costs entirely eliminated. The quality of the wood will be much better and more uniform, and as the areas will be fully stocked machinery can take the place of hand labor to a large extent, still further reducing costs.



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THE J. P. LEWIS COMPANY

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**WOOD PULP BOARDS
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**Black and Colored Specialties, Index, Duplex,
and Medium Weight Cardboards**

Our Service and Quality Product Should Interest You

CONVENTION OF MANUFACTURERS

Forty-Second Annual Meeting of the American Paper and Pulp Association Is Most Important in History of Organization

Many Important Problems in Connection with the Reconstruction Period Are Considered—President Sisson Delivers Fine Address Which Is Greatly Appreciated—Secretary Steward Also Presents Comprehensive Report—George W. Sisson, Jr., of the Racquette River Paper Co., Is Re-elected President—Arthur H. Nevius of the Miami Paper Co. Is Elected Vice-President—Other Officers Re-elected.

The annual convention of the American Paper and Pulp Association, which has just been held at the Waldorf-Astoria, was the most successful convention that this organization has ever held. The fact that the war has ended brought many more to the convention than attended last year, and this year the attendance was larger than it has ever been before.

Meeting of Great Importance

The various meetings which were held in connection with the convention this year were of greater importance than they have ever been before, as manufacturers are facing greater problems right now than they have ever been called upon to solve before.

At the general business meeting, which was held in the Myrtle room of the hotel, the program differed slightly from the program of last year in that aside from the address of the president and the reports of the secretary and treasurer there were no other speakers.

President Sisson Presides

The meeting was called to order promptly at 10 o'clock by President Sisson, after which the minutes of the last meeting were read. After the minutes had been accepted the secretary read his annual report, and this was followed by the reading of the report of the treasurer.

At the conclusion of this business President Sisson read his annual address, which was one of the best addresses that any president of that association has ever delivered.

When President Sisson had concluded his address, M. E. Marcuse, chairman of the Committee on Resolutions, read the report of that committee, and the resolutions which the committee had drawn up, were all unanimously accepted.

Resolutions Passed

The meeting then varied slightly from the program to permit A. J. Williamson, of the Canadian Pulp and Paper Association, to deliver a short talk on Vocational Education in the Industry.

Mr. Williamson strongly advocated the education of mill employees along technical lines.

Mr. Williamson's talk was all too brief, as his time was limited, to permit the rest of the program to be carried out.

The nominating committee then made its report, and the officers for the coming year, as they had selected them, were unanimously approved by the association. These officers were as follows:

Officers Elected

President, George W. Sisson, Jr., Racquette River Paper Company, Potsdam, New York.

Western vice-president, Arthur H. Nevius, Miami Paper Company, West Carrollton, Ohio.

Eastern vice-president, F. L. Stevens, Stevens & Thompson Paper Company, North Hoosick, New York.

Secretary and treasurer, L. B. Steward.

With the exception of Mr. Nevius, who succeeds L. M. Alexander of the Nekoosa-Edwards Paper Company, Port Edward, Wisconsin, these officers are the same as last year.

Divisional Meetings

Each division considered its particular problems, many of them of a technical character, but, broadly speaking, the convention did not have the aspect of the average business meeting of today, in that questions of readjustment did not rank of first importance. The industry was not diverted to any appreciable extent from peace time production into



GEORGE W. SISSON, JR., PRESIDENT.



"We pour lard for export into sacks of this vegetable parchment -- and it worked like a charm, Boss."

"You do, eh? And I've got a kid that uses it for a rattle."

WE bit off this page in the "Annual" to tell you something about our happy family of KVP paper products. From the time the baby gleefully swishes his fistful of pure vegetable parchment paper—that beats a rattle and is as safe as a church for a plaything—until the man sits in the executive chair, he finds PURE

VEGETABLE PARCHMENT PAPER of daily value. A KVP nursery blanket protects his bedding as an infant. His butter, cheese and meat come protected by this paper. Then, he uses it to cut the cost of wrapping his own product and, at the same time, preserve it from rapid depreciation. Some of the uses are suggested in the panel of copy!

Pure Vegetable Parchment Paper Recommended for

LINING CONTAINERS for Coffee (Ground or Bean), Cocos, Coconut, Spices, Tea, and Dry Food Products of all kinds. It retains all the volatile oils and does not affect the contents in any way.

WRAPPING BUTTER, OLEOMARGARINE, Nut Margarine, Cheese, Ice Cream and other Dairy Products containing a large percentage of moisture. Vegetable Parchment is the only paper that can be used for this purpose, for it is made of Vegetable Fibre which becomes stronger when wet and which is just opposite where paper is made from Wood Pulp and other fibres. It retains the moisture already in the product and prevents mold.

WRAPPING MEATS OF ALL KINDS. Fresh Meat, Cooked Meat, Smoked Meat, Dried Meat, Fish and Poultry. Retains the natural flavor, prevents shrinkage and overcomes mold.

WRAPPING ASPARAGUS, CELERY, Cauliflower, Lettuce, Onions, Radishes and Flowers. Of particular advantage where product is to be placed in refrigerator cars for long hauls or in cold storage. Retains the moisture in the product, preventing drying up or rotting.

PACKING BULBS AND SEEDS. Prevents loss of vitality, prevents sprouting.

LINING LARD BOXES, PAILS AND TUBS, also Butter Boxes and Tubs. Keeps the product packed from taking on the odor of the wood. Vegetable Parchment retains either grease or moisture, neither affecting the paper itself. Liners come out whole and not piecemeal along with the product.

WRAPPING HIGH GRADE SOAPS. Vegetable Parchment being alkali proof prevents discoloration to outside wrappers, also keeps the soap from taking on excessive moisture after it is packed.

KVP Waxed Paper

"Letter to Big Food Company! Gentlemen: We have been successful in producing a corn tinted waxed paper that looks good enough to eat -- and so on."

KVP waxed paper—to wrap the "staff of life"—to line breakfast flake cartons—to line candy pails—to wrap meat—to use in many ways as a conservator of our national wealth. War advanced the market for this "thrifty" paper faster than 20 years of peace would have done. Sample book on request.



"I'm raking in business these days!"
-- says a KVP "bonded" business letter

The new member of the KVP family, but a healthy child that we have decided to keep with us, is KVP bond—already known as one of the best utility bonds in America and being specified by conservative big users of bond paper. For moderate priced stationery, hotel stationery, office forms, inexpensive circulars, it's great stuff! Samples are ready—in white and best colors.

KVP Bond



Kalamazoo Vegetable Parchment Company

Kalamazoo, Michigan

"The world's cleanest Paper Mill"—publishers of the "Parch-ent Prattler."

other channels, and consequently, the problems arising in connection with a return to a normal basis are not present. Through curtailment of raw materials and labor supply, the war exerted a certain influence, but, if anything, production was stimulated without the development of many abnormal conditions. Had the armistice not been signed when it was, some branches of the industry might have been confronted with a crisis.

Groups Which Held Meetings

Included among the groups to hold meetings were waxed paper manufacturers, the writing and cover associations, the tissue paper manufacturers, the technical association, the pulp manufacturers, the tag and document manila manufacturers, the vegetable parchment manufacturers, the miscellaneous pulp and paper board specialties men, the gummed paper, card board, wrapping paper and binders board manufacturers, and the sulphite bond division.

PRESIDENT SISSON'S ADDRESS

To the Members of the American Paper and Pulp Association:

You are today assembled in your forty-second annual business meeting under circumstances without parallel in the history of the industry.

A year ago we met in the shadow of a great war, the issue of which, while never in doubt as to a final victorious outcome, held many disquieting features that might have spelled disaster.

Today we meet in the sunlight of a glorious victory, the joint achievement of ourselves and our allies. Active hostilities have ceased, but peace still hovers overhead—seemingly reluctant to settle down upon the earth and spread her protecting wings over the nations.

A year ago problems of preparation and production for efficient prosecution of the war challenged our attention and enlisted our best endeavor. Today problems equally important, and to meet which we are no better prepared, press insistently for solution.

War Service Activity

The Secretary's report has set forth in some detail the war service activities of our industry, and my only comment on it is that if this Association had done no other one thing during the past year than to stand sponsor for and assist in organizing and directing this work, so that it became completely representative of the entire industry without regard to actual membership in this Association, it would have fully justified its existence. The spirit of co-operation so universally exhibited and the readiness to serve of men of large interests, hitherto reluctant to take active part in co-operative efforts inspire the hope that our industry will be permanently benefited by the experience of the past year in this war service work. A common danger or emergency drives men together for the protection of all and the resulting advantages of a common effort become the strongest possible incentive to continue co-operative action.

We would not care to contemplate what *might* have happened to the paper industry without the steadying influence and genuinely constructive work of our War Service Committees in connection with the Pulp and Paper Section of the War Industries Board.

In this connection it is eminently proper that our Association, as representing the industry, should record its appreciation of the very efficient and fair-minded work of the gentlemen who constituted the Pulp and Paper Section. Their attitude was always one of helpfulness and consideration, while having in mind and always properly protecting the Government's interests.

If our industry could be so thoroughly and effectively organized for war, *why* should it not, through this Association as a nucleus, be as completely and in fully as representative a manner organized for peace. We tolerated no slackers in the war and no self-respecting man cared to take a position that would sub-

ject himself to such criticism, but I maintain that the man who will accept the benefits of the helpful co-operation and unselfish service of the industrial organization that is fighting his battles and trying to solve the problems of his industry without taking active membership and assuming some responsibility in its affairs, is an industrial slacker. We have some such in the paper business, men who always want to attend the conventions and banquets and often desirous of special favors at that time, but who, through absolute indifference, or possible fear to enter into any co-operative effort, have never identified themselves with our Association or any of its constituent divisions. There is something radically wrong when an industry like ours numbering some 700 mills shows but 305 members of the National Association that is devoted to the study of the important problems that vitally affect its welfare. The state of mind which makes men fear to associate with their competitor and makes them suspicious of him must go. It is out of place in this new era of American business. Neither the individual manufacturer nor the Government can work out so successfully the many serious economic and business problems involved as can groups of associated producers in co-operation.

To quote Edward N. Hurley: "Too many American manufacturers center all their energy and attention upon their particular establishment and fail to take a broad view of their industry as a whole. Men at the head of factories need the point of view of what might be called the 'statesmanship of business.' They need to appreciate the fact that their plant is part of a great industry; that their individual welfare depends very largely on the welfare and progress of the industry as a whole, and of industry in general. Whatever promotes the welfare of other concerns in industry and the welfare of that broad group we call the public, is bound to react favorably on individual concerns."

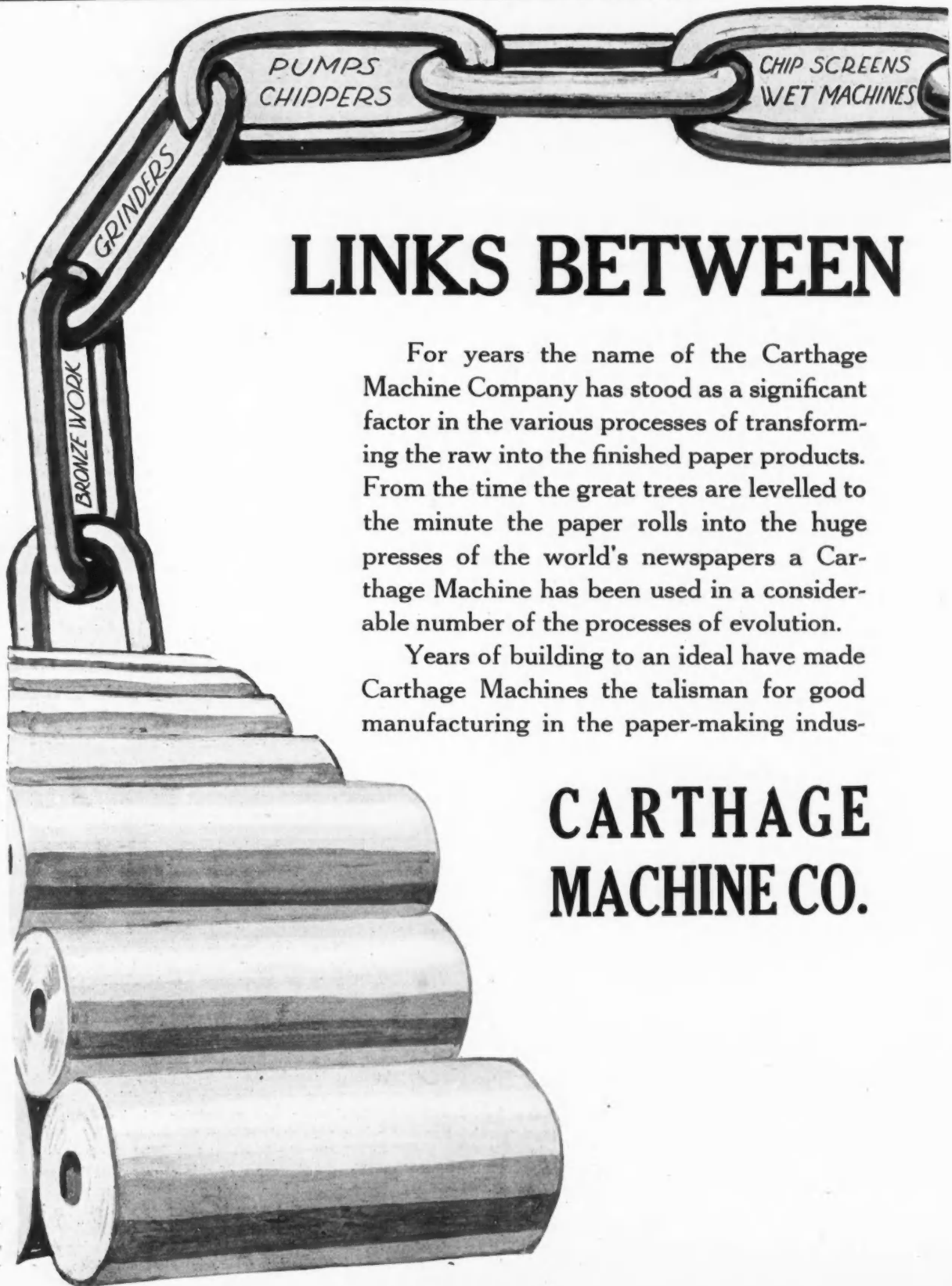
Broadening Association Work

I have made these comments on association work in general to focus your attention on a suggested plan and recommendation from the Executive Committee which will be presented in detail later for your consideration, and which has for its object the broadening of the work of the Association, defining somewhat more clearly the scope of its functions and arranging, as we believe, for a plan of membership which will eventually lead to a very complete mobilization of the industry for all legitimate purposes.

National Industrial Conference Board

Our Association, as the National Association of the industry, is a member of the National Industrial Conference Board, on which you have been ably represented by former President Daniels and Mr. C. A. Crocker, while I have also had the very great privilege of participating in this work in your behalf during the past year. The National Industrial Conference Board is composed of national associations of manufacturers engaged in the various major industries in the United States. It is recognized as the authoritative spokesman of the manufacturing interests of the country. Indeed its standing in this respect was made secure by the administration requesting the board to name the industrial representatives on the National War Labor Board with whose important activities you are familiar. One of our members, C. A. Crocker, was named for this important work.

I wish I might adequately convey to you the really great and constructive work that the National Industrial Conference Board is doing for the manufacturers of this country. It is approaching the major problems in a spirit of scientific investigation and research and its conclusions are based on careful study of facts, and not on controversial theories. The joint deliberation of representative manufacturers assisted by a staff of experts in various fields of industrial economics determined to seek the

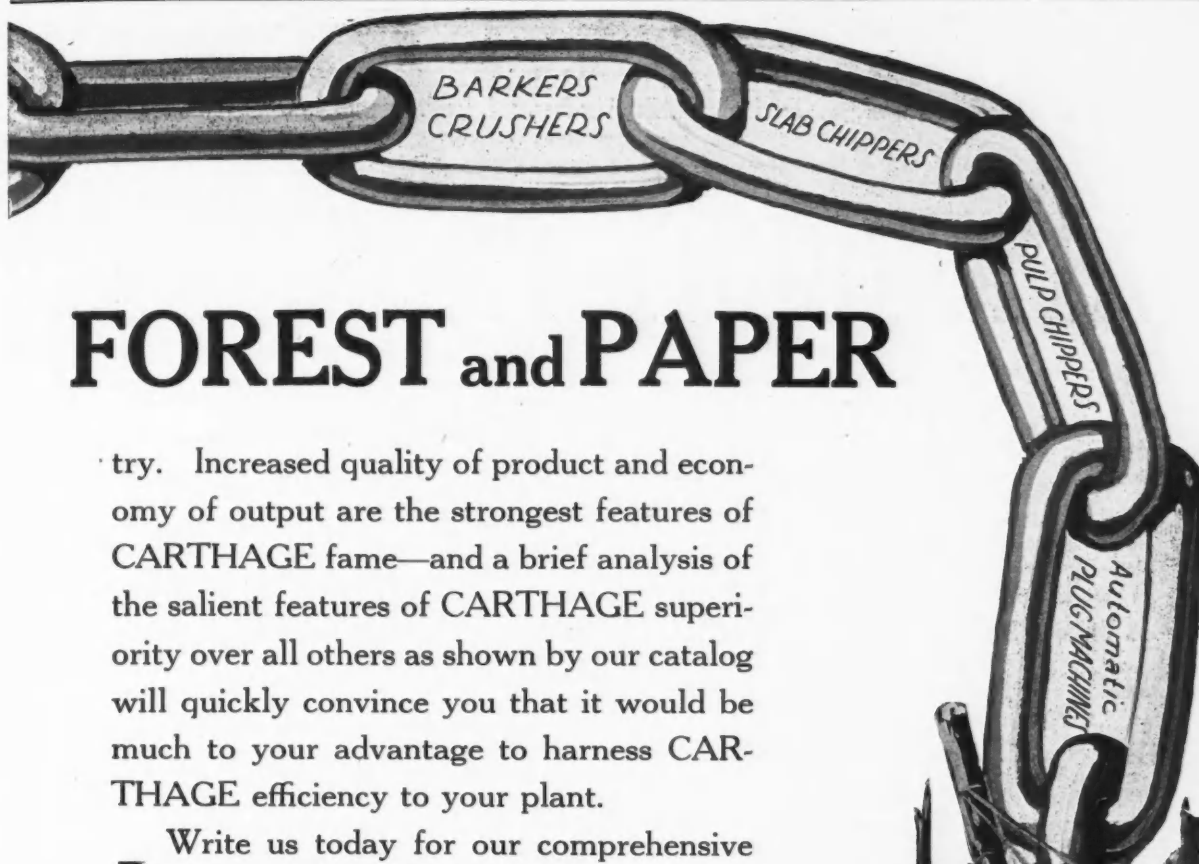


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H. E. ATTERBURY, Secretary

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truth leads to sound conclusions. The board is guided in its policy solely by a desire to promote the nation's industrial prosperity and stability, for the just and joint benefit of employers, employees and the public and, with a declaration of policy to which no fair-minded citizen can object, its activities, to my mind, bid fair to provide for a sane and orderly solution of our industrial problems. I feel that the members of our Association have not known as much of the current work of the board as they should, and in order that they may be informed we have supplied the board with a list of our membership to whom will be mailed from time to time reports of work under way and conclusions reached. The board needs our financial support. At present there are only about a dozen individual paper companies contributing to its revenues something like \$7,000 per year, in amounts ranging from \$100 to \$1,000. I would like to see a contribution from the paper industry of at least \$20,000 and I appeal to the progressive men in the industry to see to it that their concerns participate in the support of this most useful and promising activity.

Government Relation to Industry

The astounding spectacle of centralized control of industry which we have witnessed during the war period has confused many and turned the heads of some. It is high time for us to pause a moment and consider as sane men where we are heading. Experience has proven that the depositaries of power, who are, after all, mere delegates of the people, are quite as ready (when they think they can count on popular support) as any organs of autocracy to assume arbitrary power and encroach unduly on private activity. The truth is, the great majority of things are *worse* done by the intervention of government than the individuals most interested in the matter would do them. The grounds of this truth are expressed with tolerable exactness in the popular dictum, that people understand their own business and their own interests *better*, and care for them *more*, than the Government does, or can be expected to do. This maxim holds true throughout the greatest part of the business of life, and, wherever it is true, we ought to condemn every kind of government intervention that conflicts with it. The inferiority of government agency, for example, in any of the common operations of industry or commerce, is proved by the fact that it is hardly ever able to maintain itself in equal competition with individual agency, where the individuals possess the requisite degree of industrial enterprise, and can command the necessary assemblage of means.

If we are to look forward to the prosperity of all, and lay a sound foundation for the individual betterment of men, women and children, we must give a freer course to co-operation in industry. The war has compelled co-operation and the government under this compulsion has fostered what it previously punished as criminal. The public gains nothing by denying the freest scope to honest business and it is the function of government to provide only such intelligent supervision which, while allowing all legitimate freedom, will aim at the elimination of abuses and not at the circumscribing of opportunities rightly used.

There is another feature in this matter that might be easily overlooked, and that is the effect upon the character and development of our people. A people who look habitually to their government to command or prompt them in all matters of joint concern, who expect to have everything done for them except what can be made an affair of habit and routine, have their faculties only half developed; their education is defective in one of its most important branches. The only security against political slavery is the check maintained by the diffusion of intelligence, activity and public spirit among the people. Experience proves the extreme difficulty of permanently keeping up a sufficient high standard of those qualities; a difficulty which increases as the advance of civilization and security removes

one after another the hardships, embarrassments, and dangers against which individuals had formerly no resource but in their own strength, skill, and courage. It is therefore of supreme importance that all classes of the community should have much to do for themselves; that as great a demand should be made upon their intelligence and virtue as it is equal to; that the government should not only leave as far as possible to their own faculties the conduct of whatever concerns themselves alone, but should suffer them or rather encourage them to manage as many as possible of their joint concerns by voluntary co-operation.

In proportion as the people are accustomed to manage their affairs by their own active intervention, instead of leaving them to the government, their desires will turn to repelling tyranny rather than to tyrannizing; while in proportion as all real initiative and direction resides in the government, and individuals habitually feel and act as under its perpetual tutelage, popular institutions develop in them not the desire of freedom, but an unmeasured appetite for place and power; diverting the intelligence and activity of the country from its principal business to a wretched competition for the selfish prizes and the petty vanities of office.

Relations to Labor

No subject needs more careful study or more thoughtful and sympathetic attention than the relations between industry and labor. The experiences of this war have taught the value of human co-operation. The spirit of brotherhood has been developed through common danger and common suffering. The hope of the future lies in the perpetuation of that spirit and its application to everyone of the many phases of this labor problem. The really big problem in the bringing together of employer and employee upon a new basis of complete co-operation, so that industry may realize its full possibilities and its participants may all have fair shares of present profit and future opportunity. The application of right principles never fails to effect right relation; attitude and spirit are all important on both sides, and only as the parties in industry are animated by the spirit of fair play and justice to all will any plans which they may mutually work out succeed.

A labor policy which is economically sound, systematically organized and that recognizes with clearness and sympathy the social interests involved will lead to a higher degree of individual development in the worker and more genuine contentment in industry.

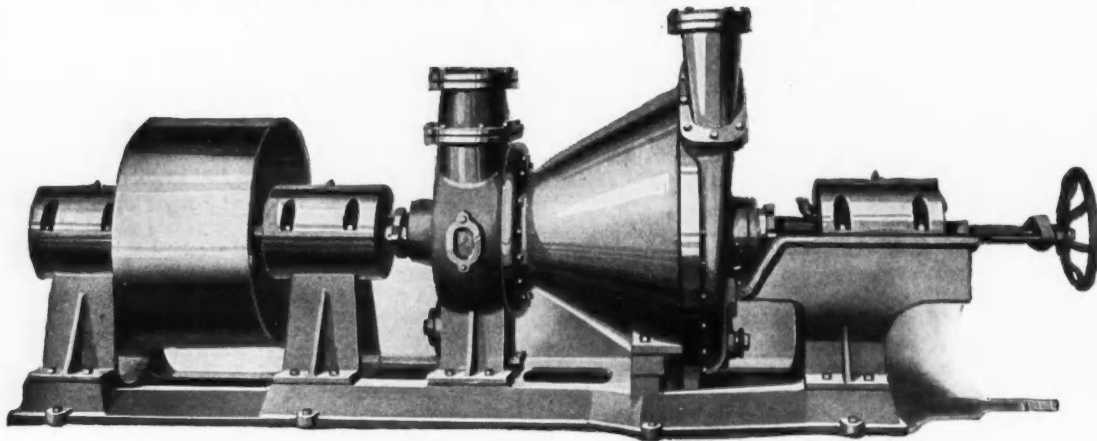
Industrial unrest is primarily due to the lack of a healthy understanding between the parties to industry and one of the principal reasons for this lack of understanding is that we have apparently few really American workmen. We find the American-born on farms, in offices, as foreman or superintendent, or engaged in a small way in individual enterprises. A very considerable portion of the workers of this country do not speak English. There are other things in their lives which mean more to them than being Americans. We already have too much in this country of that spirit which is manifesting itself in the class wars in Russia and Germany. We should lend all encouragement and aid to the practical work now under way for the Americanization of those who have made this country their *working place*, but have never absorbed the spirit and ideals which true Americanism implies.

Technical Research

It is to be hoped that one lesson of the war will be increased respect for expert knowledge on the part of those to whom is intrusted the difficult matter of supervising the activities of our industry. The future has no rewards for ignorance. Improved processes applied with superior skill and diligence can be our only answer to the pressing questions of sharp competition at home and a successful exploitation of foreign markets.

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I wish, in the name of the American Paper & Pulp Association, to thank the members of the Technical Association for joining us in our deliberations this morning. Your work is fundamental and your patient and intelligent research is laying a foundation of correct knowledge sorely needed in this industry. I desire to publicly commend this work, and to urge upon the industry as a whole, hearty co-operation with and loyal support of your association. I recommend that every mill through its active management or its technical staff become identified with this work.

Vocational Training

It is with particular pleasure that I commend to your attention and ask your approval for the proposed course of instruction for the employees of the pulp and paper mills in the United States and Canada that has been prepared by and is the joint work of the Technical Association of the Pulp & Paper Industry of the United States and the Technical Section of the Canadian Pulp & Paper Association. This course has been outlined by a carefully selected committee representing every branch of the industry. In a nutshell, the purpose of it is to afford instruction in the art and practice of paper making to every employee wherever located who takes an interest in his work and desires to make himself a better craftsman. No lesson has been more thoroughly taught us during the past few years than that of the necessity for better educated workmen and more highly trained technical supervision if we are to improve our product and enter more widely, as we must hereafter, into the trade of the world. We cannot go to the better trained men that we need unless we take vigorous action along the lines suggested by the Vocational Educational Committee. Moreover, the mill owners must realize the obligations which they owe to the communities in which they operate, to do all they can to assist in educating the younger generation in the processes many of them will soon enter upon. There is no question but that the public educational authorities will everywhere welcome the work proposed by the pulp and paper industry. But, in addition to what these authorities do, we must have the active, wholehearted support of the mill owners and managers themselves in order that the proper encouragement may be given to the employees who seek to increase their knowledge of pulp and paper making. It will require a considerable sum of money to prepare and distribute the text books suggested, but the amount is after all insignificant in comparison with the magnitude of the interests involved. Favorable action on this question has already been taken by the Canadian Pulp & Paper Association, and I urge all American mills to respond generously to the appeal for financial aid to place the work on a sound basis.

Traffic Matters

Improvement in transportation facilities, equitable and fair rates, proper classification of product, prompt and efficient freight service are essential to the success of our industry, and it is very fitting, therefore, that a body of men, expert in these matters and closely affiliated with the pulp and paper industry, have organized "A PULP AND PAPER TRAFFIC LEAGUE" for the express purpose of securing fair and reasonable transportation rates, rules and practices of general application, and to otherwise conserve the traffic and transportation interests of its membership through co-operation and negotiation with the government authorities and the carriers. The League will naturally handle matters of general interests and not purely local problems. I commend this movement to the consideration of our membership.

Cost Accounting

Trade associations are business organizations, formed for business purposes. They gather and disseminate information regarding costs, volume of business and production. This informa-

tion is valuable, but it would be very much more so if there was not such great lack of uniformity in the methods in use. If some are using one method of figuring costs and some another; if some are including items which others are ignoring, the difficulty of getting these various figures on a comparable basis is readily apparent.

The answer to this problem is uniformity in cost accounting methods and nomenclature. It is not possible to devise a system which will fit the business of every concern in an industry to the most minute detail, but it is possible to determine what items should go into cost, and also to say at just what point they should go in.

One of the newer plans to co-operate which can be made effective through trade associations is to have the accountants, bookkeepers and cost men from the various competing factories form an organization for the purpose of discussing their methods of arriving at costs.

In our own industry a very efficient cost section known as the "Cost Association of Paper Manufacturers" is now in successful operation, is organized on a basis of the broadest usefulness to the industry and I urge active participation in its work by all our members.

Tariff Matters

Within the next year there will probably be more or less political agitation relative to tariff matters. It behooves this industry to prepare itself for whatever may come. I would, therefore, urge as one of our activities for the coming year a careful study of tariffs, past and present, an accumulation of information as to the views of individual manufacturers, and such other information as may seem necessary to an intelligent consideration of the subject; and finally, a conference between representatives from the various branches of the industry for the purpose of reconciling conflicting views where they may appear, and mapping out a plan of procedure which will show a united front when it becomes necessary to present our views to whatever body may have the matter in charge, whether the Tariff Commission or Congressional Committees.

Foreign Trade

Our trade associations have neglected to a degree their opportunities relating to foreign trade. The task is admittedly too large for any one manufacturer and only by associated effort can it be made successful. The creation of foreign trade for manufactured products is a difficult problem. A manufactured article does not sell itself abroad as does a bushel of wheat. It must either fill a new demand or displace a similar article from another country. The war has created an unusual opportunity for developing our export trade. With the restoration of peace we shall surely be, for a few years at least, the leading export nation of the world. Export trade is a stabilizer of production, a means of keeping mills at capacity operation, a reducer of production costs, a remedy for unemployment, an anchor to windward in time of local depression. Groups of manufacturers must pool their endeavors to get results. The Webb bill may prove of great assistance in providing opportunity for enlarged freedom of action, but at best is only a slight advance. It needs the background of large undertakings and wide experience. We commend to our members the use of the facilities offered by such associations for export as have already demonstrated their strength and stability, and particularly commend the use of well established concerns whose broad Americanism has never been questioned and whose interests lie in the upbuilding of a permanent American export trade.

For the last two years exports of all grades of paper have been abnormally large as was to be expected, since we were practically the only source of supply. Shipments, however, were very much curtailed by lack of facilities and excessive carrying charges. Freight rates from our seaboard to foreign countries

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should be lowered to the extent at least of giving us a fair chance of competing with European shippers. It is likewise to be hoped that there will be established such co-operation between the Shipping Board and the Railroad Administration as will make for a normal flow of the products of our mills to the seaboard without constant impediments put in the way by the Railroad Administration, like the denying our exports of free lighterage at seaboard.

Forest Resources

Our industry would be lacking in foresight did it not recognize the immediate necessity of well considered measures for the conservation of our raw material supply. There are many problems connected with this matter of an adequate and continued supply of paper making materials. This association should interest itself actively in all movements looking to the careful protection, the wisest conservation and the most economical utilization of our forest products. A complete inventory of our forest resources is imperatively needed.

A dependable census showing quantity of standing timber, classified by regions, by species and quality and by accessibility would be the best kind of a guide to any legislative steps that may be necessary to encourage development, right use and perpetuation of these resources. Our country is about to undertake a new census and our association should see to it that complete information as to our forest resources be made a feature of that census and co-operate with the authorities to make it of greatest possible value.

Another most important topic to which our association should give careful study is the development of water power and storage of water. Its importance to our industry needs no argument and it is our duty to see that State and Federal attitude and legislation are intelligent and helpful while duly protecting any public interests and rights.

I have endeavored to bring to you some concrete suggestions for definite lines of action, but through it all has been running the thought that whatever we do will simply be our contribution toward the industrial and social progress of our fair land.

The problems of the future loom large before us. By the spirit in which we approach them will our efforts at their solution be judged by future generations. To be permitted to assist even a little in these great tasks is an honor and a privilege to anyone. And all can help even though it be in inconspicuous ways. May it be that out of the great catastrophe of war which has forced upon us conditions entirely new may arise a new and better appreciation of human relationships and a truer perspective of the things really worth while in this world.

SECRETARY L. B. STEWARD'S REPORT

L. B. Steward, the secretary-treasurer of the association, made the following report:

To the members American Paper and Pulp Association.
Gentlemen:

We beg to submit herewith the following report of the affairs of the American Paper and Pulp Association for the fiscal year February 1, 1918, to January 31, 1919:

INTRODUCTION

The past year is unique in the annals of the Association which is now entering its 42d year. At the beginning of our fiscal year the United States had been at war for 10 months. The various bodies that had already been created by the Government for handling the emergency problems that had arisen on account of the war were beginning to perform the functions for which they were designed. Early in the previous year, at the request of the Council of National Defense our Association had appointed a War Service Committee for the purpose of advising with and assisting the Government in regulating the pulp and paper industry in keeping with

war conditions and necessities. With one or two exceptions the Committee had not been called upon to act, however, until March, 1918. A brief history of its activities will perhaps not be amiss at this point as a matter of interest to every member and as a desirable record in the archives of the Association.

WAR SERVICE COMMITTEE

The first serious development growing out of war conditions to affect our industry was the so-called "Saturday Closing Order," emanating from the United States Fuel Administration, designed to save fuel by curtailing the product of Boxboard mills. This order became effective January 9, 1918, and, after being in operation for several weeks, there was a general feeling on the part of many manufacturers that the plan was impracticable and not productive of the desired results. The Executive Committee of the War Service Committee with the Secretary visited Washington on March 19, 1918, and, after a conference with the Fuel Administration, that body on March 20 issued an order rescinding the "Saturday Closing Order."

The Fuel Administration, however, continued its activities with the expectation of devising more effective methods of handling the situation, having in mind not only the saving of fuel but the conservation of transportation and the release of labor to more essential industries.

In the meantime, the urgency and seriousness of the situation was realized and the War Service Committee met in conference on April 5, and again on April 19, when it was directed that the Secretary should spend two days a week in Washington for the purpose of keeping in direct touch with the changing conditions. This program was immediately carried out and the Secretary continued these weekly visits until November, 1918.

In June the Pulp and Paper Division of the War Industries Board was created with William B. Colver as chief, and T. E. Donnelley and S. L. Willson as his assistants. Later Mr. Colver resigned and Mr. Donnelley succeeded him as chief in July, 1918. The appointment of H. W. Nichols, as a member of the Division, was made in August.

In order to make the War Service Committee fully representative of the Pulp and Paper Industry a new committee was appointed, without reference to membership in the association, designed to be representative of classified branches of the industry. Nineteen committees were thus organized, and the chairmen of these committees formed the Main War Service Committee of the Pulp and Paper Industry of the United States. A list of the committees follows:

WAR SERVICE COMMITTEE OF THE PAPER INDUSTRY OF THE UNITED STATES

L. B. Steward, secretary, room 605, 18 East 41st Street, New York City.

Geo. W. Sisson, Jr., chairman, Racquette River Paper Company, Potsdam, New York.

L. B. Steward, secretary, American Paper & Pulp Association, 18 East 41st Street, New York City.

F. L. Moore, Newton Falls Paper Company, Watertown, New York.

F. L. Stevens, Stevens & Thompson Paper Company, North Hoosick, New York.

A. D. Coffin, C. H. Dexter & Sons, Windsor Locks, Conn.

W. J. Raybold, B. D. Rising Paper Company, Housatonic, Mass.

M. E. Marouse, Bedford Pulp & Paper Company, Richmond, Va.

L. E. Nash, Nekoosa-Edwards Paper Company, Port Edwards, Wis.

H. P. Carruth, Mead Pulp & Paper Company, Dayton, Ohio.

F. J. Sensenbrenner, Kimberly-Clark Company, Neenah, Wis.

F. S. Harrison, Halltown Paper Board Company, Halltown, W. Va.



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MINNEAPOLIS
ST. PAUL

W. J. Eisner, Newark Paraffin & Parchment Paper Company, 90 West Street, New York City.

Phillips Kimball, Liberty Paper Company, 52 Vanderbilt avenue, New York City.

Allison Dodd, E. H. Davey Company, Bloomfield, N. J.

G. F. Merriam, Holyoke Card & Paper Company, Springfield, Mass.

B. A. Van Winkle, Hartford City Paper Company, Hartford City, Ind.

D. A. Smith, District of Columbia Paper Mfg. Company, Washington, D. C.

W. A. Forman, The Barrett Company, 17 Battery Place, New York City.

J. E. Campbell, Dexter Sulphite Pulp & Paper Co., Dexter, New York.

C. W. Lyman, International Paper Company, 30 Broad street, New York City.

Martin Cantine, Martin Cantine Company, Saugerties, New York.

L. K. Southard, Box 5193, Boston, Mass.

I. C. Blandy, American Wood Board Company, Schuylerville, New York.

W. F. Brunner, Paterson Parchment Paper Company, Passaic, New Jersey.

SUB-COMMITTEES OF THE WAR SERVICE COMMITTEE OF THE PAPER INDUSTRY OF THE UNITED STATES

Binders Board Manufacturers Association

Allison Dodd, president, E. H. Davey Company, Bloomfield, N. J.
E. C. Betz, secretary, Monroe Binder Board Company, Monroe, Mich.

R. W. Post, president and treasurer, Westport Paper Company, Westport, Conn.

Blotting Paper

D. A. Smith, vice president, District of Columbia Paper Manufacturing Company, Washington, D. C.

W. H. Eaton, vice president and treasurer, Eaton, Dikeman Company, Lee, Mass.

R. S. Crump, president, Richmond Paper Manufacturing Company, Richmond, Va.

Book Paper Manufacturers Committee

F. J. Sensenbrenner, first vice president, Kimberly-Clark Company, Neenah, Wis.

John G. Luke, president, West Virginia Pulp & Paper Company, 200 Fifth avenue, New York City.

A. G. Paine, Jr., president, New York & Pennsylvania Company, 200 Fifth avenue, New York City.

A. H. Nevius, vice president, The Miami Paper Company, West Carrollton, Ohio.

Coated Paper

Martin Cantine, president, Martin Cantine Company, Saugerties, New York.

Thos. Luke, vice president, West Virginia Pulp & Paper Company, 200 Fifth avenue, New York City.

Felix Pagenstecher, secretary, Kalamazoo Paper Company, Kalamazoo, Mich.

Grellet Collins, president, Dill & Collins Company, 140 Sixth street, Philadelphia, Pa.

D. B. Morris, Maine Coated Paper Company, 200 Fifth avenue, New York City.

I. O. Van Duzer, Louis De Jonge & Co., 73 Duane street, New York City.

Roger D. Smith, vice president, S. D. Warren Co., Boston, Mass.

Cover Paper Manufacturers Association

W. J. Raybold, secretary, B. D. Rising Paper Company, Housatonic, Mass.

G. A. Galliver, president and general manager, American Writing Paper Company, Holyoke, Mass.

H. A. Moses, president and treasurer, Strathmore Paper Company, Mittineague, Mass.

Felts

W. A. Forman, manager, The Barrett Company, 17 Battery place, New York City.

H. M. Nicholls, secretary, Lockport Paper Company, Lockport, N. Y.

R. S. Crawford, Certain-teed Products Corporation, St. Louis, Mo.

Geo. M. Graves, Bird & Son, East Walpole, Mass.

Glazed and Fancy Paper Manufacturers Association

G. F. Merriam, president, Holyoke Card & Paper Company, Springfield, Mass.

I. O. Van Duzer, Louis De Jonge & Company, 73 Duane street, New York City.

Frank O. Walther, Walther & Company, 72 Duane street, New York City.

W. H. Shuart, Springfield Glazed Paper Company, Springfield, Mass.

Glassine and Greaseproof Paper

B. A. Van Winkle, treasurer and general manager, Hartford City Paper Company, Hartford City, Ind.

Gummed Paper Manufacturers Association

Phillips Kimball, secretary, Liberty Paper Company, 52 Vanderbilt avenue, New York City.

S. G. Leitch, manager, Gummed Products Company, Troy, Ohio.

Miscellaneous Pulp & Paper Board Specialties

F. S. Harrison, president and general manager, Halltown Paper Board Company, Halltown, W. Va.

H. E. Lindquist, Chemical Paper Manufacturing Company, Holyoke, Mass.

W. J. Parrot, MacAndrews & Forbes Company, 200 Fifth avenue, New York City.

George W. Wheelwright, Jr., Geo. W. Wheelwright Paper Company, Boston, Mass.

R. C. Tilden, International Paper Company, 30 Broad street, New York City.

S. E. M. Crocker, Crocker-Burbank Company Association, Fitchburg, Mass.

Pulp Manufacturers Association

J. E. Campbell, president and treasurer, Dexter Sulphite Pulp & Paper Company, Dexter, N. Y.

E. W. Kiefer, vice president, Port Huron Sulphite & Paper Company, Port Huron, Mich.

T. J. Stevenson, Riordon Sales Company, Ltd., Montreal, Canada.

Rope Paper and Rope Paper Sack Manufacturers

L. K. Southard, Box 5193, Boston, Mass.

E. B. Allen, vice president, Adams Bag Company, Cleveland, Ohio.

John A. Manning, president and treasurer, John A. Manning Paper Company, Troy, N. Y.

R. T. Spencer, president and treasurer, Warren Manufacturing Company, Woolworth building, New York City.

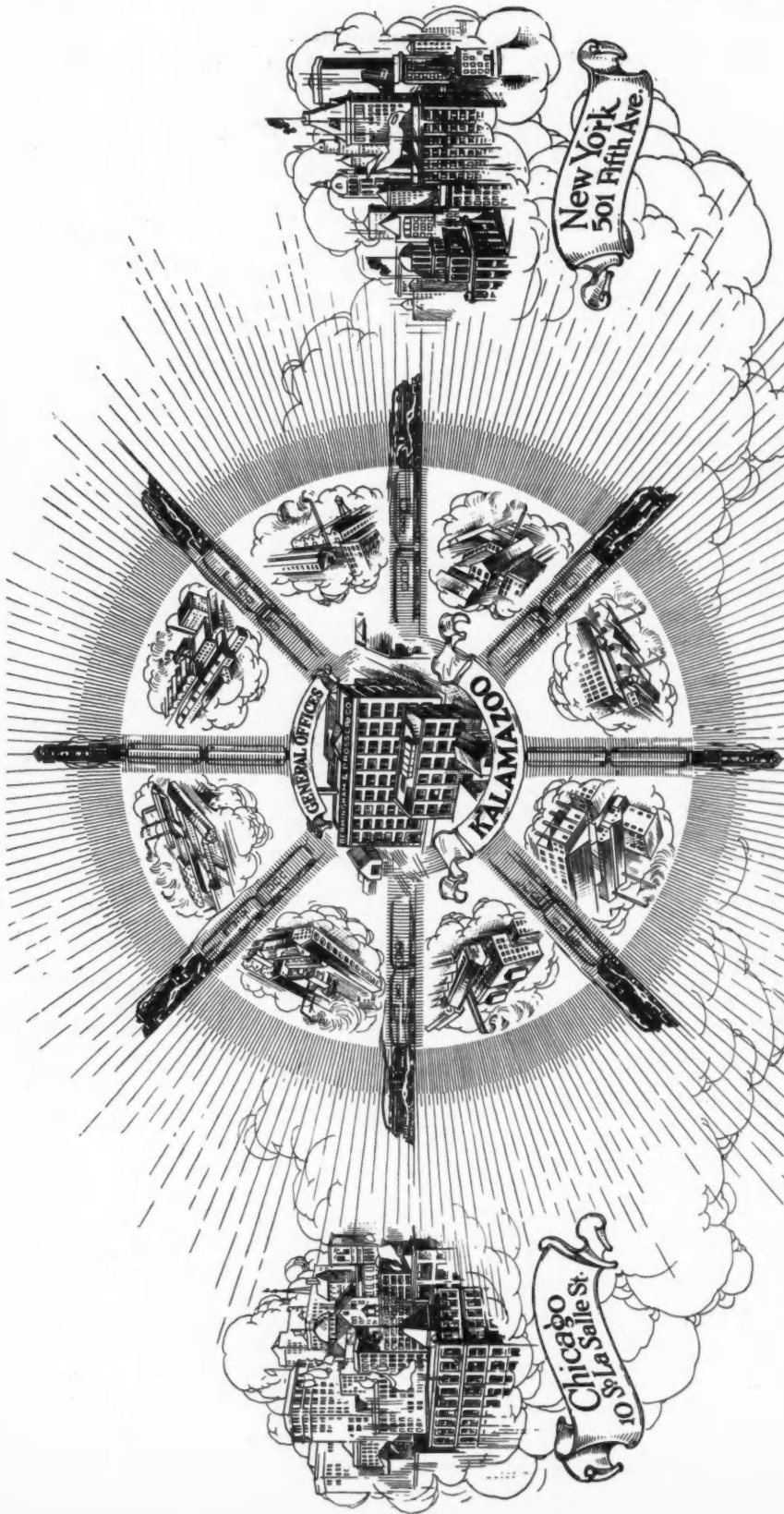
M. A. Thomas, Wardlow-Thomas Paper Company, Middletown, Ohio.

Tag and Document Manilla Paper Manufacturers

I. C. Blandy, president, American Wood Board Company, Schuylerville, N. Y.

D. C. Everest, secretary and general manager, Marathon Paper Mills Company, Rothschild, Wis.

J. M. Gamble, Brownville Board Company, Brownville, N. Y.



We are located in the heart of the greatest paper-making center in the world and are ready at all times to render service such as can be had only through an organization located as we are.

Bermingham and Prosser Co.

Paper Manufacturers

KALAMAZOO, MICHIGAN

10 So. La Salle St.
CHICAGO

501 Fifth Avenue
NEW YORK

J. B. Rieg, manager of sales, Detroit Sulphite Pulp & Paper Company, Detroit, Mich.

Chas. Vose, vice president, Hollingsworth & Vose Company, Boston, Mass.

Technical Association

H. P. Carruth, Mead Pulp & Paper Company, Dayton, Ohio.

H. E. Fletcher, Fletcher Paper Company, Alpena, Mich.

G. E. Williamson, Strathmore Paper Company, Mittineague, Mass.

F. C. Clark, in charge of Paper Work, Bureau of Standards, Department of Commerce, Washington, D. C.

Tissue Paper Manufacturers Association

A. D. Coffin, president and treasurer, C. H. Dexter & Sons, Inc., Windsor Locks, Conn.

W. R. Hobbie, president, The Phoenix Paper Company, Greenwich, N. Y.

J. B. Rieg, manager of sales, Detroit Sulphite Pulp & Paper Company, Detroit, Mich.

Vegetable Parchment Manufacturers Association

Wm. F. Brunner, Paterson Parchment Paper Company, Passaic, N. J.

J. M. Dohan, Glen Mills Paper Company, Philadelphia, Pa.

Waxed Paper Manufacturers Association

W. J. Eisner, Newark Paraffine & Parchment Paper Company, 90 West street, New York City.

J. Kindleberger, president and general manager, Kalamazoo Vegetable Parchment Company, Kalamazoo, Mich.

S. M. Ramsey, president, Waterproof Paper & Board Co., Cincinnati, Ohio.

Writing Paper Manufacturers Association

W. J. Raybold, secretary, B. D. Rising Paper Company, Housatonic, Mass.

G. A. Galliver, president, American Writing Paper Company, Holyoke, Mass.

H. A. Moses, president, Strathmore Paper Company, Mittineague, Mass.

E. H. Naylor, secretary, Writing Paper Manufacturers Association, 18 East 41st street, New York City.

Wrapping Paper Manufacturers Service Bureau

F. L. Moore, president, Newton Falls Paper Co., Watertown, N. Y.

Henry W. Stokes, president, York Haven Paper Company, Philadelphia, Pa.

A. J. Stewartson, secretary, Wrapping Paper Manufacturers Service Bureau, 2 Rector street, New York City.

D. C. Everest, secretary and general manager, Marathon Paper Mills Company, Rothschild, Wis.

A. M. Fletcher, president, Fletcher Paper Co., Alpena, Mich.

A. W. Maynes, secretary, Fox Paper Company, Lockland, Ohio.

A. S. Page, Volney Paper Company, Fulton, N. Y.

M. L. Madden, vice president, Hollingsworth & Whitney Company, Boston, Mass.

The committees representing the larger divisional organizations dealt direct with the Pulp and Paper Division of the War Industries Board. Other committees representing the smaller organized and unorganized branches were not only formed by the Association, but conducted their negotiations with the War Industries Board, and other Departments in Washington, through the American Paper and Pulp Association and its secretary. Frequent meetings were held in the Association rooms, New York, and the secretary accompanied the committees on all their visits to Washington. Thus the Association looked after the interests of its members and the entire industry in the questions of priority for coal and priorities in

production, including materials, equipment, supplies, and essential repair parts.

The Government was guided in the matter of deciding the essentiality of Pulp and Paper Industry. It was at first thought by the Fuel Administration that there existed an unnecessarily wide variety of production, but the fallacy of this viewpoint was soon proven and the industry looked upon as most essential in all its variety, not only by the Fuel Administration, but by the Food Administration, the many divisions of the War Industries Board, and also the Labor Department, the various branches of which directed their efforts toward aiding the industry in many ways.

In fact the general utility of paper, not only for war purposes but for the national welfare, became so apparent that the conservation section of the War Industries Board directed its efforts to a campaign for the saving of paper in all walks of life.

In July the Pulp and Paper Division of the War Industries Board became thoroughly organized and the War Service Committee were summoned to Washington to consult with the Board in the matter of restrictions and regulations affecting the many branches of the industry. The work thus begun was continued assiduously throughout the summer, the Pulp and Paper Division calling on the committees very often on short notice and the members responding willingly and eagerly in their desire to assist the Government in its most unprecedented work.

Regulations affecting almost every branch of the industry had either been promulgated by the Division or were in process of formation when the signing of the armistice, November 11, 1918, removed the necessity for further regulations by the Government agencies. All restrictions against the use of paper were almost immediately annulled; regulations were either withdrawn or revised between the committees and the War Industries Board are issued by the latter body with recommendations that they be adopted by the trade as permanent trade customs.

So that by January 1, 1919, the War Industries Board had practically restored to our industry all its previous rights, privileges, and conditions. The paper business perhaps suffered less on account of the uncertainties of war than almost any other large industry. The manufacturers were fortunate not only in having men of ability and standing among them, who willingly gave their time and expenses to the work of the committees, but they were particularly fortunate in the personnel of the Pulp and Paper Division of the War Industries Board—men of understanding and ability who rendered the Government and the industry alike conspicuous service to the sacrifice of their own personal interests.

CONFERENCE WAR SERVICE COMMITTEES

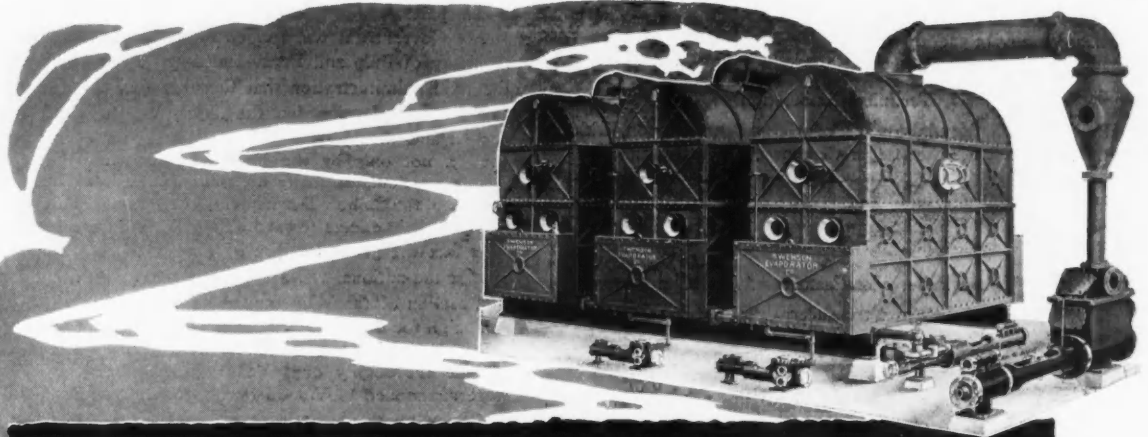
Atlantic City, Dec. 2-5, 1918

Early in November the Chamber of Commerce of the United States, which had fostered many of the War Service Committees, and by arrangement with the War Industries Board had certified these committees to that board, called a conference of War Service Committees at Atlantic City for the first week in December. This conference was styled a "War Emergency and Reconstruction Congress." Four thousand delegates attended the conference, representing 373 War Service Committees.

Thirty-one resolutions were passed by the Congress—resolutions covering every phase of the return to peace conditions. A copy of the January issue of the "Nation's Business," giving a report of this conference including the resolutions passed, was sent by the American Paper and Pulp Association to all paper mills in the United States.

Every one of the nineteen War Service Committees, affiliated with the American Paper and Pulp Association, was represented at this conference and together assumed their full share of the responsibilities leading up to the declaration of the principles of industrial peace.

Through the secretary of the association the chairmen of the



Improvements Produce Profits

Swenson Evaporators Have Proved Producers of Increased Output and Economy

Every successful mill management in the United States and Canada has an open mind on cost of production. With each yearly financial statement revealing effects of continued high cost of both labor and materials the recovery end of the mill is demanding and receiving more and more attention.

In anticipation the American engineer has not been satisfied with merely supplanting European equipment. Methods have been developed to especially meet American and Canadian conditions and requirements. This has resulted in the elimination of "firing up," thereby saving labor, fuel and wear and tear on equipment; also a more complete and effective washing of pulp, the control of obnoxious odors, increasing the percentage of recovery, cutting the cost of fuel and expensive labor, preventing shut-downs by making operation practically automatic and foolproof and capable of continued running night and day, year in and year out.

Swenson Service that goes with Swenson Reclaiming Equipment for soda, sulphate or sulphite mills, has been the choice of many of the largest and most successful firms in the United States and Canada.



SWENSON EVAPORATOR CO.
Chicago

various committees were kept advised of the arrangements as they were announced from time to time by the Chamber of Commerce; a complete program was published and distributed in advance of the convention; hotel accommodations were engaged for the members of the committees; and preliminary committee meetings arranged for in Atlantic City in order that the delegates might have an opportunity to get a proper understanding of what was expected of them, and to formulate plans accordingly for their activities.

WAR SERVICE COMMITTEE CONFERENCE New York City, Jan. 3 and 4, 1919

As an outgrowth of the Atlantic City convention, the Chamber of Commerce of the United States called a conference of the chairmen of War Service Committees in New York City on January 3 and 4, 1919 for a further discussion of industrial peace problems, and the appointment of an advisory council to the War Service Executive Committee of the Chamber. Our committees were well represented, but, as the principal problems before the conference were in relation to canceled contracts, disposition of large accumulations of raw material and manufactured goods, and the general readjustment of many branches of industry that had been adversely affected by war conditions, our industry was not directly concerned.

COST ASSOCIATION

For several years there has been more or less agitation among mills in the various sections of the country on the subject of cost accounting. Occasional meetings have been held and a few branches of the industry have, through committees appointed for the purpose, formulated and recommended certain fundamentals applicable to cost work. Some progress resulted, a few mills adopted the systems thus devised, and others, using these systems as a basis, elaborated them to the point of much higher development.

The work, however, was sporadic, and it was not until November 15, 1917, that this movement was actually launched in the interests of the industry at large. On that date, under the auspices of the American Paper and Pulp Association, a meeting was held in New York City, and a permanent cost section formed. The first president was B. A. Franklin of the Strathmore Paper Company. To Mr. Franklin is largely due the credit for the success of the section.

Regular meetings of the section were contemplated, but war conditions intervened and the second convention was not held until October 11, 1918, when 70 delegates met in Holyoke, Mass. Such keen interest was shown in the subject at this meeting that a second convention was arranged to be held in Buffalo, December 12 and 13. At this gathering there were 90 delegates, representing 65 different companies. A new organization was formed under the name of "The Cost Association of Paper Manufacturers" and a co-operative plan of cost accounting was presented to the delegates and unanimously adopted. The plan is comprehensive in every detail and will soon be presented to prospective members.

This is one of the most important organizations affiliating with our association, and its future activities should interest every paper manufacturer in the United States. The new officers of the Cost Association are:

President, D. E. Burchell.

First vice president, B. E. Hutchinson.

Secretary-treasurer, S. L. Bush.

All communications in relation to cost accounting should be addressed to S. L. Bush, secretary, Room 605, 18 East Forty-first street, New York City.

Rivers and Harbors Bill (H. R. 10069)

The most important legislation directly affecting the pulp and paper business in which the association interested itself this year was Rivers and Harbors Bill (H. R. 10069). Section five of this bill made it unlawful to discharge acids or acid wastes from any

factory into navigable waters of the United States.

This section was eliminated from the bill before it passed the House of Representatives on April 17, but, at the instance of the chief of engineers of the War Department the clause was inserted in the Senate bill. It was fortunate that the secretary learned of it in Washington the day before it went to the Conference Committee.

Not a single protest had been entered against this provision. With the assistance of Senator Calder of New York the secretary conferred with Senator Fletcher, chairman of the Committee on Commerce, who had the matter in charge, and, after explaining the menace to paper manufacturing, as well as many other industries, was advised that in all probability the objectionable clause would be eliminated from the bill. This conference was followed up the next day by a telegram from our New York office to the chairman of the Committee on Commerce outlining the disastrous possibilities of the provision and protesting against its inclusion in the bill. The section was eliminated by the Conference Committee.

Very few of our members knew of this proposed legislation but those who did were very active in urging the association to vigorously protest it. We have made more than usual mention of a matter of this nature for the reason that it is constantly being agitated by officials of the Federal Government and brought before Congress every session, and many state legislatures are periodically confronted with it. During the last year the Merchants Association of New York City was exceedingly active in urging legislation against the pollution of the Hudson River, and there seems to be a widespread movement against the dumping of factory wastes and sewage into streams and rivers.

Herein is a suggestion to our members, before it is too late, to look into the question of the most economical methods of disposing of the sewage from their mills, especially the acid wastes.

Membership

The membership of the Association at the present time is 310 companies.

Executive Council

The Executive Council and the Executive Committee have held four meetings during the past year.

Finances

The report of the Auditing Company shows that the finances of the Association are in splendid condition. There are no outstanding obligations and all dues and assessments for the fiscal year have been paid.

Statistics

Statistics covering certain branches of the industry are compiled by the Association and kept on file for the benefit of the members. Charts illustrating important statistics of the various branches of the Association are kept as a matter of record. The Association also compiles statistics in relation to the imports and exports of pulp and paper, and imports of pulpwood.

Bulletins

In the past it has been the practice of the Association to issue a weekly bulletin giving information on a variety of subjects of interest to members. The war conditions of the last year, however, have made it necessary to issue a great number of bulletins, some of considerable length, on specific matters, and for that reason the regular weekly bulletin was discontinued in July.

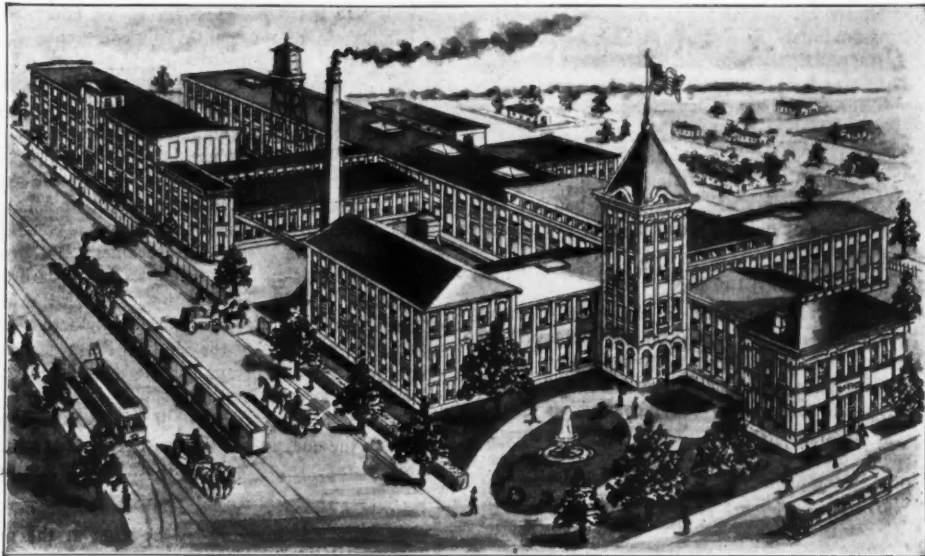
The number of bulletins issued during the year was 2,456, of which 2,144 were for the various divisional organizations; 312 bulletins were issued for the general association, 35 of which were considered to be of such importance to the industry that they were sent to all paper mills in the United States.

General Information

The Association has received, during the past year, from mem-

The "Hamilton" Felt

KNOWN IN THE MARKETS OF THE WORLD



Durable, uniform and reliable, and consequently economical to use.

Pioneer Manufacturers of
American Felts

FOR PAPER MAKERS' USE

SATISFACTION GUARANTEED

Shuler & Benninghofen

A TRIAL IS INVITED

HAMILTON, OHIO,
U. S. A.

bers and non-members, including wholesale dealers, exporters, printers, etc., 500 requests for information on a variety of subjects pertaining to the pulp and paper industry. In every instance these requests have been given careful attention and the information supplied promptly.

Import and Export Information

During the year the Association furnished the members the following reports:

- Monthly comparative statement of the imports of print paper.
- Monthly comparative statement of the imports of wrapping paper.
- Monthly comparative statement of the imports of pulp.
- Annual comparative statement of the imports of wrapping paper for the last six months of 1914 to and including 1917.
- Annual comparative statement of the imports of print paper for the years 1910 to 1917, inclusive.
- Annual comparative statement of the imports of pulp for the years 1910 to 1917, inclusive.

Federal Trade Commission

The Association was represented by the secretary at the hearings of the Federal Trade Commission on matters of importance and interest to the paper and pulp industry.

National Industrial Conference Board

The Association is a member of the National Industry Conference Board which is composed of 20 leading national associations of manufacturers. The board, as its name indicates, directs its activities to the broader national questions of interest to manufacturers.

The American Paper and Pulp Association is represented on the National Industrial Conference Board by A. B. Daniels, C. A. Crocker and George W. Sisson, Jr. During the past year the secretary has attended several of the open meetings of the board held in New York City.

Chamber of Commerce of the United States

The Association is a member of the Chamber of Commerce of the United States, Washington, D. C. During the past year particularly with reference to war service work the secretary has frequently consulted the various officials of the Chamber of Commerce of the United States and the advice and counsel thus obtained has been of great benefit.

Referenda

By virtue of its membership in the Chamber of Commerce of the United States the Association has, during the last year, voted on the following referenda.

No. 23. Proposal to discriminate against Germany in trade after the war, if necessary for self defense.

No. 24. Report of the Special Committee on Water Power Development.

National Safety Council

The Association is a member of the National Safety Council in the work of which many of our members are actively interested and engaged. There are 126 paper and pulp mills in the United States on the membership records of the National Safety Council.

Babson Statistical Organization

The Association subscribes for the service of the Babson Statistical Organization under an arrangement by which the members of the Association receive a discount from the regular rates. Fifty-eight members have taken advantage of this service and are regular subscribers through the Association.

Proudfoot's Commercial Agency

The Association is a subscriber to Proudfoot's Commercial Agency. During the past year many of our members have taken

advantage of this means of obtaining reports on various companies, organizations and associations.

Library

The most complete library of its kind, comprising books and publications on matters relating to the pulp and paper industry, is maintained in the Association rooms. During the past year 625 publications have been added to the library.

Meetings in Association Rooms

During the past year 52 meetings have been held in the Association rooms, No. 18 East Forty-first street, New York City. The total number in attendance was over six hundred.

List of Member Organizations

1. Binders Board Manufacturers Association.
2. Card Board Manufacturers Association.
3. Cover Paper Manufacturers Association.
4. Glazed and Fancy Paper Manufacturers Association.
5. Gummed Paper Manufacturers Association.
- No. 25. Report of the Special Committee on Financing the War.
6. Tissue Paper Manufacturers Association.
7. Vegetable Parchment Manufacturers Association.
8. Waxed Paper Manufacturers Association.
9. Wrapping Paper Manufacturers Service Bureau.
10. Writing Paper Manufacturers Association.

There are at the present time three more classified branches contemplating organization.

RESOLUTIONS ADAPTED

All of the recommendations incorporated in the following report of the committee on resolutions were adopted at the general meeting of the American Paper and Pulp Association on Thursday, February 6, at the Waldorf-Astoria.

Your committee on resolutions have given thoughtful consideration to many of the subjects that should invite the attention and serious consideration of your association in meeting assembled.

I therefore beg leave to report and suggest that the following resolutions be adopted.

1. National Conservation.

Whereas, The members of the American Paper and Pulp Association are directly interested in the wise conservation of our forests, and the proper utilization of our water powers; therefore be it

Resolved, That we favor a conservation policy adequate for our economic needs supplemented by investigation and educational work on the part of the Federal and State Governments in aid and encouragement of a wise and proper utilization of our natural resources, and we reaffirm our policy of co-operation for the advancement of these policies and for the proper recognition of public and private rights.

2. Industrial Education and Investigation.

Whereas, In the paper and pulp industry there is the ever increasing demand for efficient and intelligent employees and for investigation in the utilities and economies of manufacture; and

Whereas, This association has already placed itself on record as favoring constitutional Federal aid for vocational education; be it

Resolved, That this association express its hearty co-operation of the work being done by the colleges and universities of the United States in the training of young men in the fundamentals of the industry, and the investigation and research work to increase the efficiency of manufacture.

3. Standardization.

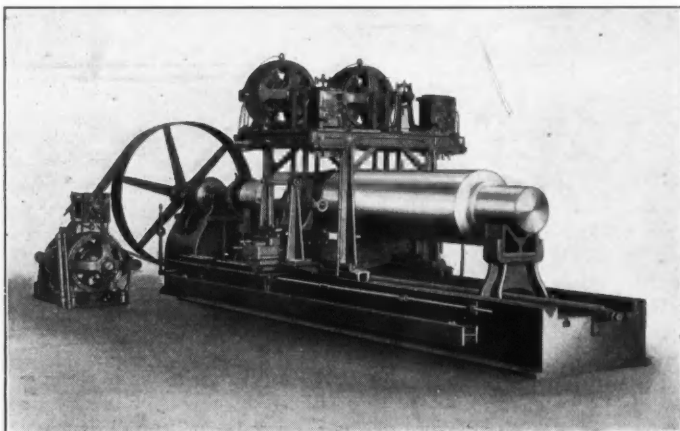
Whereas, Certain benefits were created through the exigencies of war; therefore be it

Resolved, That it is desirable to perpetuate all of the improve-

Three Requisites for
Up-to-Date Paper Mills

Chilled Roll CALENDERS

Furnished complete. Fitted with patent
ELECTRIC MOTOR LIFT
HYDRAULIC LIFT
or RATCHET LIFT
All operated from floor



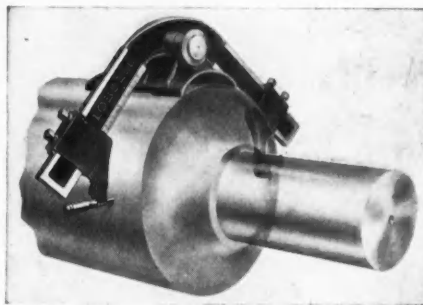
Roll Grinding Machine

PROVIDED WITH
Patent Automatic
Crowning Device

EFFICIENT

Micrometer Caliper

CORRESPOND WITH



LOBDELL CAR WHEEL CO.

WILMINGTON, DELAWARE

ments in the methods of conducting business, creating efficiency in manufacture and other advantages and efficiencies that have been obtained through the instrumentality of our various war service boards and the regulations of the paper and pulp division of the War Industries Board with special reference to simplification of processes and all other things contributing to economical production and distribution.

4. Tariff.

Whereas, It is imminent that there will be a renewed effort in the near future to revise the existing tariff laws, and it is manifestly to the interest of our industry to see that the legislative branch of our Government is possessed of the proper knowledge of our business and its tariff requirements; therefore be it

Resolved, That our present tariff laws shall be revised so as to properly conserve American industry and fully protect American labor; and, further, be it

Resolved, That this association shall place its utilities and information in the hands of the Government officials so that the interests of the paper industry will be properly conserved.

5. Immigration.

Whereas, The need for labor during the reconstruction period in this country will be great, therefore be it

Resolved, That immigration with proper regulation be permitted to meet the demands of the country for labor and the development of its industries and resources.

6. Foreign Credit.

Resolved, That we strongly favor the immediate extension by this Government of credit to our allies necessary to enable them to make their potential demands an actuality, believing that this is the major thing required to give life to a large foreign trade based upon the needs of our allies, and to restore confidence and stabilize the domestic trade situation.

7. Foreign Co-operation.

Whereas, A great spirit of military co-operation has developed in the Allies and us, and

Whereas, This spirit of brotherhood should forever be perpetuated; therefore be it

Resolved, That the American Paper and Pulp Association, for this industry, pledges to the Allies its full co-operation in an interchange of ideas and such international regulations as may be promulgated to the end that foreign trade in the future may be more equally distributed and that there may continue to grow between our allies and us as great a spirit of friendliness in the trade of peace as has existed in war.

8. Sherman and Clayton Laws.

Resolved, That we favor the repeal of the Sherman and Clayton laws, and the enactment of such legislation in their place as will safeguard honest industry and conform to the spirit and necessities of the time.

9. Railroad Control.

Whereas, The American Paper and Pulp Association is deeply interested in the intimate business relations that exist between the transportation companies and public welfare; therefore be it

Resolved, That we believe the public can best be served by utilizing the efficiency, enterprise and energy of private corporations for the continued operation of public utilities, under such public control as shall protect the public in its right to efficient service and fair rates; and at the same time assure to private capital invested in public utilities a fair return upon such capital.

10. Employment of Returning Soldiers and Sailors.

Whereas, The American Paper and Pulp Association recognizes the services rendered and sacrifices made by our boys in the fight against tyranny and autocracy; therefore be it

Resolved, That we urge upon our members to fulfill the duty which will also be a pleasure of re-employing all returning soldiers and sailors formerly in their service and assist them to secure employment in gainful occupation.

11. Forest Products Laboratory.

Whereas, The research work of the United States Forest Products Laboratory at Madison, Wis., has proved of inestimable value in the emergency created by the war and of permanent value in opening varied avenues for the better industrial utilization of forest products in the manufacture of pulp and paper; therefore be it

Resolved, That this convention recommends the services of the laboratory to all branches of the paper and pulp industry and further recommends that the laboratory shall continue to receive adequate financial support from the Government to maintain the efficient organization that has been developed during the past year.

12. Census.

Whereas, Our country is about to undertake a new census; and Whereas, A census of standing timber classified by species, quality, location, and accessibility; a census of cut-over lands that will remain temporarily or permanently in forest would secure to the paper and pulp industry information important in the conduct of its business; and

Whereas, Such a census would afford a basis for the interpretation of economic problems in forest and wood-using industries; and

Whereas, Such census would greatly aid the development of a permanent national forest policy, with respect to timber ownership, lumber export, tariff, local taxation, value of stumpage, and sundry forest problems; therefore be it

Resolved, First: The American Paper and Pulp Association heartily endorses the proposal that the Bureau of the Census with the Forest Service undertake such census;

Second: To this end the association offers its facilities to the Bureau of the Census and the Forest Service;

Third: The association urges Congress to make adequate appropriation to make such census complete and comprehensive.

13. Appreciation of Mr. George W. Sisson, Jr., and Mr. L. B. Steward.

Whereas, The American Paper and Pulp Association has, during the past year, passed through one of the most trying periods in the history of the paper and pulp industry; and

Whereas, All of the interests of the paper and pulp industry have been so well represented and safeguarded by the officers of this association; therefore be it

Resolved, That the American Paper and Pulp Association do hereby express to Mr. Sisson and Mr. Steward their deep appreciation of their services rendered as president and secretary, respectively.

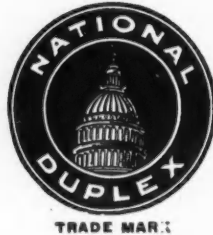
14. Necrology.

Be It Resolved, That the American Paper and Pulp Association most deeply deploras the loss which it has sustained through the deaths of

Joseph R. Allen,
J. J. Dauch,
John G. Fogarty,
William F. Harbrecht,
Howard Friend,
John J. Knight,
Albert Theodor Leonhard,
Hon. Warner Miller,
Thomas E. Nash,
Benjamin Riegel,
Wilbur M. Swan,
James Gibson Taylor,
Herbert Baily Whiting.

Be It Further Resolved, That the American Paper and Pulp Association wishes to record this expression of its sorrow at the recent death of that famous American, Theodore Roosevelt, whom all Americans mourn, and to whom history will give undying fame.

15. Speakers.



ALL danger of moisture and dampness reaching your paper in transit is eliminated when you line your cases or wrap your packages in

“NATIONAL DUPLEX”

Waterproof Case Lining.

“It’s clean to handle”

NATIONAL WATERPROOFING CO.

MANUFACTURERS OF

WATERPROOF CASE LININGS

1054-1056 DREXEL BUILDING

PHILADELPHIA, PA.

Whereas, The speakers for this annual meeting and annual banquet of the American Paper and Pulp Association have been so generous and kind as to address us thus assembled; therefore be it

Resolved, That the American Paper and Pulp Association, in convention assembled, extend to each our hearty thanks and appreciation. Yours very truly,

CHEMICAL FIBER ASSOCIATION

The Chemical Fiber Manufacturers' Association meeting, which was held in room 110 of the Waldorf-Astoria on Tuesday morning, was one of the most important meetings that this association has ever held.

New Officers Elected

The following were elected as officers for the coming year: E. B. Murray, of the Union Bag and Paper Corporation, president; Angus McLean, of the Bathurst Lumber Company, vice-president.

The chairman of the association then gave a very interesting report, after which routine business was discussed. The chairman's report is given below:

The year 1918 has been a year filled with rapidly changing conditions.

The early part of the year found our Government rapidly settling into its war stride and coincidentally occurred changes in our industry which were of great moment—labor conditions, the traffic situation, raw material supply, etc., were matters of grave concern to us. Through it all, however, the clarion call for greater effort and larger production was answered, and we have reason to be gratified at the signal results accomplished amidst our sea of perplexities.

The reports of our Association show that in 1917 the domestic chemical fiber mills produced about 81 per cent. of their maximum capacity and consumed and shipped 79.3 per cent. in 1918, these mills produced 82.4 per cent. maximum capacity and consumed and shipped 83.4 per cent.

Importations of European fiber during the year were reduced to a negligible minimum, but fortunately our Canadian neighbors were able to "take up the slack."

1918 Importations

During the year 1918 there were imported into the United States from Canada 255,000 tons of unbleached sulphite and from Scandinavia less than 1,000 tons.

This compares with 125,000 tons from Canada and 117,000 tons from Scandinavia during 1917.

Of bleached sulphite Scandinavia imported in 1917 30,000 tons and Canada 13,000 tons.

In 1918 Scandinavia imported less than 1,000 tons of bleached, while Canada imported nearly 15,000 tons.

At the present time I believe there is but one Canadian sulphite mill under construction, the Kippawa mill, which will manufacture when completed 100 tons per day of bleached sulphite.

During the year just past there has been added to the Canadian unbleached pulp tonnage the Whalen mill with annual capacity of 25,000 tons, the increased product of Mattigami amounting to nearly 30,000 tons and the Port Arthur and Fraser mills.

There has also been added the Kraft pulp of the Colonial and the New Brunswick mills.

The War Industries Board of this section, through Mr. Kiefer, has had several conferences with Mr. Donnelly at Washington in regard to the work to be accomplished.

All action was postponed, however, at the suggestion of Mr. Donnelly.

Conditions in the European pulp producing countries have been materially changing.

The central empires—Germany and Austria—have practically

ceased the manufacture of chemical pulps, due to their economic condition and also to the utter collapse of the pulp wood industry in Russia.

In Scandinavia the coal situation is, and has been, very serious during all the past year.

Coal has reached above \$50 a ton and it has been repeatedly reported that some of their mills have resorted to wood for fuel. Labor, including both skilled and unskilled, has been granted an eight-hour work day.

Unskilled labor is reported to receive \$3 to \$3.50 per work tour.

Finland, which is an important source of pulp wood, has practically discontinued the manufacture of both pulp and pulp wood.

These, gentlemen, are important items to keep before you in any analysis of present conditions in our industry, and form valuable weather vanes in estimating future trends.

Information from the Department of Commerce is to the effect that there were about 40,000 tons only of manufactured Kraft pulp in Scandinavia a short time ago, and advices from other sources seem to point to a 75 per cent. production basis of all chemical pulps at the present time in that country.

Some Important Facts

These are a few, but nevertheless important factors, which reflect underlying conditions of grave moment to our industry.

Europe will be weighted down with its heavy cross of debt for years—its liquidation of inflated values which seems destined to proceed with unorderly process, will surely add to its overburden—and the so-called reconstruction will without doubt, be filled with economic upheavals of far-reaching effect. These are but a few of the considerations which compel me to the thought that industry in this country, being less liable to these violent movements, is more likely to keep on an upright keel.

The past three years must have emphasized to us the possibilities, as also the probabilities of an increasing field for export in almost all lines, and I feel that our industry will be no exception to the rule—at least for the next few years.

During the course of my European trip and survey of the general situation of our industry in foreign countries, careful attention will be given to chemical pulps, and I hope to be able to make a comprehensive report to this section at some later date in relation thereto.

Statistical Work

As it seems proper to include in this report such recommendations as appear to be of importance, I wish to call your attention particularly to the statistical feature of our work.

There is a large tonnage of sulphite manufactured for sale which does not report to our bureau nor do our figures include this tonnage.

Then, again, there is a very large tonnage produced which is not sold but is used in manufacturing paper which also does not report to us nor do our figures include such tonnage.

It seems to me that ways and means should be developed which would bring these tonnage figures through our bureau so that we might have a more comprehensive view of the real underlying economic conditions which affect our industry.

Some of our friends who have consistently remained outside the bulwarks have done so for one reason or another—too much expense—apprehension of governmental criticism—some have called attention to the fact that the Federal Trade Commission is now gathering these facts—and so on through a multiplicity of reasons.

It is quite patent that the manufacture of sulphite is basic, so far as the entire paper industry is concerned, and therefore, it seems to me if this bureau was in a position to place before those manufacturers the real facts, not "jumped at conclusions," and

F. G. MARQUARDT
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PAPER AND PAPER MAKERS SUPPLIES

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real figures which would, within natural limits of error, reflect the economic underlying situations as they develop from time to time, then we would have made real constructive progress for the whole industry.

No man can be criticised if he insists on having the proper tools placed in his hands to work with, nor can he be adjudged for seeking such light as will make him selfishly intelligent in the management of his own individual line of business effort.

Our great paper and pulp industry is well in the vanguard as far as investment and importance are concerned, and I ask you deliberately, are you satisfied now with the working tools you have?

You cannot carry a quart of liquid in a pint flask, nor can you hope to have a continuous buying demand out of a market which is fully supplied; and until this bureau can place real facts before you which will enable you to appreciate underlying trends, how can you hope to act intelligently in any attempt upon your part to correctly analyze changing economic situations as they may develop?

This whole subject, gentlemen, is so very important that it seems wise to me it should be given special consideration by you, and an attempt made which will materially widen the scope of our activities.

Another question I wish to place before you is in regard to our Canadian chemical pulp manufacturers.

It has seemed to me for some time that there should be a very much closer relationship between us than has existed in past years.

Their interest are ours, and by the same token our interests are theirs.

The so-called dividing line between us is after all an imaginary one, and it must necessarily follow that their benefits are ours and conversely ours are theirs.

This Association has been in communication with the Canadian Association with a view of interchanging such figures as the Associations now collect, and I spoke of this at the annual meeting of the Canadian pulp section which I had the pleasure of attending a few days ago in Montreal.

The question of union meetings and also a mid-year meeting were discussed and as a result a committee was appointed to attend this meeting to discuss the matter with you.

Such committee includes two of our own members and the secretary, A. L. Dawe, who is now with us and who will address us shortly on this subject.

In closing my report I wish to thank you for your co-operation during the past two years of my chairmanship and to bespeak for my successor a continuance of your support.

The Executive Committee has given unstintingly of their time—never failing me when called upon, and their advice has materially assisted in the conduct of Association affairs. Our previous secretary, Mr. Freeman, was compelled to resign his position on account of a general nervous breakdown.

Our present secretary, Mr. Bishop, came to us not entirely unfamiliar with our work, having been connected with the chemical pulp industry before its organization as a separate section. He has been very diligent and painstaking in his services to the bureau, and his advice and full-hearted assistance to your chairman has been a great help to him during this past year.

PAPER SPECIALTIES ASSOCIATION

At the meeting of the War Service Organization of the Miscellaneous Pulp and Paper Board Specialties Association on Tuesday the following resolutions were adopted:

Resolved, that the organization be continued as the Pulp and Paper Board Specialties Association during the reconstruction period, the same officials to continue to act with a view to constructing a permanent organization to be affiliated with the American Paper and Pulp Association.

The officers referred to above are as follows: F. S. Harrison,

chairman, Halltown, W. Va.; H. E. Lindquist, secretary-treasurer, Holyoke, Mass.; W. J. Parrot, MacAndrews & Forbes Company, 200 Fifth avenue, New York City; R. C. Tilden, International Paper Company, 30 Broad street, New York City; George W. Wheelwright, Jr., care George W. Wheelwright Paper Company, 67 Milk street, Boston, Mass.; S. E. M. Crocker, Crocker-Burbank Company, Fitchburg, Mass.

It was also resolved that it is the sense of this meeting that beginning July 1, 1919, the manufacturers of Index Bristol should conform to the following proposed trade customs:

Proposed Trade Customs—Index Bristols, sealed in packages, priced per 100 sheets.

Size—The trade customs stock sizes shall be $20\frac{1}{2} \times 24\frac{3}{4}$, $22\frac{1}{2} \times 28\frac{1}{2}$, $25\frac{1}{2} \times 30\frac{1}{2}$. Any order other than a stock size must be for not less than one ton in a regular gauge and regular color.

Thickness—The above grades shall be made in the following standard thicknesses: Seven and one-half gauge (.007 $\frac{1}{2}$), nine and one-half gauge (.009 $\frac{1}{2}$), eleven and one-half gauge (.011 $\frac{1}{2}$), fourteen and one-half gauge (.014 $\frac{1}{2}$).

(Boards calipering within one-half point either way from standard gauge shall constitute a good delivery.)

No special gauge shall be made in lots of less than five tons and shall carry same price per 100 sheets as the next higher gauge.

Colors—Colors shall not be limited to any particular number but standard stock colors shall be established by individual mills. No special colors shall be made in lots of less than five tons.

The secretary was instructed to furnish a copy of these resolutions to: the American Paper and Pulp Association, the Writing Paper Manufacturers' Association, the National Paper Trade Association and to other manufacturers of Index Bristols, Card Index Systems and Index Cards.

GLAZED PAPER ASSOCIATION

The Glazed and Fancy Paper Manufacturers met in room 106 on Tuesday morning. At this meeting the following officers were elected for the coming year: William H. Schuart of the Springfield Glazed Paper Company, president. N. Fowler, Hampden Glazed Card and Paper Company of Holyoke, vice president. G. Frank Merriam of the Holyoke Card and Paper Company, treasurer. F. O. Walther of Walther & Company, New York City, secretary. The executive committee elected was as follows, William H. Schuart, N. Fowler and G. Frank Merriam.

TISSUE PAPER ASSOCIATION

The tissue paper manufacturers meeting was held in the East room on Tuesday. Routine business was discussed after which all the current officers were reelected for the coming year.

E. H. Naylor, who was chosen secretary of the association some time ago, will continue in office.

COVER PAPER ASSOCIATION

At the Cover Paper Manufacturers' Association meeting which was held in the East room on Tuesday afternoon, all the officers of last year were re-elected. E. H. Naylor will continue as secretary of this organization for the coming year.

VEGETABLE PARCHMENT ASSOCIATION

The meeting of the Vegetable Parchment Manufacturers Association took place in room 109, on Tuesday afternoon. W. J. Brunner was elected president of the association for the coming year, and J. M. Dohn was elected secretary. There was no vice president elected.

WRITING PAPER ASSOCIATION

The Writing Paper Manufacturers Association held their annual meeting in the East room on Wednesday morning. Routine business was discussed after which an election of officers was held. All of last year's officers were reelected.

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Cylinder, Fourdrinier and M. G. Products
From Pure, Slow Cooked Mitscherlich Sulphite



Range of Weights 24 x 36-10 to 350
In Bleached, Natural and Colors

Detroit Sulphite Pulp & Paper Co.

Detroit

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TECHNICAL ASSOCIATION MEETS

Organization Holds Numerous Sessions at Which Matters of Interest to the Trade Are Discussed

A. B. Cowles, President of the Pejebscot Paper Co., Welcomes the Members at the First General Sessions in the Myrtle Room of the Waldorf-Astoria, Tuesday Morning—Henry E. Fletcher Makes Responsive Address—Raymond S. Hatch Is Elected President and R. B. Wolf Vice-President of the Organization for the Ensuing Year—Fall Meeting of the Association to Be Held in Buffalo—The Program.

The meetings of the Technical Association of the Pulp and Paper Industry this year were held during a period of four days, extending from Monday to Thursday, with a special banquet, which was held at the Hotel Astor on Tuesday night.

A. B. Cowles Makes Address of Welcome

The first general session was held on Tuesday morning in the Myrtle Room of the Waldorf-Astoria. The meeting was called to order promptly at 10 a. m., after which an address of welcome was delivered by A. B. Cowles, president of the Pejebscot Paper Company. A response to this address was then made by Henry E. Fletcher. These proceedings were following by an address by President Carruth of the association, after which reports of the executive committee and the secretary-treasurer were read. A committee, consisting of F. P. Hill and J. D. Rue was then appointed to audit the books of the secretary-treasurer, and a committee consisting of Ross Campbell, W. H. Gessell and John Traquair was appointed to take care of nominations for officers.

Reports of Chairman

After this business had been completed, the reports of the chairmen of the various committees were read. Frederick C. Clark read the report of the committee on war service, Olai Bache-Wigg read the report of the sulphate committee, W. H. Gessell read the report of the committee on standard methods of testing materials used in the manufacture of paper, and Ross Campbell read the report of the committee on abstracts of literature. A special report on literature of the paper industry was then read by Henry E. Surface, chairman of the committee on bibliography.

The second general session was held in the Myrtle Room on Tuesday afternoon. Martin L. Griffin read the report of the committee on soda pulp. A symposium on important by-products of the pulp and paper industry was then held, at which the following subjects were discussed: By-products from Sulphite Waste Liquors, Recovery of Sulphite Turpentine, Recovery of Waste Fibers and Clay from Effluent Waters. Mr. Griffin then read a paper by George K. Spence, on Soda Pulp Mills' Rotary Room Problems.

Symposium on Light, Heat and Power

A symposium on Problems of Light, Heat and Power was then conducted by Edward P. Gleason, and the following subjects were then discussed in ten-minute talks by different members:

The central station plan applied to mill power departments.

Surplus electric power and its uses.

Handling and burning woodroom refuse.

The better use of waste boiler flue gases.

Horsepower required for preparation of stock (beating and jordaning) for various papers.

Mill heating systems and their control.

Mill lighting; use of 110 vs. 220 volt current. Prevention of lamp thefts.

Election of Officers

At the third general session which was held in the Astor Gallery on Wednesday morning the following officers were elected for the coming year: Raymond S. Hatch, president; R. B. Wolf, vice-president, and Thomas J. Keenan, secretary-treasurer. The executive committee chosen was as follows: F. Clarke, H. P. Carruth (to take the place of Mr. Hatch), and two new members who are George Williams and O. L. E. Webber.

Fall Meeting at Buffalo

It was then practically decided that the fall meeting of the association should take place in Buffalo, and the spring meeting at Watertown.

After this the following papers were read:

"Indirect Cooking of Pulp by Forced Circulation"—O. L. Berger.
"Common Sources of Error in Sulphite Liquor Testing"—W. E. Byron Baker.

"Correlation of Theory and Practice in Papermaking"—Communicated by James Strachan.

Fourth General Session

At the fourth general session, which was held in the Astor Gallery, the following papers were read:

The Selection of Employees—an illustrated lecture by Dr. Katharine M. H. Blackford on "How to Size Up Men at Sight."

Report of Vocational Education Committee—Geo. E. Williamson, chairman, followed by a general discussion concerning the adoption and direction of courses of instruction in paper mill practice for mill employees.

Discussions on reconstruction work and openings in the industry for disabled men and returned soldiers—Letter from Red Cross Institute.

Report of Committee on Paper Testing—Fred C. Clark, chairman

Report of Committee on Sulphite Pulp—Robert B. Wolf, chairman.

Fifth and Sixth Sessions

The fifth and sixth general sessions were held in the East Room and the following program was carried out:

Report on the Dyestuff Situation, with a description of methods for testing coloring substances used in papermaking—Carl S. Schneider.

(A recess was then declared to permit of an adjournment to the general meeting of the American Paper and Pulp Association, held in the adjoining room.)

Symposium on the Clays Used in Papermaking, with a paper

Oxford Paper Company

FIFTH AVENUE BUILDING

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NEW YORK

Manufacturers of

Super Calendered and Machine Finish

Book and Lithographic Papers

Also

Bleached Spruce Sulphite

CAPACITY OF MILL:

250 Tons of Paper Per Day Sulphite, 110 Tons Soda, 135 Tons

MILLS: RUMFORD, MAINE, U. S. A.

by Dr. T. Poole Maynard, chairman, on "American Clays."

Report of Committee on Groundwood, with symposium on methods of regulating quality of stock and latest developments in the grinding process.—J. O. Mason, chairman.

"Cotton Purification and Caustic Recovery in an Explosive Plant"—Joseph H. Wallace.

"The Use of Woodpulp in the Manufacture of Nitrocellulose"—Vance P. Edwardes.

"Process for Controlling Free SO₂ in Sulphite Liquor"—James B. Crandon.

"Reckoning the Efficiency of Fuel Economizers in Paper Mills"—Communicated by James Strachan.

"The Determination of the Tearing Strength of Paper"—Sidney D. Wells.

PRESIDENT CARRUTH'S ADDRESS

H. P. Carruth, president of the Association, delivered the following address:

"During the past year the very unusual business conditions which existed throughout the country have effected our Association as they have all other business organizations. Our members have almost without exception been unusually occupied with the most pressing work, some in the Military Service, others in various governmental departments; and those who have not gone into Government Service have had to do not only their own work, but that of the man in the service. In addition the changes brought about by the war have involved a vast amount of thought along more or less original lines.

"Probably very few of our members have not, in addition to their ordinary duties, been more or less active in some outside work connected with the war loans or war charities. All of this increased activity has naturally made it difficult for us to give the time to Association matters and to committee work, which might otherwise have been the case. We cannot, therefore, expect as much advancement by our committees as we might have hoped. On the other hand, the war conditions have enabled our Association to do some work of which I think we may be justly proud. This work, although small in comparison with the great mass of energy expended in the country, has nevertheless been of value, we are informed by those in the Government Service who are in position to know.

"Your War Service Committee has co-operated as fully as it was able with the War Industries Board. Special committees, especially that which had charge of stimulating interest in the production of Toluol from sulphite plants, have done their bit toward winning the war.

"Our annual meeting a year ago was, I believe, one of the most successful yet held by the Association, and it seemed to be the concensus of opinion that the time spent by the members at the meeting was not wasted, even under war conditions. The Spring meeting was held in Dayton, Ohio, and those members attending were hospitably entertained by the manufacturers of the Miami Valley and vicinity. The meeting was a decided success in every way. It was decided that owing to the great pressure of work upon all of our members, which has been mentioned above, it would be wise to forego the usual Fall meeting. The necessity for giving up our usual program of two field meetings in addition to the annual meetings seems now to be past and I hope that the coming year will see successful meetings both Spring and Fall in paper making centers.

"Outside of war activities, but closely related with them, is the splendid work which is well under way by our Committee of Vocational Education, under the chairmanship of George Williamson and in co-operation with a similar Committee of the Technical Section of the Canadian Pulp and Paper Association. I feel that the work which this Committee has undertaken is one which

has a particularly important interest to us all at just this time, as it seems that Vocational Education is one of the big reconstruction problems. Your Executive Committee will have more to say on this subject in their report, and you will note that our program emphasizes this question rather more than any other. I bespeak your most earnest consideration of this subject as it is presented to you throughout the meeting, believing that in no other way can our Association be more widely beneficial at this time.

"Our program is long and I do not wish to bore you at its commencement, and will therefore close by expressing my personal thanks and appreciation to our Secretary-Treasurer, Thomas J. Keenan, for wholehearted and active support throughout the year; to the Executive Committee for wise counsel and constant help; to the Chairmen of our various committees, and to the members as a whole who have been without exception most helpful and willing to assist whenever possible."

REPORT ON BIBLIOGRAPHY

The following report, in part, on bibliography was submitted by Chairman Henry E. Surface:

The policy followed in the work of the Committee on Bibliography during 1918 has been a continuation of that indicated in the annual report a year ago and the work accomplished and undertaken has been along the lines therein generalized. The policy in question has been to make immediately available to the association's research men a series of such separate and brief bibliographic contributions as can be currently rounded into shape for publication in the official journal in order that they may have access to the pertinent book literature in the meantime without waiting upon the complete final compilation in conveniently classified, translated and standardized form that is one of the ultimate objectives of the committee. The work accomplished in the way of such contributions is listed below and some indication is given as to anticipated sources for additional material and contemplated means for making it available, sooner or later. The organization work in developing interest and co-operation among indicated organizations and individuals both inside and outside the association, incident to these temporary ends, is well under way.

A year ago bibliographic co-operation with the more important publishing houses of the world was contemplated, but due to the war continuing practically throughout 1918 few efforts in this direction were made. Material, however, was incidentally received from D. Van Nostrand Company, of New York, and from Crosby Lockwood & Son, of London, but not in shape for immediate use.

Three unpublished (and not edited) compilations of books on pulp and paper have been made available for committee use at the Library of Congress through the kindness of the Chief Bibliographer, but they have not yet been reviewed for suitability or possibility of duplicating the committee's previously published data. The release of another prepared list, not duplicated elsewhere and especially devoted to a particular field in which he has specialized, is under consideration by a member of the association.

There has been need in several quarters during the past year for a dossier of sample copies of all the hundred odd periodicals devoted to pulp and paper throughout the world. The Forest Products Laboratory at Madison, Wis., had a small collection of this kind made up about eight years ago, but its age and incomplete condition render it insufficient. At the same time even the best published lists of the periodicals in question (notably committee Contributions Nos. 3 and 7 and Forest Service Bulletin 123) are not sufficiently complete in descriptive matter to show the special field and nature of each journal and its official and other connections with the industry and trade. Further work,

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MACHINE GLAZED
WATER FINISHED AND
DRY FINISHED FIBRE PAPERS
SULPHITE AND GROUND
WOOD PULP

SHAWANO

WISCONSIN

as indicated, is needed, as there is prospect of more intimate relationships with other countries in all lines of mutual interest than has been the case in earlier years.

However, the committee has as yet not been able to establish adequate co-operation to make possible the bibliographic undertaking indicated.

R. W. Sindall, of Sindall & Bacon, London, has recently become a member of the association and accepted membership on the committee. He will act as English correspondent. Arrangements for a member in France are not yet matured. Especially selected members in certain other papermaking countries abroad, such as Norway or Sweden, would be desirable.

It is felt that the Committee on Bibliography, regardless of its personnel, should complete its present commitments and continue its activities to cover such of the above indicated undertakings as current outside co-operation will enable it to enter upon from time to time.

REPORT ON GROUND WOOD

The following report on ground wood was delivered by J. O. Mason, chairman of the committee:

When the Groundwood Committee was finally formed in July, 1918, the war activities were at their height and it was found impossible for the committee to do any constructive work for reasons which will be apparent to all.

As far as the committee has been able to ascertain there are comparatively few members vitally interested in groundwood, although this product forms such an important part in the manufacturing of many grades of paper.

It is very certain, however, that the groundwood process has its problems and the operating control is being constantly improved. With a view to a thorough discussion of these problems, it has been decided to ask all those interested to attend an informal roundtable talk to be announced by the secretary. At this meeting the writer will submit the results of a test on the grinding of hard wood carried out by the Laurentide Company and will be very glad to give information concerning the new electrically driven grinders recently installed at this plant. It is, therefore, hoped that the discussion will suggest some program for the incoming committee's consideration.

REPORT OF COMMITTEE ON ABSTRACTS

The following report was presented by Russ Campbell, chairman of the Committee on Abstracts:

The Committee on Abstracts of the current literature has attempted little new work during the past year. A number of journals of allied industries, as the paper box trade, have been kept under observation, but it has been found that little of value appeared in them which was not covered elsewhere. Your committee feels that, through the efforts of its abstractors and the co-operation of the Canadian Committee, the immediate field of papermaking periodicals is rather well covered. During the coming year it is planned to go over carefully other more or less allied fields, and to make such arrangements for covering these as may seem desirable. Suggestions along this line from members of the Association will be appreciated. Your committee wishes to express its thanks to its abstractors and to the Canadian Committee for the cordial co-operation of the past year.

MIAMI VALLEY PAPER MAKERS ASSOCIATION MEETS

DAYTON, Ohio, February 3, 1919.—Practically every mill in the valley—at least more than a score—was represented at the meeting of the Miami Valley Paper Manufacturers' Association at the Hamilton Club last Thursday evening. The officers elected at the annual meeting held in December took their seats. They were: L. C. Anderson, Middletown, president; William Scobie, Lockland, vice-president, and C. R. Greer, Hamilton, secretary-treasurer. Three companies were admitted to membership, all from this city, or operating from Dayton, viz., the Aetna Paper Company, the Mead Pulp & Paper Company, of Dayton and Chillicothe, and the Peerless Paper Company, in which the officers of the Mead Company are interested.

A communication was read from P. A. Casey, rating actuary of the Industrial Commission of Ohio, requesting a meeting of the Association to consider reclassification of the paper industry of Ohio in the State compensation plan. After some discussion, it was decided to appoint a committee of one member from each mill to hold a conference with the State insurance department, and a preliminary conference of this committee will be held at the rooms of the Middletown Chamber of Commerce at 2:30 P. M. on Tuesday, February 11, when a conference with Actuary Casey will be arranged.

There was considerable discussion of accident prevention plans and the Association will go fully into this work.

A resolution was adopted endorsing the plans of the American and the Canadian Paper Trade Technical Associations for the development of a system of vocational education leading to the paper industry. Many industries are encouraging this kind of training and recent experience, when there was a decided shortage of expert help in the industry, demonstrated the importance of a system of training for those who may want to enter paper making as a trade.

Major George B. Fox of the Fox Paper Company, Lockland, gave a detailed report of the work of the Ohio-Indiana Inland Waterways Association at Defiance.

The special guest of the Miami Valley Paper Manufacturers' Association, Colonel Lansing H. Beach, of the engineering corps of the United States Army, delivered an address dealing with waterways and improvements in the Ohio river district which strongly appealed to all members, particularly as they are keenly interested in the success of the Miami & Erie Canal changes; in general river improvements in this part of the State, and, in fact, this section of the Middle West.

Those present at the Association meeting were W. D. Randall, Hamilton; R. T. Houk, Dayton; Thomas Beckett, Hamilton; D. E. Harlan, Middletown; W. W. Sunderland, Dayton; Thomas Harvey, Middletown; Major George B. Fox, Lockland; E. T. Gardner, Middletown; L. P. Boswell, Dayton; Charles E. Aull, Middletown; G. C. Thornburg, Dayton; Fred B. Zartman, Franklin; W. V. Williams, Hamilton; J. R. Allen, Cincinnati; C. R. Greer, Hamilton; M. G. Benson, Dayton; J. A. Tully, Lockland; John Calder, Middletown; L. C. Anderson, Middletown; W. W. Winship, Dayton; H. W. Server, West Carrollton; J. G. Kline, Dayton; A. O. Rolfe, Hamilton; R. D. Bertschy, Dayton; H. T. Ratliff, Hamilton; M. G. Benson, Dayton; John F. Davis, Hamilton; W. H. Richardson, Cincinnati; Frank J. Becker, Hamilton; H. P. Carruth, Dayton; J. J. Hollowell, Middletown; H. J. Johnson, Middletown; Edward Helwig, Hamilton; Frank J. Becker, Hamilton; Charles E. Aull, Middletown, and the guest of honor, Colonel Beach of Cincinnati.

GEO. W. MILLAR IN OLD HOME

George W. Millar & Co., well-known jobbers of New York, whose plant several months ago was completely destroyed by fire and who took up temporary quarters at 690 Broadway, are now located at their old address, 284 Lafayette street, in a thoroughly modern and up-to-date building.

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Here's the Best Rag Cutter for Fine Cutting Ever Made
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Standard Testing Methods in Paper Making

Results from Former Methods Varied Too Greatly—Questionnaires Are Sent to All Members of the Technical Association in Endeavor to Devise More Satisfactory Method Than Those Employed at the Present Time—The Subjoined Analytical Methods Are Proposed for the Materials Mentioned and Their Adoption by the Technical Association of the Paper and Pulp Industry Is Recommended.

Report Read at Meeting of Technical Association by W. H. Gesell, Chairman, Committee on Standard Methods of Testing Materials Used in the Manufacture of Paper.

The last meeting of the Technical Section of the Canadian Pulp and Paper Association, the Joint Committee on Testing Methods adopted certain standard methods for a six months' trial. These methods had all been previously published and were taken in most instances from reports of the American committees. The procedures for the analysis and testing of rosin size were suggested by Mr. DeCew and are excellent.

These methods are good so far as they go, but they need material improvement to be accepted as final, and this can only be accomplished by their definite temporary adoption as standards, as a result of which criticisms may be forthcoming from those who use them. Unfortunately they permit of such variation in manipulation that different analysis will never be able to check results.

Your committee sent to all of our members questionnaires, together with abstracts of standard methods as adopted by the Canadian association, for criticism. Of the total number addressed, fifteen answered, five were frank enough to admit that they knew nothing about the subject, and the rest failed us.

The subjoined analytical methods are proposed for the materials named hereafter, and their adoption by the Technical Association of the Pulp and Paper Industry is recommended:

Sulphite of Aluminum

The method given by Max Cline, has been altered, according to suggestions made by O. P. Maxwell, of the West Virginia Pulp and Paper Company. The method as given by Max Cline reads as follows:

"Weigh out 25 grams of the alum in a beaker and dissolve in 200 Cc. of hot, distilled water. Filter through a weighed Gooch or alundum crucible with suction; wash well, dry to constant weight, and calculate the insoluble matter.

"The filtrate from the foregoing should be poured into a 500 Cc. graduated flask, carefully rinsing the last traces of the filtrate into the flask. The flask is brought to the temperature of calibration, the liquid diluted to the mark and well shaken. Draw out 100 Cc. of the solution by means of a pipette and dilute to 500 Cc. in a calibrated flask. From this second flask 50 Cc. is drawn out with a pipette, and transferred to a beaker. Dilute to about 150 Cc., add 5 Cc. of concentrated HCl, and a few drops of concentrated HNO₃; heat the solution to boiling, and add slowly dilute ammonia until a slight excess is present; continue boiling until there is only a faint odor of ammonia perceptible. Remove the beaker from the source of heat, and filter on an 11 Cm. washed filter, using suction in conjunction with a platinum cone filter; wash with hot water until free from chlorides, and ignite the moist precipitate in a platinum crucible over a Bunsen burner. When the filter has been entirely consumed, ignite over the highest heat of a blast lamp or over a No. 4 Meker burner, to constant weight. Calculate the percents of Al₂O₃ and Fe₂O₃.

(We have found by experience that igniting for ¼ hour over a blast or No. 4 Meker burner is sufficient to dehydrate the alumina.)

"Note: Before precipitating with ammonia, if a little tannin is

added, the precipitate will be more granular and easily filtered."

In the foregoing Cline says to boil the precipitate of aluminum hydroxide until there is only a faint odor of ammonia perceptible. Maxwell suggests boiling for 1 minute, which would seem preferable inasmuch as long boiling is known to have a tendency to make the precipitate slimy and more difficult to filter. Cline precipitates the alumina only once. The second precipitation suggested by Maxwell would seem to be advantageous inasmuch as the ammonia is known to carry down with the aluminum appreciable amounts of any alkali earth salts which may be present, and these can only be removed by a second precipitation with ammonia. Maxwell suggests looking for aluminum in the filtrate from the ammonia precipitation. Treadwell in *Analytical Chemistry*, vol. 11, p. 83, does not seem to consider this necessary, but possibly, the basic sulphate of aluminum, of which considerable quantities are usually present in the commercial product, renders this precaution advisable.

The revised method reads as follows:

Weigh out 10 grains of the aluminum sulphate in a beaker and dissolve in 200 Cc. of hot, distilled water. Filter through a weighed Gooch or alundum crucible, using suction; wash well, dry to constant weight, and calculate as Insoluble Matter.

Make up the filtrate from the insoluble matter to 1 liter, measure out 100 Cc. (equal to 1 gram of the original sample) into a 350 Cc. beaker, and add 100 Cc. of water and 5 Cc. of concentrated HCl. (1 Cc. of a 5 percent solution of tannin, if added at this time, will coagulate the gelatinous precipitate and render it more easily filtered.) Heat the solution to boiling and add freshly distilled dilute ammonia drop by drop with constant stirring, until a slight excess is present, or until the solution is distinctly alkaline to litmus paper. Boil 1 minute, allow to settle somewhat, filter promptly through a 12½ Cm. filter, and wash by decantation, using hot water containing a small amount of ammonia and ammonium nitrate, to aid in coagulation. Continue washing until the filtrate no longer tests for chlorides. Then wash the precipitate through a hole in the paper, back into the beaker in which it was precipitated, and dissolve in 5 Cc. of concentrated HCl. The volume at this stage should be about 300 Cc. Reprecipitate the aluminum and iron with ammonia, proceeding as described above. This is done in order to eliminate any alkali earth which, if present, would be carried down with the first precipitation. In order to recover the small amount of aluminum hydroxide which passes into the filtrate with the wash water, make the filtrate slightly acid with HCl, evaporate to 200 Cc., make alkaline with ammonia and continue evaporation to 100 Cc., adding a drop of aluminum occasionally. The small amount of aluminum hydroxide which separates out is filtered off in a small filter paper and added to the main portion. The whole is partially dried, then ignited in a platinum crucible, and finally heated to constant weight with a blast lamp. Usually 40 minutes' heating at high temperature is required. Heating with a Bunsen burner is not con-

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sidered sufficient to completely dehydrate the alumina. Calculate the percentages of Al_2O_3 and Fe_2O_3 .

Sulphate—Dilute the filtrate from the iron and aluminum to 300 Cc., neutralize with HCl, then add exactly 1 Cc. of concentrated HCl. To the boiling solution add an excess of a hot 10 percent solution of $BaCl_2$, allow the precipitate to settle on a water bath for about two hours, decant the liquid through a weighed Gooch crucible or through an ashless filter paper and wash the precipitate four times with 50 Cc. of hot water. Transfer the precipitate to the filter and wash with hot water until the washings no longer test for barium with potassium chromate. Dry, ignite gently over a Bunsen burner for half an hour, and weigh *without previous heating over the blast lamp*. (Any BaS formed by the combustion of the filter paper, on being gently ignited in an inclined crucible, is easily changed back to sulphate so there is no loss to be feared. The weight of the $BaSO_4$ thus obtained, when multiplied by .3430 gives the weight of SO_3 , and two times this number, added to the weight of Al_2O_3 gives the weight of the $Al_2(SO_4)_3$.

NOTE—If any aluminum is present in the filtrate barium sulphate would carry it down; therefore the aluminum must be completely removed before the precipitation of the barium.

Sodium Chloride

As found in PAPER, vol. 18, no. 1, p. 12 (1916), with a correction as follows: Instead of using a 1 gram sample in the various analyses, use a 5-gram sample, make a solution up to a definite volume, and use a portion of the solution equivalent to 1 gram of the original sample.

For very accurate work, your committee refers to the method of Hillebrand in his *Analysis of Silicate and Carbonate Rocks*, Bulletin 422, United States Geological Survey.

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As found in PAPER, vol. 18, no. 1, p. 13 (1916), except that the paragraph on moisture has been corrected in accordance with a suggestion made by E. Sutermeister, which is based upon the method used by the chemists of the Union Sulphur Company, and reads as follows:

"Crush the sample of sulphur rapidly, weigh out about 20 grams in a low-form weighing bottle, dry for three hours at 94° Cent. and call the loss in weight moisture."

Coal Analysis

Your committee recommends the adoption of the final report of the Joint Committee of the American Society for Testing Materials and the American Chemical Society, as published in the *Journal of Industrial and Engineering Chemistry*, vol. 9, pp. 100-107 (1917).

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method. If a 1 Cc. pipette is used, as suggested in these tests, the variations of the analysis might be very great.

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Caustic Soda

As found in PAPER, vol. 19, no. 4, p. 64 (1916), except that the determination of *Alkalinity* has been altered to read as follows:

Alkalinity—Weigh accurately about 1 gram of the sample into a small weighing bottle, place the weighing bottle and its contents into a 500 Cc. beaker, cover with about 200 Cc. of distilled water and stir for complete solution. Titrate this solution in the cold with standard acid and phenolphthalein. Decolorization takes place when all of the hydroxide and half of the carbonate are neutralized. To the colorless solution, add methyl orange and again titrate with acid until the other half of the carbonate is neutralized. Twice the amount of acid necessary for the titration with methyl orange corresponds to the amount of carbonate present, and the difference between the amounts of acid used in the two titrations represents the amount of hydroxide present.

Water Analysis

As found in *Standard Methods for the Examination of Water and Sewage*, 3rd edition, revised by the Committee of the American Public Health Association, the American Chemical Society, and referees of the Association of Official Agricultural Chemists. This has also been adopted by the Montreal Section of the Society of Chemical Industry.

Rosin and Rosin Size

Sampling—Samples from 10 percent of the barrels should be taken from each end of each barrel. Total sample may be crushed and reduced by mixing and quartering to laboratory sample.

Grade—Rosin is graded in color and impurities, grades B. D. E. F. and G. being used for paper sizing; grades F. and G. being generally used.

Saponification Number—Weigh two grams of powdered rosin into an Erlenmeyer Flask of 300 Cc., capacity. Add 25 Cc. of half-normal alcoholic KOH and boil for two hours, using a reflux condenser. Shake the flask frequently with a swirling motion to prevent the rosin from sticking to the sides of the flask above the liquor line. Cool and titrate the excess of KOH with half-normal acid and phenolphthalein, and calculate the milligram of KOH consumed per gram of rosin. In each case run a blank on the KOH solution by boiling 25 Cc. of the solution in exactly the same manner as the saponification proper is carried out.

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The ester number is the difference between the saponification number and the acid number.

Unsaponifiable Matter in Alcoholic Solution—Saponify 5 grams of rosin by boiling for two hours with an excess of half-normal alcoholic potash. Evaporate off most of the alcohol, add about 100 Cc. of the water and extract in a separatory funnel with acid-free ether exactly as in the determination of free rosin.

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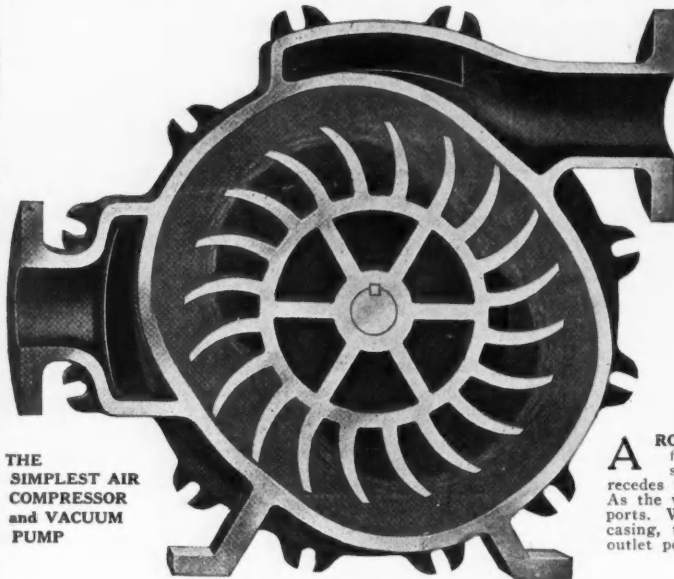
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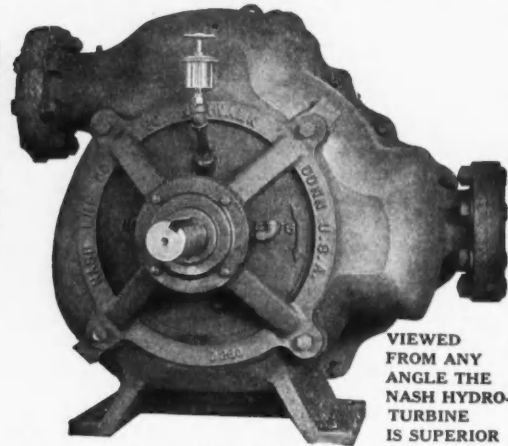


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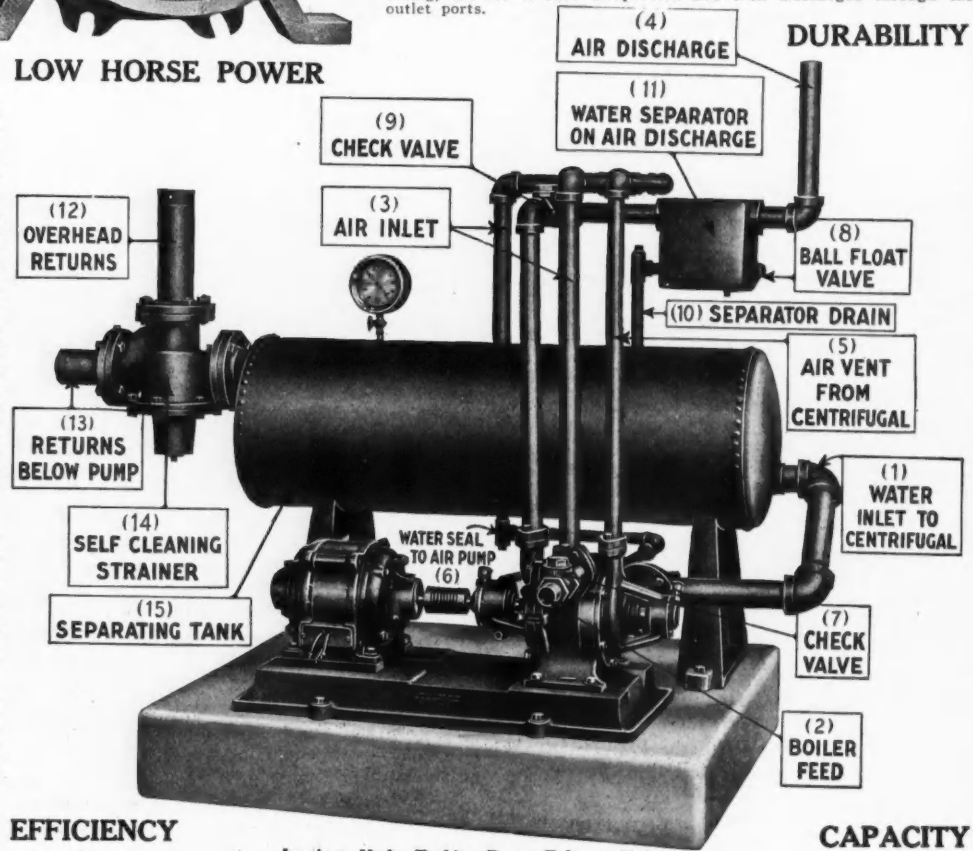
Referring to the cut, the heating returns, air and water pass through the self-cleaning strainer (14) into the separating tank (15). The water falls to the bottom of the tank (15) and passes into the Centrifugal through the pipe (1), driving out the air through the pipe (5). As soon as the Centrifugal is full of water it begins to pump and forces the condensation into the boiler through the pipe (2), emptying the tank (15). The Centrifugal now stops pumping because it cannot handle air, the check valve (7) preventing a back flow. The power required to drive the Centrifugal is closely proportioned to the quantity of water handled. It takes almost no power when it is not pumping.

The air is rapidly exhausted from the system by the air unit, which is connected to the top of the tank (15) by the pipe (3). The small amount of water necessary to keep the air end primed is obtained from the bottom of the separating tank (15) by means of the pipe (6). This water is discharged with the air and is thrown to the bottom of the separator (11) and automatically returned to the tank (15) through the pipe (10), the ball float valve (8) preventing any air from re-entering the system.



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number, is the one which shows the least modification or chemical alteration in its production.

As pine oil or turpentine are undesirable constituents for rosin size, and as the value of unsaponifiable matter is questionable, the acid number would seem to be the best guide in selecting a high grade rosin for paper size.

Rosin Size

Laboratory Sizing Tests—These tests should only be made using sizing solutions prepared in the same way as those used in the mill. The paper stock should be as used commercially, free from all chemical residues.

Solubility—The solution of a paper size should be adjusted to the methods employed for dilution as customary in the mill, so that perfect solution is maintained in the diluted state.

Sampling—The sample of size solution taken for analysis should be drawn from the dilute storage or measuring tanks which contains size which is prepared ready for use. This sample should be further diluted until it contains approximately 1 percent of total solids. The diluted solution may be somewhat hydrolyzed, if it has been improperly diluted, yet the analysis of it in this condition will more accurately interpret its sizing value, than if the undiluted sample were taken.

Total Solids—100 Cc. is concentrated to solids on a water bath and then dried at 105° Cent. to constant weight. If dried in a weighed dish containing rod and sand, the drying is greatly facilitated.

Ineffective Free Rosin—If the diluted solution contains nonreactive or suspended rosin which has a tendency to settle on standing, determine as follows:

Boil 300 Cc. of a 1 percent solution for 30 minutes. Filter, wash with hot water, and determine the weight of the dried residue. When possible, a centrifuge should be used for the elimination and determination of suspended rosin, as this will effect a more complete separation.

Total Unsaponified Rosin—Take 100 Cc. of the 1 percent size solution and extract in a separatory funnel with 50 to 175 Cc. of acid-free ether without shaking too hard. If difficulty is experienced in breaking up the emulsion, 5 to 10 Cc. of neutral, absolute grain alcohol may be added which will accelerate the separation.

Draw off the aqueous solution into a second separatory funnel and extract as above. Draw off the aqueous solution again and add the remaining ether to the original ether extract. The three ether extracts are then washed three times with 50 Cc. of distilled water. To the first water washing may be added a little alcohol, if necessary. The last two washings should be allowed to separate without the addition of alcohol.

Then transfer the washed ether solution through the mouth of the separatory funnel to a weighed beaker, or a Soxhlet evaporating flask, wash the separatory funnel with 25 Cc. of ether, and add the washings to the original ether solution. Evaporate the ether and dry the residue to constant weight at 100-105° Cent. This residue is calculated to percent on the basis of dry size.

NOTE—It is especially important that the ether used in this determination be especially prepared by washing once with sodium carbonate solution, and then sufficiently with water. It should be tested with a moist piece of sensitive litmus paper, which should not change color when completely submerged in the ether for fifteen minutes.

Total Rosin—Take 50 Cc. of the original size solution into a separatory funnel and acidify with 10 Cc. of dilute (1 per cent) sulphuric acid. Add 50 Cc. of ether, shake well and allow to stand until the two layers are completely separated. Draw off and wash the ether layer with 25 Cc. portions of water, drawing off the water into the second funnel, and pouring the ether extract into a weighed Soxhlet. Rinse the first funnel with 25 Cc. of ether into the second funnel. Shake well and draw off the water layer into the first funnel. Wash as above with 25 Cc. portions of water.

Repeat once more. Evaporate the ether from the combined extracts as in the Free Rosin determination. Dry to constant weight at not over 100° Cent. Calculate percent on dry basis and multiply by 100 to obtain the percentage of combined rosin.

The ether in this case does not need to be especially purified, though it should be as free as possible from any nonvolatile residue.

Free Alkali—Dissolve about 10 grams of the rosin free soap in a little water, and shake in a separatory funnel with an amount of neutral sodium chloride sufficient to leave a residue of undissolved salt. Now open the stopcock carefully, and allow the solution to run into a second separatory funnel, the undissolved salt serving as a filter. Wash the soap remaining in the first funnel with a saturated solution of neutral sodium chloride, and add the wash solution to the solution in the second funnel. The solution which has been allowed to run into the second separatory funnel contains free alkali, and a little neutral soap, but no free rosin. Now add to the contents of each funnel 30 Cc. of tenth-normal acid, shake well, and titrate each solution with tenth-normal alkali solution. If n Cc. of alkali is required, then the value of free alkali in the soap is $(30-n) \times 0.0053$ grams of sodium carbonate.

NOTE—If it is desired to determine the free alkali in the diluted solution, solid salt may be added until there is supersaturation and then procedure may be as in the foregoing method.

Rapid Methods of Mill Control

1. Determine "Rosin unsaponifying in aqueous solution" by method already given, or, for quicker results, this may be taken as representing the rosin which does not saponify on direct titration and is, therefore, obtained by difference, thus: total rosin—abietic acid=unsaponifying rosin.

2. Determine suspended rosin by one of the methods suggested.

3. **Abietic Acid**—To the warm filtrate from the second determination, add an equal volume of neutral, absolute grain alcohol, and heat to nearly boiling. Then titrate with one-fifth normal solution of NaOH, using phenolphthalein as indicator.

4. **Total Rosin Acids**—The solution used for free abietic acid titration is partly evaporated to remove the alcohol, and then precipitated with an excess of half-normal H₂SO₄, and the coagulated rosin collected. The solution is then cooled, filtered, and titrated back with normal alkali (NaOH). From this the total rosin acids can be determined, and hence, by difference, the combined rosin acids can be calculated.

We should also consider the practical sizing test given in PAPER, vol. 18, no. 9, p. 13 (1916). This test has not been adopted by the Canadian association, but it is of material importance. It quickly estimates the value of a rosin for size-making, a fact which few analytical methods disclose. The sheets of paper made in this test not only give the sizing effect of the rosin concerned, but also show the color which will be developed under mill conditions.

This completes the list which we are ready to adopt as standards, subject to revision whenever necessary.

There remains, however, a large list of other raw materials and intermediates used by the pulp and paper industry to be considered, which can be found in the various papermakers' books of reference.

Henry E. Surface has suggested that, possibly, the testing of soda and sulphate cooking liquors and sulphite acid might also fall within the scope of our endeavors. As wood is a material which it is sometimes necessary to test, the Forest Products Laboratory at Madison, Wis., might permit us to include its standard methods of testing. The Bureau of Chemistry and the Bureau of Plant Industry also have standards for testing wood and other raw materials which it might be advantageous to try and, if found worthy, include among the T. A. P. P. I. standards.

Some work has been done concerning the moisture in rags, but we are unable to suggest a standard at the present time. Not

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only must a regain be set for cotton rags, but also for all raglike materials, such as flax, linen, hemp and jute. The moisture regains for all of these varies considerably. The method which we have found most satisfactory for cotton is as follows:

Sample at least 25 percent of the bales at two diagonally opposite ends and in the middle, each portion to weigh 1,500 grams. Dry this 4,500-gram sample in an oven provided with a good air circulation and maintained at a temperature of 105° Cent. and weigh every twenty minutes until two successive weighings agree within one-tenth of a gram. The final weighing is considered as bone dry.

The loss of moisture in the cotton is 7.84 percent which is equivalent to an 8.5 percent regain adopted in this country by the National Association of Cotton Manufacturers. We really ought to consider their standard (although some of our members have suggested a regain of 7.9 percent for, if our methods are to be material legal standing, they ought to agree with those of the other associations. Clayton Beadle, of London, found the moisture in cotton to average 7.4 percent, which is equivalent to a regain of 7.98 percent. It may be of interest to state here that our English friends have done a great deal of work along this line, and it would be desirable for our association to get in touch with Cross, Bevan, Sindall and Beadle, so that our standards would correspond with theirs, and the testing methods be the same on both sides of the water.

As to the methods of testing starch those proposed in PAPER, vol. 19, no. 4, p. 60 (1916) have been carefully investigated but

the work has not been completed and we are not yet ready to make a recommendation. Mr. Sanburn has suggested that we develop a method which would give us a comparative sizing value on waterleaf.

There also remain to be considered and adopted, methods for testing sulphite pulp as originally proposed by the Sulphite Pulp Committee. Comments and recommendations were made by Raymond S. Hatch, then chairman of this committee, but none of these have as yet been adopted.

The question of the best method for testing hydraulically pressed lap pulp for moisture should not be forgotten. J. B. Woodruff has submitted a report dealing with the wedge method of moisture testing which is interesting. It will be found in our official journal, PAPER, vol. 21, no. 4, p. 86 (1917).

Satisfactory methods for examining glue and hide stock for use as sizing in the manufacture of paper should also be placed on this list.

It must be realized by all that we have been extremely busy during the past year, and have had little time for scientific investigations. But now that the war is practically over, let us all put our shoulders to the wheel and cooperate with our various committees, so that we may quickly complete this important work.

Your committee recommends the adopting of a resolution approving the recommended tests as standards, such tests to be improved, revised, or added to periodically as may be deemed advisable by the association.

AMERICAN PAPER MACHINES FOR THE JAPANESE MARKETS

The foreign market is again opening its doors to Bagley & Sewell Company of Watertown, N. Y., manufacturers of paper making machinery, which concern has always enjoyed a lucrative business in foreign lands. Japan and China have expanded in the paper making industry, and this company has taken a popular place in the consideration of Japanese and Chinese. They have many machines in mills there and are now exporting further orders.

A large Fourdrinier machine is now being shipped to Kobe, Japan, and will be installed in the mill of Nishinari Paper Company. It is 108 inches in width, weighs 400 tons, is what is known as a combination machine and will be used in the manufacture of straw and special paper. It is the 152nd machine of its kind to be turned out by the local concern. Sixteen cars will be utilized in transporting the machine to the coast for trans-Pacific boat.

Twenty-First Machine for Japan

This will make the twenty-first Fourdrinier machine this company has in the mills of Japan. Bagley & Sewell has more of its machines in Japanese mills than all the other American paper machine manufacturing concerns combined. The Chinese Government has two of the machines in its mills at Hankow.

A large number of Japanese paper mill representatives and students have visited the local plant during the past few years with a view to obtaining scientific knowledge of the business and in some cases placing orders for equipment. These Orientals have been given royal treatment here, and Bagley & Sewell is a familiar word in paper making circles in Japan through the friendly treatment accorded the representatives while visiting Watertown, N. Y.

The Bagley & Sewell Company sent its first machine to Japan in 1896, and the satisfaction that it gave has been testified to by the twenty other machines that have since followed, notwithstanding the presence of many American and European competitors. Last summer two machines of seventy-four inches were shipped to Japan for the Oji Paper Company, the largest paper manufacturing concern there. Those were made for the manufacture of cigarette paper.

Machines are also being sent to other markets, and the local

concern is being well supplied with orders. Besides the machine that is now being shipped to Japan, a 130 inch tissue paper making machine is under shipment to Moyer & Pratt of Lyonsdale. This machine will have a speed of 500 feet per minute and is the largest tissue paper making machine ever built.

But one other concern in the world has made a bigger machine. A 232 inch machine was made by Charles Walmsley of England for a Canadian mill.

The first paper making machine ever produced by the Bagley & Sewell Company was manufactured in 1889 and installed in what is now the Ontario Mill of the International Paper Company at Glen Park. It was an 86 inch machine and was rated at 200 feet per minute, but is still in operation and developing 400 feet per minute.

SECRECY ABOUT AMERICAN DYES

American dye stuff manufacturers are apparently unwilling to allow foreign competitors to know the status of their business during the past year.

Some couple of months ago the United States Tariff Commission, which is required by law to compile annual statistics of the dye-stuffs industry of this country, sent out questionnaires to 269 dye-stuff manufacturers. In spite of the fact that one letter reminding them to file these statistics has been sent out by the Commission up to the time of this writing only 60 manufacturers have complied with the request. The only answer to this is that the manufacturers are unwilling to allow French, English, Japanese and German dye-stuff manufacturers to know the present status of their business in the United States. It is understood, moreover, that dye-stuff manufacturers in the foreign countries are not complying with similar requests which indicates that the foreign dye-stuff manufacturers feel much the same about the matter as the dye-stuff manufacturers in the United States. It is understood that a further letter will be sent out in the near future by the Commission urging that these figures be filed with the Commission.

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ANNUAL CONVENTION OF JOBBERS

Harvey E. Platt of Philadelphia is Elected President of the National Paper Trade Association for the Ensuing Year

Ross P. Andress of Washington Is Elected Vice President of the Fine Paper Division and E. F. Herrlinger of Cincinnati Is Chosen Vice-President of the Coarse Paper Division—Excellent Addresses Are Made by a Number of Representative Men in the Organizations—Some of the Activities That Were Interrupted by the War Are to Be Renewed—Secretary Ridgway Presents Encouraging Reports.

The annual meeting of the Coarse Paper Division of the National Paper Trade Association was called to order in the Astor Gallery of the Waldorf-Astoria Hotel today by Vice-President H. E. Platt.

THE CHAIRMAN: The first thing on the program is the roll call, but we have distributed cards and want each member to register.

We will get through with the uninteresting part of the meeting at the start, while we are assembling, viz., the Vice-President's report. The report is somewhat general, for the reason that the Vice-President does not want to encroach on the prerogatives of the incoming administration as to details as to how the subjects mentioned are to be carried out. We have tried to state in a general way the matters and the topics which should be a portion of the Association's work for the coming year.

The Secretary's report will show what has been accomplished during the past year.

The year 1918 has been one of the most eventful years in the economic and commercial world and the paper business has been no exception. Prior to November 11 the entire industry of the country, of which the paper industry is one of the larger factors, was co-ordinated in the one big program of winning the war. Since that date our energies have all been bent toward the peace program, and this period of readjustment has given rise to entirely new problems.

One of the great lessons of the war has been the necessity for a more unselfish, friendly and closer co-operative spirit between various branches of the same industry. This has given an added impetus to a movement that was inaugurated some time ago but which only recently has attained such headway that definite results should be forthcoming. We refer to the better understanding and closer co-operation between manufacturer and merchant.

The solution of the problem necessary to the proper development of this co-operative spirit should have your thoughtful consideration during the coming year. The Executive Committee should have earnest support and hearty co-operation of every local association and of every individual member of each association. The matter is of special importance during the present period of readjustment and demands broad constructive planning.

It is based on sound economic principles and is much bigger and broader than any one set of trade customs or other questions that may come up under it. The letter killeth but the spirit maketh alive. The first objective to be established is a broad spirit of co-operation on the part of both the manufacturing and the distributing end of this great industry of ours. An atmosphere must first be created—an atmosphere that will bring us

together in a series of friendly conferences to be held throughout the year with the Manufacturers' Committee.

You will note from the Secretary's report that the movement has made splendid progress in the three conferences.

A co-operative movement of this kind gives rise to a number of problems, some of which have already been discussed in the conferences. Among the more important are:

I. The adoption of a series of Trade Customs formulated with a view of eliminating as far as possible trade abuses, misunderstandings, etc.; and to standardize methods of ordering.

II. Ways and means have been discussed with the manufacturers for the better standardization of certain grades of wrappings.

III. The Exchange of Market Information which involves the exchange of statistical information between manufacturers and merchants. It is unnecessary to elaborate on the value to us of this exchange as we have only to point to the experience of the Writing Paper Merchants between whom and the manufacturers the exchange of statistics has been going on for some time.

The Wrapping Paper Manufacturers' Service Bureau, which is an Association of 33 to 35 wrapping paper manufacturers, has quite an elaborate system of reporting and distributing statistical information in terms of "tons" covering market conditions, production, stock on hand, shipments, etc. The officials of this Bureau have expressed their willingness to exchange with us a portion of this information as soon as we can collect from our members such statistical information about our markets as will make the exchange of mutual advantage.

This brings us to the discussion of a very important topic, i. e., Statistics. On this question we have a definite goal at which to aim and a definite object for which to strive, and we can make a beginning in the program of the exchange of information with the manufacturers which will lend itself to a development into a complete analysis of market conditions.

As a beginning the manufactories will give us their total shipments in tons if we will give them our shipments in tons. The details of how this can be worked out will be covered in the report of the Executive Committee.

The Secretary's report will show what has been accomplished during the past year, and I have touched very briefly on some of the problems which we have before us for the coming year. Association work always is first idealistic and then it endeavors to express those ideals in action. In closing, I would like to read an extract from an advertisement which appeared in one of our daily papers some weeks ago.

"We do not believe that commercial success measured purely by its material reward will ever again satisfy American business men. But if we can regard business achievement as public

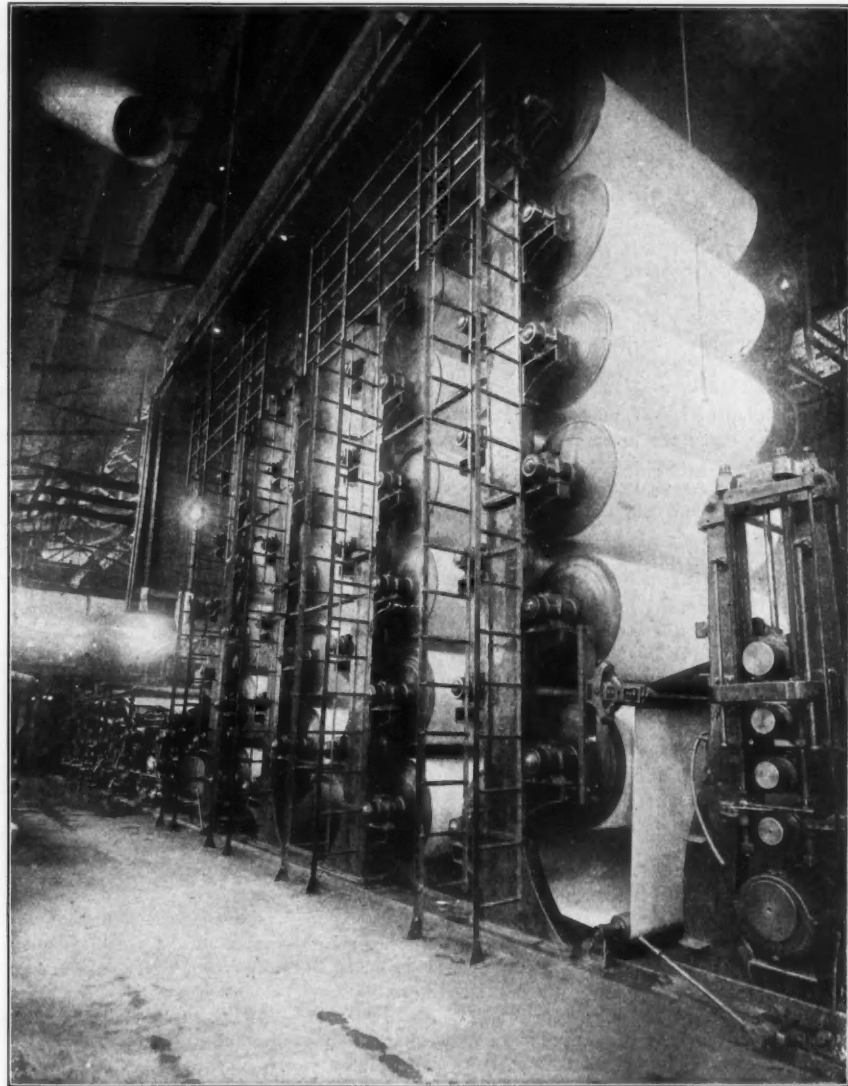
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The cut shows vertical drying system as recently installed in two of the principal mills in CANADA



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Paper and Pulp Mill Machinery Builders

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service, business success as a contribution to world progress, business management as a great human responsibility, the lessons of the war will not be lost."

Divisional Secretaries Report

We will now hear the Divisional Secretary's report.

MR. CURTIS E. LYTER: The end of this year's activities brings to a close the third year of this division under the present arrangement of the association. In that time it has grown from what was termed the "Manila Section," with a small representation, whose affairs were directed by a Manila Committee, to a membership of 267 paper merchants who handle coarse papers exclusively or stock them in sufficient quantities to be considered factors in the trade.

Our membership covers practically every state in the Union excepting Texas, and all large distributing centers except Chicago. Plans are now under way to include Texas, and, in fact, the coarse paper merchants of that district have expressed a willingness and desire to be convinced of the legitimacy of our contentions that they should affiliate with us. In the past year we have received no new organizations into this body, for with the exceptions noted, there are no "new worlds to conquer." It behooves each unit of this association to extend its roster to include every coarse paper merchant who is eligible, for in work of this sort we cannot stand still—we either go forward, or backward. We would recommend to the local associations that if they have not done so, they appoint good live committees to investigate the standing of all dealers, and report to their constituents the advisability of inviting such dealers as are eligible to membership.

The value of the work of your Executive Committeemen and the War Service Committee, together with the untiring efforts of the Secretary, in representing the association in Washington and elsewhere in behalf of the Coarse Paper Members, should not be overlooked when mention is made of the past year's activities. And while the results of their endeavors speak for themselves, we put emphasis upon this phase of the question, to bring it to the particular notice of those members who are probably not as familiar with what did happen, and what might have happened, had not the association been so ably represented.

Your Executive Committee has had four meetings during the past year, the first of which was called at Philadelphia on April 23d and 24th, where the important subject of answering the query of The Federal Trade Commission as to how the curtailment of the use of paper could be best brought about and with the least injury to all concerned. The Committee answered, in substance, that if and when a curtailment should become necessary, it would recommend the uniform curtailment of all mills. This was, in reality, our inception into war work, and from that date on our activities increased.

In June, the Secretary, at the request of Mr. Wilson, Chief of the Manufacturing Section of the Pulp and Paper Division of the War Industries Board, went to Washington and was informed that a curtailment would be necessary. The Secretary immediately called a meeting of the Board of Directors to be held in Washington on June 24th, at which time Mr. Wilson outlined the seriousness of the situation, from a transportation standpoint, the necessity of the paper industry reducing its tonnage, and suggestions were asked how this could be done. After such consideration as the limited time allowed, the Executive Committee recommended certain eliminations, and the standardization of other wrappings and tissues. In presenting these recommendations attention was called to the fact that they were made from a merchandising view of the situation, while from a manufacturing standpoint, some of them might not be practicable or advisable. Very soon after this meeting, permanent

War Service Committees were appointed by each division of the association, with Mr. H. E. Platt, Mr. A. J. Corning and Mr. F. E. Floyd representing the Coarse Paper Section, with the President, Mr. George Olmsted, member ex-officio.

The first set of regulations were issued by the War Industries Board and these were immediately distributed by the Secretary to all members. The regulations were found to be impracticable for certain sections of the country, and in August they were enlarged and made more liberal, so that they did not cause any particular inconvenience to any one, for, with the exception of a very few instances, permits for odd sizes were granted when circumstances warranted it, and, in a measure, the restrictions proved a boon for the merchants, enabling them to dispose of odd sizes and weights, which, in many cases, they had been carrying as dead stock for a long time.

In addition to the work of the War Service Committee which we have just covered, five other conferences were held with the War Industries Board between June 24th and November 11th, when the armistice was signed. In each of these, as in all correspondence and long distance messages which passed between the War Industries Board and our Committee, careful consideration was given the suggestions made by our Committee, only because it represented a large percentage of the paper merchants of the nation, and this was so stated by the Board. There was much work done by individual effort of your committeemen, work concerning which you are probably not aware, but all of which had a direct bearing upon the position which was given our industry by the government and enabled us to operate with more or less freedom, when, on the other hand, the manufacture and distribution of paper might have been seriously restricted. How very near we came to being placed on the non-essential list is noted in Mr. Ridgway's Bulletin No. 3 of July 1st, which reads: "The subject of priorities for fuel to be granted to the paper manufacturer is not as clear as it might be, but we believe that at the present time, it is the intention of the government to grant no priorities to paper manufacturers except to cover actual government contracts." The fact that paper was placed in the fourth class on the priorities list is proof that somebody was responsible for this change of mind on the part of the priorities division of the War Industries Board, and this association's representatives should be given credit for at least a portion of that work.

Other meetings of the Executive Committee were held in Minneapolis on September 5th and in Boston on December 10th and 11th, and full details of these meetings were reported in the Bulletin. Our Vice-President has touched upon the work of the Committee appointed in this division to confer with a like committee from the Wrapping Paper Manufacturers' Service Bureau, for the purpose of eliminating trade abuses, the adoption of trade customs of mutual advantage that will be approved by the Department of Commerce of the United States, and to father a movement which will bring the manufacturer and merchant to a position where buyer and seller will establish a better understanding, one with the other. There has been to date but three conferences held: The first in this city on December 13th, at which time we found the manufacturers in a receptive mood, and with an apparently earnest desire to meet us halfway and to be treated likewise in solving problems which are vexatious, but not insurmountable, if the proper spirit of give and take enters into our discussions. At this meeting our Committee entered the conference with suggestions that had been evolved from a misunderstanding: we were under the impression that the recommended regulations issued by the War Industries Board under date of November 25th, but which were in no way binding, had been the result of suggestions made to the War Industries Board by the manufacturers. With this idea in mind your Executive Committee, at the Boston meeting,

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made certain revisions which they expected to put before the manufacturers and ask their co-operation in adopting them as trade customs. It developed that the manufacturers had had no voice in the recommendations, and another conference was scheduled for Chicago on January 7th. Our Committee met in Chicago on the 6th of January, used the trade customs in effect prior to 1916 as a base, made certain recommendations, and presented these to the Manufacturers' Committee; these were taken under advisement by the manufacturers, to be reported at the next conference, which was held yesterday afternoon in this hotel, and a report of that conference will be made by the Chairman of that Committee.

The subject of statistics will be presented later during this meeting by the Chairman of that Committee, and it is hoped that any suggestions made covering this subject will have better support than our present plan has had during the past year. From 267 members, the largest number reporting monthly sales at any time was in March, when 46 reported. September was the lowest month, with 37. In weekly tonnage, we did only a little better, when on August 7th, 79 reported; and on December 26th, but 48. There is something radically wrong with either the present system or else the membership does not understand it, and steps should be taken to bring these statistics, vital to our industry, up to a high point of efficiency. Manufacturers of all grades of paper, excepting book, are compiling statistics that grow more and more comprehensive each year, and merchants should, if they would keep abreast of the times, and in touch with the affairs of their own industry, do likewise.

The Association Bulletin

The Bulletin issued from the Assistant Secretary's office has been mailed to all merchants affiliating with this division for the past year, except for a period of three months when the Assistant Secretary, through ill health, was compelled to relinquish his duties. The Weekly Bulletin contains information, as accurately as it can be learned, regarding coarse paper market conditions, and members can be of great assistance in this service if they will at any time communicate with the Assistant Secretary regarding anything affecting the industry which is unusual or out of the ordinary.

THE CHAIRMAN: If there is no objection, the Secretary's report will be received and filed.

It was said a moment ago that one of the lessons of the war was association work. I think another lesson was "Business Ethics." I say that because this thought seemed to be the golden thread running through the large meetings of war service committees under the United States Chamber of Commerce at Atlantic City, and we are going to have the pleasure of hearing from one of our own members, who needs no introduction. The time is late and I will not take any time in telling his virtues, because they are all known. I take great pleasure in presenting Frank E. Floyd, of the Crescent Paper Company, of Indianapolis.

Mr. Floyd on Ethics

MR. FRANK E. FLOYD: I do not wish in any degree whatever to minimize the obligation we owe to each other, but at this time it is not unfair to say that we recognize in our daily contact with the world a very apparent neglect on the part of some who overlook this very self-satisfying tenet—the use of which makes life worth more to the living and memory more beautiful to those who have gone before.

Our experience, as a nation, in the last two years, has given us a very forceful application of this neglect. Had the German plutocrats dealt with their neighbors according to moral, or even business ethics, France and Belgium would never have been subjected to the atrocities so wicked, nor would the United States have had to prove, by force of arms and loss of life, their desire to be "ethical" in the eyes of the world at large.

I do not wish to sermonize, but I do wish to impress upon our minds that we may, by a code of ethics, however written, build a happier and more lasting business relationship, one with the other, than we can ever hope to build by dealing with each transaction upon its own individual characteristics.

Let us analyze our own endeavors. Each of us can readily call to mind at least one transaction where we were not willing to recognize in our contact with others the least indication of sound business ethics. It may have been due to our own individual opinion of the other, founded either by personal contact in the past or information received prior to the transaction in question; but we can also recall some incident where business ethics has played a most important part in our relationships, which, however slightly, and probably not at all noticed at the immediate time, has builded friendships and business associations between us and those friends—such relationships never to be accomplished except through the use of "ethics" in the true sense of its meaning.

The home, as well as the business, must be guided to happiness and success by the use of the true code of moral and business ethics. Our homes we guard well—always guarded by that consistent code of love, kindness, virtue and duty—each of which is nothing more than an attribute of "ethics." Our business also we should surround with that thought so aptly expressed in the "Golden Rule"—a consciousness of duty to others less fortunate and a desire to fulfill every duty and obligation to those with whom we labor on a common platform. I realize this condition would be ideal and its practice might be called theory, but I also realize, and so do we all, that no structure, grand and beautiful, was ever builded except on a foundation amply able to carry same, or without tedious and close thought and application to the laws which govern. Why, then, should a business with a code of ethics be theory? It is not. All of us have the earnest desire to be true to ourselves and true to the other fellow. It is only the temporary transaction that transforms us from the ethical to the unethical—a coat of mail, so to speak; therefore, if we advance with open mind and well-defined conviction, we at once train the mind of the other to fair dealing, such as he expects to receive at our hands.

We do not at any time find it necessary to vouchsafe our own possession of that desire to be ethical—it being so well defined in a nature that it is recognizable at once if its possession is well grounded and true.

Our principal institutions—the churches—lodges and clubs, have their code of ethics—perhaps not called by that name, but, nevertheless, through all their creeds, beliefs, rituals and written purposes we find a well-defined strain of ethics, exemplified by ministrations to the well-being of their members or earnest thought for the welfare of others less informed or less fortunate in the happiness of life. Why should business be shrouded, therefore, with the cloak of wisdom less wise? Why should it not be of that class of industry, which may lend to others rather than to always exact from others? We know that man was made dependent, and that only by social and business intercourse may he improve in mental status—the only gift from God which makes him different to other animals.

We, as a nation, are a God-fearing people; therefore, His laws should govern our lives, and these laws we all know full well. We see certain well-defined principles in nature, and we know that to accomplish certain results, electrically, we must follow certain laws—to reach certain depths we must proceed downward—to accomplish certain aims we must study and apply certain rules, etc. To business, then, certain practices are well founded, and well-defined methods should be applied.

Never has there been a more opportune time for close relationship in business. Our National Paper Trade Association is proof of that business relationship in the particular industry in which we are so much interested. It has been but a few short years since you and I were entirely unfamiliar with each other.

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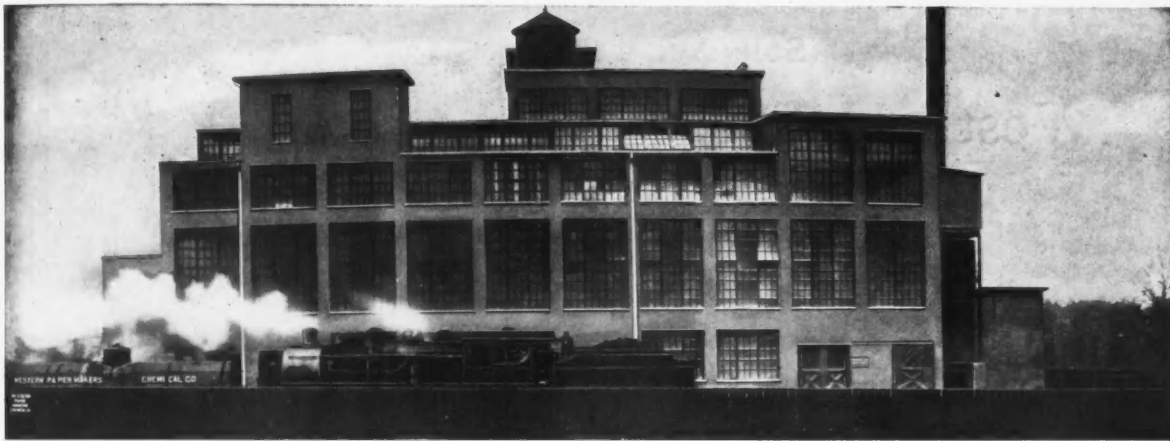
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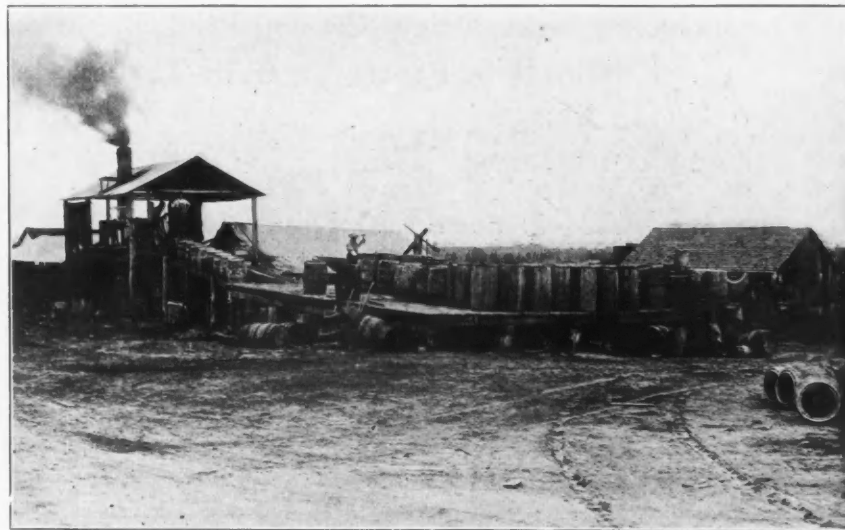
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We did not have that contact with each other to prove that after all we are but like creatures, living on the same principles of life and under the same laws of nature.

No member of our Association will dispute the fact that, but a few years past, he thought out his own problems without the help of others. We may, and do that very thing now, to a more or less degree, but we all know that by the contact with each other we are keener and quicker than if our boundary were our own office and threshold.

We all recognize that our contact makes for us a more staple thought of purpose, and we also recognize our Association has brought us more thoroughly in touch with many thoughts which lead us to closer relationship with each other. Our Association has accomplished, with our mill connections, a platform built on "ethics," on which we are able to stand and look each other in the face, feeling that their good is our good, and, that what is good and profitable to us, is likewise to them.

Considering our own individual dealings with our own individual mill connections, we hesitate now to act as we may have acted in the past—why? Because we have in our own minds a more "ethical" consideration for our mill connection than were we still laboring without the spirit of co-operation—brought about by contact in our Association. We realize that our mill friends have a tenable position; and the thought that the particular mill in question is working satisfactorily with one or more of our competitive friends, assures us that we may be at fault and forces us to an inventory of ourselves. We all know what an "invoice of self" means to us.

On the other hand, do we see where the mill connection may also be benefited? I think we do. They are not infallible (nor are we), but they more readily see their failure, if they have the personal contact, than they could possibly see it, were they not favored by this contact—brought about by association work.

It is well, I think, during this particular epoch of our history, to consider for a brief moment the possibilities of the future. I think we all believe in the future of our great nation and feel assured we are entering an era of stability in the business and financial world, such as has never been our pleasure to experience. This note of optimism may not ring as clear to us in the paper industry as we would have it, but have we not enjoyed the ringing for two years past? Our foundations are well built and our experiences have been of such nature, we cannot forget; but we must not allow the slight turn in the tide to dampen our ardor to such extent that we become pessimistic. This nation, of which we are an important part, will be called upon to instruct the world, not only in living, so that others may live, but to emulate the example of our forefathers in their desire to live and have their being under the Stars and Stripes—the symbol of "Ethics" and the result of their strict adherence to a code of "Ethics" so firmly and wisely adhered to when they wrote our constitution.

We fully realize the same cannot be said of our sister nations in toto. We also know that some of the nations, by virtue of longer experience, practice a "Code of Business Ethics" well known to all. With this condition impressed upon our minds more forcibly than ever before, we find it necessary to proceed cautiously and carefully, that we may not be classed with the more or less undesirables—some decidedly more so than others.

Our association can and will work wonders for us in solving the problem for the paper industry. Through our association, we, as individuals, will be able to learn the peculiarities of the various "Codes" (so considered) by other nations; and even through our association we may learn from the others these peculiarities to greater extent than we could hope to learn, were it not for our acquaintance and friendship, one for the other.

Our dealings with these problems may be as individuals, or it may be through our Secretary's office; but however they

present themselves, we have at our command knowledge, which otherwise could not be obtained. We, as a part of the industry of this great Nation, should, and will, establish "Ethics" in our transactions with the other Nations or their representatives, recognizable as fundamentally sound.

The "Ethics" with which we may have to deal will soon be defined by us, either as good sound business, in accordance with the real meaning of the term, or a mannerism peculiar to the representatives of the nation, with whom we are at the time transacting such business. Great care and careful study, therefore, should be given to this subject, which is sure to present itself to all of us, maybe sooner than we expect. If the mannerism, above referred to, is a method of business used by the nation, with whom we are dealing, and does not have the appearance of an ethical, sound and safe trade, then we will hesitate, and well we should. I do not feel justified in saying that all business existing under the control and jurisdiction of the central powers would stoop to unfair and unethical dealings; but I do say that, in my opinion, the business of many representatives of these powers was exceedingly dangerous to us, as a nation, and to many of our subjects. You may look back; and, in the kaleidoscope of the last three years, be fully convinced, by what you see, that we have every reason to be sure that we recognize the difference between a knave and one who desires to build for the future on an ethical foundation—the only foundation that will stand the test of time.

Therefore, let us all strive in our transactions with our employees—associates—mill connections and others of greater or less importance, to be "ethical," even to such a degree that we feel perhaps we may have accomplished more with the one we dealt with, had we not been fair to ourselves from the standpoint of "Ethics." If he has taken advantage, he knows it now, and we know it sooner or later. What is the result? He has accomplished his purpose with us at the time, but next time he has to move on to other fields, while we establish ourselves with those more ethical—at the same time feeling that pride within, that once more we are happy and can sleep soundly and undisturbed by that strange mentality—such condition of mind that scores, yea, hundreds, would forfeit all they possess to shake off and start anew. How would they start? I dare say, with a strict "code of Ethics"—moral and business ethics—the only staple law of business on which we may all look back and say "I have lived and let live."

Mr. Herrlinger's Report

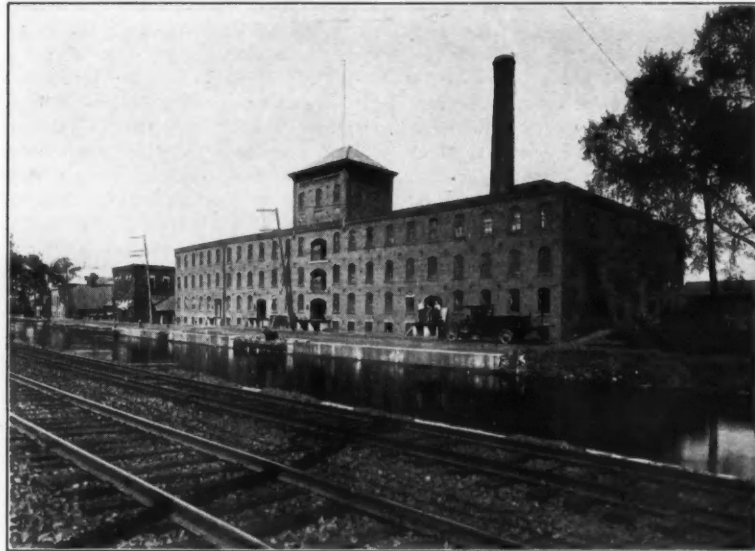
THE CHAIRMAN: We had a conference with the manufacturers yesterday lasting from about 3:30 to 6:45, and I would ask Mr. Herrlinger if he would kindly give us a report of that conference.

MR. E. F. HERRLINGER: Mr. Chairman and fellow members of the Coarse Paper Division: My position at the present time reminds me of a little story. A fellow stood up to make a little talk one night and they asked him if he had any notes, and he said, "No, I can't sing."

That is my position. I have no notes, except a few I made a few moments ago.

I was on the merchant's side of this controversy, so I suppose I have you all with me, to begin with, and I hardly think I can say very much more than our assistant secretary has already stated in reference to what transpired at these various meetings.

Under advice from Mr. Kessinger, it is entirely impossible for anybody to hope to establish trade customs with the manufacturers by agreement. They go on the theory that anything that is brought about by agreement is not sound. So our only hope was to convince them individually that we have a substantial basis for our argument, and if they would listen to us we might educate them up to the point of believing that they



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could grant some of the requests we were asking, without doing themselves any material injury.

We took up the various items suggested at the conference held at the La Salle Hotel on January 6, 1919, and of course everything went along very smoothly so long as we granted everything that the manufacturers thought was right. We finally, however, reached two of the fundamental points, one was the question of the cash discount, the real thorn in the side of a manufacturer. The other was the question of a differential between sheets and rolls. I might say that the discussion in reference to cash discount lasted until nearly seven o'clock, and we never reached the question of differential between sheets and rolls.

After the evening was over one of the important members of this Service Bureau said: "Why didn't you talk about the sheets and rolls?" I said, "Well, it was always a pleasure to hold a little something up our sleeves, and we could not convince you we were right on the matter of discount—or at least did not feel we had convinced you, and we thought it would be unnecessary to take up the question of sheets and rolls at the present time." Now I think this committee which met with the committee from the manufacturers advanced every feasible reason we have for the re-establishing of this 3 per cent cash discount. Mr. Kessinger very plainly outlined to us that a cash discount was nothing that could be brought about by agreement. It was something that must be brought about by the natural trend of events. So naturally we thought inasmuch as the 3 per cent cash discount had been in force for about fifteen years and was actually brought about by natural trade transactions it was the one we should have in force at the present time.

Now of course we discussed the question of the buyer of paper buying on the same discount as he sold it, and we plainly pointed out to them that that meant an actual loss. That when a man bought a thing at a certain price less 2 per cent cash discount, and sold it at a profit less 2 per cent cash discount, he was losing money on the transaction, so far as the discount was concerned. We also plainly pointed out to them that having to keep merchandise on hand for months, the shrinkage in weight and possibly deterioration, etc., was a big item with the average paper merchant, and any little profit we might make in this difference of 1 per cent in discount would not over-balance the loss in shrinkage and other things that occur in the carrying of a paper stock. We also pointed out to them that the discount was admittedly an evidence of a man's credit standing. We felt that when we give a man a substantial discount for payment of the account within a short period and he does not avail himself of it, that automatically advises us there is something wrong with the man. There are only two reasons in our minds—why he was not availing himself of that discount. The first one was that he had exhausted every credit at the bank, and there was no chance of his securing any more money at 6 per cent per annum to discount a bill that netted him 3 per cent profit in thirty days. The only other conclusion was that if he was not a merchant of sufficient intelligence to see that when he lost his 3 per cent cash discount he was really placing himself in position to not compete with his competitors, there was still something wrong with that man. We also cited other businesses that were handled on about the same lines.

The manufacturers advanced the argument that all the raw materials they were purchasing were being purchased on a net cash basis, and some of those that they formerly bought on a basis of 2 per cent cash discount had recently been changed to a net cash basis, and they figured that it would be unwise for them to buy raw material on a net cash basis and sell it on a discount basis of 3 per cent. In order to combat this, we cited some industries that do just exactly that thing. We cited, for instance, the shoe findings, linings of shoes, etc., which are

made largely of cotton, and are sold to the shoe factory on terms of 6 per cent ten days and 5 per cent thirty days. Leather, for example, made from hides that are bought on a strictly cash basis, hides that in many instances are bought with sight draft attached to the bill of lading, is sold to the shoe manufacturer at 5 per cent ten days, 4 per cent thirty days. Linen thread also used by shoe manufacturers is sold on the discount basis of 6 per cent ten days and 5 per cent thirty days.

You will note here that shoe findings and linen thread and the other small items that enter into the manufacture of shoes are sold at just exactly 1 per cent more cash discount than leather. I took occasion to ask a thread manufacturer why he sold thread to the shoe manufacturers at 1 per cent cash discount more than leather, and his answer was, "We like to get our money first." In other words, these thread manufacturers figure that when the payment day arrives, when a shoe factory pays its bills, and it has, for example, \$100,000 worth of bills to pay and only \$50,000 in the bank, it would naturally pay the bills that carried the largest discount. We told him that was exactly our position. When we sold paper to the country merchant we wanted to give him a sufficient discount so when his payment day arrived and he had only about half the money in the bank to pay his bills, he would pay ours first, and we would not be obliged to wait while some other manufacturer would get his money and we would have to wait until he had more money in the bank.

First of all, we admitted to the manufacturer that any discount in excess of the legal rate of interest per annum is fictitious. There is no argument about it. We felt that we had none to advance. We simply asked him for this discount of 3 per cent because it would make our condition more healthy and in turn make their condition more healthy. The only argument that I heard them advance in favor of a 3 per cent cash discount at present in force, or in favor of a net basis, was that it was contrary to the trend of events, and that they were buying their raw material on a cash basis, and it did not seem fair that they should be obliged to give 3 per cent cash discount.

Our answer to that was that inasmuch as they were giving 3 per cent cash discount in thirty days, it must necessarily be a part of the price. We figured it was like the laundry in the traveling man's expense account. It was there, even if you did not see it. We also argued that the discount was a penalty for not paying the invoice, rather than a premium for paying it. But we soon found that as a body they were not in a position to discuss the matter with us from the standpoint of an association.

I took occasion as Chairman of the committee to cite the condition of a concern who had taken the pains to figure the exact difference between 2 and 3 per cent cash discount during the year 1918, and it made a difference of \$7,333. I figure that that merchant lost that money, that they would have sold all his paper just as well at the prices at which it was sold as if he had received 3 per cent instead of 2 per cent, and he is simply out \$7,333. After discussing the subject at some length, it was finally decided by our committee that the only way we could hope to obtain any result on this matter of 3 per cent cash discount was through our own individual efforts with the various mills with whom we do business. They cannot concede as a body any kind of a discount to us. They claim it is contrary to law, and it is contrary to their policy. They operate entirely without agreement. They would not by agreement reduce the present discount and they could not by agreement increase the present discount. So the committee feels that it will be necessary, if it is your desire to bring about the 3 per cent cash discount that was formerly in effect, you should each individually use your best efforts with all the mills with whom you do business not now allowing 3 per cent to raise their discount to that figure. This can be done individually about as well as

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it can be done collectively. In fact, it could hardly be done collectively. It seems that in every subsidiary association of the National Paper Trade there has been quite a long discussion on the matter of discount, and if we are wrong in our contention it would indeed seem strange that all of the members of the National Paper Trade Association should be wrong. Every subsidiary association expressed itself as being in favor of the return to the 3 per cent cash discount. Mr. Kessinger, who very ably represents the Service Bureau, and for whom I have the very highest regard, has always maintained that the members of the Service Bureau should do just as they please individually. There will be no effort on the part of any of their members to discourage anything the members individually want to do. That has opened the path for us. It seems it will only be necessary for us to bring some pressure to restore the 3 per cent cash discount thirty days.

It is to be hoped there will be another meeting of these committees in the near future, when possibly we can get an idea from some of those manufacturers as to what attitude they intend to take.

I would like to appeal to the members, if it is really your desire to have the terms 3 per cent thirty days re-established, to use your best efforts individually with the mills with whom you do business, to try to bring it about. I think one of the members here will approve when I say that since our meeting in Chicago two or three of the mills with whom he does business have already signified their intention of returning to the 3 per cent cash discount basis, and it simply needs a little individual effort on our part with our mills to bring this about, so that it will be in reality a trade custom. (Applause.)

THE CHAIRMAN: I have attended, I think, nearly every conference that has been held with the manufacturers on this discount proposition, starting with a conference in Rochester back in 1914, when the Association was able to stave off the establishment of 2 per cent for a period of about two years, and I want to say that the Association is to be congratulated on the personnel of the committee, because I have never heard the subject more forcefully or more logically presented or the entire matter handled in a more masterly manner than was done by the chairman and the members of the committee, both at Chicago and here yesterday afternoon. I think that statement is absolutely due the committee. Every argument was put up in a logical and forceful way, and as far as the argument goes, there is no question as to which side had the better of it. The results, of course, may have been different. We have another matter of unfinished business on which I would like Mr. Seinsheimer to give us some light, and that is the matter of statistics.

MR. SEINSHEIMER: Mr. Chairman and gentlemen, I feel rather at a disadvantage in trying to talk on statistics after the subject has been so ably handled by Mr. Kessinger. In a way, however, it has made it a little easier for me, because I think you have all had an opportunity to think the subject over in your own mind as to whether statistics really mean anything to you. We have tried it out with the various associations for some time on a tonnage basis, reporting our purchases, reporting our monthly sales in dollars and cents, and it has not been very much of a success, because we have not had the co-operation of the various members. Now this has to be put up to you.

Do you want statistics, or don't you? There is no personal feeling in the matter. This committee is willing to put all the time necessary to get results, but we cannot get them without proper co-operation, and in this respect I would like to ask those present to kindly rise, indicating those who have been furnishing statistics. I would like to get a line on those who have been reporting. (In response to this invitation twenty-five members rose.)

Now I would like to ask whether Mr. Kessinger's talk has

convinced any of those who have not reported that they would be willing to report. We do not want you to come here and be influenced by what any one man says and then go home and report to your clerk what you want to do, and in a week he will say, "We cannot do it, it is too much work," and you will be busy and will say, "Well, never mind." That won't do. We used to come to our meetings and go back and tell our clerks to do it, and they would be busy and we would forget about it. If it is the sense of this meeting that you want statistics so that we can go to the mills and get something in return, we are willing to work on it.

Tonnage Sales Statistics

THE CHAIRMAN: The committee is working up a proposition whereby we shall have a set of tonnage sales statistics rather than sales by dollars and cents, and which we believe, if they are returned to us in the form of graphic charts, we can exchange with the manufacturers for their statistics, and have both theirs and ours, showing us the tendency of the market. There are some very difficult problems in working out the details. It is something that cannot be worked out hurriedly, but we believe we can eventually get a plan which, if we have your support, we believe will be of a great deal of value to you individually. I think we want to sell ourselves the idea of statistics, that we are not doing it for the general good of the Association, for the general good of our competitors, we can be selfish in the matter, we ourselves will get the most out of these statistics.

The more we know about our own business, about the statistics of our own business, and how they compare with the general trend of the market, the more intelligently we can render judgment and decisions on the questions of policy that come up every day in our business.

I would like very much to hear some discussion on statistics. I believe the committee would welcome any suggestions. As I said before, when you get right down to study it there are a number of very difficult problems that will have to be solved. I should be glad to hear some discussion.

MR. WARD: I think if any man did not get up when that standing vote was asked for and he could be convinced by anything we could say individually or collectively that he was going to gain by turning those reports in that he would do it right away.

Now, one of those things that I see is that if we are merchandising our goods properly we are adding a certain percentage on our cost to cover the profit we want to make, and our cost of doing business; therefore, we are all greatly interested in any general decline in the market. Interested, of course, from the standpoint of depreciation in the stock. But we are also greatly interested because the higher the price the more profit we shall make, and we know that our cost of doing business is not going to come down. We know that the men we are paying \$25 a week to that we were paying \$15 a week, regardless of what our profits are, we are not going to reduce that salary. We know that when orders are not coming in to the mills as they are now that the tendency is to lower the prices. The only thing that will keep these prices up is the knowledge that the goods are not being ordered, that their competitors, so to speak, are not getting the business that they would get if they lowered their price. Therefore, if all of us realized that if Kraft sells at 8 cents a pound, for the sake of argument, we shall make more money than if it sells at 6 cents. I think if every man realizes that sending in these reports promptly will mean a tendency to keep the market at the proper prices, whatever that price is, that he will not go back without designating somebody in his office and see that it is done, and done properly, and that he will realize that it is worth his time to put a memorandum on his desk and see that if they are to go forward on Friday that they go forward on Friday, and not on Saturday.

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MR. WALTER: Mr. Chairman, I believe everyone of us can recognize the force of what Mr. Ward has just said. And there is another thing to be taken into consideration. That is, if we give any material assistance to the mills in arriving at the information that really would be of assistance to them, and, as Mr. Ward says, will be of assistance to us in return, we are going to receive from the mill something that is worth a good deal more. A good many of us in the last year have tried to keep up sending in these statistics. They were not complete. Of course, through force of existing conditions we were not always able to make them up each month, sometimes due to the change in our employees. You are going to get from the mills in return, if I understand correctly, the amount of tonnage that is going out from them, giving you a very reliable check, I think about as reliable a check as you can get, of the amount of merchandise that is being sold. And I think that will be of material advantage to everyone of us. So I think we owe it to ourselves to make strenuous efforts to get these reports in and get the returns which will be promised to us for it.

THE CHAIRMAN: We shall not only get value from those who come back, but I maintain the mere fact that you get up statistics of your own business to report will show you something about your own business that you never knew. And when you compare your own business with the general market trend you will have some very reliable facts. That has been the experience of everybody of business men who have gone into this statistical scheme. We want your co-operation and hearty support in getting this information.

MR. WARD: The very fact that the manufacturers want these reports from us is in itself sufficient reason to do it. If we don't do the things that they ask us to do, then they will not meet us in any spirit of co-operation. That in itself is a sufficient reason.

THE CHAIRMAN: I want to say this; the working out of these problems will take a lot of time and thought and study. Now, gentlemen, this is your Association; these are your statistics. If you don't want them, tell us so and the committee will ask for a discharge, and it will save them a lot of work and trouble. If you do want them, say so and the committee will dig down and get to work and give the details and put it up to you. But if you are not going to do it say so now and save us the trouble.

Now, the Chair would like to entertain a motion either for or against. If you don't want them there is no feeling in the matter. It is a matter of business. If you don't want them, get up and make a motion and second it and carry it, that we don't have any statistics, that it is too much bother to make your returns, and we don't want them.

A MEMBER: Do I understand, a form is going to be gotten up and sent out?

THE CHAIRMAN: Oh, yes, forms will be sent out, and it may have to come to the selection of certain representative houses carrying specialties of certain lines in certain sections of the country, because I do not believe from our past experience we can get 100 per cent of our membership reporting. Now, just how those problems will be worked out I cannot say.

MR. O'NEILL: I never have had the reports made out, but we shall in future. The idea has been sold to me.

MR. WARD: When those forms are sent out, I suggest that the Secretary write a very forceful letter bringing out the arguments that have been presented here, in the hope that the things said to them all over again will sell the ones who are not at the meeting, just as we have sold Mr. O'Neill.

THE CHAIRMAN: We are going to do more than that. We are going to make a personal visit to each of the local associations that belong to this Association. Now if you do not want it, just save that work and expense and trouble. I am not speaking for myself, because I am not on the committee, but I am speak-

ing out of consideration for the Secretary. If you do not want it, somebody make a motion and I will put it to a vote. If you do want them I will be glad to entertain a motion on that.

MR. HODGENS: I move that the Committee on Statistics be requested to go at this work, and if this motion meets with a second, I would like to ask for a rising vote.

MR. WALTER: I second the motion.

The question was then put and the motion was carried by a rising vote.

The matter of statistics and the reporting of statistics is not a hard proposition at all. It is a perfectly simple and easy proposition, and it is really a duty that you owe yourselves. The trouble is, I think, that those of us who gather here at these meetings are usually the executives of business, and we are full of good intentions, as you see by the rising vote that was just had. These intentions are absolutely meant right now, but there is a little feeling of lethargy that comes over us when we get back home, and we forget all about those good intentions. Now, the point is, as I think and I believe, that every successful house has one of its members who attends to the detail work and goes over the books, and that man has some good ideas, and if you will go back home and talk this proposition and sell it to him, you will at least have sowed the seed of constructive work that is going to bring some results.

Now, in our business I just want to illustrate a little form that we have used, starting about two months ago, and it has not only been good for us, but it also enables us to gather these statistics that we can pass on to the Statistical Committee or to our Secretary.

Our salesmen are still our employees. We are trying to keep them feeling that they have an interest in our business, a mutual interest, and that whatever they are doing every day is for the good of the business, and whatever they are doing is good for them. We are trying to have them feel all the time that every move that they make, and every firm that they write, and every order that they take, is working straight back to them, and they are partners in that very effort they are putting into the business. We have a little form printed. It is a perfectly simple little thing. It is the daily report of the salesmen of every order that they take. He reports there the name of the man he sells the order to; just what the description of the goods are; the price he receives for it, and the estimated profit on that order. Now, without going into a lengthy discussion on cost accounting, I want to say that we have tried to educate those men to know what the profit of the order is before the goods are sold, and not wait until after the order is sold before determining the profit. They send that in every night. One man may have sold ten bills of goods that day. He simply enters the price and estimated gross sale, because you cannot tell exactly what it is going to be when goods are sold by the pound. There is a tabulation column at the bottom, on which the totals are put. There is another little column on the side which indicates how the order was received, whether he took it verbally, whether it came over the telephone, or came in through the mail system. The result is that in our line I get a tabulation at the end of the day and an actual tabulation of how much new goods we have sold, and whether it goes from the house or from the mill, and when those tabulations are made at the end of the day it is a perfectly simple matter if the association wants statistics by the day to give them. And it is so simple. It gives you much information that is good for you and will help you in conducting your own business. I want to sell this scheme to the association and have you give it a little thought. Take it back to your individual men and tell them of it and let them work out the problem. You have other things to do here. You cannot go into the details in the business, unless you want to go into it, but you can at least sell that to your statistical man or your detail man in your own business.

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MR. CORNING: A gentleman has asked me to send him one of these forms. If any one else would like one I would be glad to send it to him.

MR. CURTIS E. LYTER: There has been issued in the Middle States Association, and in use some eighteen months, a freight rate chart which has been compiled for us by a traffic man, and the members of the Middle States seem to be of the impression that the chart is of value.

At the time it was issued a copy of it was sent to Mr. Platt, and I think to all the other members of the Executive Committee of the Coarse Paper Division. The matter has been brought up at the Executive Committee meetings, and it was suggested that this chart be worked out to be of use to each subsidiary association of the National. I do not know that there is anything to be done about it this afternoon. An explanation of it will be sent.

You understand we will merely give you the outline of the plan. It will be up to you to have some man in your local association fill in the rates. But our Middle States members seem to think well of the plan. They have even put it in the hands of their salesmen for ready reference.

THE CHAIRMAN: Mr. Lyter has in his office machinery for getting out these charts. Mr. Lyter will first send to the president of each local association the form on which the local association will fill in the rate and send that back to Mr. Lyter's office, and duplicates will be made and mailed to each member of the association. That is the plan proposed. I don't know that any motion is necessary, because we are going to do it anyhow, and I think you will appreciate it when you get it.

MR. LYTER: You are all familiar with the conservation campaigns which were carried on by the government, how far-reaching those campaigns were in their scope, how they got entirely beyond control. Out in the Central and Middle States Associations it was felt that some action should be taken to offset insofar as was possible the damage that had been done to the business by the impression that there was an actual shortage of paper. With that idea in mind, an article was prepared which we out there have had published in one paper in each city where our Association was represented. The article has been written in the form of an interview and starts out by dealing with the paper industry, and the part that it had in the winning of the war. The real object of the article is to get over the message that there is no shortage in paper, that there is no reason why it should be saved from a patriotic standpoint. If you are interested in hearing this paper we shall be glad to read it. It is only a short one, and any member desiring copies for use in his city will be furnished with them upon request to the Chicago office.

THE CHAIRMAN: Gentlemen, do you wish that read?

A MEMBER: I move that it be read.

Remarks by Mr. Lyter

MR. LYTER: If any of you have had experience with newspapers you will know it is rather hard to get an article printed under a heading you put on it. Whoever has charge of it thinks he knows more about it than we do—and perhaps he does.

"In reviewing the winning of the war, and the part taken in this by American industry, the paper industry should not be overlooked," said one of the local paper merchants when seen today by a reporter for the ————. "It is not generally known by the public just how large a part our industry had in the movements which brought about the successful termination of hostilities. Paper, as a rule, is regarded by the average man as simply a means to an end, without taking into consideration the gigantic forces necessary to produce it. Let me give you some facts. When the call came for lumberjacks to cross the ocean and cut timbers for use in building barracks, piers, hospitals, and every kind of wooden structure necessary for our troops, the

camp of our wood pulp manufacturers responded with the best they had, with no thought of what hardships would follow when a shortage of wood was felt in the great paper making centers.

"Our volunteers and conscripted men were recorded, chosen and dispatched to cantonments as quickly as they were, chiefly because the paper manufacturers and merchants set aside all other orders and gave the right of way to government requirements. As the war progressed and we became more and more active, war demands for paper increased by leaps and bounds, and not once, to the best of my knowledge, was one shipment of food or munitions delayed on account of the paper industry lagging in supplying its part. And don't forget this, that paper was used in this war for purposes never thought of before. Shells, always heretofore packed in oiled cotton, were wrapped in paraffined papers. Paper surgical dressings, pneumonia jackets, and many other articles were found available through scientific research of chemically treated papers. Foodstuffs, instead of being shipped in tin, were packed in waterproofed paper containers, as this was found to be more sanitary and easier to store, to say nothing of the tonnage saved in shipping—tonnage saved when every pound counted.

Our tissue mills were called upon to furnish unheard of amounts of light weight absorbent sheets of paper, which our troops used as toweling, gun wipes, and other purposes which added to the cleanliness and health of our boys. Probably it will give you a better idea and a clearer conception of the magnitude of our industry when I tell you paper is the fifth largest users of coal and the seventh largest users of transportation in the United States.

Our consumption of chemicals is enormous, and when some of them were found to be needed in war materials, they were turned over for that use. Of course, all these things could not be done without curtailing domestic consumption, and that was done. The public, through campaigns carried on by the paper merchants and this division of the War Industries Board, was apprised of the situation and it was asked to save paper, in order that fuel, labor and transportation might be released for war purposes. How nobly the public responded is a matter of history and the fulfillment of the nation's purpose is partially due to the agencies which were released by the manufacturers, merchants and consumers of paper.

But the war is now over. All the restrictions and regulations have been removed. We are all operating on a peace time basis, "business as usual," and glad to be back where we can again supply our customers with what they want, when they want it. Paper was one war need which demanded no special machinery, no great economic change. Over night we went to war work, and over night we changed back. The paper mills of the nation are now making paper for the American to use to best advantage. It is no longer necessary to conserve through a sense of patriotic duty. Issuers of catalogues, buyers of printing, purchasers of sanitary wrapped food products and other commodities may now all demand the best in paper, and feel entitled to get what they want."

THE CHAIRMAN: The Chair will entertain a motion if you care to have copies of that sent to each of your associations?

A motion to that effect was made and carried.

Mr. Lyter Thanked

THE CHAIRMAN: I think you are satisfied now that we have thrown a little more work on our Chicago office. I believe we have given Mr. Lyter some work to do that may keep him burning the midnight oil. He is a pretty good scout.

A MEMBER: I move a vote of thanks for the good work he has done during the past year.

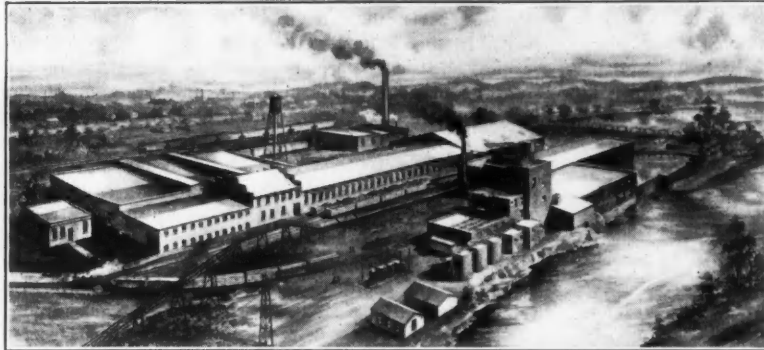
The motion was carried by a rising vote.

THE CHAIRMAN: If there is no further business the meeting will stand adjourned.

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WATERTOWN, N. Y.

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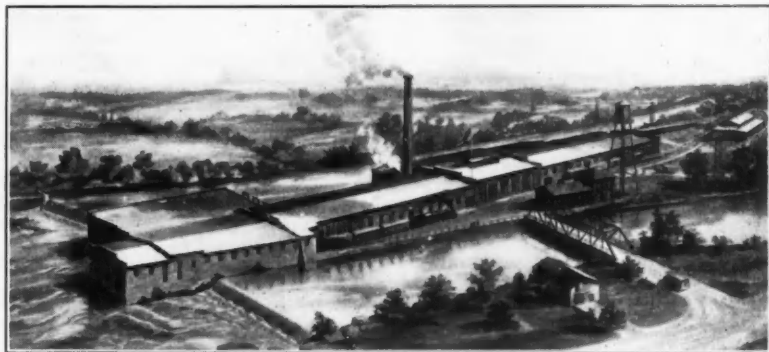
NEWSPRINT
CONTAINER BOARD
WRAPPING



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and

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Sales Office, Watertown, N. Y.

MEETING OF THE FINE PAPER DIVISION

The Annual Meeting of the Fine Paper Division of the NATIONAL PAPER TRADE ASSOCIATION was called to order by Vice President R. P. Andrews in the chair at 10 o'clock a. m. in the Astor Gallery of the Waldorf-Astoria Hotel.

THE CHAIRMAN: The meeting will come to order. The first order of business is the calling of the roll. We have distributed cards for that purpose, in order to save time, and I wish that all the members who have not signed cards will do so before they leave the room. We will then have a complete record of those present.

THE CHAIRMAN: The next order of business is the report of the Vice President. In view of the fact that we have a very complete report by the Secretary and reports of the different committees, which would necessarily mean a repetition of anything I might make in the way of a report, and as we are pressed for time, I had intended to talk in a general way about an hour and a half or two hours, but the lateness of the members in coming into the room will deter me from doing that this morning. I presume you will all be very sorry to miss that hour and a half or two hours. I regret it myself.

We have had, as we know, a very strenuous year. We can congratulate ourselves that so many of us are here and so many looking and feeling well. I have noticed a good many men in the room who looked ten years younger than they did a year ago. That hardly seems possible but it is true. One thing we can congratulate ourselves on is having the personnel of the War Board that we have in Washington during the past year. We may not have liked everything they did, but certainly if there had been a different class of men on that Board our conditions would not have been quite so happy.

The War Service Committee of our own association has performed wonderful and splendid work and deserves the thanks of our association. I hope everybody will realize that before the meeting is over.

Gentlemen, I thank you and we will now hear the Secretary's report. (Applause.)

SECRETARY RIDGEWAY'S REPORT

Secretary Ridgway read the following report:

This report will cover only such matters as pertain exclusively to fine papers and fine paper division. The Secretary's report to be made to the meeting of the entire Association this afternoon will cover all general matters.

The past year has been one of great activity in association work and we maintain that the accomplishments of the association, under the able guidance of its officers have amply justified its existence.

The principle activities of the fine paper division have been centered around the work of the War Service and Writing and Cover Paper Conference Committees.

Early in April, the Federal Trade Commission addressed a communication to the Association requesting that we advise as to how the paper industry could best be curtailed to effect a saving of fuel, transportation and labor if and when a curtailment should become necessary. In compliance with this request, a meeting of the Board of Directors was held in Philadelphia on April 23rd and after thorough consideration a statement was prepared and adopted which, in substance, recommended a uniform curtailment of all mills. This statement was presented to the Commission by a committee, consisting of the President, the Vice Presidents, and the Secretary, and that was the beginning of war service work.

Subsequently the work started by the Federal Trade Commission was taken over by the Pulp & Paper Division of the War Industries Board with Mr. W. B. Colver, Chairman of the Fed-

eral Trade Commission, as director, and Mr. Thos. E. Donnelley and Mr. S. L. Willson as heads of sections. Within a short time, Mr. Colver resigned and Mr. Donnelley became Director of the Division with Mr. Willson as head of the Manufacturing Section.

About the middle of June, your Secretary went to Washington on summons from Mr. Willson and was informed that curtailment of the industry would be necessary and that suggestions as to how it could be made with the least injury to the paper merchant would be welcomed. A meeting of the Board of Directors was immediately called to be held in Washington on June 24th. At this meeting Mr. Willson outlined the seriousness of the transportation situation and the necessity of standardization and the elimination of the non-essentials of the paper business, so that a greater number of square inches of paper could be gotten over the machines per ton of coal. He made it perfectly plain that the sole aim of the Government was to relieve transportation and that fuel and labor were, for the time being, relatively unimportant. Mr. Willson then asked that the Board advise him as to how this could be done and the Board immediately went into session for that purpose.

After as thorough a consideration as was possible in the short time available, the Board made certain recommendations as to standardization and elimination covering writings, ledgers, book cover, commercial envelopes, card boards, wrappings and tissue. In presenting these recommendations, the attention of Mr. Willson was specially called to the fact that they were made from the standpoint of the merchant and represented such curtailment as would do him least harm, and also that from a manufacturing standpoint some of them might be impracticable or inadvisable.

Shortly after this meeting, permanent War Service Committees were appointed to represent the fine and coarse paper divisions of this Association. The Fine Paper Committee consisted of Mr. Ross P. Andrews, Chairman; Mr. W. F. McQuillan and Mr. Forest Hopkins. The President was ex-officio member of both the Fine and Coarse Paper Committees.

On July 8, the War Service Committee met with a like committee of the Writing and Cover Paper Manufacturers in New York and exchanged views on the proposed regulations, and upon the statement of the manufacturers that the elimination of special finishes would limit the production of finished paper, this Association withdrew the recommendation made by the War Industries Board for their elimination. We believe it to be unnecessary to report fully on all these various conferences as detailed reports were at the time given to the members in the Bulletin.

The War Industries Board called into consultation groups of manufacturers and also groups of the users of the various kinds of paper and issued regulations covering writings, covers, glazed papers, envelopes, fine stationery, blank books and book papers to become effective August 1st and a ruling that no paper should be made after that date except in conformity to the regulations, but provided for the necessary exceptions under special permit. We are pleased to report that with one or two exceptions permits were granted wherever there was a real necessity.

About the middle of August the campaign for the saving of paper and the elimination of its waste was launched. You are all familiar with the pledge requirements and the other features of the campaign and there is no intention of recalling unpleasant memories at this time. It is sufficient to say that your officers, after expressing disagreement with some of the facts and conclusions on which the Government based the campaign, pushed it in every possible way in the belief that it was a time which required blind obedience to Governmental orders. We are duly thankful that the armistice came before the full plans of the conservation section were consummated.

ESTABLISHED 1828.

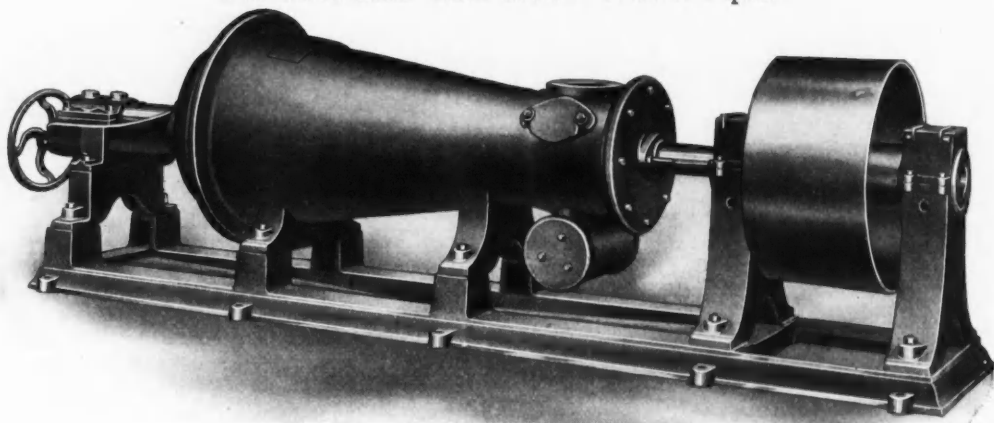
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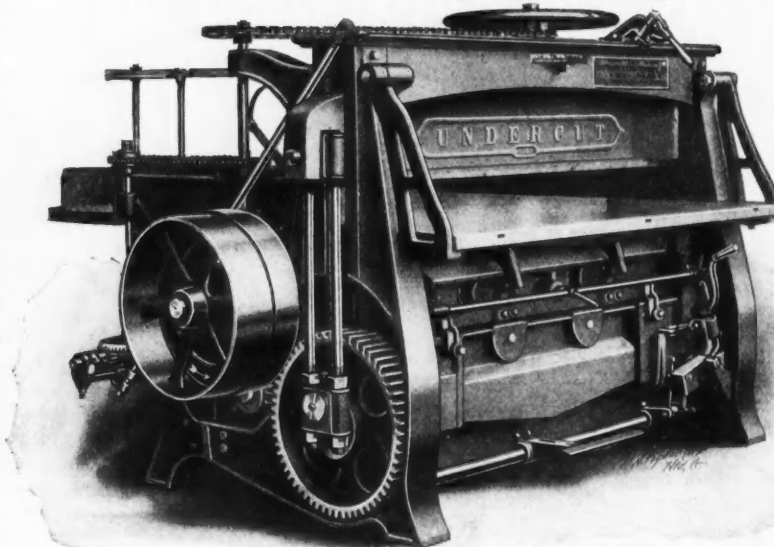


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Between August 1 and November 11, the regulations mentioned were amended from time to time to make them more workable and additional ones covering publication of books, periodicals and newspapers of various kinds, and the use of paper and boards for different purposes were issued.

Early in October, the War Industries Board took up the subject of the curtailment of chlorine, but fortunately, the war came to an end before it was necessary to put any curtailment into effect. These particular regulations would undoubtedly have resulted in a greater injury to the business of the paper merchant than any other set had they been in force for any considerable period of time. During this period your Secretary and various members of the War Service Committee visited Washington on a number of occasions for the purpose of taking up with the War Industries Board certain phases of the regulations which were either incomplete in detail or which were not working as had been intended and also for the purpose of keeping in touch with the situation. Full reports were made to the members through the Bulletin immediately upon the Association being definitely and officially informed on any subject pertaining to Government regulations. There were times during this period when there were rumors of various kinds current in the trade concerning which no bulletins were issued until official confirmation was obtained from Washington.

With the signing of the armistice, the War Industries Board withheld the issuance of regulations covering other lines which had been in preparation and which were ready to be issued. It then began lifting all other regulations, beginning with the pledge requirement. By late November, all regulations had been lifted and certain recommended regulations covering book paper, envelopes, wrappings, tag and document manila, glazed and fancy papers and tablets were issued by the Board. These recommended regulations represented such provisions as to standardization as in the opinion of the War Industries Board had been beneficial to the industry. However, they had no binding effect upon the industry and will be followed only in so far as they may be adopted as trade customs by those interested in the manufacture and sale of these papers.

We are strongly of the opinion that the industry was fortunate in having placed in charge of the Pulp and Paper Division of the War Industries Board men who were familiar with the paper business, who were broad in their vision and who were ready to accept suggestions from those whose business they found it necessary to curtail. Certainly, the thanks of this Association should be extended to Mr. Donnelley, Mr. Willson and Mr. Nichols, the latter being in charge of the Board Section.

The work of the Writing and Cover Paper Conference Committee during the past year was as important as that of the War Service Committee and the results accomplished are even more far-reaching. During this past year, there has been established an almost ideal condition of co-operation between manufacturer and merchant. A considerable portion of the credit for the successful work of this committee should be given to its Chairman, Mr. Forest Hopkins. Separate report of the work of this committee will be made at this meeting.

Immediately after the last annual meeting, in fact, on the Friday after the meeting, a special committee of those interested in news, attended a hearing before the Federal Trade Commission for the purpose of establishing the necessity for the paper merchant in the distribution of news and also to fix the margins which the merchant should obtain on the re-sale of news which might be sold under the agreement entered into by certain news manufacturers with the Attorney-General of the United States.

A statement of the position of the wholesale paper merchant, subscribed to by all those in attendance, was presented to the Commission by your President. Subsequently, on June 18, the

Federal Trade Commission handed down its findings in which it established the following rates of commissions for merchants on the re-sale of news print obtained from any of the news manufacturers who were signatory to the agreement mentioned above, namely, fifteen cents per hundred pounds on carload lots; forty cents per hundred pounds on less than carload lots, and sixty cents per hundred pounds on less than ton lots.

At the last annual meeting, an arrangement was made with the Writing Paper Manufacturers' Association whereby this association would collect statistics of the sales in dollars and cents of the members of this division and would exchange such figures monthly with the manufacturers in return for their figures showing orders on hand, production, shipment and stock on hand. This plan was put into effect early in April.

A special committee was appointed to thoroughly investigate and report relative to statistics at this meeting. This report will be presented later.

We are firmly convinced that during the present year the facts to be gathered showing demand on the part of the consumer, the production, etc., on the part of the mills, will be more valuable than ever before and the plan recommended by the committee should be adopted and heartily supported by every member of this Association. Knowledge as to business conditions will be essential to the successful conduct of any business during the readjustment period and after the return to normal conditions.

THE CHAIRMAN: The next business will be the report of the Writing and Cover Paper Conference Committee, Forest Hopkins.

Mr. Hopkins' Report

SECRETARY RIDGWAY: I have the report here from Mr. Hopkins' committee.

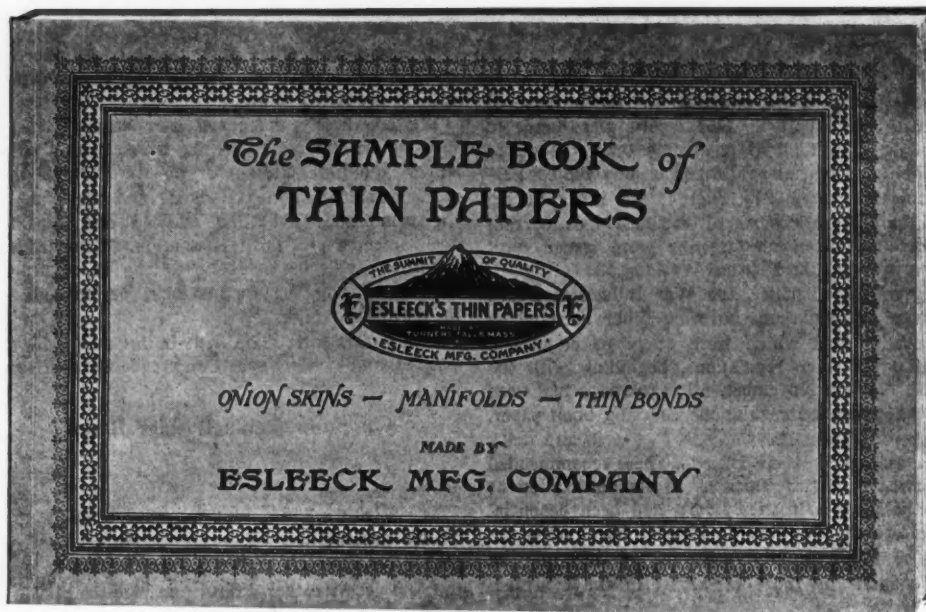
The Writing and Cover Conference Committee finds the task of the presentation to the Association at this time of a comprehensive, concrete and interesting report of its activities during the past year a rather difficult one, for the reason that events have been happening at a high speed since our last annual meeting, conditions have changed from time to time, and finally we found the industry about to face peace-time conditions after a period of very difficult war-time conditions. Your Committee has felt that the information as to its activities should reach our members quickly by way of bulletin rather than be held up to pad an annual report.

Originally this committee was intended to act as a hopper, into which all suggestions as to trade customs or the coordination of the manufacturing and selling departments of the writing and cover paper industry could be poured, and out of which would come, after mature deliberation, trade customs and suggestions as to methods and practices which would not only be constructive and progressive, but just and fair to all. It was also intended to be a clearing house for information as to market conditions *et cetera*, to the end that both manufacturers and merchants should have for his guidance as many of the real facts as to conditions as could be obtained.

Originally the manufacturer and merchant were each represented by five or six members, but in order that the committee should be thoroughly representative of the industry, not only as to various kinds and grades of paper manufactured, but geographically as well, the membership has been gradually increased until today your committee consists of 32 members, 16 merchants and 16 manufacturers. It was realized that it would be difficult to properly consider details in so large a committee, and a subdivision in the nature of an executive committee has been established, consisting of some 10 to 12 members and called "The Trade Board." It will be the function of this board to work out

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the details and to make recommendations to the full conference committee.

Four general conferences have been held since last February; in Chicago on the 23d of May; in New York on the 10th of October; in Chicago on the 7th of November, and again in New York on Monday of this week. It has not been possible to report in detail all measures discussed, but outline reports have been published from time to time in the *Bulletin* and members of the committee have verbally reported to their respective associations, so that the members have been fully informed of the work of this committee throughout the year.

Discussions at all these conferences have been full and frank, and with each succeeding conference there has been developed a better understanding, until at the present time manufacturers and merchants generally have a better understanding of the problems of the other and fully recognize the principle that their interests are identical.

At the conference last Monday amendments of trade customs which existed before the war and which have been in force since the signing of the armistice were considered, and the subject is having due consideration from the manufacturers' organizations. The manufacturers indicated confidence in the stability of present prices, due to actual manufacturing costs, and were hopeful of an early increased demand from the consumer of paper. (Applause.)

Report on Statistics

SECRETARY RIDGWAY: Your Committee on Statistics appointed at the December meeting of the Executive Committee, has thoroughly considered the subject and begs to submit its conclusions as follows:

The members of the committee were unanimous in the opinion that the Fine Paper Division should continue to collect statistics and should work to co-ordinate the merchants' statistics with those collected by the manufacturers. The committee believes that the present plan is defective in a number of details and can be greatly improved. The figures now being gathered are valuable only by comparison, and the fact that all members do not report with absolute regularity impairs its value. Purchases are reported in tons, and sales in dollars and cents, which makes the two sets of no value for comparison. Some information contained in the present reports are relatively unimportant, and the time spent in compiling them could be used to better advantage. Present figures do not dovetail with those now being exchanged with the Writing Paper Manufacturers' Association. There is no advantage in the weekly over monthly reports of purchases, and your Committee is of the opinion that a monthly report would give all the necessary information.

Your committee therefore recommends that the Fine Paper statistics be compiled for the next year, beginning April 1, 1919, on the following basis: That both sales and purchases should be made on a tonnage basis. Purchases are now made by tons, and the recommendation would make a change only in the reports of sales. That the purchase report should be amended as to the classification by eliminating blotting, cardboard, bristols and Government post-card stock, and that bonds, linens, ledgers and writings should follow as closely as is practicable the classification now used by the Writing Paper Manufacturers' Association in collecting statistics for its own members. This classification will have to be worked out by the secretaries, but will be simpler than that now being used.

That sales report should be sub-divided, the same as those for purchases, and made in tons instead of in dollars and cents. That both purchase and sales reports should be made monthly; that all reports be mailed not later than the tenth of the following month; and that the information to the members be mailed from the Secretary's office on the 20th, or sooner, if all the reports have been

received; that both sales and purchases be made on the one blank, to be forwarded to a trust company, in the same manner as the sales reports are now being made; that the figures received be reduced to graphic chart form and exchanged with the Writing Paper Manufacturers' Association as during the past year.

This graphic chart will be compiled from the figures furnished by a selected, limited list of members. This list will be composed of those houses which during the past year have reported regularly and have shown they can be relied upon, and such other members who will pledge themselves to report with regularity. This list will be representative of the business of the country and figures from the same members will be used each month. This will make the graphic chart much more accurate than the figures which have been sent to the members during the past year. The chart of our figures and that of the Writing Paper Manufacturers' Association will be sent only to those members who contribute information, but members not included in the selected list will obtain the charts and will be included in the selected list as soon as they have proven that they intend to report regularly. In this way the chart can be kept accurate and the number included gradually built up, until we reach a high percentage of the members.

This detail of the plan was included for the reason that one of the greatest benefits from the plan of gathering statistics is the comparison of the individual business with that of the entire country, as shown on the chart.

That the zone feature of the present plan be eliminated. The Committee is unable to see any particular advantage of this feature of the present plan, and has information that because of it some members have not reported during the past year.

Further, that the members report before April 1 sales and purchases in tonnages for the calendar year 1918, which reports will be subdivided in the same manner as the new monthly reports. This is absolutely necessary, in order to establish the average line for the graphic chart. Also that the members report in tonnage the stock on hand April 1 of each line as subdivided.

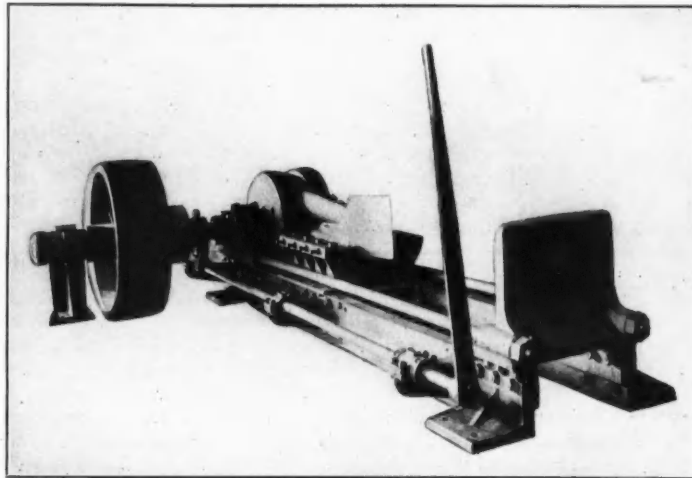
Mr. President, perhaps some explanation of the various features should be made at this time. The report covers rather meagerly some of the reasons, or makes no mention of some of the reasons for these recommendations. The members will note first that it makes a complete change in the reports of sales. Sales reports beginning April 1 will be on a tonnage basis instead of in dollars and cents. That is absolutely necessary, in order to co-ordinate the reports of sales with those of purchases. I have no doubt the most of the members at the present moment are turning over in their minds the proposition of reducing their sales to tons and saying it is impossible. There are a number of houses in this country that have those figures today and a number of houses have investigated the question of reducing the sales to tons, and they say it can be done with very little additional work. That feature of the plan, the Committee believes, is absolutely essential, if we are going to progress in the matter of gathering statistics.

They also feel that subdivision of the sales is essential, and that when they are subdivided they should be made to harmonize with the same subdivision which the Writing Paper Manufacturers' Association is gathering information from its members. The idea back of it being that as we progress in our co-operative work with the Writing Paper Manufacturers' Association, those figures can be exchanged with the Writing Paper Manufacturers' Association. In other words, you will get the same picture in regard to each subdivision as you would have of the whole.

The question as to getting a report from the members as to their sales and purchases in tonnage for the year 1918 is probably the most serious part of this report. The committee believes that if we could obtain from ten to fifteen members who would furnish this information it would be a sufficient basis to establish our average line for use on the graphic chart. And while we are on that subject we would like to know whether there are any

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members here who could and would be willing to furnish these figures from their books as they now stand, or who could obtain them with a minimum amount of work.

(Representatives of the following houses announced their willingness to comply with this request.) D. L. Ward Company, Caskie & Dillard Company, Chicago Paper Company, Clements Paper Company, Alling & Corey Company, Pittsburgh, John Leslie Paper Company, Lasher & Lathrop, Minneapolis Paper Company, B. W. Wilson Paper Company, A. Storrs & Bement Company, Union Paper & Twine Company, Chatfield Woods Company, J. W. Butler Paper Company.

MR. LESLIE: What are the subdivisions?

SECRETARY RIDGWAY: We have not been able to work those out, Mr. Leslie. The subdivision, as I understand it, in the manufacturing end is not subdivided into ledgers and bonds, for instance, but they take the very high grade of bonds and ledgers, etc., and put them all in one subdivision, and then they go down from that to sulphite bond. I think there are four classifications in their list. But what we want to ascertain is, is it possible to have ours coordinate with theirs? If it is not, then we will probably have two subdivisions of bonds, one of ledger, and one of all the other writings.

MR. LESLIE: I think we could get that. The only thing that stops me is the subdivision. I don't know how much labor that is going to entail.

SECRETARY RIDGWAY: People who have investigated say it is not going to be extremely difficult.

MR. LESLIE: We will try to get it for you, for 1918.

THE CHAIRMAN: I will state for the benefit of these gentlemen who have volunteered, you will receive full instructions from the Secretary. As I understand it, the two Secretaries, our Secretary and the Secretary of the Writing Paper Manufacturers' Association, will get together and formulate the plans on the classification.

MR. A. LAWRENCE SMITH: Send those instructions to me and I will attend to it.

SECRETARY RIDGWAY: Mr. President, I should like to say that during the past year the excuse which has been advanced in probably 80 per cent of the cases of those not reporting is based on the fact that during the war the bookkeeping departments were unable to get out this information. I assume that the war having ended that excuse has also passed out.

MR. McCLELLAN: I feel about this zoning system—the doing away with it, that it leaves every man free to make his report. That is more so than it has been in the past. No information has been given to any of its members by any other member. But I would like to hear from Mr. Carter, whom I had a talk with yesterday, and I think who feels today he can cooperate with us to the fullest extent in this matter, feeling that by changing the zoning system of the whole country they can enter into this proposition, and it will be a great benefit to all of us.

I think we are all too careful with our information. I think we are afraid somebody will know something about our business, and we are a little bit smarter than the other fellow, but the facts are that the man who holds up his information is the man who is a little bit weaker than the others and cannot progress as rapidly, and I hope that the men—I don't care how large or small—will take an interest in this proposition and will try to see it put over, because I think it is a very, very vital proposition. I don't think there is a man in this room who knows, unless he has the tonnage figures, what his position is today. I don't think he knows. I have heard men say that the tonnage inventories are very much larger than a year ago, and I am obliged to doubt the statement. If a man says he has less the chances are he has. If he doesn't know the facts I don't see how he can make a positive statement.

MR. BONESTEL: Mr. Chairman, it appears to me to be a new

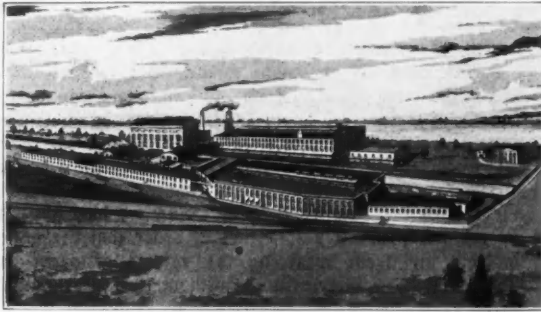
element appearing in this situation which makes it even more important than heretofore. Up to the present time (speaking at least for ourselves on the Pacific Coast) the only purpose of these figures was that we each as merchants might know the movement of merchandise in our hands. That, of course, is an important feature, an important factor. But it does not seem to us on the Pacific Coast, being as you might say in foreign territory, that it was very important to you east of the Mississippi River what volume of business we did or did not do. Nor was it very important to get (at least in our opinion) what volume of business was done throughout the country, which would mean largely east of the Mississippi River. Now we have this (which to my mind is a new feature) that in order that the mills may be entirely intelligent regarding the volume of paper moving they must have this information. Without that information they, of course, individually do not know if their sales to the dealers are less, whether it is because of some error on their part, either of price or of merchandising, or whether it is because the volume of business moving from the merchant to the consumer is less. If they know that movement is less they know it is no fault on their part. Consequently, realizing that condition, there is no inducement on their part to try by a reduction in price to increase a business which does not exist, and I think we all realize at this time the vast importance of having nothing occur whereby any mill may take any step leading toward the reduction in price which he might not take if he were fully intelligent. Consequently, I can see the vast importance to us, as well as to others, of making these statistics exact, and I shall use my influence when I return with the dealers on the Pacific Coast to try to make them see the value, so that they will send their figures in to the Secretary. (Applause.)

MR. RIDGWAY: The figures that will go on the graphic chart will be the figures from the same members from month to month. The list will start with the houses who have proven themselves to be reliable during the past two years, since we have collected this information, and such other houses who will absolutely guarantee to make these reports regularly. That will be the basis of the graphic chart.

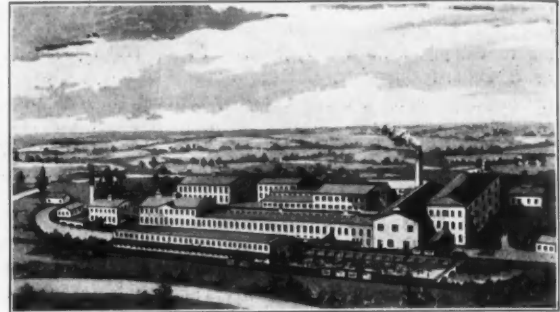
Now, in addition to that, any member who perhaps feels that he cannot report with absolute regularity or may doubt it—does not want to give the guarantee—he can come in and make his report, and that report will not be included in the figures used in the graphic chart until such time as he is convinced that he can report with absolute regularity. A change will be made at stated intervals, say it may be four months, may be six months, dependent on how this works out, a change will be made and these men who have been reporting but not included in that list will be then included, and the proper information will be then obtained to rearrange our average line.

Now the idea, of course, back of all this is that this information in the hands of a member who is not compiling this information of his own house is not as valuable to him and may be very misleading to that particular house. The great value to him, if he is making his own figures, is the fact that he can compare his own experience to the facts as shown on this chart. If his business is going down, say 25 per cent, and the business of the country has gone down 25 per cent, he need not worry. He need not go out and break the price in order to get his business back. That is the reason we want to compel all members, if it is possible to do so, to compile their own figures. We want them to have an interest in their own business. To be sure knowledge as to how the average business of the country is going is valuable to anybody, but in order for any member to obtain that knowledge he has to go into the figures of his own business and report it to the Association.

MR. CHARLES ADDOMS: Mr. Ridgway, will you make it plain as regards the distribution of these charts? Do I understand that the charts go to those who contribute only?



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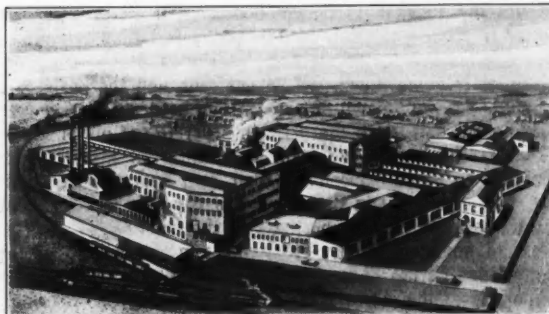
Diamond State Fibre Company

BRIDGEPORT, PA. (Near Philadelphia)

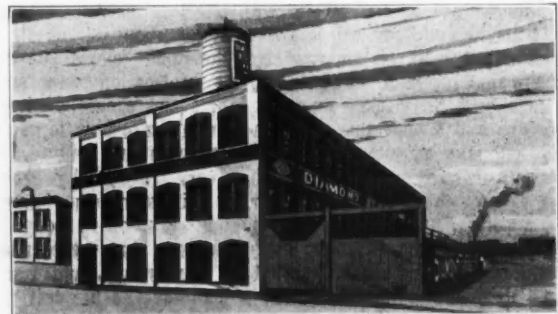
111 Broadway
New York City

1656 Besley Court
Chicago, Ill.

Hearst Building
San Francisco, Cal.



Elsmere, Del., Mill



Chicago, Ill., Warehouse

SECRETARY RIDGWAY: Go to everybody who contributes. Whether the information is included in the chart or not, as long as the man contributes his information on the blank for that purpose, he will get the information back, regardless of whether or not his figures are included in those on which the chart was based.

MR. ADDOMS: And nobody else gets them?

MR. RIDGWAY: Nobody else gets them.

MR. MILLER: I think enough has been said to show us the importance of this work. The value of it will depend entirely on the regularity of the report and the fullness thereof. I hope an individual canvass can be made and not depend on those of us who have nerve enough to rise, and enlist everybody. I think a little work along this line will bring most all of us in.

The question was then put and the motion was unanimously adopted.

MR. GEORGE T. SMITH: Might I ask, would it be possible for the Secretary to have a certain number of graphic charts prepared and sent out, so the members can fill them in?

SECRETARY RIDGWAY: There is no reason why it can't be done, but you can buy them from any stationer.

MR. SMITH: They might not be the same chart we are getting.

SECRETARY RIDGWAY: True.

THE CHAIRMAN: The next business in order, gentlemen, is New Business.

SECRETARY RIDGWAY: Under the head of New Business there are one or two recommendations from the Executive Committee to the Fine Paper Division.

A number of the envelope manufacturers had a meeting in Philadelphia in November, and at that meeting they adopted the recommended regulations of the War Industry Board as trade customs. They have notified us to that effect and ask our support. They have also adopted a resolution in regard to the use of XX's as a designation of the weights of envelopes. The resolution is in favor of the abandonment of that practice, and requesting that this Association support that action.

I might also say in that connection, that at the meeting of the Board of Directors, or rather the Executive Committee of the Fine Paper Division in Minneapolis, a resolution was passed at that time of which you have all had notice through the Bulletin, suggesting that the XX's be eliminated in the designation of the weights of envelopes and the folio weight bases to be used to indicate the thickness of the paper from which the envelopes were made. For instance, a 24-pound folio envelope would be marked either 24 or number 24. This now seems to have the endorsement of the envelope companies.

The Executive Committee would recommend to this Association that these trade customs be endorsed by this Association, and that also the resolution of the Executive Committee passed in Minneapolis be confirmed.

MR. JOHN LESLIE: Mr. Chairman, I move that the approval of this be referred, with power to act, to the Executive Committee.

MR. WARD: I second the motion.

The motion was unanimously adopted.

SECRETARY RIDGWAY: The Executive Committee also recommends to this division the adoption of the following resolution:

"RESOLVED, That the National Paper Trade Association recommends to all constituent associations the adoption of a uniform cash discount of 2 per cent for fine paper." (Applause.)

A MEMBER: I move its adoption.

The motion was seconded.

MR. BONNESTEL: Mr. Chairman, should there be added to that resolution a period at which that privilege of getting 2 per cent stopped?

SECRETARY RIDGWAY: That was purposely left out of the resolution for the purpose of enabling any local association to meet the conditions in their particular locality. The purpose is to get on a uniform 2 per cent cash discount.

MR. BONNESTEL: I accept the apology.

THE CHAIRMAN: We expected that, Mr. Bonnestel.

MR. WARD: I might say that we in Philadelphia have had 3 per cent thirty days for a great many years, and we changed three or four or five months ago, July 1. It is working absolutely as smooth as glass. We have got no kicks of any character, and everybody seems happy.

MR. A. LAWRENCE SMITH: In Detroit we went on a basis of 2 per cent beginning January 1. (Applause.)

THE CHAIRMAN: I understand that Chicago went on that basis on the first of February. Gentlemen, are you ready for the question?

MR. JOSEPH T. ALLING: If this resolution is carried it ought to mean something. It ought not to mean that people will send out their notices and then when their customers object send their agent out to those customers and say, "Now, we didn't mean you, and you are on our favored list, and you can keep the discount just as it has been."

Now I am frank to say we have not sent out those notices yet, because when we knew we are going to live up to them, but we have found other people in a territory who were doing the other thing, sending out their notices, then going around and telling the people they did not mean them, and accepting their 3 per cent just the same. Now all I rise to say is, Mr. Chairma, if we pass this resolution let us mean business, and if we don't mean business let us vote against it and don't pass it. (Applause.)

MR. FISHER: I would like to hear Mr. Miller say something. He played a lone hand, and I think it would be nice if he would say something.

THE CHAIRMAN: We are always glad to hear from Mr. Miller.

MR. MILLER: Mr. Chairman and Gentlemen: We have been talking about this collection for some years. In June I notified the Central States Association that we had adopted, I think in December it was finally adopted by this Association, and is now in force through the Central States. I want to say to you, gentlemen, standing alone, I had very little trouble, and as we are all in our sections standing together we have none. There has been nothing done in our association work that has been more valuable and more sensible than this one question.

MR. THOMAS F. SMITH: Mr. Chairman, I do not like to take any glory away from these gentlemen who have suddenly realized that 2 per cent is the right thing. It is no glory to me because I was born on it and started my business on 2 per cent. The reason I want to mention it is that I notice a great many of these jobbers here who are my competitors probably do not know just how we stand. After the Central States passed this resolution, I went over our books carefully and found that we did have possibly sixty favored customers to whom we gave 3 per cent, and I wrote a personal letter to every one of them and withdrew the same, stating that they should pay 2 per cent, and we have not had a single complaint from a single one. I mention that so that Mr. Clements and other gentlemen with whom we come in close competition will know that our terms are strictly 2 per cent to any customers that we have, and always will be, unless we reduce them later to 1 per cent a month. (Applause.)

THE CHAIRMAN: The Chair is going to ask for a rising vote on this question, if you are ready for the question.

A MEMBER: Read the resolution again.

THE SECRETARY: The resolution is, Resolved, That the National Paper Trade Association recommends to all constituent associations the adoption of a uniform cash discount of 2 per cent for fine paper."

The question was then put and carried by rising vote, only three rising in opposition.

THE CHAIRMAN: Gentlemen, our calendar is cleaned up Has any gentleman anything on his mind he would like to get off?

MR. CLEMENTS: The subject of the prices for printing en-

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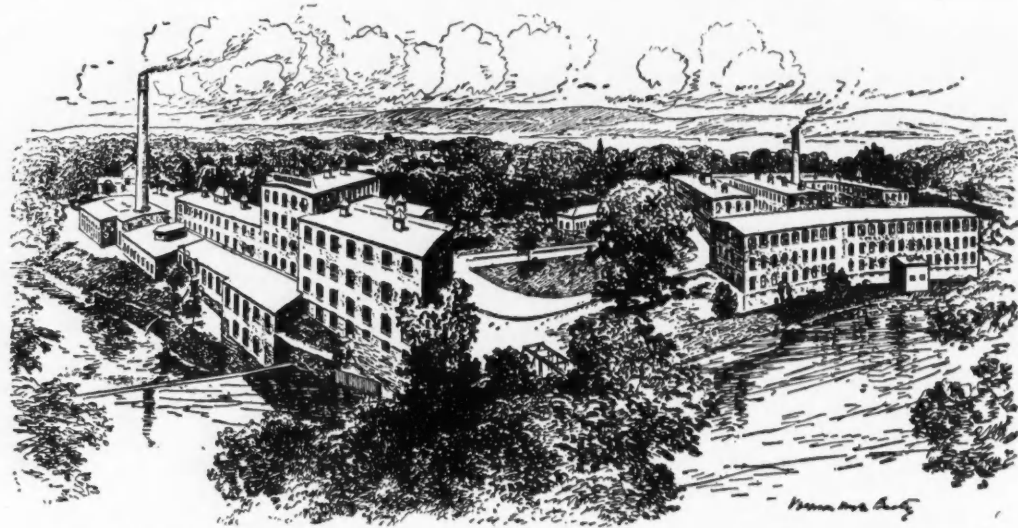
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velopes issued by the envelope companies is rather an important matter. I think that should be considered. I think we ought to ask the support of the envelope factories.

Mr. OLMSTED: We ought to have it understood, in the first place, that they do not send out such price lists indiscriminately, and if they did, it would be subject to the proper trade discount, because as it is now that is unprofitable work. We have either got to handle this one way, either with a discount or just a net price to us, and those lists not issued, miscellaneous distribution, and then take it as we would the cost of anything else and add the proper margin. Then of course it would not make so much difference. This gives us a good opportunity to go right to the organization and tell them that this is the worst sort of practice.

Mr. CLEMENTS: I move you name a committee of three to confer with them to work out that proposition.

The motion was seconded.

THE CHAIRMAN: Would that be agreeable to you if that question was referred to the Executive Committee of this Association for prompt action?

Mr. CLEMENTS: Yes.

THE CHAIRMAN: You understand this communication came to them from the envelope manufacturers, and it would be all right to go right back at them with this proposition, tell them we are going to support their substance numbers on the envelope, and we would like to have them come across and do this for us. If that is agreeable a motion to refer this to the Executive Committee of this Association will be entertained.

Mr. CLEMENTS: I make such a motion.

The motion prevailed.

THE CHAIRMAN: Is there anything else?

Mr. McCLELLAN: I move we adjourn.

MEETING OF THE GENERAL ASSOCIATION

The annual meeting of the National Paper Trade Association was called to order on Wednesday, February 5, 1919, at 2 o'clock p. m., in the Astor Gallery of the Waldorf-Astoria Hotel, New York, by President George Olmsted.

The Secretary's Report

Secretary Ridgway read the following report:

Fifteen years ago this month the organization of this Association was completed at a meeting held in this hotel. Since then, the membership has increased steadily and today it is thoroughly representative of the paper merchandising business both geographically and as to the various kinds of paper manufactured. The original membership of seven constituent Associations with an individual membership of about 150 has grown to fourteen constituent Associations covering the entire country and an individual membership of 355, excluding all duplication. This is an increase of nine since the last annual meeting. The enrollment in the two divisions is 196 in the Fine and 267 in the Coarse Paper Division.

The following is a comparative table of the membership of the constituent Associations for the years ending February 1918 and 1919:

	1918	1919
New England Paper Merchants' Assn.....	29	32
Empire State Paper Trade Assn.....	29	21
Paper Assn. of Philadelphia.....	19	23
Gulf States Paper Trade Assn.....	5	4
Baltimore & Southern Paper Trade Assn.....	30	27
Southeastern Paper Merchants' Assn.....	20	17
Northwestern Paper Merchants' Assn.....	10	10
Western Paper Merchants' Assn.....	31	31
Missouri Valley Wrapping Paper Assn.....	16	22
Pacific States Paper Trade Assn.....	27	27
Wisconsin Paper Merchants Assn.....	9	11
Middle States Wrapping Paper Assn.....	40	39
Central States Paper Trade Assn.....	27	25
Paper Assn. of New York City.....	63	66
	346	355

There are a number of houses scattered throughout the country which should be members of this organization. In no one locality do they number more than one or two and their total probably is not more than thirty-five or forty, but they are getting the benefits of the work of the Association without contribution of time or money. The past year should have convinced any reasonable paper merchant of the value of cooperation and we believe if the proper effort were made, a large majority of the non-members would join the local organizations.

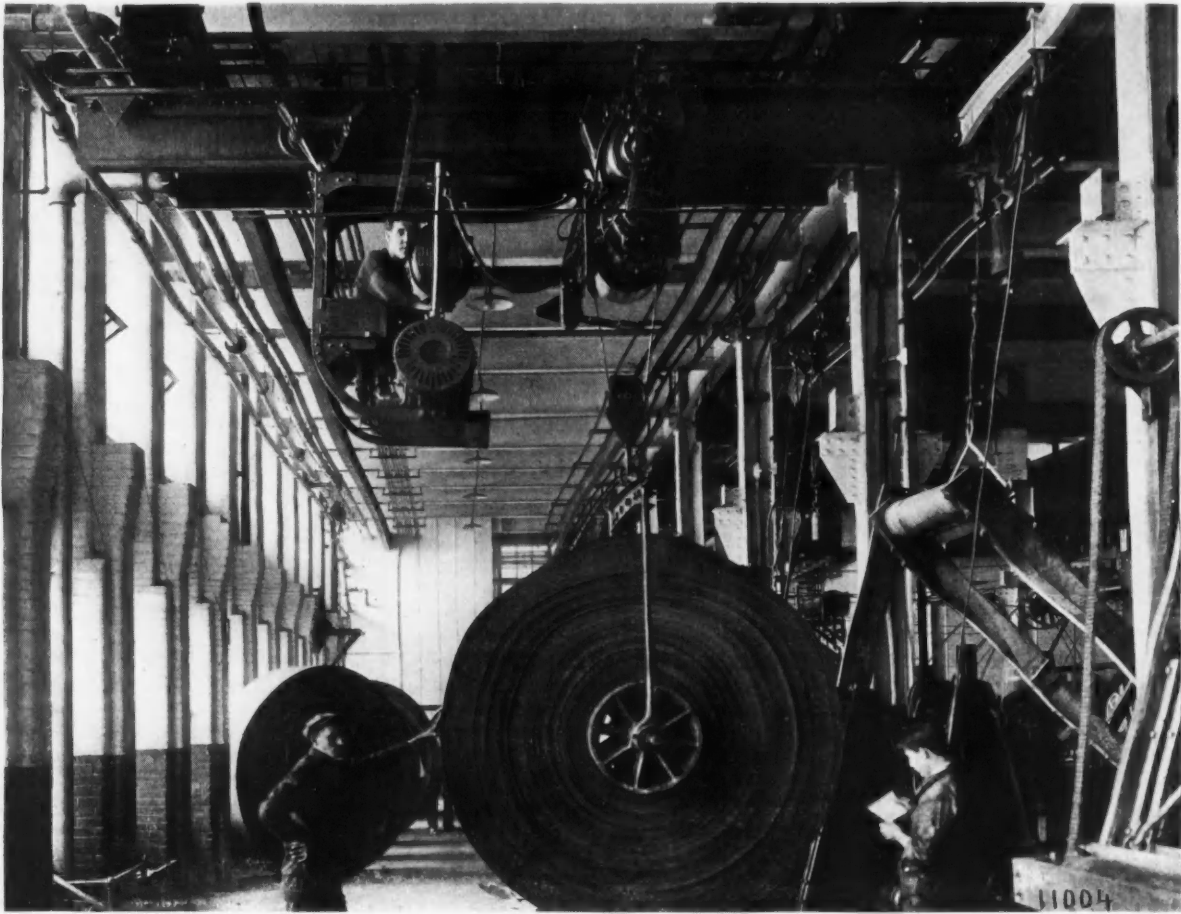
Due to war conditions and the regulation of the industry by the War Industries Board the work of the Secretary's office, during the past year, was materially increased beyond that of any previous year. The activities in connection with the Government regulation have been recounted in the reports made at the Divisional Meetings.

In the interest of the Association, your Secretary has visited the following cities during the past year: Washington, six times; Philadelphia, twice; Boston, twice; Chicago, twice; Minneapolis and St. Paul, Cleveland, Baltimore and Syracuse. The correspondence of the office has increased more than 100 per cent over the previous year and during this time many matters have been handled through the Chicago office of the Assistant Secretary.

At the Annual Meeting a year ago, the business situation was the subject of grave concern. Demand was slack, the great war was at its height, Government regulation was in the wind, no precedent could be found to use as a guide, and the general uncertainty made for doubt and misgiving as to the future. The year has passed and the doubts and misgivings of a year ago have been proven to have been without foundation. Demand improved and the volume of business for the year as a whole has been entirely satisfactory, the war has been won, somewhat drastic government regulation came but was gone before its effect was seriously felt by the industry and yet today the general feeling is again one of doubt and misgiving and precedent fails as it did a year ago.

At the moment demand is at its lowest ebb in years, taxation threatens to take the greater portion of the profits of the past year, labor troubles are said to be brewing and high priced stocks on hand are greater than many would like. This is the dark side of the cloud, but like all clouds, it has its silver lining and it is the silver lining which must be turned out if the industry is to come through this year with some credit. Let us remember that nearly three months have passed since the signing of the Armistice, that except here and there prices since then have been stable, that stocks have been materially reduced since November 11th, and at prices based on high costs, that the signs of an active demand in the near future are many, that to date no one has lost his head and precipitated a panic with prices far below actual values, that from all present indications the readjustment from war to peace prices will be gradual and will be accomplished with a minimum of the loss which everyone recognized as inevitable and which must, of necessity, come to any merchandising business after a period of inflated prices, and that the paper merchant, because of the prosperity of the past three years is in excellent financial condition to weather any storm which may come.

What was feared a year ago never happened, and there is no



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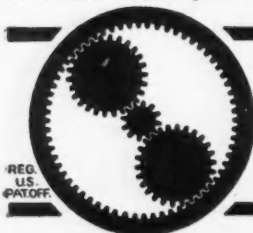
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greater reason for the happening of what some now fear. The paper merchant, who shapes his action from day to day according to the then existing conditions, and who does not try to out-guess the other fellow as to the future course of prices, need have no fear. He should endeavor to know the real facts as to the industry and as to his own particular business. Action has been taken in the Divisional meetings to give him the facts as to the supply and demand and these he must use. At this meeting, the committee authorized last year to devise a cost system, which will give the separate costs of doing store and direct business will report and this report calls for the careful consideration of every member. In common with every other prolonged period of high prices, the dollars and cents cost of doing business has steadily mounted until it is higher than ever before in the history of the industry. This fact makes it absolutely necessary that the merchant have an accounting system that will inform him of what he is really doing. The paper merchant has been notorious for his antiquated accounting but now is the time when he must get up-to-date, if he is to successfully meet the competition which will come with the re-establishment of normal conditions.

Address of President Olmsted

Our Association has just passed through probably the most stressful as well as epoch-making year in its history. It appears that the paper industry has ridden the storm well, and that our worthy craft has come through with flying colors, ready for a long peace-time cruise. We are going to navigate some unknown waters. Are we prepared for the trip as paper merchant mariners? Have we learned well the lessons of the past year, or are we going to forget them? Your President cannot undertake even briefly to review all the happenings or the work accomplished the past year. Through our official bulletin and other avenues of publicity our members have been kept well informed, I am sure, of conditions and the Association activities.

In this connection, and at this time, when we are reviewing our year's work, it seems fitting to refer to these activities which have been so extraordinary in scope and influence. The time and effort devoted to this work during the war period by your Secretary, officers and committees seemed necessary in the face of the very unusual conditions prevailing in the industry. It was fortunate that our national and constituent associations were so well organized and that we were prepared for the ordeals and vicissitudes of war. Right here let me pay a tribute to the founders of the National Paper Trade Association and the patrons of the association idea in the paper industry—"They builded better than they knew." During the past year in particular your officers and committees have had a wonderful experience and have had a vision of some of the accomplishments and achievements just in front of us if we "be not weary in well-doing" but "carry on" until our aims and ambitions are realized.

I think no one will gainsay that our organization is now a real, live, potent force in our industry. We are a little nearer 100 per cent efficiency than was ever possible before. We must not rest on these laurels, but must forge ahead to further triumphs, exercising a high order of co-operation and helpful influence in the trying days to come. This means that more and better work must be done. Our Association must have the loyal and aggressive support of the local associations and their individual members. We must be wise and discriminating in the selection of our directors, officers and committees, that we may be assured that our Association loses nothing of its present advantage, but that year by year it may fulfill a continually enlarging function in the paper community.

The local associations should constitute themselves as training schools for the young men in the industry. These men should be educated to a high appreciation of their duties and responsibilities as association members. In this way we can have rotation in

office and new men will be ready for the call. As it is now, we are losing the advice and assistance of some of our best trained minds because we have not enlisted their services in this highly important work.

Our Association, through its War Service Committee in collaboration with the War Industries Board, undertook the big task of trimming our business down to meet war-time needs. In this work we cooperated with the various war service committees appointed by the paper manufacturers. This team work made it possible to do some things that under normal conditions would have appeared well-nigh impossible, but all the factors involved bent to the task and were disposed to accept graciously whatever regulations and restrictions seemed essential to a speedy winning of the war.

When we entered the period of governmental supervision and direction of business, we all became impressed with the meagre knowledge that our Government and the average citizen possessed of the importance and magnitude of the paper industry. Even we engaged in it were slow to appreciate that the annual production in the United States of paper and boards was nearly six million tons, and the approximate value of the product nearly a billion dollars, and that the cars required for transportation totaled over one million. It took the demands of war to convince the American people of the very necessary part played by paper in our civilization—in our political, commercial and social life. What can we, as paper merchants, contribute to the effort to raise the standards of our industry still higher, that it may receive the consideration and recognition it deserves? It has been suggested that locally as well as nationally we should start a campaign of publicity, having for its object the education of the public mind in paper, its importance as a highly essential commodity, and such other facts regarding the industry as should be generally understood.

As we look back through the year we wonder to what extent conditions might have been different if all speculative buying of paper had been eliminated. With the records we have before us we know there was nothing like the actual shortage of paper that the public was led to believe there was. There was perhaps a real shortage of news print, kraft and sulphite bond, but even in these lines there was more or less speculative buying beyond actual consuming needs. The Government became very much concerned over the apparent paper shortage and instituted an aggressive campaign of publicity, urging unusual thrift and economy in all kinds of paper. Fortunately, this campaign was not carried so far as the program called for, as the work was stopped with the signing of the armistice, but, nevertheless, a definite injury was done to the paper business—not intentionally, but unconsciously—and it remains for all of us to do our utmost to counteract the effect of that campaign and encourage the free use of paper for all legitimate purposes.

The biggest and best lesson we have drawn out of this war experience is the value and absolute necessity of co-operation—not only among ourselves, as members of the National Paper Trade Association, but among all the factors in our industry, carrying the idea on to cover the relations between all industries and activities of our people. We have always subscribed to the general idea of co-operation and association work, but it took the war, with its disturbing and disciplinary experiences, to more clearly define this idea and vitalize it. In this day and age we can no more work independently of our fellows than can the members of the family. We, as paper merchants, cannot work independently of our mills. If we can get this thought thoroughly in our minds I feel that many of our problems will be solved. If we can keep eternally before us, for instance, that we, as merchants, are the distributing department of the mills, and the mills, in the same way, are the manufacturing department of the merchants our work will be simplified, unified and dignified. Meet-

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ings like the recent one at Atlantic City, attended by thousands of the masters of finance, industry and commerce throughout the land, bear witness to the almost universal confidence in the value of getting together and finding a common ground for sticking together.

In this connection I wish to say that I cherish the hope that a big, live organization, representing all the factors in our industry, may be formed at an early date. Such an organization could be the "Great Headquarters" through which our present organizations and associations could function on all matters affecting the industry as a whole. Under such a plan we would have a "Paper Institute," acting and functioning as does the Steel Institute. As great a necessity exists for a league among industries as a League of Nations, and if each local association, each merchandising institution and each individual would lend their energies toward making such a league a success, we shall have left a legacy greater and richer than anything we could leave in money or chattels. Such a league or institute can be established on sound and altogether legal lines. The Government of the United States as well as the people are beginning to appreciate that trade war, involving unfair practices, unscientific methods and unethical policies, is as destructive to industry as military war is destructive to life, liberty and happiness of human kind.

The work of our Conference Committees, particularly those of writing, cover and wrapping papers, has opened our eyes to the wonderful opportunities for real constructive work in our industry. It is unfortunate that these conference committees are not at work in all the grand divisions of our business, but it is welcome information that the cardboard manufacturers have perfected an organization and that the book paper manufacturers are also striving to work out organization plans. This leads us to hope that this coming year may see a very large development of the conference plan of work.

Each of you, like myself, would like to have a wise word of advice or a prophecy of what is before us and what we are to expect as to the condition of our industry during this year 1919. This is not much of a time for forecasting, however, but a wonderful time for being prepared for eventualities. I commend to you the sage advice of both Morgan and Schwab—"Don't be a bear on America," and I say to you, don't be a bear on the paper market. There will ultimately be some revision and equalization of paper prices, because war markets and peace markets are not the same, but this process of price adjustment bids fair to be a slow one, one that will not be destructive but that will permit our constructive and reconstructive work to go on. That is to say, I think the process will be one of evolution rather than of revolution. This belief is supported by most of the facts and figures now in our possession.

In connection with the future work of our Association let me urge that each individual of every local association highly resolve that this year he will contribute at least something to the work of the association and therefore to the uplift of our industry. Remember that we get out of our association about what we put into it, so let's put into it something genuine and worth while.

In my work the past year I ran across a good many pessimists—men in our business and members of our association who had all sorts of forebodings of impending disaster, etc. These men were almost universally those who were passive rather than active in association work. There is nothing like having your hand at the throttle, or at least being somewhere around where you can examine the works, to give you confidence. This reminds me of the story they tell of the aviator who made a trip into the clouds with a negro soldier as an observer. This negro had never been in an airship, and so the aviator thought he would show him a few things. After he got him about five thousand feet in the air he commenced to loop the loop, nose-dive and perform a lot of other hair-raising stunts, and after one long swoop with the

engine shut off, the aviator straightened out a few hundred feet from the ground, started his engine and flew off again, with the remark to the negro—"Well, Sambo, 90 per cent of the people down there thought we were going to crash." "Yes," said Sambo, "and 50 per cent of the people up here thought so."

I wish to take this opportunity to formally express the appreciation of this Association for the very great consideration shown our War Service Committee, and our industry as a whole, by the War Industries Board. The Pulp & Paper Section displayed a most co-operative spirit and tried to make our work as easy as possible, and I hope that in some measure we helped to lighten their burdens. I also wish to express my sincere and grateful thanks for the loyal and co-operative support of my fellow officers and directors in the Association, the Executive Committees, the Conference Committees, the War Service Committee and the members of our National Association, who have contributed so much in an endeavor to make my administration a successful one. While these officers and committeemen have had many unusual duties to perform, I am sure they have felt repaid for all the time and effort devoted to the work. We have formed some fine friendships, and lasting ones, and I trust the incoming administration may have as interesting and instructive a year's experience as has the retiring one.

In conclusion, then, let me give you the meat of my message. Let us gird ourselves up and jump into the commercial battle, but, as members of the same industry, let us jump in together—members of the same company with one objective, to win the battle together, knowing that there are laurels enough to go around. Let us ring the note of optimism.

We will now have the report of the Board of Directors.

THE SECRETARY: They have a number of matters which I think might better be taken up under the head of new business.

THE PRESIDENT: The next order of business then will be the report of the Committee on Cost System, Mr. Charles Addoms, Chairman. I would like to say here that this committee has gone into this work in a very comprehensive way, and it might appear to you at first blush that it was in shape so that we could have a long discussion of it today, but I think you will all probably look at the paper long enough to see it is a pretty big subject, and it needs a very painstaking study and thought, and then we hope we shall get comments and opinions from all of you. We would like to hear from Mr. Addoms. (Applause.)

(MR. CHARLES ADDOMS then explained his report.)

THE CHAIRMAN: I am sure we owe a vote of thanks to Mr. Addoms and his committee for the very comprehensive way in which they have compiled this information and data, and I am sure it is worthy of our very close study and consideration.

THE PRESIDENT: We have with us today a gentleman whom we are always pleased to have with us—he has been one of us a good many years. He is one of that band of stalwarts—I can say band of stalwarts, because I do not belong to it yet—that band of ex-presidents. Our ex-presidents have always acquitted themselves nobly, and I feel considerable hesitancy about joining their ranks, but we have one today who particularly we should pay tribute to, because he has done a very fine work. I refer to Mr. Joseph T. Alling, and we would certainly all appreciate very much having a word from him. (Applause.)

Remark by Mr. Alling

MR. JOSEPH T. ALLING: Mr. Chairman and gentlemen, it is very kind of you to welcome the prodigal back in this friendly way. Let me say, even in speaking for a moment today, I do it under protest, because I have no desire to take your time or mine either in this way. I have had a very interesting and a very stimulating period of a year and a half. I have come out of it a confirmed optimist. I have seen America at its best all this time, and that is a great experience for any man to have. After being ten months in the camps in this country I had the privilege of

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going abroad and seeing the work at first hand in France, and I repeat I have come back a confirmed optimist on American manhood, to say nothing about the manhood of other nations. We ordinarily speak of our American men as fine. They are finer because of those that went into the war. They are finer because of that experience. Taken out of all sorts of classes, they have been lifted—the very lowest of them—they have been lifted, and they are coming back finer men, with mighty few exceptions, in my judgment, than they went out. Their spirit on the other side, their spirit on this side, is splendid. Of course, it is the rollicking spirit of youth. It is full of amusing incidents. I was telling one of them with whom I sat at breakfast the other morning a story that might interest you, of just the bubbling-over spirit of our boys, a story I heard in France, and I have heard it since in this country, you may have heard it, of a soldier who was coming along the street, and another fellow sticks his head out of the door where he was trying to buy some goods and he said, "Can you speak French?" "Sure." "Come in and help me. I can't get my change." So he went in and used the only French language he knew, "Parlez vous Française?" "Mais oui." "Then why the hell don't you give him his change?" (Laughter.) Bubbling-over good nature. King George said when he was reviewing the soldiers one man said, "Who is the bud?" Next man answered, "The King." "King of what?" "King of England." "The hell he is. Where's his crown?"

I don't want you to think I am a profane individual. I am from Philadelphia. But I do want to say to you that that is one of the things over there that one gets accustomed to, because man for man there is more profanity used in the army than there is any other place, so far as I know, in the world. Why, even in expressing their religious experiences sometimes they swear. A captain said to me one day, speaking earnestly, saying how much the war has meant to him: "Well, when I get back to America I am going to join a church. This God damn war has made a Christian out of me." I never even cracked a smile when I heard that, because he meant it for emphasis and not for blasphemy.

The other day in St. Nazaire I heard this from a man who had been in our employ who was over there, and when Miss Margaret Wilson came in to sing for the boys one of them in the back end of the hut sang out, "Oh, I say, Maggie, tell your old man I am over here and I want to go home."

That simply is an illustration of the unbounded good nature over there. The spirit before battle everywhere was just that kind. "Let us get into this thing." The only men who were disappointed when they were coming back were either those who had not had a chance to get over from this side, or if they went over there were not on the actual battle line. They wanted to get in. Men were not looking for mahogany desk jobs. They were looking for front-line jobs. They were eager to get to the front. The spirit in battle was fine. It was just fine the way they romped in and romped right after the object they had. And it was because of that spirit that things took a change and the spirits of our Allies lifted as they saw the splendid fighting qualities of our men. And then after a battle it was the same, no matter how they were wounded. It fell to my lot to carry a great many wounded men. Those who were lightly wounded were saying, "How soon before I can get back again?" And those who were seriously wounded and could never get back again were saying, just equally contented, "I am glad I did it. If I had it to do over again I would do the same thing. I am glad I did what I did." Those are the men, gentlemen, who have the right to say to us, "This is my body which was broken for you." And the thing that came over me all the time was whether we are worthy of the sacrifice that they have been making. That thing was through all branches of the service everywhere.

OUR NAVY. We would not have gotten over there if it had

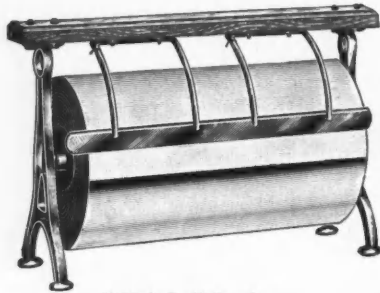
not been for the Navy. We would not have been able to take care of the things if it had not been for the boys of the Navy, who were on the front line trenches all the time, for that is what life on the sea during the period of the submarine activity was. The air service. They took the risk of losing their lives during preparation, losing their lives at the front, with the same easy nonchalance that every other man in the service did. The men in the tanks took their risks too, for, interesting as it was, and splendid as it was, no man went into battle in a tank without the fear that the tank would be penetrated by some shot and the gasoline set on fire, and they would all be set on fire, as many a man was. It was so in the service everywhere without any exception, and we won because we were united.

And we didn't win alone. I think we have got to be careful, we Americans, that we don't throw out our chests and get to bragging that America won. We won because we came at the right time to help the nations who had already stood the heat and the burden of the day for four long years. We came in at the last moment and cast the deciding vote. But don't forget the Belgians who stood them off for two weeks and saved France. England saved the sea, and decided in two days what it took us four years to decide, that it was their war. France held in a way which none of us can imagine. The heroic way in which she held those lines all these years. Tired out? No. Fifteen hundred thousand men gone under the sod in France. And all the rest. Don't think that we did all the thing. Don't let us say that. If we would have peace and good feeling in the world, don't let us break out that we won this whole thing.

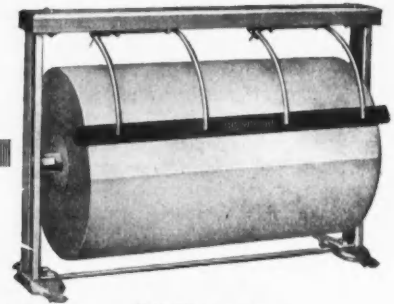
I went over as a Y. M. C. A. man. I wore the uniform of the Y. M. C. A., and notwithstanding the objections that are being raised to it, I am proud to have worn it, and I would be proud to wear it today (Applause.) I came pretty near seeing all there was to see in France, along all the battle lines and throughout the back regions of the S. O. S., or service of supplies. About 50 per cent of the criticisms are the viewpoint. They are simply a difference of viewpoint. And many a man who went to the Post Exchanges in our home camp, to the chain stores that all the camps have to have, all the men expected to pay for their goods. Of course, just as much as if they would go into your store or mine and expect to pay for it. But somehow or other, when they got to France and when the Army asked the Y. M. C. A. to take over these stores because the Army could not run them themselves, somehow or other the viewpoint of a great many of the soldiers changed, and they said if the Y. M. C. A. is running them they ought to give all these things, and when they found they didn't, that they had to pay for them, they got very critical about them. Now, 50 per cent, in my judgment—of course I am talking at random—is simply due to that difference of viewpoint. The Y. M. C. A. was not asked to give it. The Y. M. C. A. expected to run the stores and do the best they knew how to do it in that way. But if they had been given free all the material, tobacco and cigars and candy and chewing gum and chocolates which an army of two million men might have to have, if it should have been given to them, then it is an entirely different viewpoint from what the Y. M. C. A. understood they were asked to take over.

Some small per cent, of course, is due to the faults of the personnel. Some said the secretaries were too good, too holy; others said the secretaries were not good enough. I don't know which class I belong to.

There were mistakes. Surely there were mistakes. There were in the Army. Some men did not size up to the situation and were sent home. Some of the Y. M. C. A. men did not size up to the situation and were sent home. But every man who ran up against a grouch or an incompetent man, no matter whether he was grouchy because he had been working twenty-three hours a day or for any other reason, immediately he laid that one ex-



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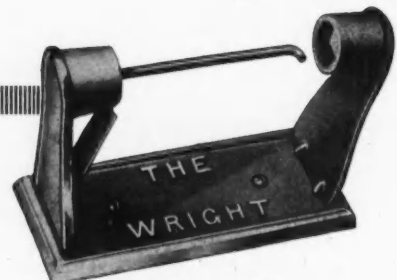
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perience down to the whole thing. I found some regiments who had no use for the Y. M. C. A. because they had a poor specimen of a man attempting to run it, and when that man was changed and a real red-blooded man put in, the whole tone changed. On the other hand, while there is some of that, a whole lot is nothing but general gossip. The Army can give any lady's sewing society that ever was invented cards and spades and beat them at gossip. I know two sergeants that used to start rumors going and then bet on how long it would be before the rumors came back. (Laughter.) You used to hear last year the story of the Red Cross woman who had made a sweater and tacked a five dollar bill in the pocket and went down later and found a Red Cross worker wearing the sweater and the five dollars had disappeared. There are similar stories about the Y. M. C. A.

And gift tobacco. A few cases were sold, yes, that got in from the manufacturer to the quartermaster and was sold by the quartermaster to the Y. M. C. A. and was sold by the Y. M. C. A. to the soldier, and when they opened them and found these gift packages inside, they said, "The crooks, the crooks, the crooks." A few cases like that. And when they were taken back they were given tobacco in exchange, and that was taken and sent back to the quartermaster.

The Army has investigated. The Army has said it was all right. There was nothing wrong intended. Just an accident on our part.

Profiteering? It did not exist. The things were sold not only at cost, but at less than cost, saying nothing about use of capital and use of buildings and salaries of the people who sold them. It simply is not true. In the sales of \$5,000,000 a month there was a loss in actual cost of about a quarter of a million dollars a month, to say nothing about the overhead of salaries and buildings and all these other expenses. All I want to say is that after going all over France and seeing the thing from beginning to end, the judgment of the French Government, when it made Dr. Mott, the head of the whole thing, a Knight of the Legion of Honor, is justified. They said, "For what you and your organization have done to win the war we hand you recognition of merit." They would not have done that if the thing had been the way some people say. The Salvation Army did well. The Knights of Columbus did well. But realize this. At the maximum the Salvation Army had forty places where they were doing work. At the maximum the Knights of Columbus had one hundred places in France where they were doing work. The Y. M. C. A. had 1,530 in the American Army and 1,340 in the French Army, and something like 2,000 places in the Italian Army, and there is no comparison. That is all as to the amount and volume of work.

In one division a man would find a Salvation Army lassie and get his doughnuts, and come home grateful for them; but in all the other places they didn't see a Salvation Army lassie, they didn't find fault with her. That was all, and the same way with the others. That wherever throughout France it was impossible to get all they wanted at the Y. M. C. A.—and they could not get it, it simply could not be gotten. Regiments couldn't get up their own provisions, so that all they had was iron rations for two weeks. It was not to be wondered at that if the Government couldn't get up their provisions to them the Y. M. C. A. couldn't get its stuff either into those front lines.

It is not true the men did not go to the front. They did. They were killed, and gassed, and wounded, and cited for distinguished service.

Thank you, Mr. Chairman, for letting me speak. I just wanted to say that thing. If you are interested, you need not be afraid that the honor of the Y. M. C. A. is going to come out seriously harmed. There were some errors, some mistakes. It could not be otherwise. But in the main it was as good as Ivory Soap—99 per cent pure. (Applause.)

THE PRESIDENT: Mr. Alling, we thank you. We all know that we would get something from you. That is a fine word.

We also have with us today a man—and his being here also indicates that we are trying to carry out this idea of "United we stand; divided we fall." The Canadians and the Americans fought side by side, and they propose to be together in peace, and we hope to be together in commerce a good deal closer than we have been. In our association work we know that we have co-operation, and we think we can accomplish a good deal together. The gentleman who is here with us today—I hope he is in the room—Mr. E. S. Monroe, Treasurer of the Canadian Paper Trade Association. We would appreciate just a word from Mr. Monroe.

A Word from Canada

MR. E. S. MONROE: Mr. President, I did not come here expecting to say anything. I came here to listen, to see if I could get some information to carry back to Canada. I was quietly taking my seat at the back there. I didn't expect for a moment I would be called upon to make any remarks, but while here I am certainly very pleased to see such a body of bright, keen, active business men as you have here in your National Paper Trade Association. I cannot see anything for it but success when I look around and see the intelligent minds before me.

We have in Canada only a small organization. We have two organizations there, one in the paper and pulp manufacturers, which governs the mills, and we have the Paper Trade Association, similar to what you have here, the Merchants Association. We only formed our association on the first of May of this past year.

I might say that we have in that association 95 per cent of the paper merchants of Canada, (applause) extending from Vancouver to Halifax; and I must say that from our experience of the eight months that we have had in trade it has been but the most delightful, pleasant and profitable experience that I think the paper trade of Canada has ever had, from the fact that they are acting unitedly. They are co-operating more closely with the mills than they ever did before. The mills are appreciating the fact that the merchants are their distributing power, and they are giving us better consideration than we ever had before, and we hope that that will be continued and extended, and I am sure that it will.

Canada of course is a young country, especially in paper-making.

When I tell you that in 1890 the total cost of paper and pulp exported from Canada amounted to \$120, in the year before the war the amount of paper and pulp exported from Canada amounted to more than all the other manufacturing industries of Canada combined. So that will give you a little idea that Canada is growing somewhat as a paper-making country. The area is large there. We have large timber areas. I think it is estimated about 350,000 square miles of pulp lands. You gentlemen who are interested in the figures will be able to realize that that is considerable raw material to work upon.

I was very much interested this morning—I was at your meeting this morning—at some of the items that were discussed. Particularly so of one resolution you brought in of changing your cash discount from 3 per cent to 2 per cent. We welcome that quite heartily. In our country we have our branches in five different provinces, the Trade Association. We have Winnipeg and the Prairie provinces; we have British Columbia; we have the Province of Ontario; the Province of Quebec, and the Maritime Provinces. Regarding the discount, Winnipeg and the Prairie Provinces and British Columbia sell their goods on net 30-day terms. In Ontario and the Province of Quebec and the Maritime Provinces our discounts are 2 per cent.

I was interested in the discussion this morning that bringing that from 3 per cent to 2 per cent would be varied probably in the case of favored customers. In Canada war terms are net



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30 days, payable on the 20th of the month. If a check is received on the 21st or the 22d of the month it is returned. If it comes in the second or third time the same way, that person is put on a net cash basis, doesn't get the opportunity of getting the discount. So, quite needless to say, we don't have very many returns.

This is my first visit to the paper association, and I am sure that I hail it with delight to have an opportunity of being present. I didn't expect to even make any remarks, but we are vitally interested in the work that the National Paper Association has before it, and whatever does vitally affect us because our interests are so closely allied.

We buy certain goods over here, and possibly some day the paper merchants of the United States will be seeking some of the products from Canada, because Canada is going to be one of the paper-making countries of the world, from the large resources which she has.

I do not think I have anything else to say. I thank you.

THE PRESIDENT: We have one other gentleman with us who comes from the Great Northwest, who has never been here before, and I would like to have him get up so we may all know him. Mr. James J. Flaherty, President of the Great Falls Paper Company, Great Falls, Montana.

JAMES J. FLAHERTY: Thank you. Mr. Chairman, and members of the National Paper Trade Association; it is indeed a pleasure for us to become affiliated with this association. When we were running into competition with such high grade houses as Leslie, McClellan, the Stillwell house, and the St. Paul people, such concerns as that who are members of this Association, it convinced me that if you members of the Association are that type, we want to be with you. I thank you.

THE PRESIDENT: The next item on the order of business here is Unfinished Business. So far as I know, or the Secretary knows, there is no unfinished business.

SECRETARY RIDGWAY: The Board of Directors also recommends the passage of the following resolution:

"Resolved, That the National Paper Trade Association extend to Messrs. T. E. Donnelley, S. L. Willson and H. W. Nichols a vote of thanks in recognition and appreciation of the fair, broad-minded and capable manner in which they conducted the business of the Paper and Pulp Division of the War Industries Board."

On motion this resolution was unanimously adopted.

SECRETARY RIDGWAY: The following resolution has also been handed up for presentation to this meeting. It was not taken up in the meeting of the Board of Directors, but did have the approval of the Executive Committee of the Fine Paper Division; it reads as follows:

"Resolved, That the members of the National Paper Trade Association in their relations with the manufacturers subscribe to the following principles of purchase:

"All prices to cover safe delivery to merchant's home city, and subject to a cash discount of 3 per cent."

MR. ROSENTHAL: I would like to see a rising vote on that without discussion, Mr. Chairman, as to whether that resolution should be adopted, or not.

THE CHAIRMAN: All in favor of its adoption will signify by rising.

The resolution was unanimously adopted by a rising vote.

THE CHAIRMAN: Is there any other general business to be brought up before this meeting before we proceed to some other matters?

MR. ROSENTHAL: I would like to see the motion we have just passed changed to show it is adopted by the Coarse Paper Division as well as the Fine.

SECRETARY RIDGWAY: Mr. Rosenthal, the object of bringing it in here was that it would have the endorsement of the Coarse Paper members as well.

MR. ROSENTHAL: That covers the point.

THE PRESIDENT: Are there any other matters?

COLONEL MILLER: Several today have spoken to me regarding some large lots of paper which the Government has in different parts of the country, with the fear that it is going to be thrown onto the market, and in order to allay the feeling of any of you, I can speak authoritatively that there will be no lots of paper disposed of by the Government in any way that will be an injustice to the trade. Their plan is, before advertising a lot of paper, to take that matter up with the industry interested. And I would honestly like to suggest that if any of you have a fear that a certain lot of paper is to be thrown on your market that you communicate through the Secretary of this Association, and he can get the matter to Washington, where it will be given immediate consideration, because I know it is the express and definite policy of the Government not to disturb the market by disposing of these accumulations. I thank you. (Applause.)

MR. J. A. CARPENTER: I am going to ask Colonel Miller why this hasn't already been done? There have been three or four lots of Coated Blank thrown on the market by the Food Administration out in the Western territory.

COLONEL MILLER: I can only speak for the army. I cannot speak for the Food Administration. Mr. Thorne wrote me a letter on that within the last week. The army is going to be very careful not to disturb these relations.

THE PRESIDENT: If any of us find any of the departments of the Government doing that sort of thing, get a report to our Secretary and communicate with the department and see if we cannot stop that kind of thing.

MR. J. A. CARPENTER: There were nearly a quarter of a million sheets of Coated Brown thrown on the market in Oklahoma, Missouri and Kansas.

MR. MILLER: I might help to clean up that matter. The Food Administration is controlled by the State. The State of Ohio sold some board last week that I sold them. I was asked to bid on it, but I was not there. I know that is done by the State of Ohio and not by the Government.

THE PRESIDENT: We ought to find whether it is a Federal proposition or not. As Mr. Miller says, if it is a State matter, let us find out. If it is the United States Government, I think there is a way to stop it. If any of you have any information of the real facts to indicate that the United States is doing this and will get the information to our Secretary, we will take it up.

MR. HAM: In connection with this question I wish to state that only a few days ago our house had some paper offered to us and we learned that it was only offered to paper merchants.

MR. SMITH (Fisher Paper Company): The Food Administration are going to throw on the market a lot of paper they have got cut to letter sizes.

THE PRESIDENT: Kindly send that information in to the Secretary, so we can present the matter.

MR. WARD: Under New Business should not Mr. Adams' committee be directed how to proceed? Is that necessary?

SECRETARY RIDGWAY: I don't think it is necessary, Mr. Ward.

THE PRESIDENT: Are there any other matters under this caption of General Business? If not, the next matter is the nomination of officers.

Secretary Ridgway presented the following report:

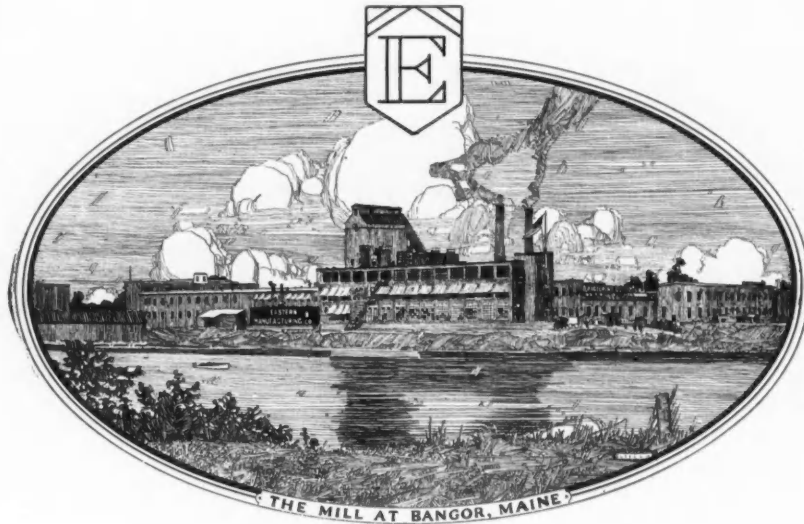
In accordance with the by-laws the Board of Directors beg to recommend the following officers:

For President—Harvey E. Platt, Philadelphia.

Vice Presidents—Fine Paper Division, Ross P. Andrews, Washington, D. C.; Coarse Paper Division, E. F. Herrlinger, Cincinnati.

Treasurer—A. J. Corning, Baltimore.

MR. MCCLELLAN: Mr. President, I move that the Secretary cast the ballot for these gentlemen.



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The motion prevailed.

THE SECRETARY: It has been done.

MR. B. W. WILSON: I don't think, gentlemen, we should permit Mr. Olmsted to retire without some word of appreciation for his services. Mr. Olmsted has served the association at a period and a time and under conditions which no gentleman present I think will ever see again, and I think we should go on record as expressing our substantial appreciation for the splendid service he has rendered in the past year. (Applause.)

The question was then put by Mr. Wilson and unanimously carried by a standing vote.

PRESIDENT OLMSTED: Gentlemen, I thank you. I can only repeat what I said before; whatever success my administration has had is because of the fine spirit you gentlemen have given to us. I want you to know that the President has not done all the work, and our incoming President and Vice President in charge of the Coarse Paper Division, as well as Mr. Andrews of the Fine Paper Division, had much to do with our work, not only in connection with the War Board, but has been busy from the start, and we all want to hear from our incoming President, President Platt. I can tell you he is a worker, and he is one of us. (Applause.)

Remarks by Pres. Platt

PRESIDENT PLATT: Mr. President and Gentlemen: You have given me an honor this afternoon of which I am very proud; of which any man may well be proud and which I deeply appreciate, and for which I thank you. It is an honor, however, which entails responsibility, which I, also, I trust, shall appreciate. Our President, Mr. Olmsted, has set a pace during the past year which it will be very difficult to equal, and he has set us a standard which it will be equally difficult to attain, and I want to ask for the hearty co-operation, and I know I shall have it, of every member of the National Paper Trade Association, because we cannot afford to let our association work lag, we must push it ahead.

And I want to take this opportunity of saying a word of appreciation to the many loyal friends which I have in the association, and particularly in the Coarse Paper Division, for their loyal and cordial support during the five or six years which I have been connected with that branch of the association. And I want to leave as a slogan for the coming year that motto which has become historical in the English army, "Let us all, each one of us, carry on." I thank you for the honor. I appreciate it and will give you my best efforts at all times. (Applause.) Again I thank you.

THE CHAIRMAN: We cannot adjourn without having a word from our incoming Vice President of the Coarse Paper Division, who was one of the pioneers in association work in the Coarse Paper Branch of the business, Vice President Herrlinger. (Applause.)

Remarks by Vice Pres. Herrlinger

VICE PRESIDENT HERRLINGER: Mr. President, and Fellow Members of the National Paper Trade Association: In the first place, I hardly think you can call what I am going to say a speech of acceptance. I am here again without any notes—except the few that I made a few moments ago. I find myself largely in the position of two men who were on the street corner one day selling waffles. One man had a very powerful voice and sang out, "Here is your red hot waffle, only 5 cents apiece." The other fellow had a very weak voice, and he simply said, "Here too, here too, here too."

After what has been said this afternoon, about all there is for me to say is, "Here too."

I believe I had the pleasure about two years ago of saying I was neither a trained organization of workers nor was I a natural born organization, but during the two years I have been connected with this Association I have learned, as I said at that time, that if an Association of this kind did nothing else than

merely bring us into social contact with each other, it has served its purpose and justified its existence and likewise its continuance.

In accepting one of the offices of this organization, I feel it carries with it quite an honor, because I am probably the youngest member of this association to hold an office. But with an honor of this kind always comes responsibility, a responsibility that requires effort and time. I never believed in going hunting with a brass band, I hardly think it is right for me to stand and tell you what the new officers expect to accomplish, but I would like to say this, that the officers will do their share, or at least, this officer will. The Executive Committee will do its share, but not much can be accomplished unless we have the hearty support of every member who is in our Association. Each one of you can help us.

In accepting the stewardship of this organization, we realize that it carries with it a double responsibility, but we assume control of this organization at a time when it enjoys the best success that it has had since its inception. I not only say that from the standpoint of what it has actually accomplished, but from the standpoint of membership. I believe the Association today enjoys the pleasure of having the largest membership it has had at any time. All I can say is that as an officer of your organization I intend to try—it may be a hard task, but I intend to try to do my share to, if possible, improve its condition. I want to be able to say to you a year hence that even with the success that this organization is enjoying we have at least improved. We want you to help us in every way. We want you to go out and solicit those firms who should be members of the Association. I want you to take up with me as a friend any questions you think will help the organization or you individually, and I say frankly I shall be at your service in the Coarse Paper Division at all times. Thank you. (Applause.)

Mr. Bonestell Speaks

MR. BONESTELL: Mr. Chairman, and Members of the National Paper Trade Association: It is very kind of you to give me so pleasant a reception. To the most casual observer there are certain conditions existing now in this country which require a very careful consideration. A year ago, as you will all remember, the great question which we asked ourselves, and which we asked each other, was, "What kind of work could we individually as paper merchants do to help win the war?" How well we answered that question is now manifest, and I venture to say that there are no records anywhere, commercial records, or at any time, where a body of men voluntarily spent their money to induce people to refrain from purchasing the merchandise the selling of which was necessary to their business. That is something, gentlemen, which I think we may be proud of. Our men at the front have won the battles; they with their Allies. But the winning of a battle, while it is a most important incident in the war, is, after all, only an important incident. We know very well that in the war of 1870 Germany won the battle, but did she win the war? Her very condition today is proof that she did not win the war. Now our men and women who went to the front have upheld the best traditions of the American country. Now it devolves upon us, upon the merchants, upon the manufacturers, upon the men engaged in all industries, to carry out the entire program, so that their victories may result in an honorable and real peace. This is a time, gentlemen, in this country when the inflation is something tremendous. Values have gone beyond anything that anybody at any time could have expected, and we are in the position of a lot of men sitting on the top of a balloon. That is our position today. If by courage, by patience, and by wisdom we can be brought back into normal channels, then there will be no suffering. But if we lose our courage, if we allow selfishness to take the helm, we shall be engulfed by a tide which we cannot control. This is the time for the American merchant, for the American manufacturer, to show what stuff he is made of. If any man at this time attempts to

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claim business to which he is not entitled—I mean business which, all things being equal, would not come to him—if he attempts to obtain such business by unethical business methods, by the cutting of prices, or if he is cowardly enough to try to unload, that man is unfaithful to his business associates. He is untrue to himself; and I am not afraid to say he is a traitor to the best interests of his own country. We have got to hold the thing in check. Of course, adjustment is bound to come. The adjustment will come. But let it come based on a reduction of cost, and not on any effort to get something individually to which

we are not entitled. A year ago we said, "We will sacrifice ourselves, we will sacrifice our interests, to win the war." Let us now, with the same fervor, with the same courage, with the same patriotism, say that we will sacrifice ourselves to win a peace. (Applause.)

MR. THOMAS F. SMITH: Mr. President, I think before we adjourn we should like to thank the War Service and Conference Committees for their splendid work that they did during this year, and I offer that resolution, and request a rising vote.

The resolution was adopted by a rising vote.

HUBBS HOUSES MEET

The first annual convention of the Hubbs Houses was held at the Hotel Lafayette, Buffalo, N. Y., January 13-17.

The Hubbs Houses include Charles P. Hubbs & Co., New York; Victoria Paper & Twine Company, Ltd., Montreal and Toronto; Hubbs & Hastings Paper Company, Rochester, N. Y.; Interstate Cordage & Paper Company, Pittsburgh, Pa.; Hubbs & House Company, Buffalo, N. Y., and Cleveland, Ohio; Hubbs & Corning Company, Baltimore, Md., and Richmond, Va.

The attendance embraces the managers of the parent concern in New York and of branches in principal cities and the meetings are given to discussion of problems connected with the making and selling of many products of the Hubbs houses. The entertainment, arranged by George E. Beggs, of Rochester, and Robert W. Gallagher and H. K. Severance, of Hubbs & Howe Company, Buffalo, includes inspection of local industries and theater parties.

Those in attendance were: President Hubbs, J. C. Mallalieu, Charles P. White and H. W. Doremus, New York; Charles F.

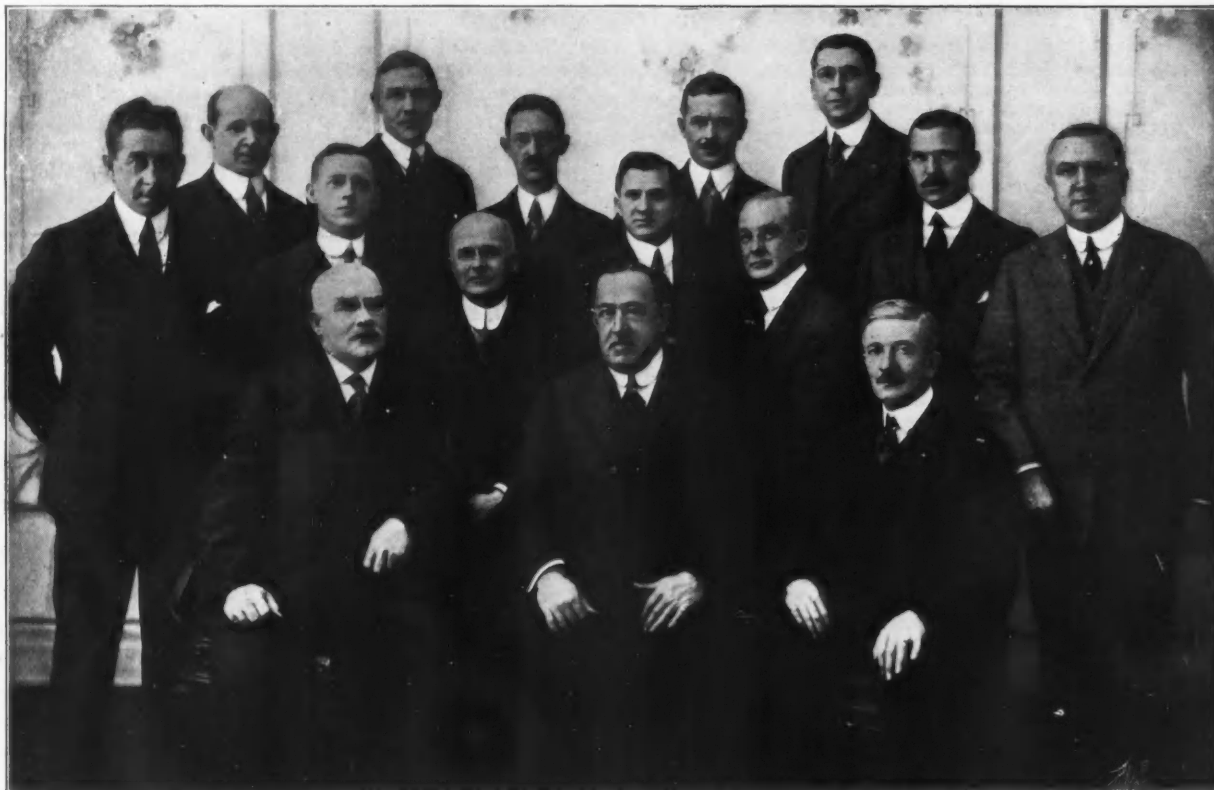
Corning and A. J. Corning, Baltimore; Charles S. Hastings and George E. Beggs, Rochester; Charles V. Syrett and Leo E. Charles, Toronto; Finley T. Jamison, Pittsburgh; Henry G. Ishen, Cleveland, and William H. Howe, Robert W. Gallagher and H. J. Severance, Buffalo.

CAPTAIN KELLOGG GOES WITH BROWN CO.

Capt. E. H. Kellogg, a brother of R. S. Kellogg, secretary of the News Print Service Bureau, who has been recently returned from the Chemical Warfare Service, U. S. A., in which organization he served as a captain, has accepted a position with the Brown Company, of Berlin, N. H.

He is a chemical engineer in the research department of the company working upon sulphate pulp. His headquarters are at Berlin, but about half of his time will be spent in the Canadian pulp mills at La Tuque.

Capt. Kellogg was assigned to the research division during his military service, his last three months in the army being spent in France.



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The forty-second annual banquet of the American Paper & Pulp Association at the Waldorf-Astoria was a most successful affair. The menu was more elaborate than last year, but in accordance with the custom established at that time no souvenirs were given out. The money usually expended for this purpose will be devoted to some war charity.

Geo. W. Sisson, Jr., Is Toastmaster

George W. Sisson, Jr., the president of the Association, was toastmaster, and the speakers included Hon. Warren G. Harding, United States Senator from Ohio; Frank Trumbull and Rev. Nehemiah Boynton, D. D.

The toastmaster, arising, spoke as follows: Gentlemen of the American paper and pulp industry, friends and guests: We met here a year ago tonight under the stress and amidst the uncertainties of a great war, the issues of which held many disquieting features. Tonight we meet cheered and relieved, rejoicing in the glorious victory, the joint achievement of ourselves and our Allies. (Applause.)

That we may have some conception of the part played by the men from this industry in the great war, we shall have thrown upon the screen figures showing the number of those, men from our mills, who were in active service; and then the number of those, those patriots, our boys, from our mills, who made the supreme sacrifice. After the figures are shown and when the lights are again turned on I shall ask you to arise and join me in a silent toast to their gallant spirits.

(Slide: 13,902 men from the paper industry in the United States entered the service in the late war.)

(Slide: 351 men died in the service of their country.)

Gentlemen, a silent toast to their memory.

(The toast was drunk by the men standing.)

As we think of them and the thousands of others who in that inferno of war gladly yielded up their young lives, we thank God for the Victory and that we had a glorious part in its final achievement. But as we think of them, and amidst all our rejoicing, I cannot help but think of the long, weary struggle of those who with dauntless spirit, fighting often with back to wall and smiling in the face of death waited patiently for our coming. (Applause.) And I feel like saying to myself and to every American: Be humble, O America. Let not the idle boast, the weak, vain glory blot the fair page of our achievement; let us not in this triumphant hour forget the years we hesitated, held aloof while nations trembled 'neath the cloven hoof. Be humble, O America; our dead lie side by side with those who bled that Liberty might live. Be it our pride that we came not too late, but turned the tide and led the way to Victory. Thank God that in that bloody path we, too, have trod and that in Gethsemane we, too, have stood, that all that consecrated crimson flood had spread beneath the shrapnel's lighting showers one splendid, brave, redeeming drop was ours. (Applause.)

But now America must turn from the contemplation of the problems, the sacrifices and the victories of war to the practical consideration and, we hope, the sane solution of the pressing questions of peace. Gentlemen, America tonight is facing the No-Man's Land of her political, industrial and social future. Out there in No-Man's Land are shell craters, pitfalls for the unwary, barbed-wire entanglements, cunningly devised traps to fool even honest souls with the glittering promise, with here and there some safe and solid ground, and paths in which we may move forward with comparative safety to our objective.

We have been waiting in that tense attitude of mind which precedes great adventure, but now the zero hour has struck, and we must go over the top. Who lead and who show the way?

What brave hearts! What keen ears! What brave voice, even out there in the listening posts and brought back a true word of warning for guidance! What star shells of light and truth on questions that must be settled out there have been sent up to guide our footsteps.

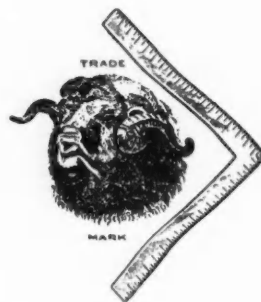
Gentlemen, it is a time for clear, straight thinking, and plain, blunt speaking. It is a time when business men must keep their heads clear, and do their own thinking, not merely in terms of their own plant, or even of their own industry, but in terms of national conditions, and national tendencies, yea, even in terms of world conditions.

What a sweep it gives a man's thought? What dignity and space to heaven is swelling up in the great drama! He can no longer plod along at his daily task, with his eye on the ground and his wits asleep; but now, under the urge of these new critical conditions, and in the spirit of helpful cooperation and unselfish service, he does his work with his head in the air, where a man's head belongs, and his eyes searching a wider horizon, where, with almost prophetic vision, he can see the appreciation of his labor in its true relation to others as well as to himself.

Never was need of down-right affirmative leadership greater in America than today. It is a time when America could ill afford to spare that dauntless spirit, that clear vision and that brave voice so recently stilled. God rest the soul of Theodore Roosevelt. (Great applause.)

I am sure that the speaker whom I am about to introduce will feel indeed honored to know that I had the very great pleasure of inviting Theodore Roosevelt to speak to us tonight, that I went to the hospital where he was confined only the Friday before Christmas, that I have as a precious memento a personal letter signed by his own hand and dated the 23rd day of December in which he regrets, and I think honestly and truly, that he could not be with you tonight. But imbued with the same spirit of robust Americanism, devoted to the same principles of equal justice and fair play, fearless in utterances of constructive criticism, we have with us tonight a man who may point the safe way out into that No-Man's Land, the Hon. Warren G. Harding, United States Senator from Ohio. (Applause.)

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Mr. Harding Speaks

Mr. Toastmaster, Ladies and Gentlemen: No man could be insensible to the courteous and kindly words of your Toastmaster, and no man in America could be other than proud to be asked to fill any humble position, as I am tonight, in the place of the most courageous American that ever lived. (Applause.) Theodore Roosevelt was the watchman of the parapet, proclaiming the dangers and the menaces to the American Republic, and there was not a voice in all history that spoke with greater courage or with stronger appeal to the American people.

The world is in an atmosphere of the aftermath of war.

Two-thirds of the civilized world has been at war. I do not know that any one has known precisely, but I think there have been forty millions of men under arms. I am sure no one knows definitely, but the toll of war has probably been ten million human souls, and I saw only yesterday the estimate that it had cost the wealth of the world two hundred billions of dollars, not counting some of the collateral costs. And apart from all these stupendous figures is the still more important thing. When the Kaiser cast the die of war he flung that something into the activities of human-kind that put our civilization in a fluid state, and the man does not live who can correctly prophesy the after-crystallization.

Your Toastmaster spoke of the No-Man's Land which you are called to go over. There is a No-Man's Land not only for American business and all American activities; there is a No-Man's Land before the world tonight to save the fabric of civilization; and there never, in my judgment, was so serious a moment from the beginning of the war as we contemplate tonight, my countrymen.

We are as little prepared for peace as we were for war, and we were pitifully and virtually unprepared for war. It is not surprising when you come to think of it. We of America were lacking in a national spirit, we were a polyglot people with a blend of all the races of the earth. We were committed to our selfish tasks. We were what the world wants, a nation of money-makers. Aye, worse. Too many of us in this country were more concerned with the exploitation of the human element that came from foreign lands than we were absorbing and digesting that element, making it a real part of American life. We had not found the American soil. I come to understand it as a public servant. I remember the most shocking thing that came to me as a member of the Senate. It was nearly two years ago now, and there was before that body the measure known as the Armed Shipping Bill, the measure that was delayed and defeated by the regrettable filibuster, wherein the President asked for authority to arm our merchant shipping for defense. And while that question was under discussion in the Senate, and even under the more earnest discussion throughout the country, a constituent of mine from my own State, an intelligent one, too, by the way, wrote me and said: "My dear Senator, why are you so concerned about the defense of American rights? Don't you know, sir, that there is no such thing as a distinctly American citizen?" And when I made reply to that letter I said: "My dear sir, it may be true, as you urge in your letter, that there is no such a thing as a distinctly American citizen, but if that astounding thing be true, then in God's name, out of this turmoil of the world and this travail of civilization, let us have a real American spring from Columbia's loins to lift the race of real Americans."

So I have made it a point on such occasions as these and in all public gatherings, without trespass, I hope, on the topics that are to be discussed hereafter, to talk Americanism, real, genuine, simple, unalloyed Americanism, and I announce my platform now, that from this time he who wears the garb of an American citizen and profits, his selfish existence on American soil must be an American in his heart and soul.

It was not surprising, however, that we were lacking in the development of a soul. We were a heterogeneous mass; we were

not even united or unanimous, or clearly understood why we went to war.

I speak advisedly. I heard the discussion in the Senate; and we were not unanimous, because of a very marked weakness in popular government, which I ventured to point out.

The trouble with popular government is that too many men in public life are more concerned with results at the ballot box than with the exaltation of the people they represent.

And we did not tell the truth about why we went to war, because there was a very large pro-German vote in the United States of America; and so, rather than offend that vote, we announced with considerable flourish and not a little appeal that we were going to war to make the world safe for democracy, when, in truth, we went to war in defense of American national rights. (Applause.)

I had said this before, and some one has said in criticism of my position that I am taking a wholly selfish and material viewpoint. Why, my countrymen, I know of nothing more appealing than warfare for the advance of national rights, because I tell you now that the nation good enough to live in is good enough to fight for. (Applause.) And we only said the other because we were thinking of the effect on the American voter. It was not confined to any one party, I may say. There were other important collateral issues involved. We went to war to make the world safe for civilization; aye, more important, we went to war to make America safe for Americans.

We went to war to make it possible for the American citizen to go wheresoever he would on a lawful and righteous mission anywhere the shining sun on land and sea, in safety, under the American flag. That is worth fighting for. (Applause.)

And after we committed the country, we found a new soul, a new spirit; and I know of nothing more magnificent than the final committal of America to the war.

But, my countrymen, as the toastmaster has suggested, if we had gone to war wholly for democracy's sake, I rather think we would hasten our forward march; and I am not sure but we would have made war on Turkey and on some other nations of the old world who were fighting us, where democracy is not making as much headway as it might.

But I do believe, my countrymen, nothing is so important as the cultivation of the American spirit, and, in my humble judgment, it is the first thing essential to the solution of the tremendous problems of the aftermath of the war. And in my humble judgment, if we are to save American civilization and make it safe, it must be done following the great light of a genuine American spirit.

It is the surest thing, my countrymen, to lead us on the right path; and while I am speaking of that, let me digress for a moment, if we want to hold America safe, we are going to be a little more exacting about the character of those admitted to American citizenship hereafter. (Applause.)

I am opposed to America being made the dumping ground for the product of human activities or human agents themselves, no matter whence they come. More than that, if I could have my say, he who has previously enjoyed the privileges and advantages of American hospitality in the name of citizenship, and who has gone back to the fatherland, or any other land, to fight against us, can never again find a place on American shores. (Great applause.)

But the pathos of the situation is that the world, fevered by war, is just as little prepared for peace as it was for the conflict; and we, in this American Republic, are less prepared than any other participant in the great world war.

I am not sure that I can tell you the reason precisely. I do not know that we lack vision in the Republic. I am inclined to think that we are just a little too much inclined to be opportunists in the American Republics because some of the na-

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tions at war found time during their tremendous activities and anxieties to lay the foundations looking forward to the conquests that come in the aftermath. And Britain, solid, old Britain, was ready to release her ships and send her agents of commerce to all the markets of the world the day the armistice was signed.

We ought to have had that sort of preparation in this great American Republic, but, unhappily, we were so busily engaged in committing our tremendous resources, man-power and wealth, to the winning of the war—and we were not quite as hopeful as we might reasonably have been about its early conclusion and the armistice came and found us very much at sixes and sevens; and I am sorry to say that we have not yet charted the way for a peaceful advent on the markets of the world, or even for retaining our eminence in our markets at home.

You can not have the fevered relation of war in the aftermath. We have been paying the mounting costs of grief and necessity; we have been paying the extravagant costs of urgent need. We have been paying enormously for speed; and advantage has been taken of the conditions of war. I wish I could somehow portray—no one has felt it more than the man in public life—everybody in the United States of America who has had a particular fad to promote, a particular reform to bring about, or a special axe to grind, has sought to accomplish his ends amid the anxieties and stress of war.

Of course, the tendency was patriotic, I grant that. America has given a magnificent demonstration, but there was profiteering practiced none the less in various walks of life, and the trouble now is that far too many people want war compensation while their outlay shall be in terms of peace. That can never be, my countrymen; and any delay in getting ready, and I hope you won't misconstrue it—I would not violate the properties of any occasion if I knew it—but one of the delays in getting ready to go over is that a considerable portion of American thought is too much devoted to settling the affairs of the world, and not enough to settling the affairs of the United States of America.

Frankly, I am not an Internationalist myself. (Applause.) I am an American Nationalist first and last. I have not any objections to a League of Nations. I hope the same society of nations can be brought about if no American surrender of sovereignty is involved. I would like to have something brought to pass which shall be a guarantee of the peace of the world. But, mark you, my countrymen, I had infinitely preferred to bring about a League of concord between the captains of industry and the American toilers who make up the activities of American life. There is a League of Peace that is absolutely essential to continue American eminence, and there is a League that is absolutely necessary to continue American tranquility. I know of no world problem comparable to that. I rejoice in the inheritance of America. That is why I am a Nationalist. I rejoice in the things that have come to us through the heroism of the founding fathers, national aspirations, righteous national aspirations have been the impelling thing that has made everlastingly for human progress. You take a people without national aspirations and you mark the end of their attainments in the activities of human life. I always like to be proud that I am an American. I like the man who is proud of his home town, because show me the man who is proud of his home town and its activities and its importance and accomplishments, and I will show you one of its builders. And America, the nation, is only the aggregation of home towns. And I like the spirit that leads one of us to proclaim himself an American. I want conditions to abide that shall make it desirable to be an American who can boast not alone our achievements, but can boast the advantages that come to the individual citizen. Have you ever asked yourself why we of the republic have outstripped the other nations of the world, how we have accomplished in this

republic in 135 years what other nations were five centuries in attaining? It is not resources alone, because while we are blessed with God's bounty in measurous resources, other nations are abounding therein and it is not industry alone, because there are other nations of the earth quite as industrious as we. China is the most remarkable example, and it is not because of genius, though we challenge the world in the brilliance of American genius. Aye, but it is not due to any inherent qualities in the American citizens. Because we of America are the blend of all the peoples of the world whom we have outstripped in the race for accomplishment. Ask yourself, is it most important to know what has made us what we are, and I can partly explain. In the founding of the American Republic the inspired fathers wrote into the Constitution a thing never put into a written Constitution before that time.

They wrote into the fundamental law of this republic a provision for civil liberty, civil liberty which guarantees a man protection in his righteous acquirements; and then on the foundation stone of civil liberty they put a second, human liberty; and then on human liberty and civil liberty they laid the third, religious liberty. And on these three, the triune of American freedom, they built the temple of American equal opportunity.

Equal opportunity, I said; not equal reward. God Almighty never intended us to be equally rewarded, or He would have made us all exactly alike. Wouldn't this have been a miserable world if He had? (Applause.) But equal opportunity to all men, and reward according to merit; and all the Socialists, and all the Bolsheviks in the world can never repeal the law rewarding merit. (Applause.) Men say there is no such thing as equal opportunity: it is a lie. Equal opportunity in this republic beckons with open arms to every man, and he is rewarded accordingly as he seeks to deserve it.

Have you ever tested that out? May I venture to divert you for a minute. Do you know where you find the nearest to pure democracy in America? It is in the village, where there are no strata in the social life, where there are few of any considerable amount of amassed wealth. In the village of five or six hundred or less or more, where everybody knows everybody else's business, where the church is the social center, where farmer's son and doctor's son and the merchant's son and the carpenter's son mingle together, there is where you see the average American boy start out and toe the mark with life before him, in an exactly even line. And to prove my contention of equal opportunity I went back—you will find it a rather interesting reminiscence and reflection—I went back to the boys of the school in the village where I was a gawky youth, and I traced them up. I wonder if it will interest you?

Jeff, Jeff was my pal. He was the bruiser of our class, and a darn good fighter; I have had occasion to know. (Laughter.) You would have thought he was going to be a belligerent in the world. I traced him up. He is the mildest mannered sort of a fellow in the world today; he is the village banker, and a success. He might have been a great luminary if he had gone into some other center.

And then there was Charles. I won't follow Charles; good fellow, he went the way of mediocrity.

And there was Bill. Bill, Bill was one of these persistent youths who was always jumping railway trains that slowed up through the village, and was always trying to get a whack at the telegraph key. I had lost track of Bill until I met him, within the last year and a half, as a great divisional superintendent of railroads under federal administration, and a general manager of the road with which he was connected prior thereto.

And then there was Frank, the carpenter's son. You don't think the carpenter's son in a village has any extraordinary advantage, do you? And I traced Frank, whose father loved him and denied himself in order to send him to college. Frank is

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one of the greatest commercial distributors in the United States today, and he is getting \$25,000 or \$30,000 per year because of his capacity.

Then there was Keeler. I will not mention him. He had the best start of any, if any had a better start, because he inherited approximately \$3,000, and that was a large sum in those days. But Keeler was addicted to excessive indulgence in alcohol, and he went his pathetic way.

And Else, I remember him. Else, the joker of the class, went West to grow up with the westward march of the star of empire; and he was conquering in the great West as a great distributor until death struck him down.

And another; there was Harley. Harley was the local saloon-keeper's son, and that is not a very promising start in a village, you know. But his father was fond of him, and the boy had something in him, and he is one of the greatest lawyers in Ohio today, and he measures his wealth in seven figures; and he never cheated anybody out of a dollar, I'll venture to say. (Applause.)

Then there was one more. There was Joe. Joe was the luminary in my class. Teacher picked him out for the shining light. And I hunted up Joe, and there he was in the village, janitor of his lodge (laughter), playing his part when they put on the amplified degree. Everybody calls him "Joe." And he never had \$15 at one time in his life. (Laughter.) And yet, who can say? Maybe he is the happiest one of them all; because, after all, what is the great desideratum? Happiness, is it not?

I only point out these boys within my own experience, as you can with yours, with interest, because they all started alike in the little village, with opportunity beckoning to each precisely the same, and some one had to accomplish and others fell by the wayside. But the big point is, my countrymen, that in America, with equal rights and the reward of merit, opportunity is beckoning to all men to achieve according to their merits and as they deserve. That is what made the American Republic. And the man who cries out against it would destroy our American civilization, and he does not offer you anything in the place thereof.

I want to tell you, my countrymen, the world is in a ferment, and there are those who are crying out, from one end of the earth to the other, against the existing form of civilization, crying out against the form or the system itself, when there isn't anything wrong at all, except some of the abuses of a righteous system, and the abuses ought to be corrected. (Applause.)

I don't know what you think about it; I say it without hesitation, if I must choose between anarchistic, destroying, Bolshevik democracy, on the one hand, or hateful autocracy with orderly government on the other, I choose autocracy and orderly government. (Applause.) But there must be and there is a righteous mean between the two extremes, and in the American Republic we ought to find and hold on to the righteous mean. That is the big problem in life, anyhow. The extremely radical man never created anything in the world, and the extreme reactionary never maintained anything in the world. You never say anything worth while that was built up by either a bulldog or a pinhead. (Laughter.) You must get between these two extremes if you want to get things right. (Applause.) That is the one great thing that shows the wisdom of the Founding Fathers. They did not choose either autocracy or monarchy or any of the hateful forms of individual rule on the one hand, nor did they go to destroying democracy on the other. But they drove straight between these extremes, and gave to America representative democracy, where intelligent public opinion becomes the law. And I tell you, my countrymen, there can no popular government abide anywhere in the world that is not led by intelligent and deliberate public opinion.

Ephemeral opinion is not dependable. I wish I might give you an example—I venture to do it. In 1913 out in the State of Ohio we had a developing opinion spread by the socialistic element so strong that the legislature was about to abolish the National

Guard. Right in the midst of the movement in that direction which threatened to succeed Providence visited our state with the most destructive flood we had experienced in fifty years. In the chaos and the suffering there was not anyone to minister to suffering humanity and bring order out of chaos except the National Guardsmen of the state and when they had done that splendid work there was not a man in Ohio who would have abolished the National Guard. We went on and builded them up and when civilization called and America's rights were to be defended in the Old World they were the first to go with the Rainbow Division and helped to turn the tide. (Applause.)

Mr. Toastmaster, one trouble with the world is that there is an inclination to think you can mollify and modify or even abolish all human ills through the enactment of law. It can never be done. And another great difficulty is there are too many people in the world now trying to find out what the Government can do for them without stopping to ask what they can do for the Government. (Applause.) That is the tendency of the times and that is the thing in my judgment that has set us adrift toward the Government ownership of American activities, and I do not hesitate to cry out everlastingly against it, my countrymen. (Applause.)

You men in the pulp and paper business ought to know I am sincere. I think I have been paying tribute to you news print makers for two years now. I know I have. So it is the distributing secretary who hands out the dividend checks in our newspaper office in Ohio. But in spite of that fact I was the one man in Congress to rise up and cry out of Government control of the print and printing business in this country because I believe it would be a destructive tendency and lend to less satisfaction in the printing craft of the United States of America. (Applause.)

I know why it is wanted, Government ownership is wanted by a radical class in this country because the tendency under political control is to yield to numerical strength and the cost is paid out of the public treasury for you, for which mighty few men seem willing to stand on guard. The treasury is rather an interesting institution and an inexhaustible supply without anybody considering whence it comes and there are those in American life who think you can burden the Federal Treasury without limit and at the same time destroy its sources of supply. (Applause.) I wonder where the socialist advocate expects to get the treasury with which he means to carry on all these American activities? Two hundred millions lost in railway operation already since the war began. Two millions a month lost on the Government control of American communication lines that were seized, if you want to know it, under a false pretense. (Applause.)

I asked the question when the matter was pending in the United States Senate, "Why this authority to seize the American telegraph and telephone lines?" "I don't know," they said, and some of the sponsors said it in sincerity that it was only designed to give the extraordinary authority in case an emergency arose that made it necessary. And under that plea Congress was willing to grant authority, and did grant it, and within ten days, without an emergency, they were seized, showing the tendency in the Republic to take over individual enterprise and put it under the control of the Federal Government. And that, my countrymen, is one of the problems that we are facing this moment, the destruction of efficiency, the elimination of individual initiative, the paralysis of our activities, because there are so many in American life crying out against success. I believe in success, my countrymen. I honor the man who can righteously succeed and I believe one man's success is another man's inspiration to succeed, and I would like to end the clamor in American life today that is crying out that success is a crime against the American people, and yet that doctrine is preached. That is one of the underlying bases of the Bolshevik movement of the world, and I warn you unless we halt it by appealing to deliberate American judgment and to the American spirit which holds us securer, you will have the

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Bolshevist movement of the United States of America that under popular movement you cannot stay them. It is up to you leaders in activities and captains of industry to get on intimate terms with the men in the ranks and bring them to a fuller understanding. I would like to speak to you men with conscious appreciation and understanding to lift your hands against the exploitations of human efforts and human agencies and bring the toilers of America upon a little higher plane if it is possible to do so. (Applause.)

I do not object to the standardization of the world. I believe in fraternity, and I would gladly welcome the uplift of the great human mass of civilization, but mark you, my countrymen, no surrender of the American standard to the lower levels of the old world, let them come up to ours. (Applause.) That will be the real fraternity. Socialism would paralyze and Bolshevism would destroy. We have got to find the rational way that can be supported by deliberate and considerate American opinion.

I won't venture, Mr. Toastmaster, my time has essentially expired—to discuss the problems of reconstruction. I know some of the things that I think ought to be done. First of all, we ought to put an end to the grant of extraordinary executive war powers. (Applause.) Not in distrust of the executive, but because we granted these powers in a violation of the spirit of American institutions to meet the exigencies and urgencies of the war. I voted for them and I voted for them without hesitation, because I was willing to take any step that would commit America unalterably and unitedly and effectively to the winning of the war. That was the necessary thing to do. But now that it is won, these extraordinary grants of power with Government agencies meddling and interfering and trespassing upon the activities of the individual—they ought to cease. The trouble is we don't always hear how annoying they are.

I am going to venture to tell you a little illustration of it. I tell it to you because it is one of the things you never see in the press. I cannot discuss that phase of it. (Laughter.)

We had been in the war nine months before we found ourselves finally committed to the erection of a powder plant. Well, we have to have powder for warfare and finally the agents of the Government saw the urgent need and reluctantly called in the great powder experts, and they commissioned the du Ponts to build a—I am not sure that I can give you the capacity, whether it was five hundred thousand pounds, but I think it was five hundred thousand pounds of powder a day at a plant in Tennessee. They were driving it with all their skill and understanding and finally there came a summons from Washington one day for an interview and conference, and the proposition was laid before Mr. du Pont to build a plant of double the size and speed it to completion by October of last year. He said, "If you will take away your pestiferous and uninformed Government inspectors and will let us build the plant, for we know how, and you will prosecute every crook that shows his face in the enterprise and we will help you; we will build your plant and we will take this contract that we have that pays us three and a half millions' commission for the first unit and three and a half millions for the second unit, we will tear it up and give it to you as our contribution to the winning of the war, if you will just let us do it on our own account." (Applause.)

That is not more generous perhaps than Mr. Ford's contribution to the building of the Eagles. What we need is a definite statement of policy. Tell American captains of industry to take council of one another and note the problems incident to the readjustment, and there are problems for everybody. There will be sufferings and deprivations and loss and denials to everybody in the readjustment, labor and capital alike. There can be no escape. There will be many a great industrial enterprise fail and the world will little note it as it always notes the failures, but those who have the courage and capacity to go through and thrive, there will be those to cry out in envy and jealousy. But the thing

to do in this country is to tell honest and righteous business to gather her resources together and tackle the problems of peace and drive on in confidence that this Republic and its Government wants you to succeed. That is a good policy to announce to American business, and then it might reasonably as early as possible—we could not do it this year—it might reasonably as early as possible say, we will not burden you with the problems of taxation any more than is necessary to lift the great cost of the war from the generations to come. (Applause.) We will try and let you go on without staggering under the load and we will end the interference and these extraordinary commissions—Oh, I won't criticize them, but Washington needs more power for legislators and not so much taken up by a thousand and one commissions that manage the business of the country from the Federal Capital. (Applause.) They might do more than I shall have done. We ought to have inherited the great thing out of the problems of war. We have spent billions for the creation of ships and we ought to have an American Merchant Marine that shall be the agency of American commerce and find us welcome marts in all the ports of the earth. Unhappily, we are yet without a policy. Oh, we have always been without, that is why we have ceased to be an American marine power. We ought to have a merchant marine policy.

I am happy to say I don't believe there is a man in Congress today of either political power that has not finally come to the understanding that you can not have an American merchant marine carrying American commerce without the Government steps in and makes up some of the losses incident to congressional requirements for higher standards in American shipping. In other words we have got to subsidize. We have got to encourage and we ought to have the policy now that fixes it and tells American captains on the sea to go find the markets of the world for the American producer. That is rather an interesting thing. (Applause.)

Just a moment. Did you ever know what defeated that measure through the long years of effort to establish it in this country? There was of course the popular cry against subsidy, that the great subtle lobby against it were the agents of the German shipping lines in this country, who were determined there should be no American merchant marine in competition. Aye, more, the Kaiser intoxicated with power and drunken with ambition, looking ahead to the day when the world war was to come. "Der Tagg," did not want this great republic with its resources, finance, men, to have a part in the conflict for preserved civilization and it was he and his agents who had done the work to halt that great American movement. But the Kaiser has come to his own. World domination was not for him, world domination is not for any one man or any one nation. World domination belongs to God Almighty alone. (Applause.)

I would like the agency to be the brotherhood of mankind, but first of all for our part let us have the inspiration and the aspirations of the American nation. Let us continue to make good, that it is greater to be American in our spirit of accomplishment and achievement than to be a citizen of any other nation on the face of the earth. Let us not destroy the spirit we have awakened, let us go on to the fulfillment. Do you believe with me there is a destiny in national life? I do. I believe that the destiny of this new world republic was written by an infinite hand, in the consciousness of a divine purpose, and we have seemingly established the first dependable popular government on the face of the earth. Republics have failed before, but the founding fathers inspired drove along rational lines and I believe it is the destiny of this world to take the advanced lead in the progressive movement for the advancement of human kind and with equal opportunity, with equal rights, and the reward of merit and the preservation of orderly government, where reformations can be made by an intelligent ballot, where we do not yield to the force of physi-

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cal might, where we do have freedom in its fullness, and we have the weight of intelligent opinion.

Let us go on in this republic, armed to the great fulfillment, and before the sun of national life shall have passed the emergency and started on its downward course I can believe that the myriads, the millions of Americans of today if only we keep the faith and the conscience will go on and on and on until they become the myriads of Americans of the future. And I love to think of them, faces to the front, with aspirations inherited from the fathers, moving on and on and on, singing their songs of triumph by day and their songs of rejoicing by night, and in my fancy I can hear their songs echoing to the heavens, "Glory to God in the highest and on earth peace and good will to men." (Prolonged applause.)

The Toastmaster

"Please be seated gentlemen we have great treats in store for you still," said the Toastmaster. "I am sure you have all enjoyed with me this inspiring address from Senator Harding and that he has given a pitch and a tone to our meeting and to our thought along this line of Americanization. It fits so aptly into the topic of the next speaker that it absolves me from any necessity of an introduction of the speaker of the next topic. We are indeed fortunate to have with us a gentleman who has made a study of these matters, who is chairman of the National Americanization Committee, who has always been active at educational and patriotic affairs and has been giving particular attention to practical methods of Americanizing those who are coming to our shores. I have the very great pleasure of introducing to you Frank Trumbull, Chairman of the Board of the Chesapeake and Ohio Railroad, also Chairman of the Board of the M. K. & Texas Railway, who is also a member of the Board of Trustees of Tuskegee Institute, as you know founded by Booker T. Washington. Mr. Trumbull will address you on this topic of Americanization. (Applause.)

Mr. Trumbull's Remarks

Mr. Toastmaster and gentlemen. Fifteen million foreign born people in this country; seven million illiterate, three million foreign born who can not speak our language. They are deaf and dumb and blind in our ordinary methods of communication. Is it any wonder that in this aftermath about which Senator Harding has spoken so eloquently the topic of Americanization of foreigners has become the live and burning question as never here. Thousands of men went into our army who could not understand an order given in English.

That is one of the things that the war has done; that has brought us up with a round-turn on this question of foreigners in our midst—five million people in Greater New York, two million foreign born—40 per cent; nearly 80 per cent either foreign born or of foreign born parentage; five hundred thousand born in Russia. Does that suggest anything to you?

Isn't it time that we are stopping to think, as Senator Harding has helped us to do tonight, about Americanism? Does it mean anything or not? Are we ourselves Americanized? What does it stand for? Is there a golden thread running through our history that, in spite of all our mistakes and shortcomings, means something?

May I quote just a few things to illustrate, if I may, that I think there is. And first, from President Wilson—I am not a Democrat, but I believe the world is safe for me; and he is my President, and your President; and he has pronounced no finer sentence than he did last Fourth of July at the tomb of Washington, when he said, "What we seek is the reign of law, based upon the consent of the governed and supported by the organized opinion of mankind."

Surely there is no Bolshevism in that, the reign-of-law;—and again, since he has gone to Europe, he said, "What we seek is

to organize the friendship of mankind." Is this idealism? Are these strange words? Let us look back and see. Three hundred years ago next year, a little company of one hundred immigrants landed at Plymouth Rock, and before they set foot upon our soil, they formed a compact, very brief, but very full of meaning; and in that compact they did not say a word about individual rights, or vested rights, but they agreed to make such ordinances as would be for the good of the colony.

In 1776, in the Declaration of Independence, we said, "A decent respect to the opinions of mankind." The very same words used one hundred and forty-three years later, which convinces me again that the people of one hundred years ago, or three hundred years ago, had a good many modern ideas.

In the Constitution, in the Preamble, we said, "To promote the common welfare." And we put into the Constitution, protection of life, liberty and property; and I believe that we shall never see any moment that obliterates that protection of life, liberty and property.

In the Civil War Mr. Lincoln said at Gettysburg that "those men who had died had died that government of the people, by the people and for the people should not perish from the earth." He did not say, "from America," but from the earth. No Bolshevism in that case.

Bolshevism is government by a class. In the War of 1898, with Spain, we made a declaration that we would not keep Cuba; and in the war that has just been closed, we made a declaration that we had no policy of aggrandizement. Surely in those two great wars we went in on a high plane, the most altruistic wars in history, so far as this people is concerned.

And that great American, Theodore Roosevelt, the night before he died, sent a message to a meeting at New York City, a robust, sterling message about Americanism. May I quote one more, from Booker Washington, the spokesman of twelve million negroes in this country? Whatever you may think of them and their shortcomings, you find among them no Socialists and no Bolsheviks. And that man leaped into fame as the spokesman of his people in an address at Atlanta over twenty years ago, in which he said, "No man, North or South, while or black, rich or poor, shall drag me down so low as to cause me to hate him." And he said again, "No man can hold another man down in the ditch without being down in the ditch with him."

So, running all through our history, we do find not so much about individual rights but about the common welfare. Now, naturally, with thirteen million foreign born people in this country, we have some differences of view. Take the prohibition question: many of these people come from wine-growing countries.

When you prohibit drink, what will we substitute in its place for these people? I believe that the way to cure any bad thing is to substitute a good thing; the way to solve any difficulty is to put in something better for something worse. And we found in our study of the last eight or nine years that this Americanization question naturally resolves itself under three heads. First, a large part of it is a governmental function; it is no longer a local issue, it is not even an interstate issue, it is a national issue and is going to become an international issue in spite of us.

And, therefore, we are very happy that the Secretary of the Interior, Mr. Lane, is putting behind the movement his vision and the seal of the great government, because he has charge of the Educational Bureau of the United States Government. It is in his department, as are the public lands, and it could be in no better hands than his.

The second head is an industrial head, because there we come into the human relations between man and man, and I am glad to know, to be able to announce, that recently there has been formed an Interracial Council of prominent industrial men, with General Coleman Du Pont as chairman, of which Philip

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Dodge, of your number, is vice-chairman, which is going to make a study of these inter-racial problems as they affect industry.

And third is the community work. This problem, gentlemen, is a community problem everywhere. If we are to do that which is for the good of the colony we cannot forget that.

I shall not go into the details of the work, simply to tell you where we have landed after eight or nine years' study, and we have learned a good deal ourselves. I know it is not necessary for me to suggest what employers should do, because you are all thinking about it. I am only glad to know, at every gathering I go to, more and more emphasis is put upon the human equation.

I was talking today with the secretary of the welfare work of the American Steel and Iron Institute, and he said: "One of the first things I do everywhere in our work is to put in shower baths." Probably you have already thought of that, but I was reminded when he told me of the remark of a very wise friend of mine, who said to me, a year or so ago: "Mr. Trumbull, if you look over the social contests of the world you will find that they have all been between the people who take baths and the people who do not. (Laughter.) In the long run the people who take baths always get the worst of it." So the moral is obvious; we must get more people on our side by having them take baths. (Laughter.)

That is only one thing an industry can do. I am going to ask Miss Keller, who has been the dynamo of our work, who has devoted her life unselfishly and untiringly, without compensation, who knows more about this question than any other person I know, to give you some concrete suggestions, which I know you would rather have, a body of business men like this. I only say what I have by way of introduction of her, and I know you will be interested in every word she says. I thank you very much, sirs. (Applause.)

Miss Frances Speaks

Mr. Chairman, Members of the Association: When a body of business men, such as is gathered here tonight, will take time to listen to Americanization, we are writing Americanization into the history of this country.

Americanization means the making of the foreign-born into good, loyal American citizens; and there is only one real way to do that, and that is to Americanize yourselves and Americanize industry. There isn't any other way. (Applause.) When we talk ideals and American democracy to the immigrants, the first thing he does is to square the industrial conditions of America with the United States Constitution and what we are preaching, and if they don't square, we don't Americanize him. (Laughter.)

Now let me give you a little idea of what the job ahead of you is like. Mr. Trumbull has told you that we have fifteen million foreign-born people, but we also have thirty-three million people that are partly foreign born or of foreign-born stock; practically one-third of our entire population. We have 38 races that speak 54 different languages. We have three million people who do not speak English, and we have six million people who are un-Americanized; and by that I mean that they have no definite American contracts with American-born people, other than their work. We have several hundred thousand alien soldiers coming home, who have been partly Americanized in the army, who are going to create an interesting and difficult problem for us when they return to our industries.

Now, what is the situation of this mass of people? We have 300 nationalistic organizations in this country, interested primarily in conditions on the other side, and of those 300 nationalistic organizations there are 42,000 local organizations. Practically every adult male immigrant in this country belongs to a foreign organization.

And those organizations are of three kinds. First, the organization that is interested in the home country; second, the organiza-

tion that is interested in preserving the solidarity of that race in America; and the third organization is the one that is interested in America First. And on a basis of 100 per cent, 85 per cent of them belong to the first two classifications.

In addition to that we have 58 different magazines devoted, either in English or foreign languages, to preaching nationalistic doctrine concerning other countries, and practically no American magazine devoted to America. We have 1,146 foreign-language newspapers that are carrying primarily the same kind of doctrine, and that does not include the 568 German-language newspapers. We have 12,000 steamship ticket agents that are primarily concerned—they act as the banker and the friend and the notary public and the legal adviser of the foreign-born in this country, and are primarily interested in having them go back to the other side; and of that 12,000 eighty per cent. are dealing with the foreign-born or are foreign-born themselves.

This is the raw material with which we have to deal in this Americanization problem. Now, gentlemen, whose fault is it that these racial organizations are so separated from American life? It is primarily yours and mine. If we had greeted these immigrants when they came in, if we had gotten into contact with them, if we had treated them as anything except a cog in our industrial machinery, if we had not put them across the railroad track, if we had not crowded them into unsanitary dwellings and conditions and quarters, if we had taught them English, if we had been in the least interested in trying to Americanize them, we would not be facing the condition in America which we are facing today. And there isn't any cure for this situation, as we see it, except for you industrial men to get busy in every one of your plans and in every one of your communities.

Now let us see what you are going to reap in the next six months as the result of this situation in America today. First of all, you are facing a restrictive immigration law, which is going to prevent anybody from coming into this country for the next four years; and that is regardless of conditions of abroad or regardless of conditions here. The only reason it will be possible to pass such a law in America at this time is because of the industrial treatment which the immigrant has received in this country during the last ten or twelve years.

Worse than that, America is going to lose between a million and three million men just as soon as the passport regulations are lifted and the food conditions on the other side will permit and these men can get back to the other side. There is still some time to spend, in the next three or four or six months, in working with these people, trying to interest them to stay in America; but our information is at the present time that here will be a tremendous exodus, taking the larger bulk of our unskilled labor out of America at the time when the international contracts are beginning to come in from the other side.

America is split into these different groups, what we might call embryo republics. We have got about 38 different kinds of republics, all trying to grow up in America at the present time in order to settle the affairs on the other side over here. We have got to deal with them. We not only have to deal with them nationally, but you have to deal with them in every one of your towns and in every one of your plants. The Americanization movement is being slowed up at the present time because of this solidarity among the immigrants, and because of the necessity of getting industrial co-operation. Employers will increasingly have to deal with the racial leaders, instead of dealing with the rank and file of their men, because of this enormous solidarity which has resulted from the war.

Take for instance the savings of immigrants. Practically during the war, with the immense amount of savings, almost no effort has been made by the banking institutions and the industrial concerns to interest the immigrant in making those investments in America. The War Trade Board reported the other

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day that there is lying idle in America, among the immigrant groups, practically a billion four hundred million dollars, ready to be transmitted to the other side just as soon as the conditions will permit. We are not going to get immigrants upon the old terms. America is going to have the competition of South America and Canada and the other countries in man power. Unless it intelligently takes some action in regard to the matter it is not going to get the necessary man power.

Now, what is the real task before us? It is first to unite the races in America and make them good citizens. It is second to keep the immigrants who are here and keep them contented. It is third to interest other immigrants to come here, and to make our working and living conditions right, so that they will stay here and be contented. It is to make every immigrant who returns to the other side a press-agent and salesman for America and for American business. The men who are working in your plants today, common unskilled labor, when they go back to the other side are going to be the leaders. The savings they have here will contribute wealth over there. They will be the heads of their families. They are going to be in positions of power and influence, and they may be the very men who will determine whether you get the contract from their country or not. So it is very important that we should treat them in the right way here, so that they will say the really good word for America there.

Now that is a very brief analogous or a summary of the situation as it is. The thing we are most interested in is, what can we do about it, and what can be done about it right away? There are two things. This problem has got to be taken up as a business proposition in every plant in America where the foreign-born are employed. It has, second, got to be taken up beyond your factory doors. The business man today who does not see beyond his factory door is not going to be able to help solve this problem.

Now that is precisely what the inter-racial council is calling to the attention of business men, of labor men and of foreign language leaders that have gotten together for the purpose of putting this question up to this country as a business proposition. In other words, what the inter-racial council is planning to do is to sell Americanization to you business men. If we cannot sell Americanization to you, within the next year or two, Americanization is going to be a failure in the United States of America. There isn't any other way out. The civic organizations, the educational institutions are all doing their part, but in the final analysis it comes down to the industrial plant and to the community where that plant is located. The first thing we want to sell you is to teach the foreigner English. The teaching of English in the night-schools and the public schools at the present time is practically a failure. And why? Because the industrial system is not adjusted to the educational system; a man who works six, eight, ten, twelve, fourteen hours a day cannot study English at night and cannot learn it. Therefore there must be an adjustment between the industrial system and the educational system, and English must be taught in your plants, and it must be taught on company time or on part time. There are certain problems of that kind in the situation which business men must know about in helping to solve the problem.

Now we want to sell this to you as a good business proposition. Why? Because it reduces labor turn-over, it lessens accidents and compensation costs, it stabilizes the labor supply by keeping the workmen in America, and it really is a direct contribution to the increase of production.

The second thing that the inter-racial council wants to sell the business man is the encouragement of citizenship. This gives a man a home stake in addition to a job stake, and it gives him identity of economic interest and some expression in American life and in American industry. The employer who encourages and facilitates that makes a good labor investment. The man who does not will be in a panic when he sees a million men going out of the country and no more men coming in, and does not know

where to find the labor which he will need in order to fill his contracts. There are some things in the question of citizenship that cannot be done and some things that can be done, and it is very important that the business men should know those things in working out the plans in their own plants.

The third thing we want to sell you from a business standpoint is to forestall Bolshevism and unrest and anti-American propaganda, which lead to strikes and riots and destruction. These find a greater hold upon the races in America than they do upon the native born American, because they come from their compatriots across the sea, by letter, by speech, by foreign language newspapers, and in many ways we do not know anything about. The answer to this, gentlemen, is not speeches from soap-boxes, it is not platitudes and it is not generalizations. The only way to do it is to improve the working and the living conditions, to Americanize the courts and the neighborhoods where your plants are located. These are the things which are necessary in order to overcome the growing unrest among our foreign-born people.

It is something more than that. It is to give the workman in your plant a hearing. I mean the foreign-born workman who does not ordinarily get a hearing. It is to cut out the nicknames and treat him with respect. It is to recognize his national holidays and give him a square deal and decent housing and American friends and opportunity and self-expression in his work, and to some degree representation in plant management. There are a thousand industries in this country at the present time that have Americanization committees, and the immigrants tell us that it is the first time in American history that they have had any real contact with Americans, or have ever had the opportunity of even shaking hands with Americans; and some of them have been here ten or fifteen years.

Now the hardest and most important thing which we want to try and sell you is a knowledge of the racial relations in America. We have gone on the theory that it was not necessary to know about the factions and the difficulties and the differences existing among these races; if we didn't know anything about them we could handle them. We have found we were in error about that when we went to handle them in our plants. For instance, there are certain races that won't work together at the present time. There are certain races that are going back on the other side, certain races that are going to stay here. It is very necessary that you should not have all of one nationality in your plant, because when that nationality gets ready to go back you will have your plant stripped. I mean, it is necessary that there should be in handling the foreign language labor supply, certain questions of this kind should be taken into consideration. For instance, the first five releases which the inter-racial council has sent out to employers are the following:

It has taken up the question of inter-racial unrest and antagonism, and it is informing the foremen and the employment managers where these antagonisms exist, so that they may deal intelligently with their labor supply.

It has taken up the question of employment discrimination against aliens; that is, not giving them jobs and giving them to the citizens. That is not only unconstitutional, but is creating a very serious situation among the alien groups.

It has taken up the question of the next sale of Liberty Bonds. We are relying on the industries to sell a good many of those bonds, and it is going to be exceedingly difficult; and if they are sold at all it is going to be through the leadership of the foreign-born in the industries and not through the American foremen. Also the sale for Liberty Bonds. There are a great many brokers that are buying up these bonds at eighty-five dollars, and that is, curiously enough, creating a great deal of unrest in the different industries.

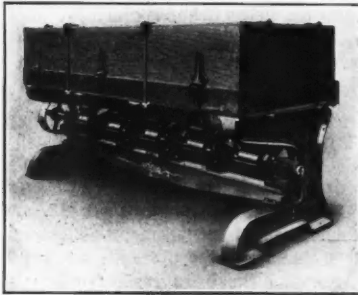
I am speaking of these things because you do not ordinarily think of them as having anything to do with a man leaving a job

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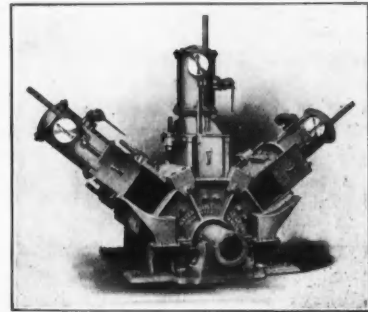
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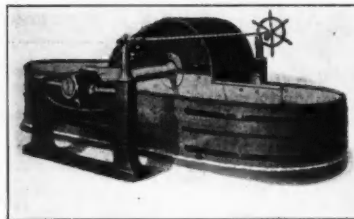
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or with his not coming to work, and things of that kind, whereas they have a very vital relation.

Next is the question of selling steamship tickets, men leaving their jobs and coming to New York by the hundreds or by the thousands, to find out if they can sail. A little information given them in the plant would forestall all of that movement to New York and back again, when those men find they cannot sail for the next four or five months.

An analysis of the present immigration bill, and the reasons why action should be taken at this time to defeat it.

Another thing which is exceedingly necessary is that the plant should develop some kind of home service to reach the American at home. One of the manufacturers for one of the paper mills shows that out of twenty-two hundred men employed there were five hundred and thirty-seven lost time, and there was a loss in November of two thousand two hundred and twenty-nine days, working days. That is a loss which we cannot continue to sustain. A very interesting thing is being worked out by some of the banks. The banks are beginning to take an interest in man-power, and in the future a good many institutions, when loans are made, will be required to state their man-power, their turnover, the expense rate and costs, and if the costs in man-power are high, it is going to be inquired into, because we cannot pay if we are to have these deadlocks in our industrial situation.

Just one more line of thought; there are the things that can be done in a plant; but we can never handle a national problem, which is international and goes beyond our own borders, unless the manufacturer has a point of view which extends beyond his factory.

It is necessary to put this responsibility up to the Government and to back the necessary legislation, for instance, at the next

Congress there should be legislation creating a bureau of legislation in the Department of the Interior so that this work can be promoted throughout the country.

We have got to have an amendment to our law as it reads at the present time.

You may try to interest men in your plant and induce them to take out naturalization papers, but we have an expensive law which really defeats what we are trying to do. You cannot get anywhere unless you take up national legislation. The fact that the man is not naturalized tends to negative what you are trying to do, and what you are working to try to get him to do; and if he happens to be a Slovak, he gets his orders from the Czecho-Slovak Committee in Austria, and those are the orders which he obeys.

It is necessary to work beyond the plant doors, intelligently and effectively among these racial groups, in order to counteract the racial influences which constantly play through the plant.

The greatest obstacle which we find in developing this work so far is the employer who is entirely satisfied with what he is doing in his own plant, and cannot see the complexity of this problem.

The thing we are trying to do is to sell Americanism to the business man. It is an experiment. It is an experiment which depends entirely upon whether we can get your co-operation. If you will work with us, if you will make a fair test of the subject and of the recommendations, the things which will be suggested to you, then we have a chance to succeed. But whether we succeed or fail, it is going to be a real test of Americanism; and we shall know at the end of a year or two just exactly how much we are going to succeed, not by what you say, but by what you gentlemen do in your plants, and the extent to which you get behind your Government on a national program.

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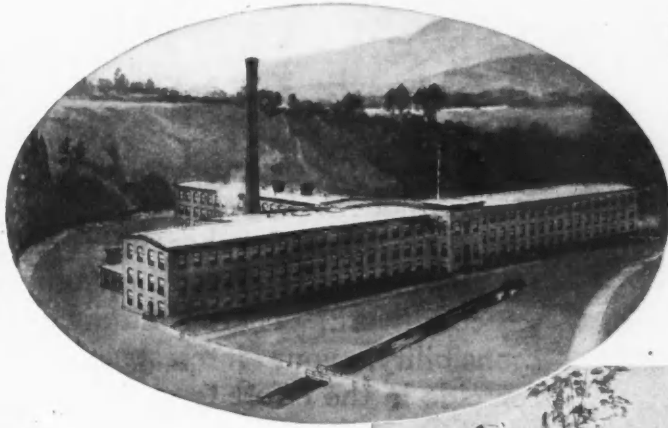
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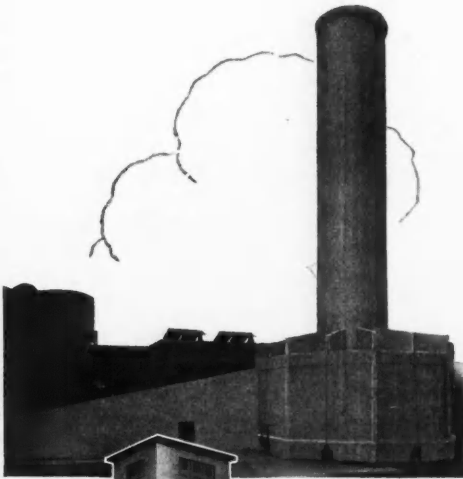
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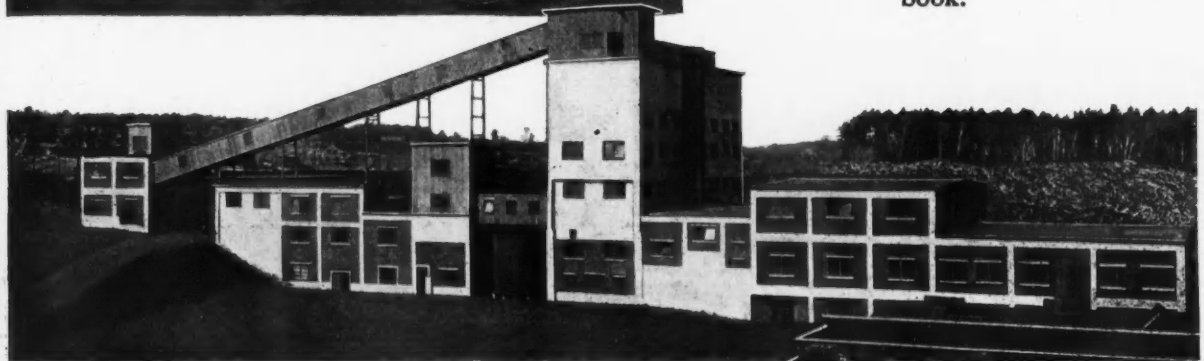
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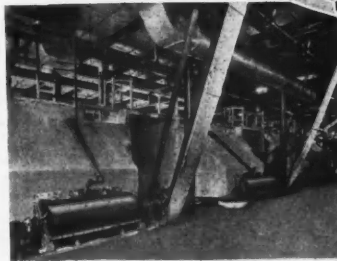
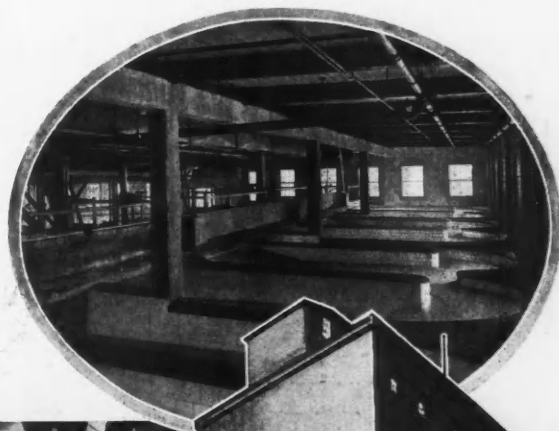
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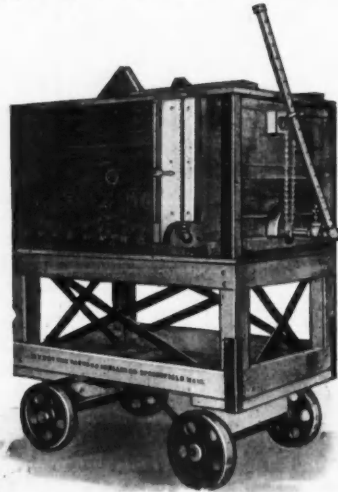


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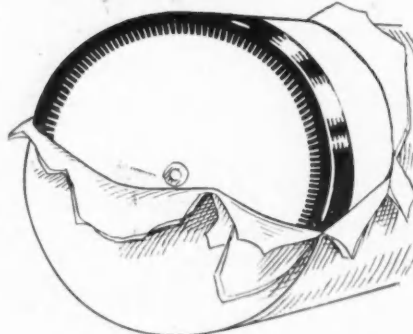
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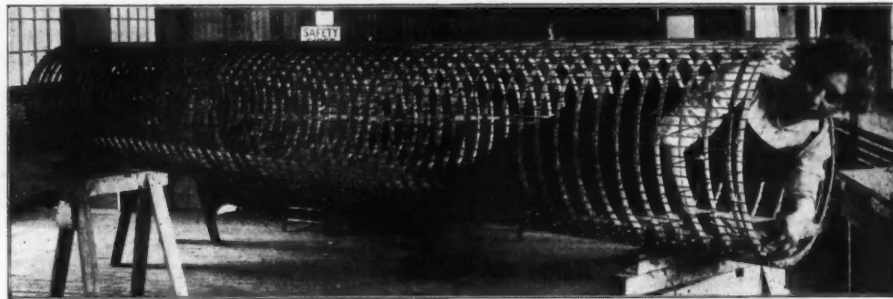
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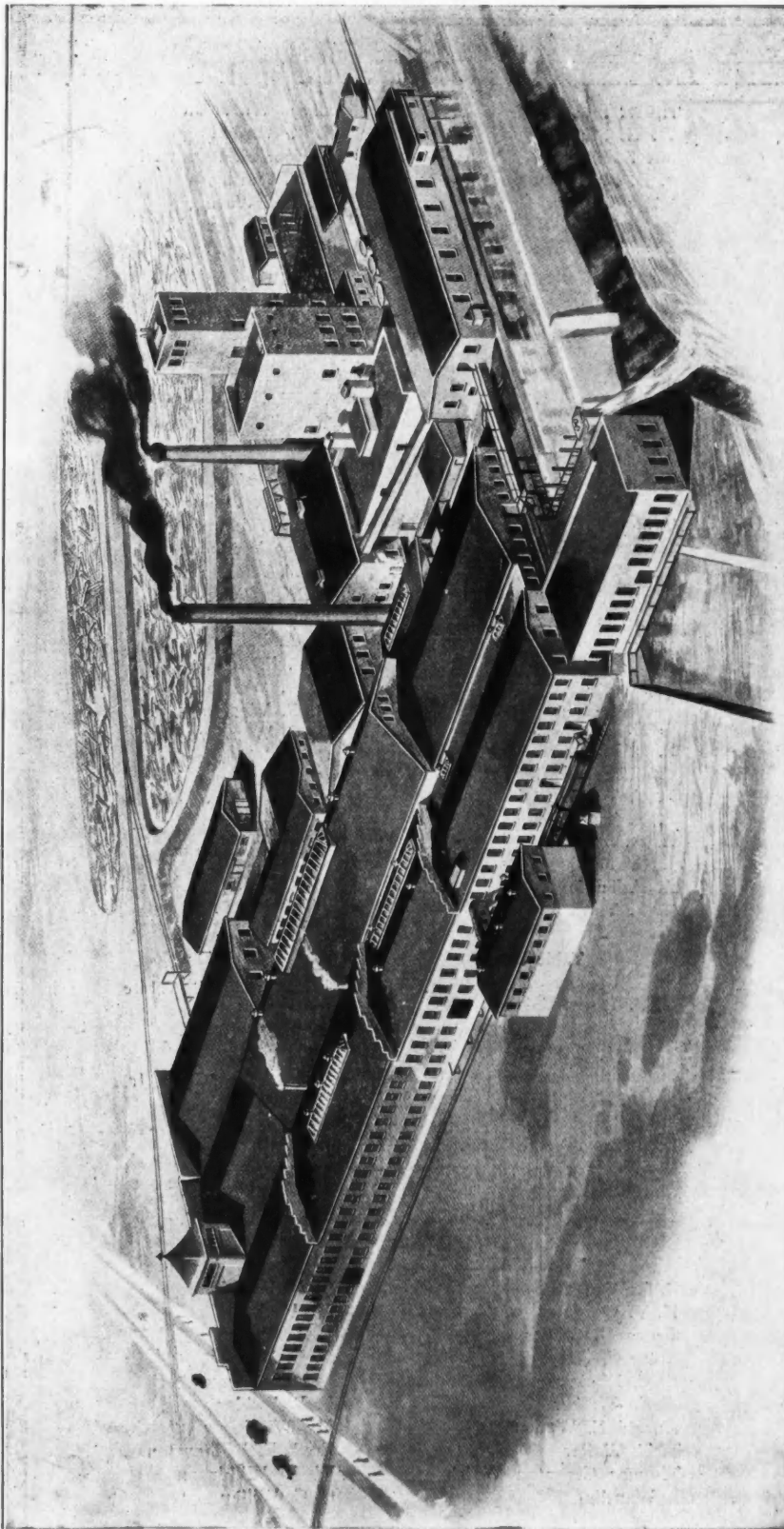
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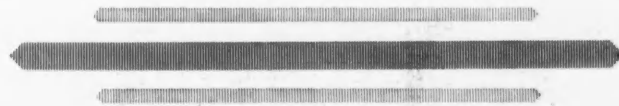
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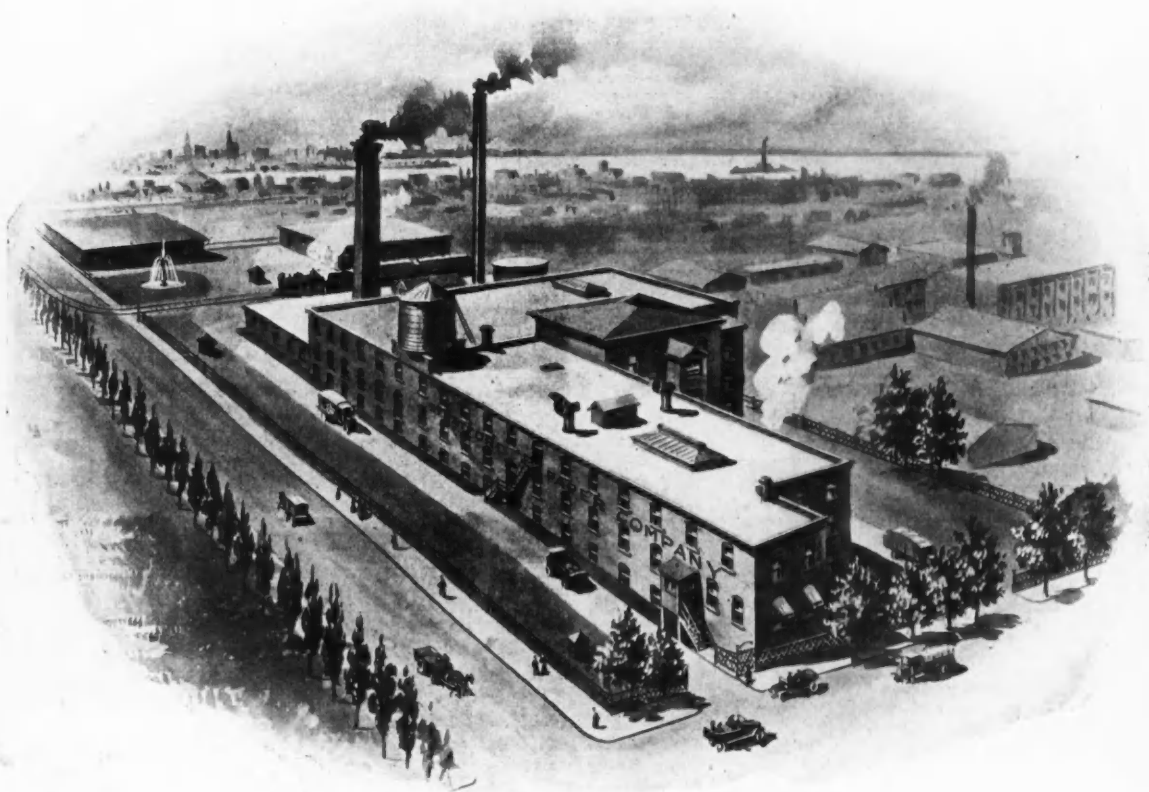
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Jersey City, N. J.

Scott Paper Co. Improves Tissue Plant

The 148th Fourdrinier Recently Installed Is Widest Machine Ever Built for the Manufacture of Tissue Paper—How a Large, Interesting Business Has Been Developed from a Small Beginning—Mill at Chester, Pa., Which Has Been Recently Greatly Expanded Is a Model of Efficiency—Entire Output of Plant Converted Into Scott Products—Views of the Interior and Exterior of the Plant.

The Scott Paper Company, founded in 1879 by E. I. Scott, began business as a wholesale paper dealer, doing a small conservative business, each day putting its best into the work, endeavoring to do just a little better than yesterday and hoping that tomorrow it could perform a better day's business for itself and a larger service to its small but loyal trade.

How the Business Grew

Business grew and the old establishment at 427 North Sixth street, Philadelphia, where the business was started, became too crowded, making it necessary to take in other buildings on Commerce street and on North street. This was in the early '80's. The Scott Paper Company's cabinet paper sales increasing rapidly were followed up by the conversion of tissue paper into toilet rolls, the demand for these becoming so great that in 1899 plans were made and work started on a new mill at Seventh and Glenwood avenue, Philadelphia. This mill was planned to be large enough, as was thought at that time, to take care of any production which might be expected of it in the future. This in a few years proved to be an error, and it became necessary to expand again by the addition of another floor and a further extension of the building to supply the demand which came through the introduction of what might be called the modern methods of home and commercial plumbing that became a factor in the higher ideals of the American public in personal hygiene.

These higher ideals led the Scott Paper Company to invent and place on the market the Scott Tissue Towels, this company being

the originator of the paper-towel idea. It was followed by a complete standardization of its toilet-paper line. At this time it became exceedingly difficult to obtain sufficient tissue paper of such high quality as was demanded by the company's standards, and it was then thought necessary to manufacture the tissue paper, as well as to convert it into rolls.

Ideal Location at Chester

In 1909 an ideal location was found at Chester, Penn., and property containing three buildings adapted to the installation of paper machinery was purchased. The fact that the new possession was located directly on the Delaware River assured an abundance of water for the mill and afforded excellent facilities for the receipt of raw pulp and the shipment of manufactured goods by water. Two trunk lines with side tracks on the property gave freight service to all parts of the country.

Two-cylinder machines were installed at once, followed by a Harper Fourdrinier, which was installed in 1912. A year later it became necessary to install a second Harper Fourdrinier, due to the continued demand for the Scott Tissue Products, because of the successful advertising campaign from which the company was just emerging.

Standardize Its Products

The policy of the company in standardizing the quality of its products and its campaign for educating the consumer to the value of buying standard goods, and the constant thought of giving increasing value,



1.—No. 3 Paper-making Machine. 2.—View of No. 4 and No. 5 Paper-making Machines. 3.—A View of the New Beater Room. 4.—Partial View of Boiler House Showing Two of the Four Boilers. 5.—No. 5 Paper-making Machine. To Our Knowledge the Largest Tissue Paper Making Machine in the World.

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Easy Bleaching and Bleached Sulphite,
Soda and Kraft Pulp

It Will Be to Your Advantage to Consult Us as to Prices
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WE EXPORT

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Paper Mills Seeking Profitable Connections Please
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brought out the slogan—"It's the Counted Sheets that Count." The Scott Paper Company decided that the only way for the consumer to know whether value is received is to have all brands produced by the company plainly marked with the company's name and the number of sheets in each package or roll.

Plans for Expansion

In 1916 production could not meet the demand, the plant had again become congested, and more room was required. The engineering department now decided that radical steps must be taken if they expected to keep ahead of the sales and production departments. Plans were, therefore, made to rebuild and enlarge the mill. A contract was let to build a new machine room and a beater room, and an order was placed for a fifth machine. The old buildings were remodeled and work was started on a large finishing room. The buildings of the new mill are of reinforced concrete construction, and the very latest and most advanced ideas in construction have been incorporated in them. The new buildings almost surround the old mill, which by ingenious planning, became units of the new mill, and further units can be added to accommodate more large paper machines, as required.

The Finishing Building

The finishing building has three floors and a basement, and is 256 feet long. Large doors connect it and each machine room through which the paper is received with a minimum of labor. Light, air, convenience and the elimination of lost motion in handling products have been given every consideration. Gravity conveyors, belt conveyors, electric trucks, and other labor-saving devices have been installed.

A large dining room is in operation where any employee, whether he be president or third hand, can obtain a very substantial lunch for a moderate sum.

In the shipping room in-bound cars are unloaded and goods received in the store room by a direct conveyor or chute. This does away with all trucking and handling on the main floor. Manufactured goods are first sent to the store room, which is on the second floor, on a power-driven conveyor, and from this room they are sent direct into the cars for shipment, by use of a gravity conveyor, again eliminating trucking.

The Scott Tissue Mills now contains five machines, two 86-in. cylinders, two 86-in. Harper Fourdriniers and one 148-in. Fourdrinier. The machines are driven by steam. The beaters, Jordans and auxiliaries are motor driven.

Widest Tissue Machine

The 148-in. Fourdrinier is the widest machine ever built for making tissue paper, and no doubt, makes the widest sheet of tissue made on any machine as a regular run.

The machines are supplied by 16 beaters and 5 Jordans, and have a total daily capacity of between 30 and 40 tons.

The Scott Tissue mill was the first tissue mill to place its men on a three-four system.

The power plant has at present a rated capacity of 1400 h. p. Provision is made under the unit plan for 1200 more rated h. p. Underfed stokers are used with both forced and induced draft. The boilers can be operated at 200 per cent. of their rating continuously at high efficiency. Provision has been made for the installation of turbine generators, should this be necessary or desirable at any time.

The output of the entire plant is used in the manufacture of the Scott Tissue Products, consisting of Scott Tissue Towels, Toilet Paper and Zorbik. Zorbik is a tissue gauze, and is one of the most interesting products recently developed, and

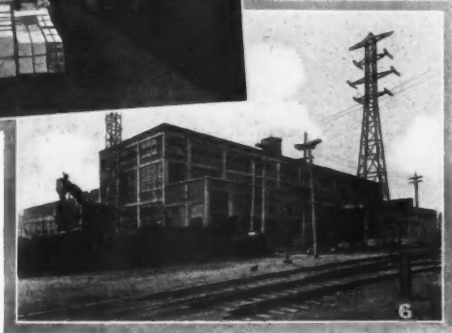
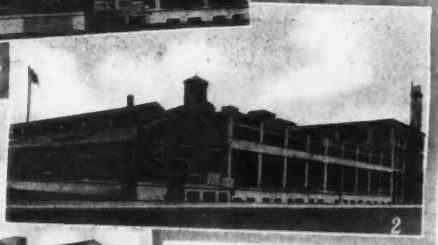
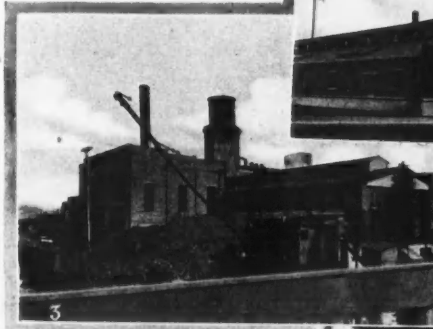
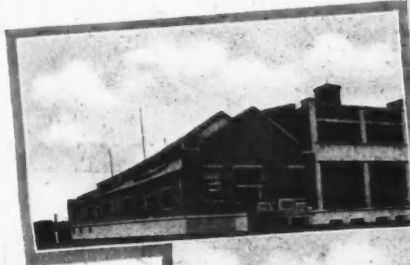
has been rapidly adopted by the medical profession for surgical work.

SCHOOL FOR SALESMEN

[FROM OUR REGULAR CORRESPONDENT.]

GLENS FALLS, N. Y., February 3, 1918.—The Union Bag and Paper Corporation has opened a school for salesmanship which will be continued for a year. It is the intention of the corporation to instruct all persons selling the products of the company, including the jobbers and salesmen. The instructors will include George S. Witham, Sr., and Lawrence Barsaloux, the last named person being chemist for the corporation. Last week nine salesmen from New York arrived in town to

spend a week. It is anticipated that from eighteen to twenty persons will be instructed each week. The plan is a new departure and will be watched with keen interest not only by those directly interested but by many others.



1.—Exterior of New Beater Room. 2.—North End of Mill. 3.—View of Boiler and Transformer House. 4.—New Warehouse for Finished Goods, 70 ft. by 250 ft. 5.—Enclosed Shipping Platform on Pennsylvania R. R. and Reading R. R. Sidings. 6.—View of No. 7 Building.

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HOLYOKE

Expansion in the Industry at Monroe

Growth in Five Years Has Been Extremely Impressive—No Less Than Five Large Mills Have Been Erected from 1914 to January 1, 1919—Is First in America in the Manufacture of Container Board, Binder Board and Products of a Similar Character—River Raisin Paper Co. Established in 1834 Was the First Paper Mill in the Northwestern Territory.

Written Especially for the Annual Number of the Paper Trade Journal by Howard P. Hall.

Down Monroe way, should your travels take you into Michigan and to that thriving city, you will find much to interest you in many channels. What you don't find voluntarily will be eagerly pointed out to you, for Monroecites are proud of their hustling, growing city, and glad to detail its advantages.

If inclined to listen to lore and incidents of the past, it will be a rich field of research. Monroecites will tell you that their town is older than Detroit and they will recall the names of the early settlers. Old Frenchtown will be pointed out, now transformed into a charming residential district. There you will see directly in front of the office of the River Raisin Paper Company the monument that commemorates the River Raisin massacre, where several hundred American troops were put to death by the brutal Indians under the leadership of a half-breed chief named Elliott.

Right in the center of Monroe the visitor can see the fine equestrian statue of General George Armstrong Custer. This city was the home of America's most picturesque and dashing cavalry leader. There is the Michigan historical monument for the heroes of the War of 1812; there are tablets marking many historical spots. If a horticulturist, he will be shown the Col. Francis Navarre pear trees, planted in 1784 and still bearing. He will also see the great nurseries, for which this town has long been famous.

First in Board Manufacture

But if he happens to be interested in paper, he will not only see all these things, but much more and will incidentally discover that Monroe is first in America in the manufacture of container board, binder board and products of a similar nature. Monroecites will leave no doubt of that fact and merely by scanning the pages of the last Lockwood directory one will discover that any statements they may make to that effect are based on facts and solid argument.

Just as Kalamazoo is first in America in the manufacture of

book paper, so Monroe takes a correspondingly commanding position in the production of board. This position of importance has been attained during the past five years, expansions in the paper trade in that short period having been impressive and startling. No less than five large mills have been erected from 1914 to January 1, 1919.

Monroe's Paper Concerns

Reviewing the industry at a glance one finds the following concerns engaged in the manufacture of board in Monroe:

River Raisin Paper Company, four mills, four paper machines, 600,000 pounds every 24 hours.

The Boehme & Rauch Company, three machines, three mills, 314,000 pounds every 24 hours.

The Monroe Binder Board Company, two mills in Monroe, six wet machines and one board machine, 250,000 pounds every 24 hours.

Monroe Paper Company, one mill, one machine, 10,000 pounds each 24 hours.

In addition to these there are two or three paper products plants already in operation, viz.:

Weis Fiber Container Corporation, employing 75 hands in the manufacture of paper milk bottles and similar packages.

Monroe Corrugated Box Company, an adjunct of the River Raisin Paper Company.

Beginning of the Industry

The history of the paper industry in Monroe reads backward and forward. If one delves into dim and distant industrial history he will discover that the original River Raisin Paper Company, of Monroe, was established in 1834, and that it was the first paper mill in the Northwest territory. The old-time paper machine was made of wood, with the exception of the cylinder roll and the dryer was fired by wood. It had a product of about one ton daily and was but 30 feet long, 10 feet high and 38 inches

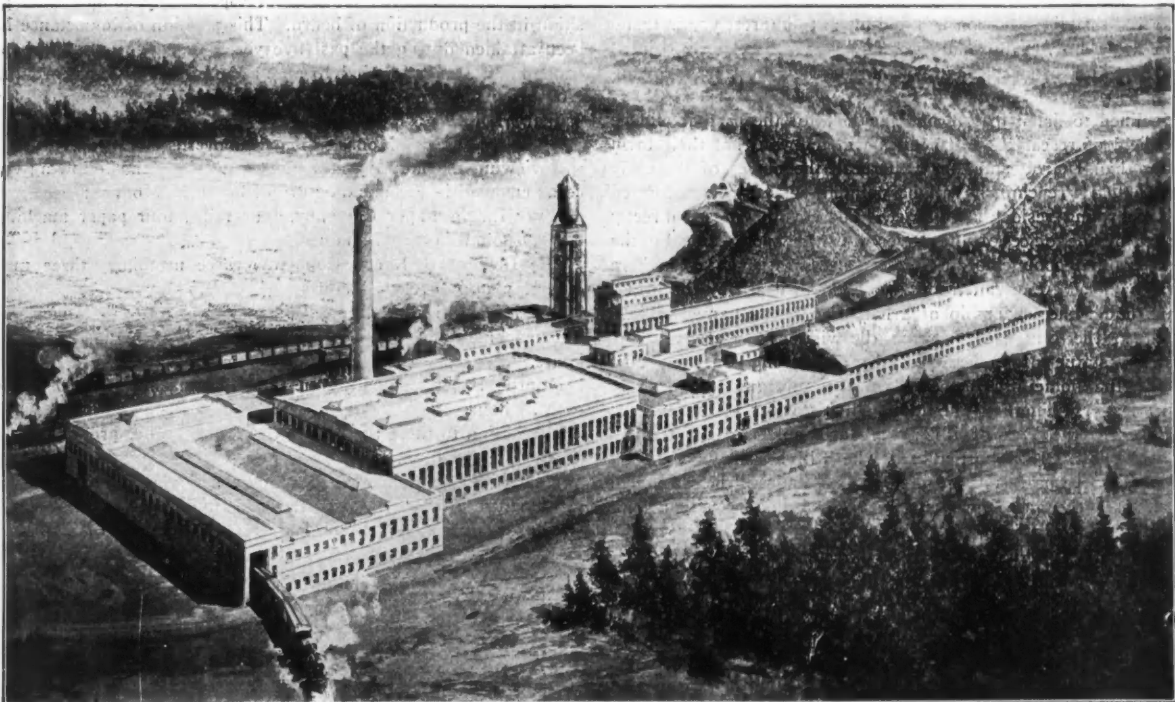


PLANT OF BOEHME & RAUSCH COMPANY, MONROE MILLS

Price Brothers & Company, Ltd.

Head Office, Quebec, Canada

Paper Board and Pulp Mills at
KENOGAMI, JONQUIERE and RIMOUSKI, Province of Quebec



NEWS MILL AT KENOGAMI

This mill has four 156-inch Fourdrinier machines, trimming 146 inches each. Average daily production 215 tons news print.

The Jonquiere Mill

has one 78-inch six-cylinder machine, capacity 30 tons per day, and one 110-inch Fourdrinier machine, capacity 35 tons per day, producing News Print, Manila, Sheathing, Tag and Board Products.

WE ALSO MANUFACTURE GROUND WOOD AND SULPHITE.

in width. This crude contrivance was destroyed when the original mill burned to the ground several years ago.

Good Prospects for Future

The future prospects for the board industry in Monroe are very flattering. The Boehme & Rauch Company is planning to duplicate its present No. 3 mill by installing another 124-inch paper machine and auxiliary machinery.

To Erect Immense Plant

The Monroe Binder Board Company will this year erect an

immense plant for the manufacture of fiber board boxes and a commodious office immediately adjoining its new No. 3 mill. It is also its express purpose in the next two or three years to duplicate its No. 3 mill, with a unit equipped with another 124-inch board machine and necessary added equipment.

There are in all nearly 2,000 employees in the various mills in that town.

They are well paid and contented. Monroe has certainly struck its gait industrially and promises to hold the vantage point it has won on merit.

NEW PLANT OF MONROE BINDER BOARD COMPANY

Written Especially for the Annual Number of The Paper Trade Journal by Howard P. Hall.

Among the big things done down at Monroe, Mich., during the past eighteen months are the improvements and enlargements made by the Monroe Binder Board Company. For several years this company has operated mills at Monroe, Mich., and Aurora, Ill., for the manufacture of binder boards, backing boards, special fibre boards, templet board and trunk and suit case boards. It has just added to its capacity the No. 3 mill for the production of plain chip board, single news vat lined chip, solid news, single and double manila lined chip, mist gray, bleached manila lined chip, test outer liners for corrugated shipping cases and container board from .060 to .100.

One of Finest Plants of Its Kind

The new mill was built in war times and the construction is of a nature to make the inspector believe that it was intended to withstand the ravages of war. It is certainly one of the finest plants of its kind in the world. The idea of original cost was abandoned for permanency, durability and productive efficiency. Nothing that could be asked for in a modern board mill is lacking in this plant. From the great concrete piers and bases on which the structure sets to the peak of the roof, completeness is everywhere evident.

Steel, reinforced concrete and vitrified brick are the materials used throughout. The exterior walls are of vitrified brick, which gives an atmosphere of immense stability. The foundations for the building and machinery are of reinforced concrete, all washed finished after being laid. The roof supports are heavy steel trusses. Fire walls separate the various departments, with ingress and egress through automatic fire doors. Despite the fact that the plant is practically fireproof, further protection against loss by conflagration is furnished by a complete sprinkler system, installed by the Phoenix Sprinkler Company, and a fire pump and equipment.

The Stock House

The stock house is a great open structure, 130 by 130 feet in dimensions and 32 feet in the clear to the roof. All stock is handled by a traveling electric crane that operates on a monorail system with access to any part of the department. It has a storage capacity of 3,000 tons.

The beater room is 120 by 130 feet in size, and is equipped with four Noble & Wood mammoth jordan engines and eight 1,500-pound and two 1,800-pound beaters, the product of the Diltz Machine Works, Fulton, N. Y.



MILL NO. 1 OF THE MONROE BINDER CO., MONROE, MICH.



While we frankly admit that

Old Hampshire Bond

Made a little better than seems necessary

is that the standard paper for business stationery, we would call the attention of the trade to our other lines, all of which are splendid value in their respective grades.

They are TITAN BOND, ITASCA BOND, ANGLO-SAXON BOND and OVERSEAS BOND.

If these lines are not represented in your city you will find it worth your while to inquire about them.

HAMPSHIRE PAPER CO.

SOUTH HADLEY FALLS

MASSACHUSETTS



Carew Manufacturing Company

MAKERS OF

VULCAN LINEN LEDGER

SOUTH HADLEY FALLS

MASSACHUSETTS

The machine room is 505 feet long and varies in width from 42 to 46 feet. It contains a Black-Clawson six-cylinder board machine, with 96 dryers set in vertical sections, ten dryers to the section. This machine extends into the basement below. It is 124 inches in width and produces a sheet of board that trims 114 inches.

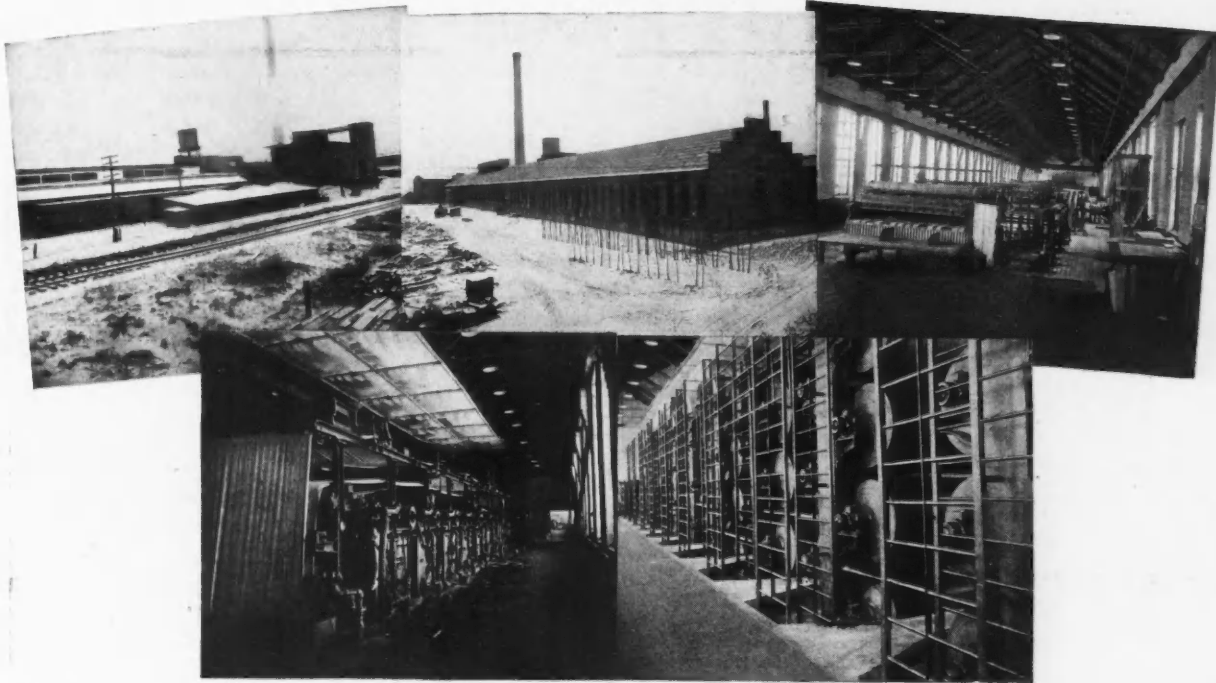
Unusually Fine Board Machine

John Wenzel, superintendent of the mill, stated to a represen-

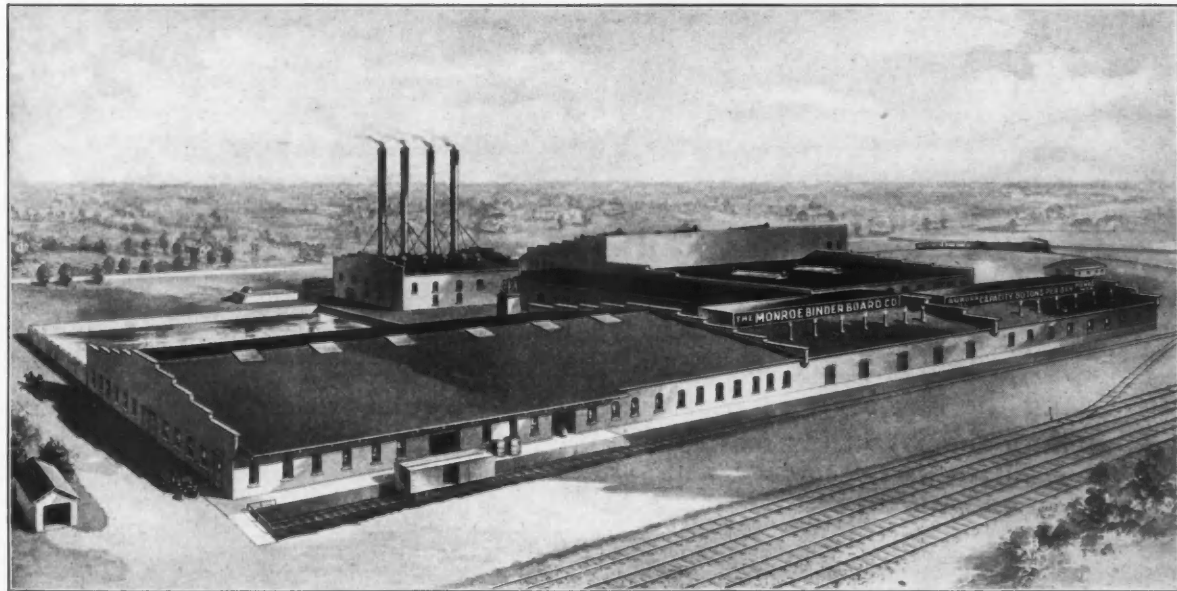
tative of THE PAPER TRADE JOURNAL that he had operated many board machines in years past, but had never seen a machine equal to the one in this No. 3 mill.

"From all standpoints, it beats anything I ever saw," said Mr. Wenzel. "It takes less power to operate and turns out the product. We are now using less than two pounds of waste steam for drying purposes and turning out a perfect sheet."

In the basement and directly below the wet end of the machine



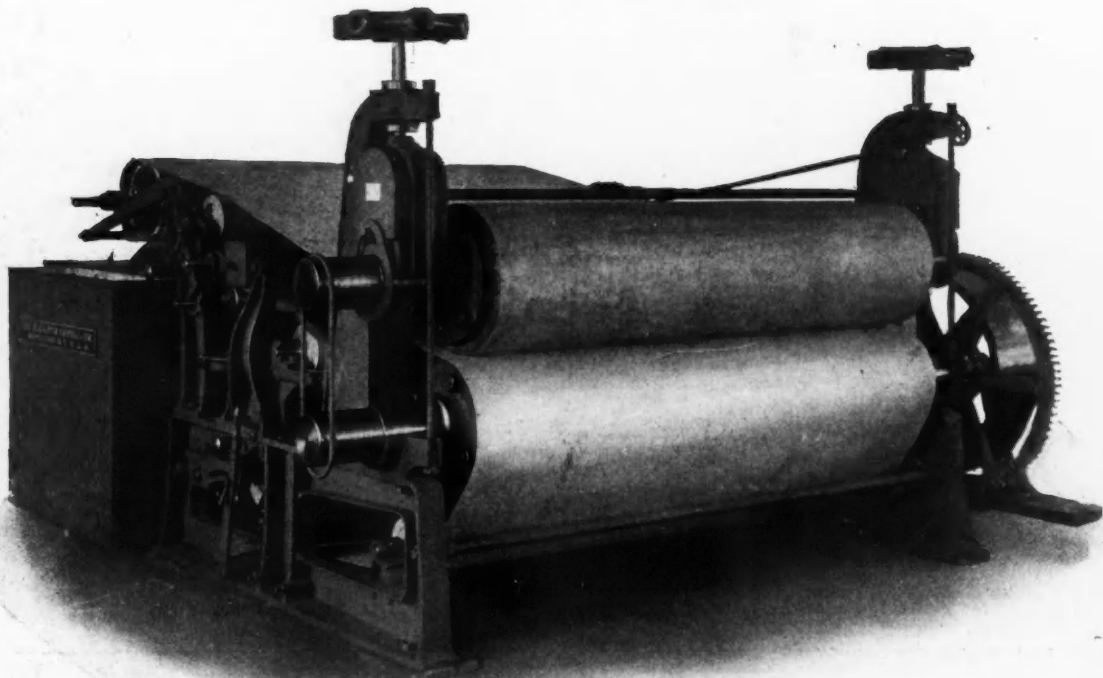
MILL NO. 3 OF THE MONROE BINDER COMPANY, SHOWING INTERIOR AND EXTERIOR VIEWS



MILL NO. 2 OF THE MONROE BINDER COMPANY, AURORA, ILL.

THE BAGLEY AND SEWALL COMPANY

WATERTOWN, NEW YORK, U. S. A.



Bagley Standard Spring Wet Machine

We carry this standard machine in stock ready to assemble and can make prompt deliveries.

This is positively the best wet machine on the market. The lower box is held to the top of the housing by heavy rod, making the housing and bearings of the two rolls self-contained. Any shock to the press rolls is taken up by heavy railway steel spring in the spring housing.

Write us for quotation.

is an interesting little device that was worked out at this plant. It is an inexpensive stock-saver. All waste water passes through it and deposits all stock that is thus carried off. It will return its expense many times over each year.

The machine room is also equipped with a Black-Clawson pasting machine that carries a sheet 112 to 114 inches in width. An order has been placed with the Samuel Langston Company for a Langston rewinder, which is to be installed in the immediate future.

The finishing room is 54 by 250 feet in dimensions and placed therein is an 84-inch Seybold cutter.

The Power Plant

The power plant is quite in keeping with the balance of the plant in efficiency and equipment. The engine room is 70 by 110 feet in size, and the boiler house 66 by 54 feet. A 30 by 42 Hamilton Corliss engine, equipped with rope drives, propels the beaters. A Chandler & Taylor twin variable speed engine of 150 horsepower drives the big machine. Electric power for the other equipment is furnished by a 33 by 28 Chuse Corliss engine, driving a 450 k.w. General Electric generator. Space is also provided for the installation of a similar unit in the near future. This will be needed when the company's box plant is in operation.

The boiler house has four 350 Wicks vertical water tube boilers, manufactured by Wicks Brothers, Saginaw. They are equipped with Detroit stokers. All ashes are removed by the jet system to an elevated tank, from which they can be automatically dumped into trucks and hauled away. The mill has bunker capacity for 500 tons of coal and a coal-crushing and coal handling machine, product of the Palmer-Bee Company, Detroit, is to be installed.

Mills Nos. 1 and 2

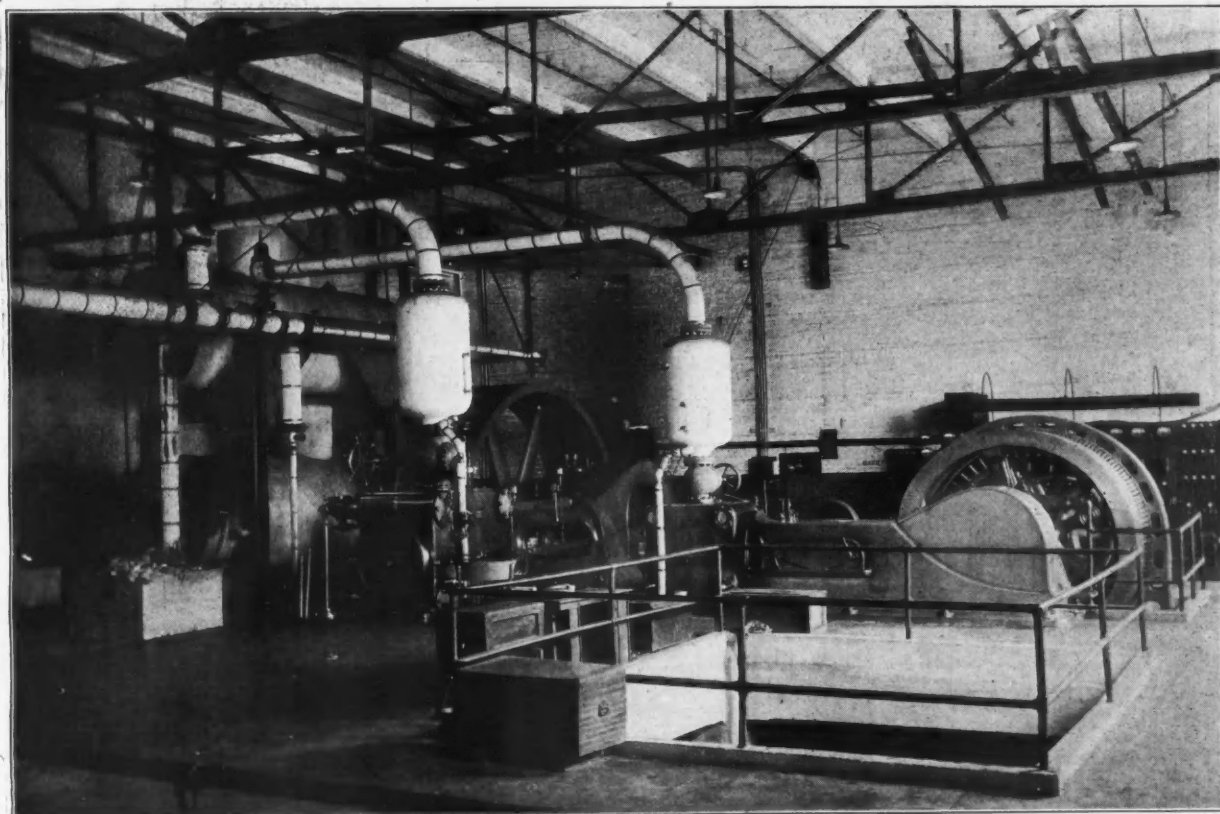
Mill No. 1 of the Monroe Binder Board Company is located at Monroe, and is manufacturing binder board, backing board, special fibre board, templet board, trunk and suit case board. It is equipped with six Noble & Wood wet machines in all, three 62-inch, one 52-inch and two 96-inch. The largest sheet made and trimmed is 72 by 138 inches. It is equipped with nine 1,500-pound beating engines and four Noble & Wood Mammoth Jordans. A Cottrell scoring press and four Thompson scoring presses have recently been added to the machinery in this plant. The capacity of this mill is 50 tons of finished board every 24 hours, while mill No. 3 produces 80 tons in a like period, giving the company a production of 130 tons a day in its plants at Monroe.

Mill No. 2 is at Aurora, Ill., and manufactures a line in all ways similar to that of the No. 1 mill. It is equipped with three Noble & Wood 62-inch wet machines and one 72-inch machine. The largest trimmed sheet is 48 by 120 inches. There is one 1,800 breaker and five 1,500 pound beaters and two Noble & Wood Monarch Jordans. Within the past year the finishing room of this mill has been enlarged by an addition 75 by 100 feet, while an office, 20 by 30 feet, has also been erected.

Increases Capital Stock

The Monroe Binder Board Company has increased its capital stock from \$500,000 to \$1,000,000, and is employing 400 hands at the three plants. This number will be nearly double with the completion of the proposed box plant.

The officers are: President, L. W. Leathers; vice-president, L. C. Knapp; treasurer, Don B. Leathers; secretary, Eugene C. Betz; assistant manager, L. W. Newcomer.



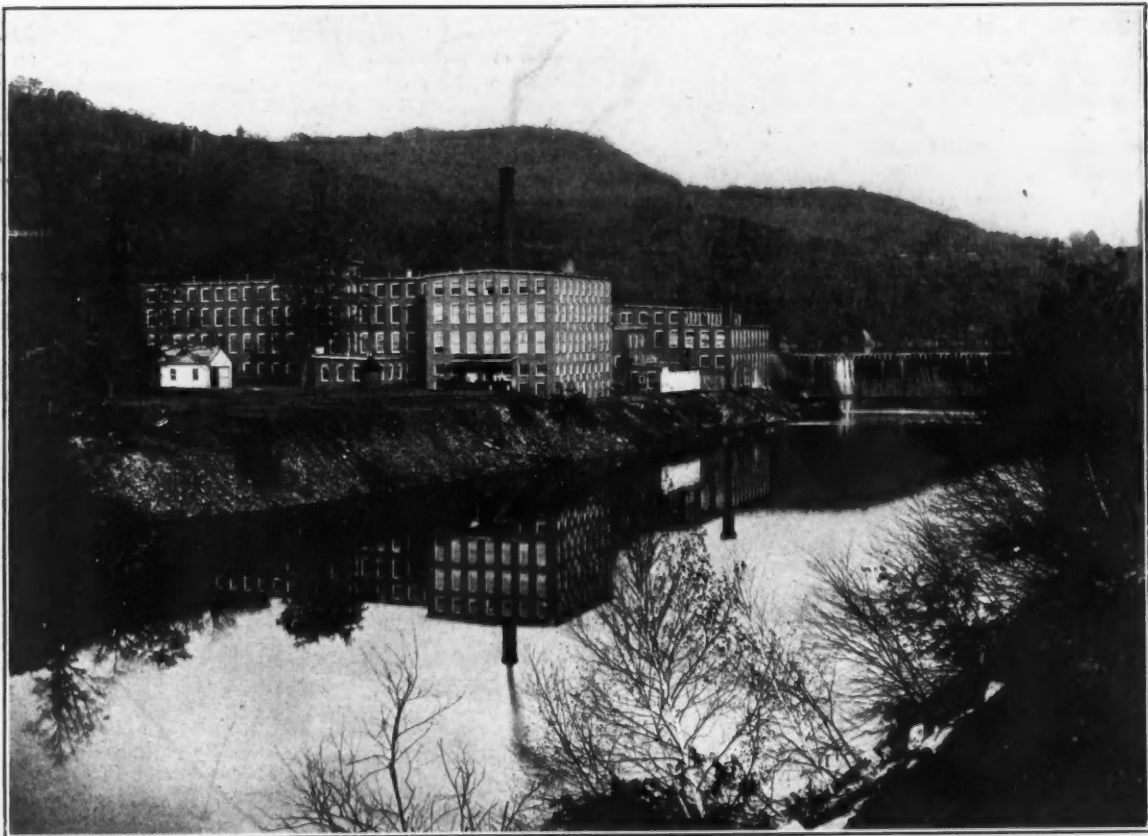
POWER PLANT, MILL NO. 3, MONROE BINDER BOARD COMPANY

Millers Falls Paper Company

EDWARD P. BAGG, Pres.

J. EDWIN RANDALL, Clerk

ANGUS CAMERON, Treas. & Mgr.



MAKERS OF

Old Deerfield Bond

MILLERS FALLS, MASS., U. S. A.

A System of Laboratory Management

Showing the Application of the Principles of Industrial Chemistry to the Needs of the Paper Industry—Some Rules and Suggestions for the Paper Manufacturer Which Will Aid Him in Maintaining the Quality of His Product and Avoid Financial Loss—Details That Should Have Careful Attention in the Various Departments of Plant in Order to Obtain Best Results.

By **Frederic Danneth, Ph.D.** Consulting Industrial Chemist in Newark, N. J. Sometime member of the Staff of the Pennsylvania Museum and School of Industrial Art in Philadelphia

Several years ago the author was invited to present at the Kensington Institute in Philadelphia a series of lectures on the application of Chemistry to Industry. This course was designed to show the dyer and bleacher, the paper maker, the rubber compounder and the tanner, the relation of chemistry to the problems which confront him almost daily. The aim, therefore, was constantly to point out those lines of work which would prove profitable to superintendents in their work. At the same time the author found that there were certain underlying principles which are applicable alike to any industry using chemical processes. Many paper manufacturers now realize that systematic chemical control of their raw materials, processes and products is an essential part of their business. And they have also found that the success of their sales department is dependent in a great measure on the "quality" of their product. This is interesting when we consider that the older point of view was that a salesman was the only essential to success. The experience gained by the author in intimate contact with industrial plants has now been reduced by him to a systematic plan for a comprehensive Laboratory Department.

In a recent discussion of industrial chemistry, one of the foremost members of the chemical profession in America said: "A long experience in this industry in the United States showed me that the machinery and processes hitherto employed left very much to be desired in the way of improvement. There had been practically no progress in the industry in the last twenty years, and this condition was due in all probability to the mistaken policy of manufacturers in the maintenance of secrecy. As a consequence of this inventors, scientists and manufacturers of machinery are kept ignorant of the necessity, for the application of their knowledge, and energies in the improvement necessary, for the healthy development of any industry."

There are certain persons with whom the paper maker should be very frank when troubles arise in a process. Here, as in many other cases, the prime question is:

"How can I maintain the quality of my product and avoid financial loss?" Specialization in the chemistry of paper making has now made it possible to secure the services of trained men well qualified to investigate the many difficult problems of the industry. There is at times a strong temptation to underrate the seriousness of a defective process, and the result of this attitude is well known to many of our ultra-conservative mill owners. The case is very similar to the man who thinks he has only a "slight cold" and who suddenly finds himself in a hospital with acute pneumonia. The progressive manufacturer or his general manager is today seeking to accomplish certain ends. In order to obtain the best results he must:

1. Purchase the best raw materials for a given purpose at the lowest possible market price.
2. Secure constructive criticism of the manner in which his several products are being manufactured.

3. Secure technical advice from the sales department for the purpose of learning all details about competing products.

4. Obtain heat, light and power at the lowest possible cost.

5. Protect his processes by secrecy or patent and avoid unnecessary legal suits for damages in the case of "spoiled goods."

6. Develop new processes to produce new and attractive products.

At the same time waste must be reduced to the lowest point consistent with good factory practice.

Successful corporations of today have either a written or an oral agreement with the managing director covering these points. Many of our paper manufacturers have risen to an appreciation of the chemist as an indispensable part of a perfect factory organization, and the plan of systematic chemical supervision presented herewith has been devised as a survey of a Laboratory Department to be used in connection with such supervision. It is intended to be a guide for investors and executives. The laboratory department should be equipped to serve the departments for purchasing, manufacturing and selling, and provision should be made for work in engineering chemistry, legal chemistry and research chemistry. Let us consider these six divisions of work in numerical order.

The Purchasing Department

INSTRUCTIONS to the chemist, to guide him in his work.

1. Plan the work so that it will lead to the most efficient co-operation of the laboratory with the purchasing agent.

2. SPECIFICATIONS: Prepare specifications for raw materials, or procure from the present supply houses exact specifications for the materials which they are now delivering to the factory. This includes fibers, dyes and chemicals.

3. RATIONAL SPECIFICATIONS: See that your specifications for the purchase of materials are issued in correct form. Write them so that they will, as far as possible, represent good materials of commerce. In this way you will avoid the danger of having to pay an extra price for a special product. The idea in writing specifications is to get bids on a standard material, having certain desirable properties.

4. Discriminate very carefully between the laboratory test of the material and the service test of the material. The former is in most instances a chemical analysis of a physical test. The latter is the actual, practical try-out on a large scale.

5. RECORDS: Keep a record of all chemical analyses made in your laboratory. This can be done on a 4 in. x 6 in. card index.

6. Keep a record of all physical tests made in your laboratory. This card index is kept uniform with the chemical file.

7. Keep a record of all materials now in use in the factory. This must include complete data on each of the ten points.

8. Keep a record of all important information on materials offered to your company, whether they are purchased or not.

9. Discover the factors which govern the choice and the proper time of purchase, for the raw materials of your industry.

10. The several raw materials used in the paper industry have

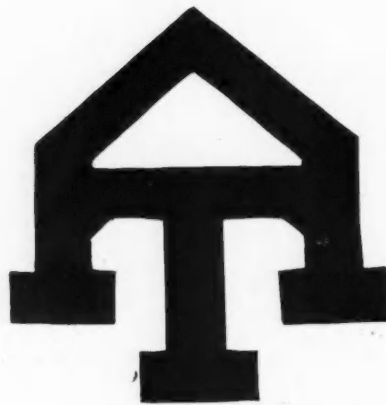
J. F. AUER, President

E. W. TWITCHELL, Treasurer

AUER AND TWITCHELL PAPER

AUBROC—KRAFT—DURAP

SNO-WYT GLASSINE
GRA-WYT GLASSINE
EMBOSSED GLASSINE
COLORED GLASSINE



BLEACHED GREASEPROOF
UNBLEACHED
GREASEPROOF
AEBF GREASEPROOF

TRANSWYT MANIFOLD
AUBRO TAG
SUPERIOR MANILA

PHILADELPHIA

General Offices
Ninth and Chestnut Streets

MANUFACTURING PLANTS

PHILADELPHIA
UNIONVILLE, CONN.
BEVERLY, N. J.

**We Manufacture Paper Twine, Paper Tubes, Paper Cores
for Paper Mills, and Fibro-Hyd (An Imitation Leather).**

NEW YORK
ATLANTA
MINNEAPOLIS

BOSTON
ST. LOUIS
CINCINNATI

WASHINGTON
CHICAGO
SAN FRANCISCO

definite trade names. Prepare, for the use of yourself, the laboratory and the purchasing department—a correct description of each material purchased. This glossary will be of considerable help in case of a legal dispute.

11. Keep a record showing where standard methods, for the analysis of each raw material may be found in print or typewritten.

12. Prepare a typewritten record, or other record with complete directions, for methods used in making physical tests, which are applied in your laboratory to raw materials.

13. Prepare for the laboratory museum authentic specimens of all raw materials purchased by the company; all raw materials offered to the company, but not purchased, should also be placed in this museum. These samples must be so arranged and labeled that exact information can be obtained from them without waste of time.

14. Secure for the information of the purchasing department as much information as possible concerning the source of raw materials or the method of their manufacture. This data can in many cases be secured from the vendors themselves.

15. Acquire a general knowledge of raw materials of your industry, so that you will be in a position to suggest substitutes, if a certain material suddenly becomes unobtainable.

16. TIME RECORD: Keep a time record showing the amount of time spent by you on the several investigations in the course of each week. One week is usually calculated as six days of eight hours each.

17. LABORATORY ORDERS: Do not undertake any work until after it has been given a laboratory order number (L. O. N.) and the order has been filed in its proper place.

18. PERIODIC CONFERENCES: Arrange for periodic conferences with the purchasing agent and the chief engineer for the purpose of coordinating the work of these persons with that of the laboratory department.

19. Arrange for conferences with the factory superintendent for the purpose of gaining a better insight into the way in which he uses his raw materials.

20. LEGAL TERMS: Study the meaning of the legal terms: agreement, sale, contract and breach of contract.

21. RULES: Establish certain rules which will be followed in making examinations and preparing reports for the purchasing department.

NOTE.—Many of these instructions may seem to be more logically a part of the duties of the purchasing agent, but experience has shown that it is most important to have one of the chemists in very close touch with the technique of purchasing. In fact, many corporations today prefer a collegiate trained chemist for the position of purchasing agent, as his training has made him a rapid and accurate observer.

The Manufacturing Department

Instructions to the Factory Chemist to guide him in his work for the Manufacturing Department in the control of processes:

1. Plan the work so that it will lead to efficient cooperation with the factory superintendent.

2. Note the several factors which influence a given chemical process. Examples of these factors are: Fibers, dyes, water, water-soluble chemicals, water-insoluble chemicals and machines.

3. Note the influence of different types of machines on a given chemical process. The kiers for boiling rags may be open, or pressure type. The machines used for washing, beating and reducing the fibers may or may not be of the best and most desirable form.

4. PROCESSES: Analyze each process into individual operations so that unnecessary operations may be eliminated, if that seems desirable and does not interfere with the quality of the product.

5. VITAL FACTORS: Study the four factors which govern

each process used in the factory. These are: Time, temperature, concentration and pressure.

6. WASTE: Devise general and specific methods for reducing waste of time, heat, chemicals and labor in a given process.

7. SECONDS: Discover the factors which affect the production of "seconds" or defective products. Plan to discover means for reducing them.

8. OPTIMUM CONDITIONS: Devise methods for determining the best conditions of time, temperature, concentration and pressure, for conducting a given process.

9. CHEMICAL CONTROL METHODS: Devise chemical methods for controlling the strength of baths or solutions used in a given process.

10. PHYSICAL CONTROL METHODS: Devise physical tests and study testing machines used for determining the best working conditions in a given process.

11. PREPARATORY PROCESSES: Collect, prepare and arrange data, relating to the preparatory processes through which the raw material passes in your factory before it is put through the intermediate processes. Rag boiling, digesting wood chips with caustic soda liquors, these are preparatory processes.

12. INTERMEDIATE PROCESSES: Study the intermediate processes used in the factory. These include: Reducing the fiber stock in the Jordan engine and making the paper on the Fourdrinier and drying the sheet in the steam-heated iron cylinders.

13. Study the finishing processes used in the factory. These include: Coating, calendering and printing designs on wall paper.

14. DEFECTS: Trace to their origin any defects which appear in the product at the end of the finishing operations. These defects may be detected by installing a proper inspection table. It is important that the defects be discovered before the goods leave the factory.

15. RECLAIMING OLD LIQUORS: Devise methods for revivifying old baths, liquors or other materials used in a process, so that they may be used over again if this is worth while.

16. RECOVERY OF WASTE PRODUCTS: Devise methods for reclaiming valuable constituents from old, waste and used baths, in those cases where the bath cannot be revived to advantage.

17. WASTE MATERIALS: Devise ways and means for utilizing waste materials to advantage in other processes or other industries.

18. FOREIGN MATTER: Develop methods for recovering the foreign matter from the principal raw materials when they are passing through the preparatory processes. Example: The waste sulfite liquors drawn from the digestors.

19. TECHNICAL READING: Devote a stated number of hours per week to the reading of technical periodicals with this in mind: the improvement of processes now in use in your factory; the development of new processes; utilization of processes used in other industries, such as textiles, leather, tanning and rubber.

20. CONFERENCES: Arrange for periodic conferences with the factory superintendent *in his office*.

21. LABORATORY ORDERS: Do not undertake any work until after it has been given a "laboratory order" number, and a copy of that order has been filed with the factory superintendent.

22. Establish certain rules which you will follow in the systematic examination of processes. This should also cover the arrangement of your work with reference to the other departments of the laboratory.

The Selling Department

Instructions to the Sales Chemist to guide him in his work for the Sales Department in the control of products:

1. THE SALES MANAGER: Plan for efficient cooperation with the sales manager and the salesmen.

2. PERFECT PRODUCTS: Determine the factors which go to make up a "perfect" product so that you will be in a position to

Craig-Becker Company, Inc.

52 VANDERBILT AVENUE

New York City



*Bleached, Easy Bleaching
and Unbleached Sulphites*

also

Spruce and Hemlock Ground Wood

examine the products of your factory, and determine by laboratory methods or service tests, the degree of perfection which any given sample of your factory's product represents.

3. **ADVERTISING DATA:** Present to the sales manager, in terms intelligible to him, the results of your various examinations of commercial products, so that he may, if necessary or desirable, use this data in his advertising campaigns.

4. **SELLING POINTS:** Discover the points of superiority of each product of your factory, so that the sales manager may obtain from you the important "selling points" needed when talking to intelligent buyers.

5. **SHIPMENTS:** Check up the quality of each shipment before it leaves the factory, and keep a permanent record of the results of the tests.

6. **DEFECTIVE GOODS:** If a dispute arises concerning defective goods returned to your factory, determine, so far as possible, if the defect is due to some cause which was present before the goods left your factory, or to conditions under which the goods were stored after they left your factory.

7. **COMPETITORS' PRODUCTS:** Devise methods for examining products put out by your competitors. Secure samples of these in the open market, so that you can compare their value with that of the products which your company manufactures.

8. **RECORDS:** Devise simple and easily understandable form for recording all the results of your investigations, (1) on your own products, and (2) on competing products.

9. **SPECIFICATION PRODUCTS:** In cases where a product has been made to conform to certain specifications, keep proper records of (1) products which met the specifications, and (2) products which, when examined by you, failed to meet the specifications.

10. **RECORD OF METHODS:** Prepare and keep a permanent record of the methods used by you for determining the quality of the finished product. This includes methods for testing the dyes for sun-fastness, the quality of "white tints" on white papers, quality of coatings on papers, etc.

11. **DEFECTS:** Prepare and keep a permanent record of defects which must be looked for in the finished product, before it leaves your factory.

12. **PHYSICAL TESTS:** Keep a record of the physical tests which each product should meet before it is shipped.

13. **CHEMICAL TESTS:** Keep a record of the chemical tests which each product should meet before it is shipped.

14. **EXHIBITS:** Together with the sales manager and chief of advertising, prepare collective exhibits, large and small, which may be used by the sales department or the individual salesman, for demonstrating the quality and make up of the several products made by your company.

15. **CUSTOMERS' SPECIFICATIONS:** Keep an index and file of all specifications issued by the customers of your factory and by prospective customers.

16. **USED PRODUCTS:** Secure, if possible, specimens of your products which have been sold and which have been in actual service for a given period. Note the particular points at which the greatest wear and tear is exerted on the product. Note the resistance which your product has offered to these destructive agencies. Examples: faded dyes on paper, drying out of paper, discoloration of paper, etc.

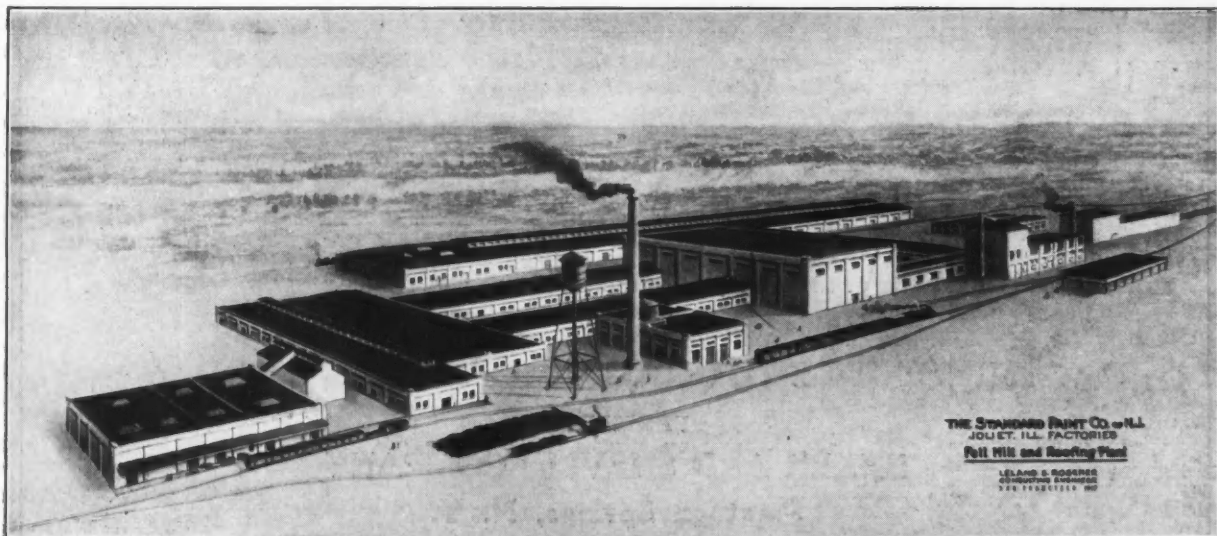
17. **TECHNICAL SELLING DATA:** For each product made and offered for sale by your company prepare a descriptive text stating—the quality and character of the raw materials used in making up the products; tests which a buyer may use to discriminate between your product and other products; the particular uses for which your product is adapted; precautions which your customer should observe when using this kind of products; the way in which your customer can get the best value out of your product. In the case of chemical products state the proportions in which your product should be used, as for example: "Use two pounds of dye for each 100 pounds of wool in order to obtain a full shade."

18. **RULES:** Prepare rules which will be followed by you, in taking up problems brought to the laboratory by the sales department.

TISSUE PAPER BANQUET

The Tissue Paper Manufacturers' Association held its annual dinner at the Hotel McAlpin on Tuesday night. Three speakers were on the program, all of whom delivered interesting addresses.

H. R. Coffin of C. H. Dexter & Sons Inc., acted as toast master and in a humorous manner introduced the speakers. The first speaker of the evening was E. H. Palmer of Boston, who delivered an interesting talk on Foreign Trade. Mr. Palmer was followed by J. J. Jones of the Alexander Hamilton Institute, who talked on "Paper Salesmanship in the Next Five Years."



NEW FELT MILL AND ROOFING PLANT OF THE STANDARD PAINT CO., JOLIET, ILL.

Baker Manufacturing Corporation

FORMERLY

Baker and Shevlin Company

DURING the year 1918, our plant was devoted to the extent of about 90% to the production of machinery for the government necessary for war purposes, so of necessity our regular trade did not receive from us the attention which they had been accustomed to receive in previous years. It was a matter of much regret on our part that we were unable to give the prompt attention to our regular trade which had been our custom, yet we believe there is no question but that we were doing the proper thing in exerting our energy, so far as possible, towards the successful prosecution of the war. This condition has now passed and we are able to give our former prompt and careful attention to the manufacture of our specialties, including:

The Centrifugal Screen

Shortt Patent Combined Chipper
and Crusher

Baker & Shevlin Extra Heavy
Chippers

C. Bache-Wiig Barking Drum

Feeney Automatic Stuff Box

Monarch Diaphragm Screen

Ramsey Patent Grinder Valve

Baker & Shevlin Patent Split
Winder Shaft

Baker & Shevlin Worm Knotter

Baker & Shevlin Worm Washer
and Thickener

Butterfield Barker Attachment
with Baker & Shevlin improve-
ments

Baker & Shevlin Patent Bronze
Valves for Sulphite and Sul-
phate Mills

Baker & Shevlin Patented White
Metal Valves for Sulphite and
Sulphate Mills

Baker & Shevlin Centrifugal
Pumps of Iron, Bronze or White
Metal Construction with Uni-
versal Body which may be used
either as right hand or left hand
and at any angle.

Besides which we manufacture wet machines, pulp thickeners, grinders, dryers and rolls of all kinds and a full line of bronze, white metal and lead pipe and fittings for sulphite mills as well as a general line of machinery for pulp mills and paper mills.

Baker Manufacturing Corporation

FORMERLY

BAKER AND SHEVLIN COMPANY

Saratoga Springs, N. Y.

Work of the U. S. Paper Laboratory

Considerable Important Research in Connection with the Paper Industry Has Been Carried on During the Past Year by the Bureau of Chemistry of the Department of Agriculture—Important Investigations Included That Relative to Obtaining Suitable Waterproof Interlining Wrapping Paper for Baling—Earnest Effort Made to Develop Waterproof Containers.

Written for the Paper Trade Journal.

During the year 1918 the Paper Laboratory of the Bureau of Chemistry cooperated with the War and Navy Departments in war work to a large extent. Considerable data, which will be of interest to the commercial interests of the country, have been secured in this work.

Waterproof Paper for Baling

One of the most important investigations conducted was in cooperation with the Industrial Research Division of the office of the Chief of Staff relative to a suitable waterproof interlining wrapping paper for baling. A great saving of domestic and especially overseas cargo space was effected by the shipment by the War and Navy Departments of large quantities of goods in bales in place of boxes or crates. All kinds of clothing, blankets and even leather goods were compressed into compact bales, securely wrapped with a water-resistant interlining paper and the outside of the bale covered with burlap and firmly strapped with steel straps.

This method of packing will undoubtedly be adopted in the future for both export and domestic shipments of certain materials, since only about half as many cars or ships are needed to carry the same tonnage in bales as in bulky wooden cases.

Actual baling tests were conducted with all types of water-resistant wrappings and extensive laboratory tests were made in order to prepare specifications for the most satisfactory water-resistant interlining baling paper. It was found that the most serviceable interlining paper for baling, especially for overseas shipment, must be so water-resistant that upon exposure to wetting or high humidity the strength of the paper is practically unaffected. Water-resistant baling papers were tested by determining the bursting strength of the paper after exposing the waterproofed surface to three inches of water for three hours and the loss in strength as compared with the strength before exposure was calculated. The work done by the Bureau of Chemistry indicated that asphalt duplexed wrapping papers surface coated or impregnated with asphalt withstood wetting and protected the contents of a bale most satisfactorily. Paraffin or oil impregnated papers show a loss in strength of over 80 per cent. upon exposure to wetting and made a poor showing in the tests indicating that in service they would not protect the bale contents from water and dirt.

Experimental Tests.

The experimental baling tests showed that any of the papers so far tested would be broken occasionally, depending upon the conditions to which the bales were subjected, and that from time to time strap cuts will occur. To maintain the density and shape of a bale it must be tightly and securely strapped with a sufficient number of straps and the interlining paper must be sufficiently strong to prevent material expansion between the straps, withstand transportation and hold the shape of the bale. It was found that flat asphalt waterproofed kraft of sufficient strength to withstand the strain of the bale and so waterproofed on one side

that when wet on that side its strength is not materially weakened, was the most serviceable of the papers tested. Owing to the fact that light weight case lining papers which were at first used by the army for baling, would not withstand the service without giving way, considerable work was done by dealers to make this paper expansive. Papers rendered expansive only in one direction by creping were unsatisfactory due to the breaking of the paper across the creping, since there was no expansion of the paper in this direction.

Paper made expansive in both directions by creping and corrugating are now available. Such paper withstood experimental bale tests very satisfactorily. However, the strength of the paper is considerably lowered by the creping process and when the outer surface is not waterproofed by coating or impregnation loses half its strength upon exposure to wetting. The determination of the bursting strength on any type of expansive paper, especially creped, is unsatisfactory. Tensile strength tests made on baling paper before and after creping indicated a loss of approximately 50 per cent. in tensile strength.

Reinforcing Advisable

It is advisable in baling certain materials to reinforce the interlining baling paper, whether flat or expansive, in order to relieve the strain on the paper and prevent strap cutting. Fiber board, heavy wrapping paper, and even wood slats, if used on the outside, have been found suitable for this purpose. The chief function of the burlap covering is to protect the paper wrapping from abrasion and impact. The burlap stretches considerably and most of the strain between the straps is thrown on the paper.

Several baling papers which have been reinforced in various ways in the process of manufacture have also been tested. The combination of paper with cotton cloth, burlap, or twine, has not been found satisfactory or economical, owing to the difference in physical qualities between paper and textiles. Since textiles possess considerably more stretch than paper the entire strain of the bale is carried by the paper and the twine or cloth becomes effective only after the paper has given way. Paper reinforced in both directions with a material which has less stretch than paper probably would be more serviceable if they possess no other objectionable features.

All of the data secured in these investigations together with reports on the examination of bales in actual service, are to be compiled and published for the benefit of American industry.

Water Proof Fiber Containers

Owing to the scarcity of metal, an earnest effort was made to develop a waterproof fiber container for the overseas shipment of powder. Since the absorption of moisture by powder seriously affects it, it was very essential that not only a waterproof but a moisture proof container be secured. Unserviceable types of water-resistant containers were detected before delivery and recommendations made to both the War Department and to manufacturers for their improvement.

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Niagara Paper Mills

LOCKPORT

NEW YORK

In cooperation with the Navy Department and the War Service Board of the solid and corrugated fiber manufacturers considerable work was done in the preparation of specifications for solid and corrugated fiber containers for canned goods for overseas shipment.

In the course of this work an impact tester was developed for determining the strength and resistance of the fiber boards and an article dealing with it will be published in the near future. Preliminary tests indicate that this tester will be very useful in determining the resistance of the fiber board to impact to which the boxes are so largely subjected in service.

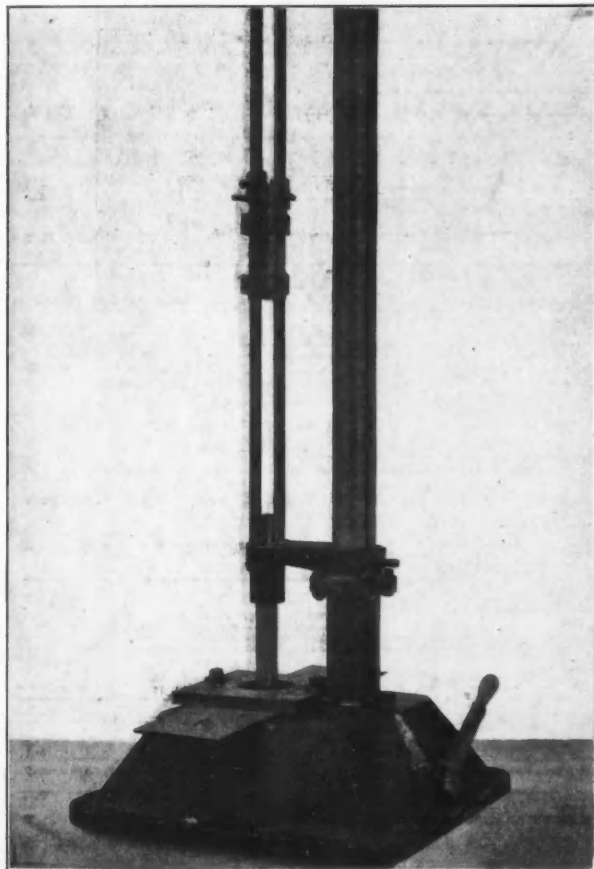
In connection with the work on fiber containers it was also developed that the serviceability of the container was considerably lowered when wet. This is an important factor in export shipment. In fact, this is probably the weak point of the fiber container as compared with the wooden box. Paper pulp is very readily affected and greatly weakened by exposure to high humidity or contact with water. It has been felt that there is need of a cheap waterproof adhesive or an adhesive which would not injure the strength or sizing of the board to take the place of silicate of soda, which is used almost exclusively now.

Adhesive from Corn Cobs

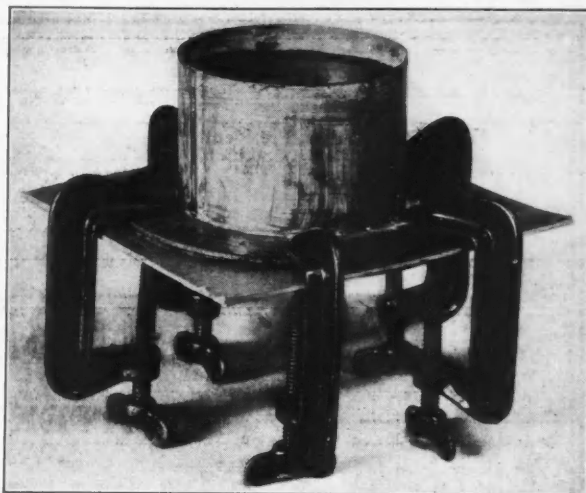
The Bureau of Chemistry has developed an adhesive from corn cobs which promises to be no more costly than silicate of soda. It is not water resistant, but is neutral in reaction and will not injure the sizing or strength of the plies.

Water Resistance of Fiber Board

A simple apparatus for determining the water resistance of fiber board has been devised. This consists of two steel rings or



IMPACT TESTER FOR TESTING SOLID AND CORRUGATED FIBRE BOARD



APPARATUS FOR TESTING THE WATER RESISTANCE OF FIBRE BOARD AND WATER RESISTANT WRAPPINGS.

flanges, the upper one of which has a galvanized cup soldered to it. The test is made by clamping a square of the board between the flanges and filling the cup to a depth of three inches. The time required for the appearance of moisture on the under side or the wetting through of the fiber board is noted. Very useful information has been secured by exposing the fiber board in this manner for six hours and then determining the bursting strength of the board and calculating the loss in strength as compared with the strength before exposure. A large quantity of the fiber container board on the market today, although labeled "outer ply waterproofed," wets through completely in less than four hours. Although it is possible to render the outer ply fairly water resistant by rosin sizing it has been shown that silicate of soda penetrates the fiber board and, by combining with the rosin size, destroys its sizing qualities and therefore its resistance to wetting.

Blue and Brown Print Papers

Prior to the war in 1914 nearly all of the better grades of blue and brown print papers were imported. Since that time, largely through the assistance rendered the industry by the Bureau of Chemistry, high-grade blue and brown print papers have been made in this country. Some of these papers are fully equal to the best imported papers which have been tested at the Bureau of Chemistry.

Published Matter

The following articles of interest to the paper industry have been published during the last year:

"A Constant Temperature and Humidity Room for the Testing of Paper, Textiles, Etc.," *J. Ind. & Eng. Chem.*, Vol. 10, No. 1, pp. 36-44.

"A Method for Determining the Absorbency of Paper," *J. Ind. & Eng. Chem.*, Vol. 10, No. 1, pp. 44-47.

"Blue and Brown Print Papers: Their Characteristics, Tests and Specifications," *J. Ind. & Eng. Chem.*, Vol. 10, No. 3, pp. 222-226.

Desires to Cooperate

The Bureau of Chemistry desires to cooperate with the paper and fiber board industry on problems of interest to the trade, and is always glad to have suggestions from the manufacturers. This laboratory does but little routine testing of paper, but devotes practically all of its time to investigational work relative to paper testing, durability of paper, stocks and sizing, preparation of speci-

H. I. PRANKARD, President

F. W. POMEROY, Secretary-Treasurer

JAY GILBERT, Vice-President

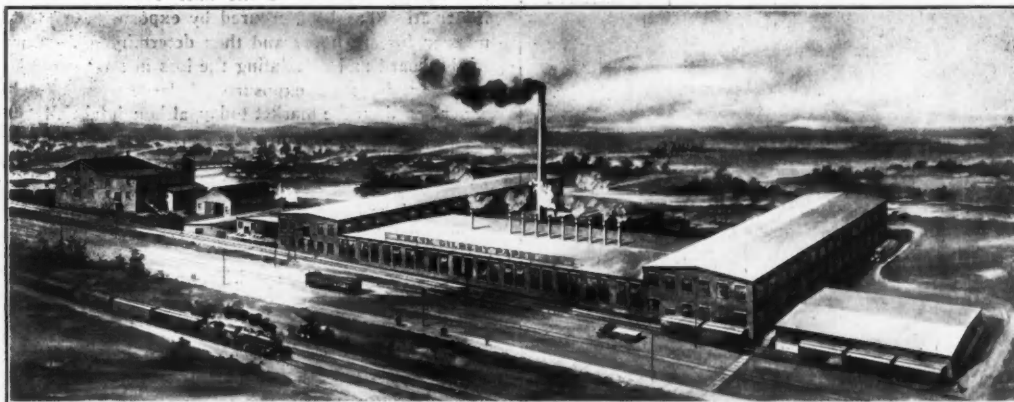
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WM. A. EBBETS, Manager

fications for various kinds of paper and development of new paper products.

Many other problems of greater or less importance have received attention during the year. The advice and suggestions of the Bureau have been sought by paper makers, manufacturers of special paper products, various Government departments, and other paper users, and all have been helped as fully as possible.

Lighter Weight Paper

For many years the Department of Agriculture has urged the use of light-weight paper and shortly after the outbreak of the European war in 1914 attention was called to the fact that the price of paper would probably rise and that one of the most effective ways to meet it and to help conserve material, labor and transportation was through the use of lighter-weight paper. This suggestion was adopted by the publishers of weeklies and monthlies of large circulation, and is gradually being embodied in Government specifications for paper. The rules laid down by the War

Industries Board have followed the same line, which has been of material aid to the country in war times. The Bureau has continued to assist the Joint Committee on Printing of Congress in the preparation of specifications for paper for the Public Printing and Binding.

Personnel of Paper Laboratory

The personnel of the Leather and Paper Laboratory consists of the following staff:

F. P. Veitch, chemist in charge; H. P. Holman, assistant chemist in charge; E. O. Reed, R. W. Frey, V. E. Grotlisch, R. E. Sayre, B. S. Levine, I. D. Clarke, T. D. Jarrell, M. G. Hunt and E. P. Ingalls.

Other Work of the Laboratory

Other interesting lines of work carried on by this laboratory are the development of the naval stores industry; leather and leather substitutes; and the water and mildewproofing of fabrics, leather and paper.

DEMAND FOR PAPER IS BETTER IN TORONTO

TORONTO, February 3, 1919.—Business in all paper lines has been picking up appreciably during the past week or so and evidently the trade have arrived at the conclusion that there can be no immediate or even early decline in prices. Orders are being received by the mills more freely and, as production is now on a much better basis, with transportation conditions good, the outlook is favorable for a satisfactory year's business. It is a long time since manufacturers have been so free of trouble. The coal supply is good; raw materials, while still high in price, are more readily available; the winter has been so mild that the usual ice blockades which have formerly interfered with the power supply are not a factor; transportation is in excellent shape and labor is not only more plentiful but is so much more efficient that even without any reduction in wages, mills are being operated more profitably.

Labor During December

The following is the report on labor conditions in the pulp and paper industry in Canada during December, as appearing in the Labor Gazette: "The Nashwaak Pulp and Paper Company at St. John, N. B., was closed down during the month on account of a strike of its employees. Montreal reported the pulp and paper mills active, while the beaver board and other pulp products companies were anticipating large overseas orders. Sherbrooke reported the pulp and paper mills busy. The Wayagamack Pulp and Paper Company at Three Rivers employed over 1,000 hands and the St. Maurice Paper Company worked full time and were adding to their plant. Hamilton and St. Catharines reported activity in the felt and tar paper group. Victoria, B. C., reported considerable activity in the mills of the district."

Paper box factories at St. John, N. B., were working overtime. Montreal reported that extra hands were employed in the paper novelties houses. Paper goods firms at Toronto had a busy month. The paper box factories at Peterboro and Brantford were well employed, as were also the paper box workers at Kitchener. At Winnipeg paper box concerns experienced a shortage of help. At Vancouver, B. C., the paper box and novelty firms were busy and at Victoria, B. C., the paper box firms reported increased business.

Labor Troubles in December

There were two strikes in existence during December, these involving 634 employees and resulting in a loss of 7,224 working days. One strike, that of pulp and paper workers at Ottawa, was carried over from the previous month and settled in December. After the men had been out for some weeks an adjustment was reached between the parties as the result of negotiations brought about by the Minister of Labor in which a departmental fair wage officer took

part. A strike of pulp and paper workers at Fairville, N. B., for union recognition and increased wages, which commenced early in the month, was untermiated.

Book Paper Inquiry Resumed

As the outcome of representations made to the Minister of Finance recently by a deputation representing the publishers of magazines and trade newspapers, the inquiry in connection with the cost price and supply of book and halftone news paper is to be resumed and a hearing will be held at the Parliament Buildings here on Wednesday next. It will be recalled that when the investigation into the cost of news print paper was first opened, the users of book and halftone news papers thought that their supply of paper should also be made the subject of inquiry and they succeeded in having the Government extend the powers of the news print commissioner to cover the kinds of paper used by them. Two or three hearings took place and the Commissioner put his accountant at work on the books of one of the book paper companies. A long and exhaustive examination of the costs of this company was made, the results evidently being such as to persuade the Commissioner that there was no call for fixing the price of book paper. The matter was accordingly allowed to drop until quite recently when the publishers pressed for a resumption of the case, with the result above mentioned. Manufacturers do not take developments at all seriously and believe that they will be able to prove conclusively that the fixing of book paper prices is not feasible or necessary.

Personal Items

John Martin, president of the John Martin Paper Company, Winnipeg, and vice president of the Canadian Paper Trade Association, is slowly recovering from a serious illness which has confined him to his house for some weeks past.

A. G. Pounsford, general manager of the Port Arthur Pulp and Paper Company, has been in Toronto on a business visit. Another visitor in town was Joseph G. Mayo, resident manager at Smooth Rock Falls of the Mattagami Pulp and Paper Company.

E. P. Foley, president of the Foley-Rieger Pulp and Paper Company, will preside on Monday at a banquet to be tendered by the Thorold Board of Trade to E. W. Beatty, K. C., the new president of the Canadian Pacific Railway Company, who is an old boy of the town.

N. L. Martin, secretary-treasurer of the Canadian Paper Trade Association, acted as honorary treasurer in connection with the recent Salvation Army Hut campaign, which went over the top so successfully.

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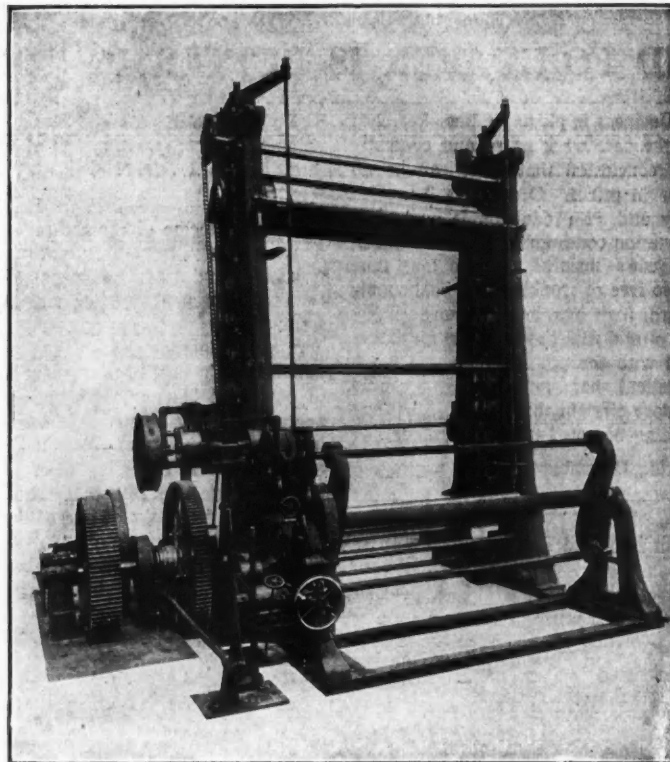
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Friction Calenders
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Highly Commended by Prominent Life Insurance Officials Who State That in Their Experience No Similar Form of Insurance Has Ever Before Been Offered in Such a Manner—Beneficiary Will Receive the Amount of Wages or Salary That Would Have Been Earned by the Deceased for a Period of 26 Weeks—No Beneficiary Will Receive Less Than \$500 or More Than \$3,000.

On Sunday, December 15, more than 4,000 employees of the American Writing Paper Company and members of their families assembled in three large halls at Holyoke, Mass., to take part in a series of what probably were the most novel meetings ever held by an industrial concern. These gatherings were called Christmas meetings, and as an air of mystery preceded them they aroused much curiosity and interest.

Unique Method Employed

Since many of the leading industries of the country have seriously taken up welfare work among their employees, one phase of which is the granting of free life insurance under a blanket policy, the benefits of such a plan are too well recognized to require lengthy mention here. It was for the purpose of presenting life insurance to all the employees of its eastern mills and division offices that these Christmas meetings were held, but the unique method employed in announcing the fact was a step in advance of that of any other industrial organization conferring group life insurance upon its employees.

Prominent life-insurance officials have spoken very highly of the plan adopted by the American Writing Paper Company, and declare that in their experience no similar form of insurance had ever before been offered in such manner. They commend it as a model form of announcing the presentation of life insurance to any industry desiring to show appreciation of its employees' services.

Instead of the sending of a formal card or letter to employees stating that their lives had been insured without cost to them and without medical examination, and asking each for the name of a beneficiary and so on, the American Writing Paper Company officials decided that the action should take the form of a Christmas gift and be publicly presented with the fitting ceremonies worthy of any invitation "affair." As there is no single building in the city of Holyoke with a seating capacity large enough to accommodate all the A. W. P. Co. employees and their families, three halls were engaged for the meetings. The attendance was carefully calculated and the respective divisions of the company were allotted to different halls so that the employees of each of the sixteen mills in the city could meet at the same time. A neat invitation with a card of admission was sent to the home of every man and woman employee whose home address was available from the office records. In this way at least 60 per cent. of the employees received direct notification of the meetings at their homes. In order to reach the rest of the employees, however, quarter-page advertisements were placed in the local newspapers in which the employees were asked to attend these Christmas meetings, always withholding as a secret the purpose for which the meetings were called. News stories sent out by the publicity department also aroused the interest of the company's workers and caused quite a general stir among them as well as among the residents of the city who were kept wondering what the American Writing Paper Company was going to do. The curiosity of the employees was keenly awakened.

It is a well-known psychological fact that the best way to gain one's attention is by stimulating the curiosity. Consequently, the attendance at the meetings was as near the 100 per cent. mark as it was possible to attain. The same program was followed at each of the meetings. Music was furnished and there was a community sing led by an army song leader. When the audience had reached a high pitch of enthusiasm by the patriotic singing, the purpose of the meeting was announced by President George A. Galliver. In presenting life insurance to the employees, President Galliver made an interesting address on "The Spirit of Democracy." He spoke of the co-operation and good will shown by the employees of the mills, of their attention to their work, and duly recognized the fine sense of unity with their company which had been conspicuously displayed during the period of the war. He pointed out that the presentation of life insurance was a manifestation of the appreciation felt by the company for the loyal services rendered by its employees.

Under the terms of the life insurance policy accorded the employees of the American Writing Paper Company the employee names his or her own beneficiary, and if the employee dies while in the company's service the beneficiary will receive on each regularly established pay day the amount of wages or salary which would have been earned by the deceased for a period of 26 weeks. No beneficiary will be entitled to receive less than \$500 nor more than \$3,000. Provision is also made for employees under 60 years of age who may be wholly or permanently disabled by injuries or disease while in the employ of the company. Another feature of the insurance is the free service of a visiting nurse for employees who are ill. By this provision the employee is assured of proper care during a period of illness. This additional service was found to be of great value during the recent influenza epidemic. Although the group insurance had been in effect but a few weeks, its benefits have already been felt. Since its inception eight deaths have occurred among the employees, and their beneficiaries are now receiving weekly the equivalent of wages of the deceased workers. In at least two cases brought to the attention of the company this continuation of the weekly wages in the form of insurance has proved a boon beyond words, so much so that the few sceptics who were inclined to look with disdain upon the insurance plan have sensed a full realization of the good it can do and are now loud in their praise of it.

Four Hospital Units

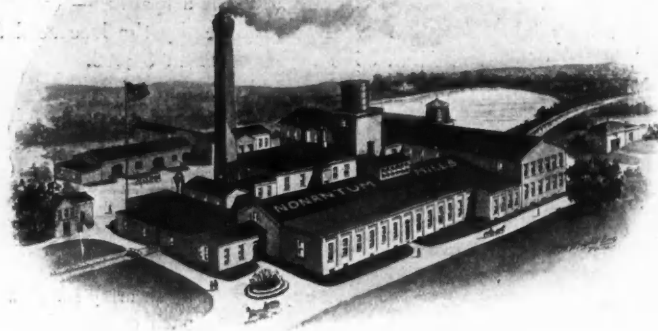
Another recent innovation inaugurated by the company is the establishment of four hospital units for the handling of emergency accident cases. Each unit is located at a point central to a certain group of mills and is in charge of a trained nurse who has had a wide experience in caring for accident cases in industrial plants. At these hospital units all cases of minor as well as of serious injury are promptly treated.

The company has also made provision for a surgeon of high standing to care for the injured while cases requiring the services

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of a specialist are to be cared for by the best surgeons it is possible to secure.

Nurses Provided

The nurses at these hospital units are in attendance during the working hours of every working day and are always in readiness to handle any accident cases that may be brought to them. Cases of indisposition will also be treated by the nurses; further, the employees will be instructed in the laws of simple hygiene. A feature of the nursing service will be that of following up the progress of the cases treated in daily reports and these will be

issued so that friends may learn how the patients advance toward recovery.

In the establishment of these hospital units there are at least three distinct advantages to the company and to the employees. It affords, first, immediate as well as subsequent treatment of the injured employee, thus providing a safeguard against infection and other dangers; secondly, it provides complete facilities for the treatment of accidents; and, lastly, it minimizes the time lost by employees through injury. It saves time and money for the individual and for the company, and its prime object is to restore injured employees to their duties.

PRODUCTION OF BOOK AND NEWS IN JANUARY

The Federal Trade Commission has given out the following statements relative to the production and stocks of news print paper for the first three weeks of January and of book paper for the same period.

Reports from 34 domestic manufacturers operating 55 news print mills show the following results for the first three weeks of January, 1919:

	—Week ended—		
	Jan. 5	Jan. 12	Jan 19
Mill stocks first of week:			
Total Print	19,300	20,823	20,462
Standard News	15,656	17,289	16,303
Produced during week:			
Total Print	25,843	26,240	26,844
Standard News	23,773	23,774	23,802
Shipped during week:			
Total Print	24,320	26,601	26,527
Standard News	22,140	24,760	23,617
Mill stocks end of week:			
Total Print	20,823	20,462	20,779
Standard News	17,289	16,303	16,488

NOTE.—Above figures for total print include hanging paper.

Corrected figures received from the mills are responsible for 3,033 tons decrease in the stocks of total print and 2,695 tons decrease in the stocks of standard news at the beginning of the period.

Mill stocks of both standard news and total print increased during the period.

Loss of Production

Aside from the loss of production of two mills due to the taking of the power by the Government, reports from 153 machines running full or partial time on print paper showed the following loss of time during the first three weeks of January:

	—Repairs—		—Other Reasons—	
	No. of Machines.	Hours Idle.	No. of Machines.	Hours Idle.
First week	14	267	7	33
Second week	19	242	4	6
Third week	20	489	0	0

The total time the machines were idle decreased about 35 per cent. over the preceding three weeks' period.

Weekly reports from 45 book paper manufacturers operating 77 mills for the first three weeks of January, 1919, show the following results:

	—Week ended—		
	Jan. 5	Jan. 12	Jan 19
Mill stocks first of week:			
Total Book Paper.....	26,978	27,754	29,167
Periodical Paper	3,033	3,333	3,840
Produced during week:			
Total Book Paper.....	15,266	15,662	15,579
Periodical Paper	5,246	5,120	4,926

Shipped during week:

Total Book Paper	14,490	14,249	15,127
Periodical Paper	4,946	4,613	4,797
Mill stocks end of week:			
Total Book Paper	27,754	29,167	29,619
Periodical Paper	3,333	3,840	3,969

NOTE.—Periodical paper includes that known by manufacturers to be used for printing magazines and periodicals. The total figures include the periodical book paper. The stocks contain a duplication of about 5,000 tons on account of the coated paper included.

Stocks of total book paper were increased 434 tons at the beginning of the period by corrected figures received from the mills.

Mill stocks of both periodical and total book paper increased during the period.

Loss of Production

Reports of 204 machines show the following loss of time during the first three weeks of January:

	Repairs.		Lack of orders.		Other reasons	
	No. of Machines.	Hours Idle.	No. of Machines.	Hours Idle.	No. of Machines.	Hours Idle.
First week	22	1166	24	2540	24	840
Second week	14	522	23	1876	25	741
Third week	16	534	24	2665	24	672

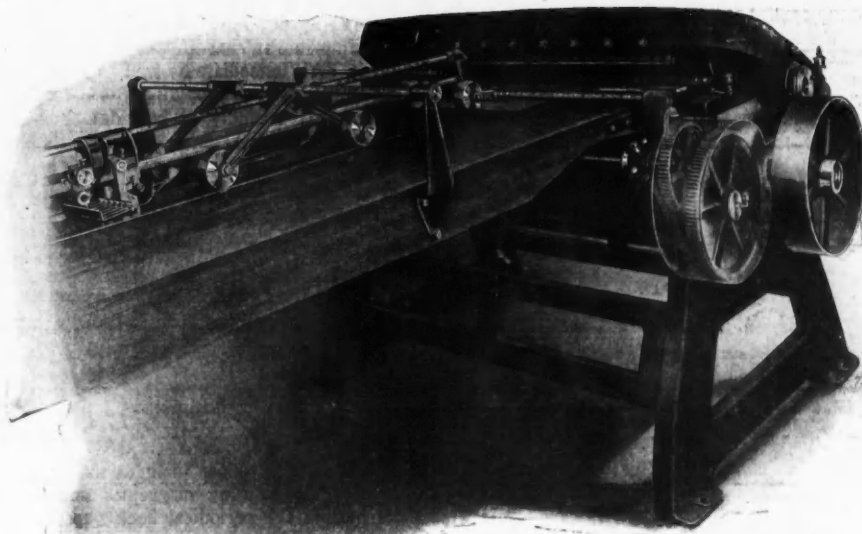
Under "other reasons" during the first week 4 machines of the 24 were idle 576 hours on account of lack of labor; during the second week 3 machines of the 25 were idle 432 hours on account of lack of labor; and during the third week 3 machines of the 24 were idle 432 hours due to lack of labor, and one machine was idle 120 hours for lack of stock.

MORE TOWNS WANT NEW EDDY PAPER MILL

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., February 3, 1919.—Interest in the mad scramble for the new board mill and container board plant to be erected by the Eddy Paper Company is on the increase. The city of Paw Paw, Mich., fifteen miles west of Kalamazoo, on the Paw Paw river, entered the race and is prepared to offer a site of 57 acres, assured water rights, concessions in taxes and adequate railroad accommodations. The Paw Paw boosters have been instructed to put all their ideas on paper and be prepared to present them at the regular meeting of the directors, which will be held February 12, at the the Home Savings Bank in this city. At that time the site for the new mill is to be selected definitely.

Three Rivers and White Pigeon are both pressing their claims for the new plant, while little Bistol, Ind., also asks opportunity to give a site and other considerations. Oscar Gumbinsky is reported to favor the Chicago offer of a hundred thousand dollar site on the Illinois-Michigan canal. Kalamazoo's claims rest on the fact that over 80 per cent. of the stock is owned in this city; also that six of the nine directors are residents of the city.



KNOWLTON WALL BOARD CUTTER

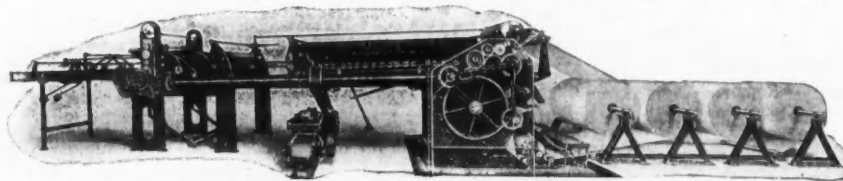
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Rotary Creasers and Slitters
Bar Creasers

Slotters and Flap Cutters
Sheet Cutters
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Cable Address, "Stayer, Rochester" A B. C. Code



A. P. W. Paper Co. Starts Up-to-Date Tissue Mill

Plant Is One of the Most Up-to-Date and Efficiently Equipped of Its Kind in the Country—Four Cylinder Machines Are Operated Which Though Standard as to General Paper Machine Designs Are Made Special in Many Points and Are Built Under the Most Modern and Complete Specifications—George F. Hardy Was Consulting Engineer and Willis F. Crandall Is General Manager.

The new tissue mill of the A. P. W. Paper Company, which has just been started at Albany, N. Y., is one of the most efficiently equipped and up-to-date of its kind in the country.

The new paper mill is situated in North Albany, on the bank of the Hudson River in what is known as the lumber district, and has the advantage of direct rail shipments and water transportation both by canal and river.

Mill Built of Concrete, Brick and Steel

The mill building is 120 by 300 feet, one story, and is built of concrete, brick and steel, of daylight construction. The interior is so arranged for manufacturing that raw stock coming in at the receiving end is in direct travel through all processes to the finishing end and all handled on one level.

At the receiving end there is storage for stock 60 by 120 feet, 25 feet high, which passes into the beater room, 60 by 120 feet, in which are four Noble & Wood beaters, two mills double roll beaters and four Noble & Wood Jordans. In this room also is a new arrangement for processing the stock whereby the amount furnished and the time of the operation are all mechanically and automatically recorded. All manual labor in the handling of raw materials ceases at the incoming beater room door. All beaters are furnished through valves and the stock in process automatically kept at a known per cent all through the process. The beaters are all electrically driven through belts and Jordans direct connected. In driving the whole outfit, it is interesting to note that there is in use only 240 feet belting over 8 inches in width.

Machines Made of Special Design

Between the beater room and the machine room there is a partition of glass, and the machine room, which is 110 by 120 feet, contains four cylinder machines made by the Sandy Hill Iron & Brass Works, each having 17 dryers, and 84 inches wide. These machines are standard as to general paper machine design, but are made special in many points and are built under the most modern and complete specifications. Ball bearings are used

wherever desirable, dryers are machined inside, frames are heavy and of suitable proportions for a much larger machine, all gears cut, and every known precaution taken to prevent any frictional troubles from vibration. The drive is combination electric and steam, and the back driving mechanism is new in arrangement and detail and designed especially for this company. Through this new arrangement only a single line of shafting is used and all bearings are either roller or ball, and one complete machine carries about 40 feet of belting 8 inches or over in width. The variable drives on the machines are driven by Erie Ball engines and the balance by 50-h.p. motors.

Equipment of the Machine Room

In the machine room on an elevated platform is located the heater and blower for heating the mill. This outfit is furnished by the Buffalo Forge Company.

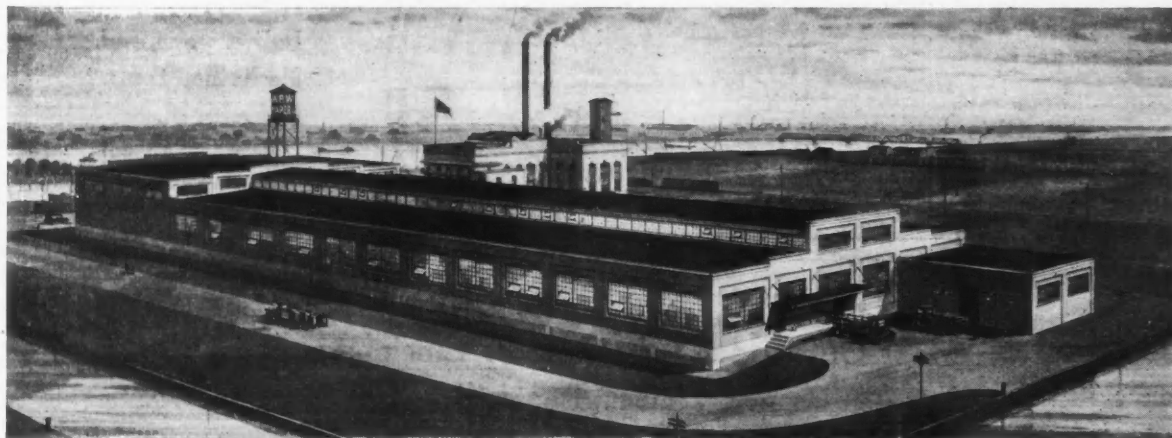
Between the machine room and the finishing end of the mill is another partition of glass which also encloses a large dressing room equipped with shower baths and lockers for the men, also toilets and lavatories in a separate compartment. The finishing end of the mill comprises a finishing room 40 by 70 feet, a machine shop and storeroom, an office and mill supply department.

George F. Hardy, the Consulting Engineer

George F. Hardy was the consulting engineer for the mill and the plans and specifications were put under way about January 1, 1918.

The construction work was started about April 6, 1918, and the mill building completed September 15. The plant was in operation and turning out product January 6, 1919.

Willis S. Crandell, for many years well and favorably known by the paper mill industry, is the general manager of the new mill, and will have exclusive charge of this branch of the industry. Mr. Crandell became connected with the A. P. W. Paper Company on January 1, 1918, and was in constant touch with Mr. Hardy during the designing and building of the mill.



NEW LIBERTY PAPER MILL OF A. P. W. PAPER COMPANY



WILART MILLS

DURING the war a number of our best men enlisted and many others were taken for munition and airplane making.

We heartily co-operate with the War Industries Board in their regulations and program for saving paper necessary for the winning of the war

The reconstruction days are here, our boys are coming back, and we now propose to reinstate our former lines of Ledger, Bond, Writing, Tablet and Envelope papers which we are distributing through the paper merchants of the country.

THE MIAMI PAPER COMPANY
WEST CARROLLTON, OHIO

WHOLESALE DISTRIBUTORS OF
Paper of Every Description

BRANCH OFFICES:

Pittsburgh, Pa.
Cleveland, Ohio
Chattanooga, Tenn.
Detroit, Mich.
Birmingham, Ala.
Columbus, Ohio
Dayton, Ohio
St. Louis, Mo.
Evansville, Ind.



BRANCH OFFICES:

Knoxville, Tenn.
Quincy, Ill.
Indianapolis, Ind.
Nashville, Tenn.
Chicago, Ill.
Atlanta, Ga.
Toledo, Ohio
Akron, Ohio

Main Offices and Warehouses, Cincinnati, Ohio
Branch House, Louisville, Ky.

CHARLES BEEBE IN PAPER TRADE FIFTY YEARS

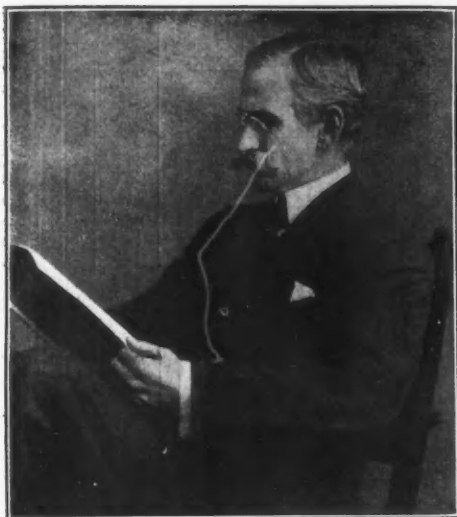
Especially Written for the Annual Number of the Paper Trade Journal.

Fifty years ago (1869) this month, Charles Beebe started in the paper and paper stock business as a salesman with the firm of Beebe, Son & Co., at 23 Beekman Street, New York City.

Comes from Family of Paper Makers

He comes from a family of paper makers and paper merchants, his father, Roderick Beebe, owning and operating mills making straw paper at Chatham, N. Y., as far back as 1840. Later his father opened the first commission house in New York City, locating in Maiden Lane, near Dutch Street. He brought the straw paper to New York down the Hudson River in sloops before the railroads were built, sending merchandise back.

As a clerk, Charlie can recall the names of paper merchants,



CHARLES BEEBE.

such as John B. Ayres & Co., Hubbs & Yates, Bradley R. Hard & Co., James Barry, B. & O. Myers and Henry Lindenmeyr, all on Beekman Street. White, Sheffield & Co. were on the corner of Gold Street. Campbell, Hall & Co. were around the corner on Nassau Street.

Old New York

The Post Office was at Liberty Street and Nassau Street. There were no mail carriers, so he as the office boy won his spurs by chasing to the Post Office several times a day.

The site of the present Post Office was the park surrounded by iron railings. The Astor House was in its glory and the food served at luncheon was a feast, compared to the present day and at reasonable prices; but "Matarans" at 15 Beekman Street was the meeting place of a select few at noon to enjoy the French cooking.

Stages ran on Broadway from Wall Street and South Ferris to 30th Street, where goats ambled among rocks on which squatters lived in huts and raised chickens and vegetables.

In winter snow fell early in the year and these stages were placed on runners and drawn by four horses made our Main Street animated. The drive up town was always popular. These were the days before white wings and snow removal contractors were

known; as the snow was allowed to remain to the delight of the small boys.

Barnum's Museum was at the corner of Broadway and Ann Street, the show place of the city. When it burned to the ground the fat woman and the woolly horse vied with each other for a place of safety.

The "Tribune" at Spruce Street was a comparatively small building, but the ruling spirit, Horace Greeley was often seen in his ill fitting clothes, with his kindly face smiling a greeting to friends.

Tom Rafferty was the popular barber at Franklin Street, now the site of the World Building. Politicians and many notables were his customers. It was here Charlie first felt the razor on his face.

One winter the ice on the East River froze solid permitting one to walk on the ice to Brooklyn. Charlie took advantage of it with many others and crossed safely, but some were caught in the break up and rescued by tugs from the floating cakes.

The "World" occupied a fire trap of a building on the present site of the Potter Building on Beekman Street. The disastrous and fatal fire of this building occurred about this time. Many occupants were killed by jumping from the windows. Charlie saw men and girls take the leap, which has left a lasting impression on his mind.

Paper Trade Conventions

Later the Paper Trade Annual Conventions were held at Saratoga and Niagara Falls. These were the days of great enjoyment and fellowship among the salesmen and manufacturers.

The night boat to Albany before the meeting carried many, and it was then that business cares were laid aside and sociability prevailed. Real friends were found which lasted a lifetime.

Those were days of good prices and profits, but the trade grew with the city and competition started. It was before wood pulp was known, Beebe Son & Co. imported rags from European countries. Charlie had charge of sampling these goods on the dock and learned their qualities and value, and about 1873 was put on the road, visiting the mills throughout the country.

For a few years he gained valuable experience in selling jute stock throughout the West for Messrs. Woolworth & Graham, succeeding Gilbert Peck.

Good Times at Holyoke

He visited Holyoke monthly and after the day's work was over met other stock men (who have now passed on), under the hospitable roof of the Holyoke House, and swapped stories till bed time, which was not as early as one might expect.

Samuel Train of Boston was the life of the party and was held in the highest esteem by all. The Wauregan Paper Company was just finished and Charlie sold them the first stock to run over their machines.

In about 1880, he was sent to Gouverneur, N. Y., by John A. Manning of Troy to take the selling end of the Adirondack Pulp Company. It was this that started him in the Agalite business. His acquaintance with the paper makers throughout the country was well established. Hardly a manufacturer but knows him personally. His friends in the trade are legion.

Since 1900 he has been the manager of the Union Talc Company at 132 Nassau Street, New York, and his knowledge of the practical value of Agalite as a paper filler has been of great help in making the company a success.

ROBERTSON PAPER CO.

BELLOWS FALLS, VT.

Manufacturers

Oiled and Waxed Papers Plain or Printed

Established 1892

Daily Capacity 50 Tons

SPECIALTIES:

Lunch Rolls or Envelopes.

Self Sealing Paper, in Sheets or Rolls.

Packers' Manila, for Meat Packers.

Butter Wrappers, in Sheets or Rolls.

Lining Paper, for Cases or Cartons.

Tympan Paper, for Printers.

Printed Bread Wrappers, in Sheets or Rolls.

Special Paper for Dynamite and Gun Powder Manufacturers.

HAVERHILL BOX BOARD COMPANY

HAVERHILL, MASS.

MANUFACTURERS OF

"CALNO" WALL BOARD

BINDERS BOARDS

TEXTILE BOARDS

JUTE BOARD

FIBRE BOARD

MANILA LINED BOARD

CHIP BOARDS

NEWS BOARDS

PASTED BOARD

WOOD BOARD

MIST GRAY AND CHEVIOTS

SINGLE AND DOUBLE PATENT COATED BOARDS
NEWS AND BOOK MILL AND SHEET LINING

METHOD OF DETERMINING COST OF DRYING PAPER

By Arthur G. Maury of the Walter H. Bowes Co., Inc., Port Chester, N. Y.

That part governing the cost of paper manufacture which relates to the drying end is one of the least known. The Walter H. Bowes Company, of Port Chester, N. Y., in demonstrating to the users of the Dodge Gravity Evacuator its economies has evolved a means of figuring this cost very accurately and their method is here outlined.

As explained in the PAPER TRADE JOURNAL of December 26, 1918 (page 88), the Walter H. Bowes Company, both before and after installation of its device, run steam tests, which have been fully described in that article. The result of such tests gives the amount of steam used to dry 1 lb. of paper. As an example we will say that it takes 3 lbs. of steam to dry 1 lb. of paper. Take a machine making 20 tons of paper per day (40,000 lbs.), it would mean 120,000 lbs. of steam had been used for drying. If it takes 1 lb. of coal to produce 8 lbs. of steam, which is a fair average, it would take 15,000 lbs. (7½ tons) of coal to dry 20 tons of paper. Assuming that the coal cost \$5.00 per ton, the cost of 7½ tons would be \$37.50, or \$1.88 would be the cost of drying each ton of paper made.

Of course, unless a test to determine how much steam was required to dry a pound of paper had been made, it would be impossible to reach this result, but for an approximate idea of what the costs of drying in a mill may be, the Walter H. Bowes Company has worked up the following formula which is based on 22 steam tests, under varying conditions and grades of paper and board, and if applied to any machine would give an excellent idea of what the drying end of the paper manufacturing business represents in cost. This formula also indicates what economies are brought about by the use of a Dodge Gravity Evacuator through increased production as well as coal saving:

Coal Saving

Multiply DAILY production of a paper board machine (in tons) by 120 to determine how many tons of coal are USED YEARLY for drying.

Multiply DAILY production (in tons) by 24 to determine how many tons of coal will be SAVED YEARLY by the Dodge Gravity Evacuator (about 20 per cent).

Multiply tons of coal saved by PREVAILING cost per ton to determine dollars saved yearly through reduction of coal consumption.

Production

Multiply DAILY production of machine (in tons) by 45 to determine YEARLY increased drying capacity with Evacuator installed (about 15 per cent).

Multiply INCREASE by average profit per ton of paper or board to determine gain from increased drying capacity.

Total Economy

The COMBINED ECONOMIES in dollars divided by the yearly production of paper or board will represent the amount of saving in cost per ton of production.

The following is a concrete example of how the above formula would apply to a machine making 20 tons daily and shows how much money would be saved if the drying system of such a machine was changed from being siphon equipped to the more highly efficient scooping system:

20 Tons daily production of paper or board
120 Formula equation

2,400 Tons coal used yearly for drying

20 Tons daily production of paper or board
24 Formula equation

480 Tons of coal saved by Evacuator
\$5.00 Average cost per ton of coal (estimated)

\$2,400.00 Money saved yearly from coal saved

20 Tons daily production of paper or board
45 Formula equation

900 Tons paper increase from machine
\$5.00 Average profit per ton paper made (estimated)

\$4,500.00 Money gained from increased paper
2,400.00 Money from coal saving

\$6,900.00 Combined economies.

20 tons daily equal 6,000 Tons yearly, divided into \$6,900.00, equal \$1.15 saving in cost per ton of production.

Results from Tests

The following summary shows the average results derived from tests run by the Walter H. Bowes Company, Inc., divided into separate classes of paper and indicate the saving in steam and the increase in production due to the application of the Dodge Gravity Evacuator:

Class.	Pounds of Steam Used to Dry 1 Pound of Paper.			Pounds of Production Per Sq. Ft. of Drying Surface.		
	Before Installation,	After Installation,	De-crease, Per Cent.	Before Installation,	After Installation,	In-crease, Per Cent.
	Pounds.	Pounds.		Pounds.	Pounds.	
News print	3.49	2.18	38	0.744	0.908	22
Book paper	3.03	2.42	20	1.101	1.196	9
Writing paper	2.93	1.75	28	0.675	0.808	20
Tissue paper	4.05	3.02	26	0.543	0.630	16
Wrapping paper ...	3.47	2.60	25	0.943	1.142	21
Box board paper...	3.25	2.25	38	0.666	0.806	21
Insulating paper ...	3.39	2.95	13	1.220	1.490	17
Sulphite paper	1.71	1.19	31	1.022	1.148	12

Andrew Carnegie once said that he owed his success in life to never letting well enough alone. He oftentimes, in the quick development of the Steel Industry, found a better method of producing steel, and without hesitation relegated to the scrap heap all previous methods, even when they represented gigantic expenditures of time and money. This mode of procedure could be adopted to good advantage by the paper industry, especially to its drying systems. But the first step in this direction is to determine through correct steam tests and intelligently applied costs what changes are required.

NEWS PRINT HEARING FEB. 11

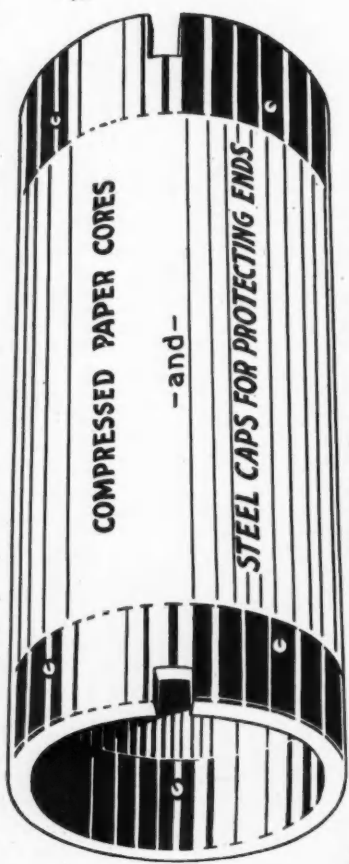
The Federal Trade Commission has given out the following relative to the reopening of the news print case:

"Upon the request of the Attorney General, acting in behalf of newspaper publishers, the Federal Trade Commission today set February 11 for a preliminary hearing on the matter of fixing new prices for news print paper as of August 1, 1918.

"The publishers have indicated they will also ask for new prices as of May 1, June 1 and July 1, 1918. They base their appeal on what they contend has been a material reduction in news print production cost."

THE ELIXMAN PAPER CORE CO., Inc.

Can be used on any paper machine using iron cores.



COMPRESSED PAPER CORES

- and -

STEEL CAPS FOR PROTECTING ENDS

Save two-thirds of your freight by using paper instead of iron cores

CORINTH, N. Y.

WRITE US

SUTHERLAND PAPER CO. EXPANDS ITS PLANT

Especially Written for the Annual Number of the Paper Trade Journal.

The Sutherland Paper Company was the single addition to the Kalamazoo Valley paper interests for the year 1918. Capitalized at \$200,000, it took over the Kalamazoo Carton Company, an infant industry born the year previous.

New Company Increases Plant Five Fold

The Kalamazoo Carton had been started in a small factory structure located on the lowlands near the Kalamazoo Paper Company. With the advent of the Sutherland Paper Company, the physical properties were increased fivefold to develop the first unit of what promises to be one of the big concerns of the city in the years to come.

The Sutherland Paper Company operates a parchmmentizing plant and a carton plant and is now turning out 750,000 cartons daily to supply the greedy demands of a steadily increasing clientele.

The original structure was a small machine shop, 110 by 40 feet in dimensions, one story high, and subject to the devastation of spring floods and freshets. This structure was entirely rebuilt and enlarged to a length of 225 feet, while it was raised bodily above the highest flood danger line. It now houses a 105-inch Beloit parchmmentizing machine, capable of producing 30,000 pounds of parchment paper every 24 hours. The machine embodies some interesting features that were worked out at the plant.

Immediately adjoining is the acid storage building, 16 by 40 feet in size, and capable of storing five tank cars. The boiler house is 38 by 60 feet and has one 200-horsepower Sterling boiler, which furnishes the steam for manufacturing purposes and for heating the buildings. The company uses electric power exclusively and purchases it from the Consumers' Power Company. Individual motors operate the separate mechanical units.

The carton plant is a model steel-and-concrete building 167 feet long and ranging from 120 to 124 feet in width. The arrangement is such that unfinished stock enters the building and passes around, without any rehandling, finally emerging finished and ready to ship. There is a fine battery of printing presses, including two three-color Sterling presses, equipped with automatic delivery and receiving systems. A high-grade Kidder, costing \$10,000 and designed to print directly from the roll, is now being installed.

Treated by Special Process

All waxed butter boxes are treated by what is known as the hot and cold process, a process that was worked out in the plant and on which the Sutherlands now hold patents. The three machines are a new design, constructed to avoid conflict with any now in use. An adequate battery of box cutters, creasers and folders and one and two-color flatbed presses complete the equipment of this department.

Artesian Wells Furnish Water

The water supply is furnished through the Frank Rust system of artesian wells, with a daily capacity of 1,500,000 gallons. This is pumped into a 100,000-gallon reservoir. The-sprinkling system is fed from a 40,000-gallon tank, elevated. A temporary frame warehouse is used to store raw stock in. At present the plant employs 125 hands.

The original site was lowland. This is being rapidly filled and raised above flood level. As soon as the winter passes it is planned to grade the property and make the surroundings generally attractive.

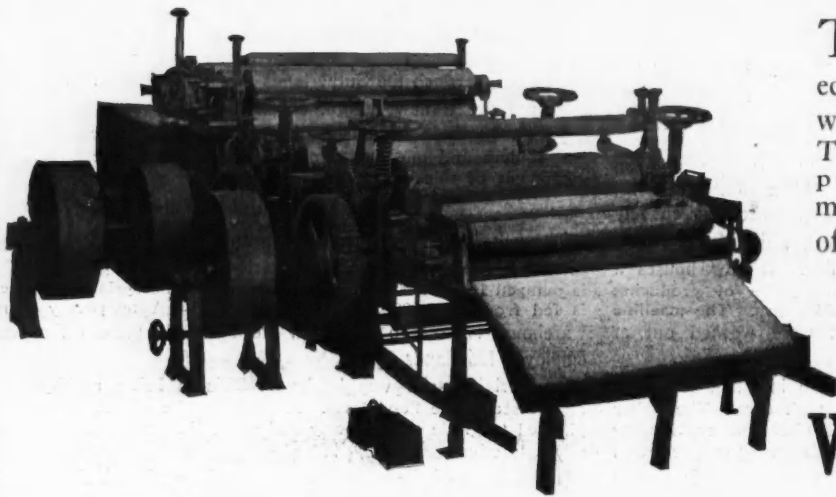
The officers of the company are: President, L. W. Sutherland; vice-president, Oscar Gumbinsky; secretary-treasurer, Frederick W. Sutherland.



NEW PLANT OF THE SUTHERLAND PAPER CO.



These Machines Save Time, Labor, Power & Freight



THE two machines illustrated here are distinguished for economy of operation, coupled with perfection of performance. They are made to lower cost of pulp-making operations, yet maintaining the high standard of quality.

ROGERS Wet Machines

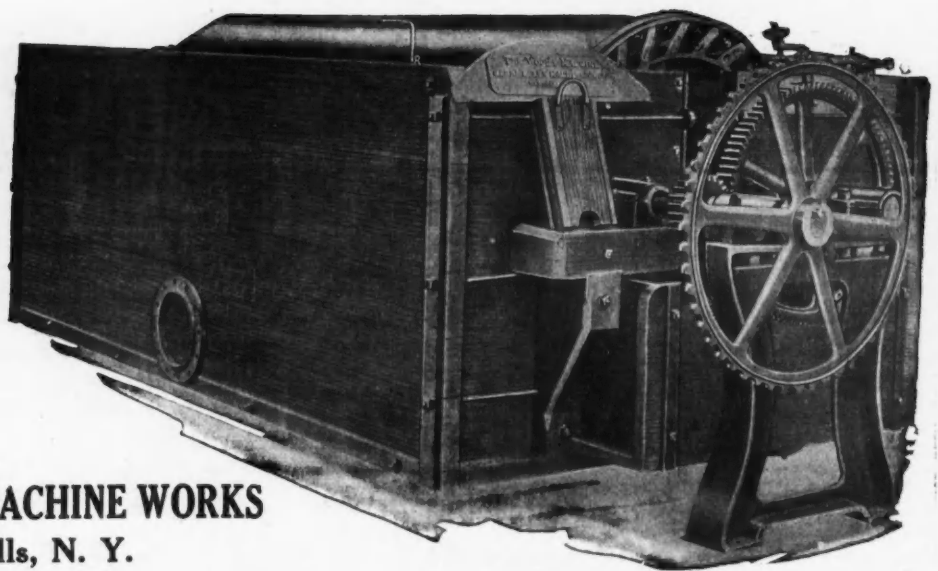
Built both Single and Double Press. They handle both sulphite and sulphate pulp with equal success. Low felt costs and great drying power, highest grade ball bearings for cylinder mould and couch roll, automatic felt guides, sheets automatically deposit in tray at front of machine, one man to operate—these are some of the quality features that explain the popularity of the ROGERS.

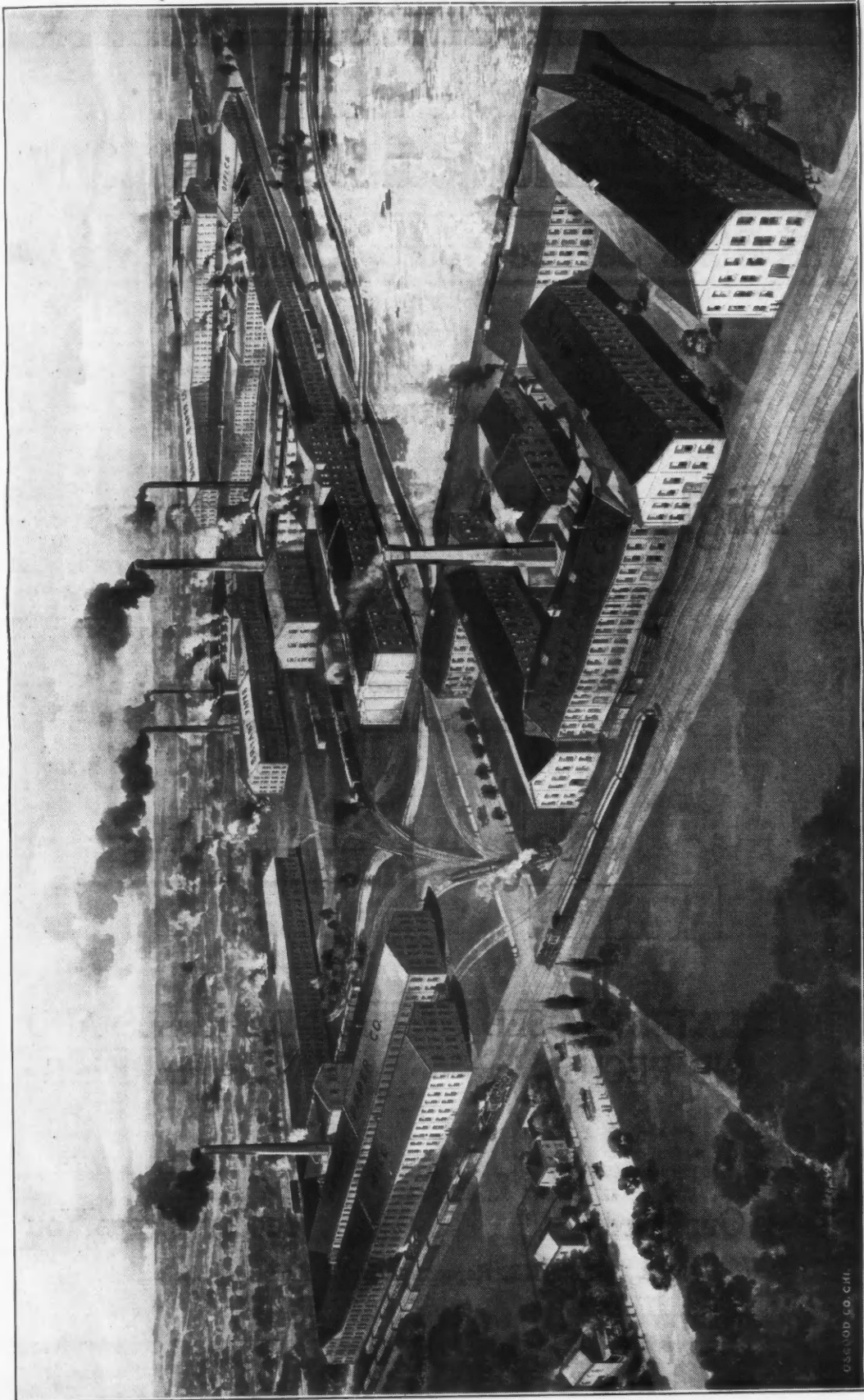
THE WOODS Machines

Designed for economical operation. Reduce wire costs, work automatically, without couch roll or doctor. Used with equal success as Pulp Thickeners, Save - Alls, Pulp Washers, Water Filters, etc.

Write for our circulars, giving full description.

GLENS FALLS MACHINE WORKS
Glens Falls, N. Y.





BIRD'S EYE VIEW OF THE BRYANT PAPER Co., KALAMAZOO, MICH.

OSGILBY CO. CHG.

Central Manufacturing Company

The Quick Service House, Kalamazoo, Mich.

MANUFACTURERS OF

High Grade Screen Plates and Dandy Rolls

Acid-Resisting Bronze Castings
Phosphor Bronze Bushings and Bearings



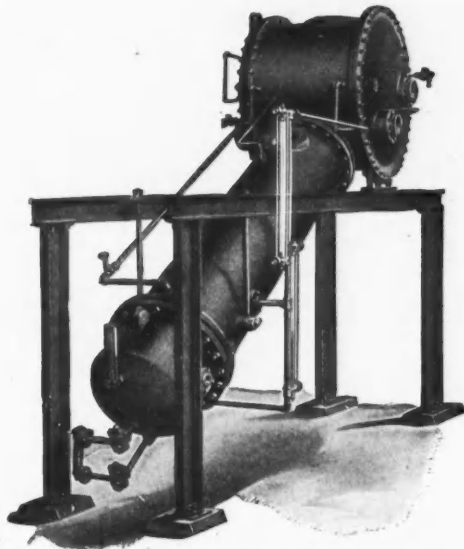
OLD PLATES CLOSED
AND RECUT

DANDY ROLLS AND
WATER MARKING

Secure Our Prices

We Can Please You

CALE B. FORSYTHE, Representative, Kalamazoo, Mich.



"Buflovak" Rapid Circulation Evaporation

"BUFLOVAK" EVAPORATORS

and other apparatus for soda,
sulphate
and sulphite mills.

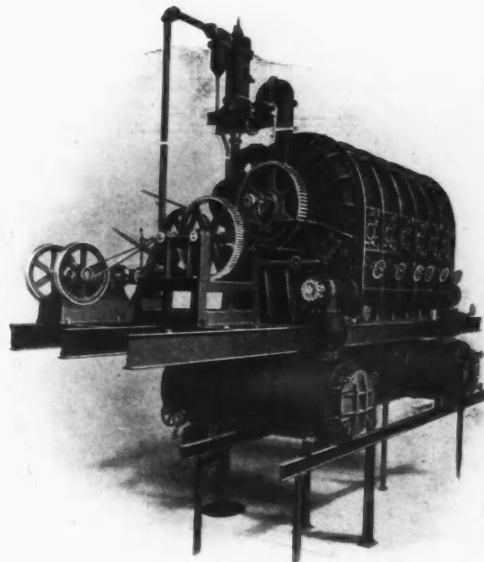
Leaching Cells, Causticizers, Digesters, etc.
Evaporators built to handle all liquors. Horizontal Tube Evaporators, Vertical Tube Evaporators, Rapid Circulation Evaporators, High Concentrators.

"BUFLOVAK" VACUUM DRYERS

for recovering sulphite waste liquor
and other products.

The recovery of sulphite waste liquor from paper mills is one of the important fields developed through the "Buflovak" Vacuum Drum Dryer, which converts the liquor into a dry powdered form at an extremely low cost and yields a handsome profit.

- Vacuum Drum Dryers—for drying liquid solutions,
- Vacuum Shelf Dryers—for materials that must be handled in pans or trays,
- Vacuum Rotary Dryers—for materials that permit agitation or mixing,
- Dry Vacuum Pumps, Condensers, Solvent Reclaiming and other Vacuum Apparatus.



"Buflovak" Vacuum Drum Dryer

BUFFALO FOUNDRY & MACHINE CO.
1545 Fillmore Avenue, Buffalo, N. Y.

NEW YORK OFFICE: 17 Battery Place

HUBBS & HOWE CO.
Paper and Twine
495 Seneca Street
BUFFALO, N. Y.

INTERSTATE
CORDAGE AND PAPER CO

PAPER and TWINE
14 AND 16 FOURTH AVENUE
PITTSBURGH, PA.

"ORIOLE MILLS"
Hubbs & Corning Co.
PAPER and TWINE
404 South Eutaw St.
BALTIMORE, MD.

Charles F. Hubbs & Company
Paper and Twine

383-389 LAFAYETTE STREET
NEW YORK

Branch: 36 Beekman St., N. Y.

CHAS. F. HUBBS & Co.,
203 Chestnut St.,
Philadelphia, Pa.

HUBBS & HOWE Co.,
1301 W. 9th St.,
Cleveland, O.

HUBBS & CORNING Co.,
Lyric Bldg., Richmond, Va.

Hubbs & Hastings Paper Co.
PAPER AND TWINE
319 Main St., West
ROCHESTER, N. Y.

**VICTORIA PAPER &
TWINE COMPANY, Limited**
Wholesale Paper Merchants and Importers
Selling Agents:
Continental Paper Bag Co.
Garden City Paper Mills Co., Ltd.
Toronto Warehouse:
439-441 Wellington St., W.
Branches: Montreal, Halifax
and Winnipeg

NORTHERN PAPER MILLS

GREEN BAY, WIS.

MANUFACTURERS OF

Paper Towels
Toilet Paper
Paper Napkins

Daily capacity 100,000 pounds. Entire production distributed through jobbers.

THE WARDCO CLUB AND BUSINESS EFFICIENCY

Written Especially for the Annual Number of the Paper Trade Journal by G. Carr.

Business efficiency may not have its highest illustration and attainment in the activities of the Wardco Club of Philadelphia—its members are too modest to make so large a claim—but they do believe, and results have justified the opinion, that there is in the brief history of operations of the Wardco Club some suggestive and helpful hints which may with profit be accepted by other firms. Local conditions may of course require a modification of methods so successfully followed by the Wardco. But a little survey of the elements of its organization surely will be helpful.

The Aim of the Club

The aim of the Wardco Club—its name readily indicates that it is built out of the organization of the D. L. Ward Company—is to attain a 100 per cent. efficiency of the personnel through the development of mutual good will, enthusiasm and an intelligent understanding, but all the constituents of the point of view of the other fellow. Since the Wardco Club has been in operation there has never been confusion over any subject requiring consideration or adjustment for the subdivisions of the club are such that there is the appropriate committee or agency dealing with any problem which arises in the month's business. Almost



GEORGE W. WARD.

automatically every special requirement goes to the inside organization of the Wardco Club most competent to dispose of it.

Now a Business Association

The foundations of the Wardco Club were laid quite a time ago, but the unusual conditions of the war made necessary the highest development of efficiency, and for that reason the Wardco Club, before a rather social organization, became a highly special-

ized business association. Its president is George W. Ward, head of the D. L. Ward Company; vice-president, William S. Wilcox; secretary, E. J. Walter, Jr., and treasurer, Frank F. Straka. These constitute as well the Executive Committee, and with the addition of Joseph S. Welsh and W. W. Seary also compose the Sales Service Committee. The membership is constituted of the heads of all the departments of the D. L. Ward



WILLIAM WILCOX.

Company organization. They are shipping, warehouse and transportation, mill, accounting, billing, order, stock, credit, export, import, sales, twine and fine and coarse paper.

It is the practice of the Wardco Club to hold on the second Thursday of each month a session in the rooms of the Poor Richard Club, on South Camac street, where social features are interspersed with the purely business. But every Saturday afternoon there is a session in the firm's offices and warehouse, 6th and Ludlow streets.

Helpful Discussion

At the Poor Richard Club a rich dinner is served, subscriptions being made by the membership. When cigars are lit there is the helpful discussion in the informal and free way possible under the surroundings. A vast variety of matters come up. A customer suddenly has either markedly increased or decreased his order. There must be a reason—the credit man may have an interesting light to throw on the subject. He is right there to answer. Or there comes into the meeting room the echo of a complaint or of a commendation from a customer brought in by a salesman. How can complaint in future be avoided; how can commendation made be more worthy? Or the competitor is doing—or is believed to be doing—certain things, and here is opportunity to discuss the matter and to bring it simultaneously to the attention of all department heads. Or there may have been an unusual delay in a certain shipment, and here in the comradeship of the Wardco Club at table is opportunity to ascertain just where the halt occurred, and, perhaps, to establish how in future other delays may be avoided. The social-business gatherings have been unqualified successes. Time and again they

Riordon Sales Company, Limited

Montreal

Bleached Sulphite

Of fine Quality

Hawkesbury and Merritton Make

150 tons per day

Easy Bleaching Sulphite

of the Highest Quality

Hawkesbury Make

Strong Wet Sulphite

These Pulps are Manufactured from

the Best Quality of Quebec

Spruce Wood.

Sales Managers:

T. J. STEVENSON

GEO. E. CHALLES

have justified their being in a direct financial return. Increase of the amenities of life have been marked.

Saturday Afternoon Meetings

The Saturday afternoon meetings are the detailed and specific deliberations, and to these come not only department heads but salesmen, and, in fact, all employees. All the details of all problems encountered in the experience of the week are reviewed while still they are fresh. The wheat and the chaff are separated. Matters of really permanent value requiring more deliberate consideration and executive action are referred to the Thursday afternoon dinner table conference.

Heads of departments give the sales force, the shipping clerks and all the others helpful encouragement. Constructive criti-

cism is encouraged; destructive—mere scolding—is sedulously avoided. Experience has shown that the spirit of the Saturday afternoon session is so helpful and means to the attendants such a direct financial return not only in the weekly wage but in the sharing of the bonuses at the end of the year that there is never the slightest difficulty in inducing attendance.

Finally the best which comes out of Saturday afternoon detail meetings and Thursday afternoon general and social meetings is made effective by the Executive Committee, and then whatever benefits the world without, particularly the consumers, but as well the general public, is told by a publicity department of which the permanent head is W. A. Hence. During his absence with the Colors management is imposed on J. L. Curry.

THE WESTINGHOUSE COMPANY'S SOUTH PHILADELPHIA HOUSING DEVELOPMENT

Several years ago the Westinghouse Electric & Manufacturing Company bought a tract of land at Essington, on the Delaware River just south of Philadelphia, with the intention of erecting there eventually a plant for building geared turbines for ship propulsion. This work was at that time being done at East Pittsburgh, and in the normal course of events the new plant would not have been begun for some time.

But the declaration of war against Germany by the United

States, called the South Philadelphia Company, to handle the housing development, and deeded to it ninety acres of land suitable for residence purposes near the plant. All the stock of the South Philadelphia Company is owned by the Westinghouse Company.

Laying Out the Grounds

Clarence W. Brazer, an architect of New York, designed the houses and laid out the grounds, which consist of broad streets



WESTINGHOUSE HOUSING DEVELOPMENT.

States changed the situation abruptly and radically. The contemplated plant became immediately an urgent necessity, and so the Essington plant was begun in the summer of 1917, rushed to completion, and began shipping products in less than a year after ground was broken. Today there is here a manufacturing establishment which employs 5,000 persons, and was during the war a most important factor in our ship-building program.

Problems of Housing Workmen

One of the many problems which arose in the course of this work was that of housing the workmen. The plant is located in the open country, some distance from extensive settlements, and is near several other large industries, such as Hog Island and the Baldwin munition works, so that such living accommodations as existed within easy reach were inadequate to take care of the armies of workers that were drawn into this region. Hence, the erection of houses for the Westinghouse employes became absolutely essential.

This work was begun as soon as the plant itself was well under way. The Westinghouse Company formed a separate corpora-

tion, called the South Philadelphia Company, to handle the housing development, and deeded to it ninety acres of land suitable for residence purposes near the plant. All the stock of the South Philadelphia Company is owned by the Westinghouse Company.

The actual work of building the houses was done by the Shipping Board of the U. S. Emergency Fleet Corporation, who let the building contract to William Crawford, New York. Two hundred houses and part of the stores are now in the course of erection, and nearly half of this number are now completed and occupied, and all will be finished by spring.

The houses stand on sodded terraces in rows of two, four, six and eight, on either side of macadamized streets, with concrete pavements. As the Westinghouse plant is not merely a temporary war factory, but is the beginning of a very large industrial undertaking, all construction work is of the highest grade. There are no frame houses, most of them being of brick, with a few of hollow tile and stucco to provide desired variety. The roofs are of slate and the cellars of concrete.

Most of the houses have six rooms, but there are some smaller and some larger ones.

McENERY PAPER COMPANY

MANUFACTURERS' SALES AGENCY
112 WEST ADAMS STREET
CHICAGO

PRACTICALLY ALL GRADES

WISCONSIN WIRES

WISCONSIN WIRE WORKS
APPLETON WISCONSIN

VALUABLE BY-PRODUCTS OF SULPHITE MILLS

By O. M. Halse and Herman Dedichen, Translated from *Paper-Journalen*, October 10 and 24, 1918. (Abridged)

In sulphite cellulose mills a valuable oil is obtained as a by-product of manufacture. Examination shows that it is an ethereal oil, similar to turpentine, and it consists chiefly of cymol. In 1915 we undertook an investigation of a large amount of the crude oil from a Norwegian mill. Fractional steam distillation of the product gave a yield of 90 per cent of a clear, colorless liquid, which was mostly pure cymol. Its constitution was shown by oxidation with potassium permanganate after Wallach's method, by which para-oxy isopropyl benzoic acid was formed. This substance, crystallized from water, has a melting point of 159 C. According to Wallach, it has a melting point of 157 C when crystallized from alcohol. Titrated with deci-normal NaOH, the molecular weight was found to be 178.5.

Subsequently, when the above investigations of the raw product had been concluded, Zoltan Kertesz (Chem. Ztg., 945, 1916) found the same complex in the by-products of a Hungarian mill. Thus it appears to be a fairly constant constitution of the ethereal oil from sulphite cellulose processes.

The practical use of this important by-product has of late been a subject of interest for the first time, since it is found that cymol can be converted into toluol and cumene by Friedel and Crafts' reaction. The product is excellent in both quantity and quality.

The Nitration of Cymol

Cymol can be nitrated with a mixture of nitric and sulphuric acids, if certain cautionary rules are observed. In this way we obtain mononitrocymol and trinitrocymol, but the yield of these compounds is relatively small. Sometimes, in nitrating, other reactions also occur, as the isopropyl group is easily attacked and readily oxidizes into the carboxylic acid group. Thus paratoluic acid and nitrated paratoluic acid are almost always found mixed with the products of the nitrating of cymol. Vidman and Bladin have shown that the isopropyl group can also be oxidized into the acetyl group, and at the meeting of the Finnish Chemical Society in 1916 Aschan described a dinitro compound of cymol, which contained a hydroxyl group in isopropyl elements. It is clear that trinitrocymol has been but slightly studied and has not been produced in its pure state. It was the object of these researches to undertake the investigation of these higher nitro compounds of cymol by new methods, and also to study the nitration of cymol and the oxidation of the isopropyl group. The results showed that the reaction largely depends upon acid concentration and the degree of temperature during nitration. The first experiments were made with a mixture of ten parts of oleum (with 20 per cent of SO₃) and seven parts of nitric acid of a specific gravity of 1.5. The product, after washing and crystallization from alcohol, had a melting point of 76 C. The nitrogen determination after Dumas' method gave 18.85 per cent N. Further reactions were those of trinitro compounds. It was deduced from these facts that the product consisted chiefly of a-trinitrotoluol, which has a melting point of 80 C and an N content of 18.51 per cent.

A smaller proportion of nitric acid, for example, five parts instead of seven, seems to promote the oxidation of cymol; with even less, that is, two parts, most of the cymol is oxidized into a sort of amorphous mass. After nitration with a weak acid mixture, 95 per cent sulphuric acid and nitric acid of a specific gravity of 1.44, most of the cymol is oxidized into mononitrotoluic acid. This product, on further nitration, was converted into dinitrotoluic acid. Many experiments designed to subject this acid to further nitration and thus to obtain trinitrotoluic acid, gave negative results.

Experimental Part

The nitrating mixture, by which trinitrocymol was formed, had the following composition:

Cymol	100 g. (3.3 oz.)
Nitric acid, sp. gr. 1.5.....	700 g. (23.3 oz.)
Oleum (20 per cent SO ₃).....	1000 g. (33 oz.)

The result gave about 10 g. (155 grains) of crystals and about 125 g. (4 oz.) of an unstable nitro product. Analysis of the crystalline product gave the characters of trinitrocymol. It was of neutral reaction, soluble in water, and had a melting point of 125 C.

Summary

1. Nitration of cymol with concentrated nitric acid yields a product which consists chiefly of mononitrotoluic acid. This acid can be further nitrated until dinitrotoluic acid is formed.

2. By nitrating cymol in a mixture of oleum and nitric acid, trinitrocymol is produced. It sometimes occurs that the isopropyl group is replaced by a nitro group with the production of a-trinitrotoluol.

—Chemical Laboratory, University of Christiania.

ABOUT EXPORT TRADE

But there is a further look ahead with which the trade is concerning itself more and more every day—the look across seas to South America and over the Atlantic for export business. J. L. N. Smythe, of the J. L. N. Smythe Company, it will be recalled, already is on his way to Australia. George W. Ward has planned to sail January 15 for China and Japan, but business developments have caused a temporary postponement of the trip. Other firms are expanding their agencies—like the Philadelphia Paper Manufacturers' Company and Auer & Twitchell. But everyone in the trade is taking a direct interest in the port developments, for which the Chamber of Commerce in particular is agitating. Just a mere incident related thereto is the arrangement which the Chamber has just made that its members will have access to a collection of the business directories and commercial ratings of all large cities of all the countries of the world. An Export Committee is at work with the government endeavoring to remove what it alleges has been discriminations against this city and Baltimore. While the paper trade has already shown its confidence in big opportunities abroad, President Joseph R. Grundy, of the Pennsylvania Manufacturers' Association, whose membership is more directly related to the textile industry, told the association at its annual meeting this week that home markets must be looked to first and that in his opinion not more than five per cent. of production could be sold abroad. The association, by the way, proposes this winter to open branch headquarters at Harrisburg during the pending session of the legislature that it may keep a watchful eye on all legislation in which manufacturers are interested.

BIG LUMBER FOR PULPWOOD

There has been some comment in Canadian papers on what has been described as the "wasteful" methods of lumbermen, in splitting up large logs and using them for pulpwood, instead of sawing them into lumber. Pulp wood sticks measure 8, 10, and 12 inches at the butts, but sticks with a diameter of 16 and 18 inches are being used for pulpwood. The lumbermen's defence of this is that the price of lumber has been down so low in comparison with the expense of cutting it that there was a much wider margin of profit on the turning of this wood into pulp than in sawing it into lumber.

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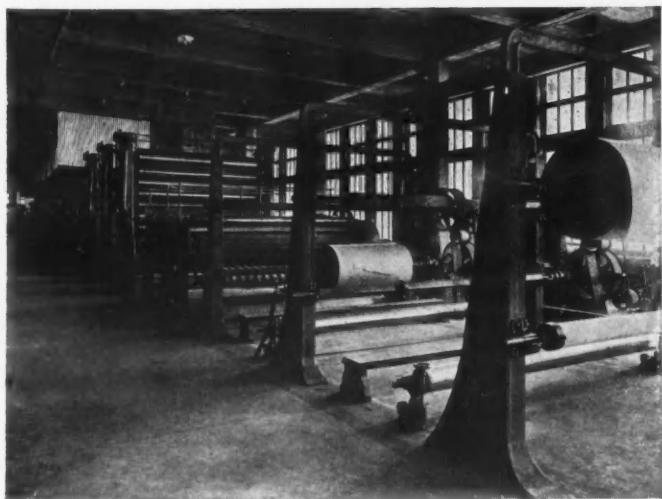
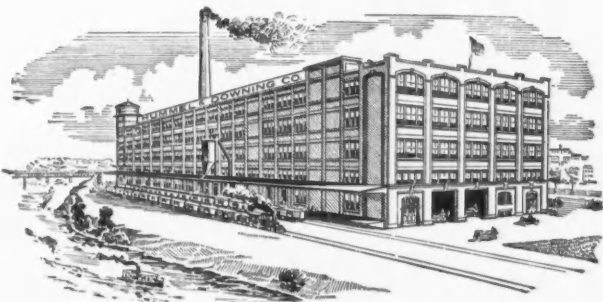
Obituary

Philip Hauck

PHILADELPHIA, February 3, 1919.—Philip Hauck, head of the Philadelphia paper box manufacturing business bearing his name and who in June last celebrated his fiftieth anniversary of active business life, always in the manufacture of boxes, died on February 1 at his home, The Terrace, Elkins Park, just beyond the Philadelphia county line. Though a sufferer for a year past with heart trouble, he had been able to actively give his attention to his business until last October.

Mr. Hauck was born in Roxborough, a suburb of Philadelphia, in 1840. He learned the trade of machinist and in 1868 established himself on Alder street in the paper-box business. Later on the factory was removed to Germantown avenue and Thompson street, and early in the '80's was removed to its present location, 1227 N. Fourth street. The mastery of the machinery business which he attained enabled him to perfect many inventions of great advantage in the paper-box business.

Mrs. Hauck, with whom in June, 1914, he celebrated his golden wedding anniversary, survives. Surviving children are Walter R. Hauck, who is in partnership in the business; Mrs. J. J. Flick, Tiffin, Ohio, and Mrs. W. C. Brickner, of Sheboygan Falls, Wis. A brother, Henry Hauck, is a resident of Kalamazoo, Mich. Mr. Hauck was a member of the Manufacturers and the Columbia Clubs.



VIEWS OF THE IMPROVED PLANT OF HUMMEL & DOWNING.

ST. LOUIS TRADE NOTES

ST. LOUIS, Mo., January 28, 1919.—The demand for both coarse and book papers seems to be steadily increasing, and trade conditions in all lines generally show a decided improvement. Jobbers and manufacturers' representatives declare that things are looking up nicely.

T. P. Chapman, president Chapman Paper Company, was the only St. Louis jobber who attended the recent meeting of the Middle States Wrapping Association.

The paper and allied trades sub-division of the St. Louis Chamber of Commerce has elected the following representatives: T. P. Chapman, president Chapman Paper Company, chairman; F. J. Harding, Harding Agency, vice-chairman; P. H. Baker, Seaman Paper Company; Edgar W. Baremsien, St. Louis Label Works, and Martin J. Collins, vice-president Graham Paper Company.

HUMMEL & DOWNING IMPROVEMENTS

The Hummel & Downing Company, manufacturer of box board and fibre and corrugated shipping cases at Milwaukee, Wis., has more than doubled the capacity of its paper mill recently, the capacity now being 130 tons daily. The new machine trims 126 inches and the old machine 120 inches. The plant is equipped with twelve beaters and eight Jordans. All the equipment is of a thoroughly modern character.

The new boiler house contains ten boilers, developing 4,000 horsepower. It is equipped with Murphy automatic stokers and has artesian water.



McMAHON PATENT FRICTION CLUTCHES

Our Style B patent friction clutch has been adopted as standard by many of the paper and pulp mills, and many of the mills have equipped their old machines with our clutches.

Specify McMahon Friction Clutches

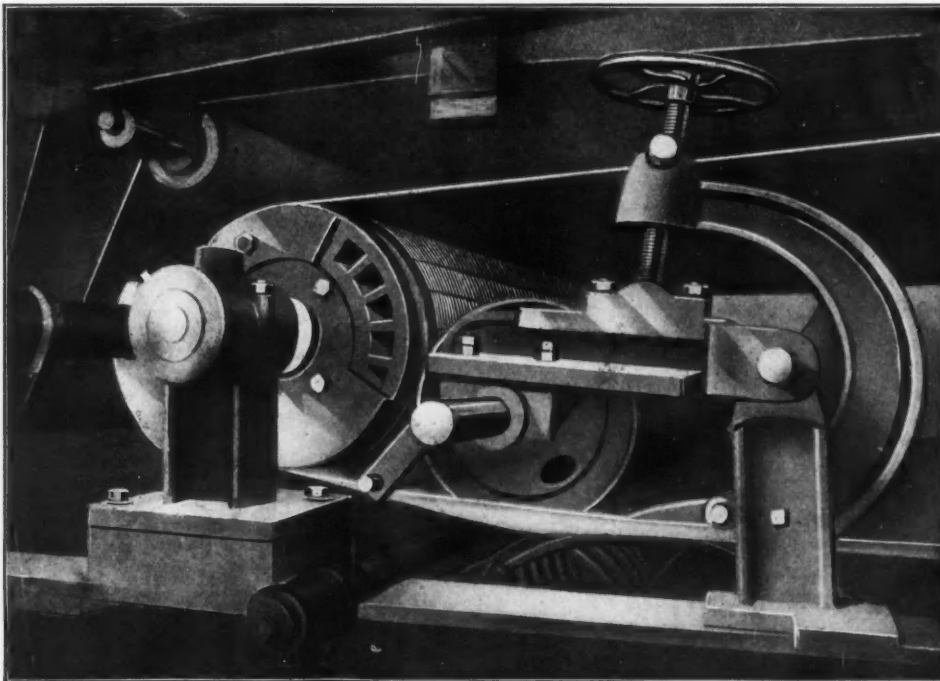
Why not specify our Style B Friction Clutches when ordering new machinery and provide gainst future clutch troubles, loss of production, and subsequent expensive changes?

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REPORT SOME IMPROVEMENT AT THE HOLYOKE PAPER MILLS

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., February 3, 1919.—The demand for paper is no longer falling off. Last week another slight improvement was noted over the week before. The betterment, though not heavy, nevertheless means a gradual improvement in orders for paper, and local manufacturers are becoming more optimistic daily.

One of the largest local independent manufacturers informed the writer that the week before last was bigger in the volume of business handled than any since the signing of the armistice. Last week, he said, even bettered the preceding one. This, in his opinion, is a good prediction of the continued improvement that will come from now on.

Prices, as at present, are bound to remain for some time to come, he said, which also seems to be the general opinion among all local paper manufacturers. None with whom the writer has spoken have declared their belief of an early drop in prices, while all appear unanimous that a rush of orders will come along before many more weeks. Considerable importance is attached to the rapid clearing up of the armistice problem and the signing of peace, after which, local paper mill men say, a big difference in the paper market will be noticed.

To Seek Export Trade

The attempt of paper manufacturers of this city to stimulate and further improve the export trade was given added impetus last week when a drive towards this end was launched by manufacturers and members of the Holyoke Chamber of Commerce. The Chamber of Commerce has sent out blanks to manufacturers which are to be filled out and returned to the Chamber for reference at any time concerning the particular company's position to increase its export trade. The drive launched last week is in conjunction with the State Board of Labor and Industries, and also with the Federal Board. The manufacturers who identify themselves with the plan will receive from the State Board copies of reports on trade opportunities in foreign countries as fast as they are sent in by the State and Federal agents, these reports coming in almost daily and consist many times of direct inquiries of manufacturers for prices on products. The reports also give directions as to shipping, etc., which will have to be followed should a sale be made, affording the local manufacturers at the same time the opportunity of figuring accurately the costs.

South America seems to be the apple of the eye of Holyoke manufacturers as well as manufacturers throughout the country. This sister republic, all seem to agree, is ripe for an immense trade with this country, and much of the efforts will be concentrated towards this country. One of the first things to possess is a thorough knowledge of the language of the country, and as this is for the most part Spanish, the local manufacturers, together with the Chamber of Commerce authorities, have already sought out ways and means successfully to meet this problem.

Crocker-McElwain Co.'s Card System

In order to complete a card system that has been carried on at the Crocker-McElwain Company for several years, the employees of the company are now being called upon to fill out cards so that these records will be complete in every way. R. Franklin McElwain, vice-president of the company, said that this is being done so that officials can see at a glance how long their employees have been with them, when they came, what positions they occupy, and other conditions relating to the employees.

Because of the sending out of these cards some of the employees cause it to be reported that the company was seeking to take out a group insurance plan. Nothing definite has as yet been decided upon, however, according to Mr. McElwain, but he says that the company is considering the plan same as manufac-

turers throughout the country are doing. No insurance policy of this kind now prevails at this plant.

Fuel Conservation Committee

At the request of the local paper manufacturers, Joseph A. Skinner, Federal Fuel Conservation Agent for Western Massachusetts, has appointed a local fuel conservation committee, which includes the following paper mill men: Sidney E. Whiting, of the Whiting Paper Company; S. E. Rogers, of the Chemical Paper Manufacturing Company, and Mr. Towne, of the National Blank Book Company. Mr. Towne has also been appointed to a committee of three to arrange for a meeting of the local manufacturers at which the Worcester manufacturers will explain their organization.

It is planned to appoint a shop committee at each factory to be comprised wholly of employees, this committee to report any suggestions for saving light, heat and fuel in the plants. Later all manufacturers will be made acquainted with the general ways and means of saving fuel.

General Trade Notes

The Highland Manufacturing Company held its annual meeting this week Wednesday. The past year has been a very prosperous one for this concern, of which Patrick J. Judge is treasurer. The Highland Manufacturing Company deals in stationery and many different kinds of paper products.

The girl employees at the Parsons Paper Company are certainly a progressive lot. Fifteen of the company spent many weeks knitting a beautiful blanket which they last week presented to Mayor John D. Ryan, requesting the latter to turn this over to Camp Devens or to any other cantonment where there are Holyoke soldiers. The Mayor heartily thanked the workers for spending so much time on this work. It was indeed a beautiful blanket, and the recipient will be a nappy one.

At the regular January meeting of the Chemco Club, composed of office and mill executives of the Chemical Paper Manufacturing Company, recently the following officers were elected: President, Robert Knowles; vice-president, Robert R. Fyfe; secretary, William J. McNally; treasurer, John Balch; governing board: John J. O'Connor, William J. Halliday, M. B. Long.

The speaker of the evening was J. T. Seller, of the Greenfield Tap and Die Corporation of Greenfield, Mass., who spoke on "Co-operative Work Among Employees."

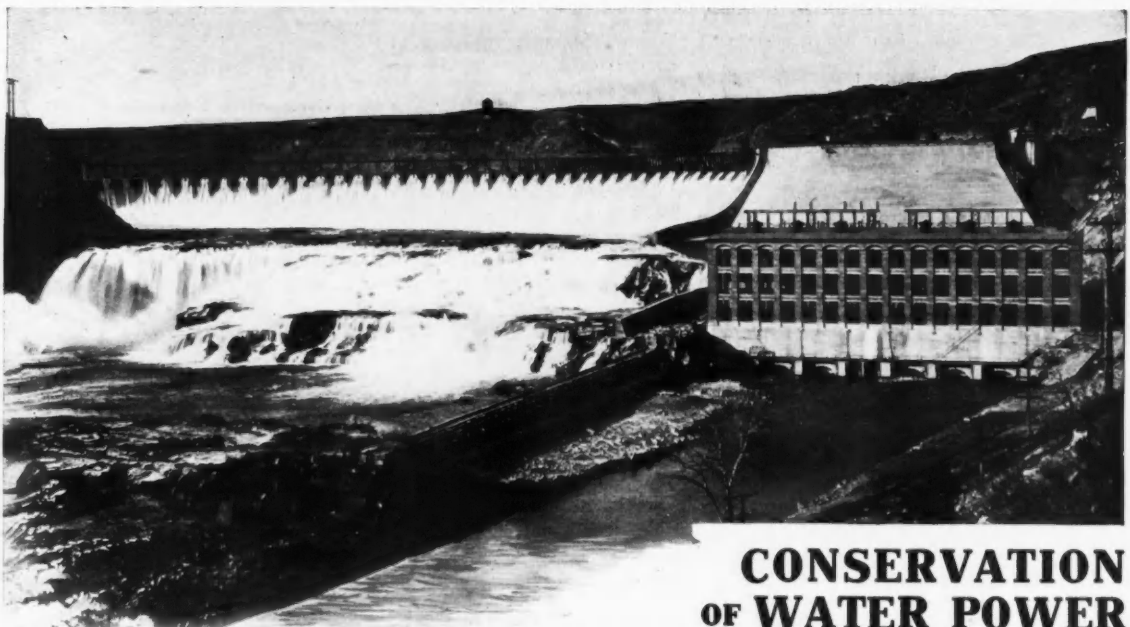
Martin L. Cramer, general purchasing agent of the American Writing Paper Company, is winning many laurels in the trap-shooting events, staged in connection with the annual golf tournament at Pinehurst, N. C. Last week news was sent here that Mr. Cramer was one of the three Massachusetts men who were successful with their guns.

WAX PAPER MANUFACTURERS' ASSOCIATION

The annual meeting of the Waxed Paper Manufacturers' Association was held in the State Apartments of the Waldorf-Astoria on Monday, February 3. Routine business was discussed, after which the following officers were elected for the coming year: J. D. Goldberg, president; W. J. Eisner, vice-president, and J. W. Hurlburt, secretary.

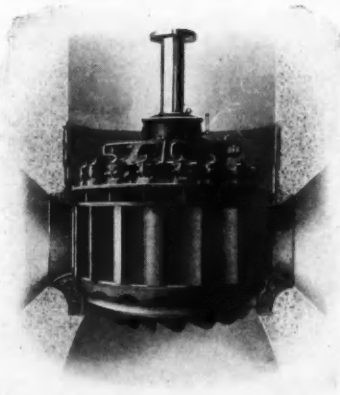
On the same day the Executive Committee of the Technical Association met in room 107 of the Waldorf-Astoria, and at this meeting it was practically decided that the Spring meeting of the association be held in Buffalo, and the Fall meeting will be held at Watertown, N. Y.

Fleschhand & Daniels Paper Company, Chicago, has incorporated to deal in paper stock and cardboard. The capital stock is \$25,000.

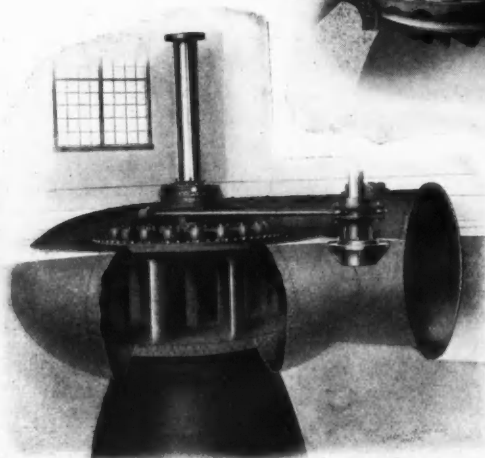


CONSERVATION OF WATER POWER BECAME A NATIONAL ISSUE DURING THE WAR

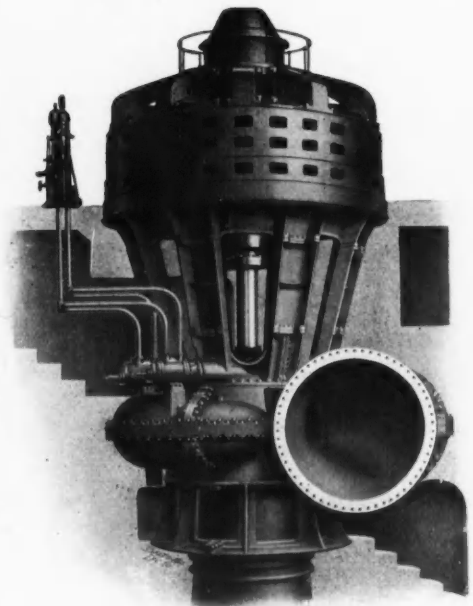
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CONDITIONS IN PHILADELPHIA MORE ENCOURAGING

PHILADELPHIA, February 3, 1919.—Everybody is agreed—or rather was before the exodus began to New York and the annual meeting leaving the trade today bare of the big fellows—that the past week brought a decided improvement to everybody—jobbers and stock men. The extent of the gain was dependent solely upon the enterprise shown in going after orders. There is a consensus of opinion in the trade that the consumer is now entirely prepared to place business at present prices having been brought to a realization of the fact that though there may be an easing off in quotations, the amount will not be large and not sudden, and that if he has needs for paper he had best satisfy the consumer with prompt deliveries rather than take a chance of disappointing by deferring to gain in price reductions. Demand was reported to be excellent all along the line—for practically every grade of the finished product.

In the paper stock market mill demand has increased for hard white and the better grades of old papers. The rag stock men also report increased inquiries from the mill and are jubilant that the improvement which usually does not show itself until February 15 came with the first of the month.

Prices are unchanged, but are rather firmly held all along the line and the outside rather than the inside of the range is the customary one.

Opens New York Office

Announcement was made by C. A. Morian, manager for the J. L. N. Smythe Company, that it has opened a New York office at 147 Metropolitan Tower. It will be in charge of Eugene Rose-dale, who has had many years' experience in the manufacturing and sales business. The New York office will be a sales agency, but particular attention will be given there to the export business which the Smythe Company is developing for the many lines of products for which it is agent. A cablegram was received during the week from the head of the firm announcing his safe arrival in Sydney, Australia, and adding "All is well."

Want Improvement in Traffic

The following members of the paper trade have formed a committee co-operating with a number of large firms in Philadelphia and adjacent New Jersey towns in a petition for relief from congestion in the ferry traffic between Philadelphia and Camden, sent to Elisha Lee, divisional Federal manager of railroads in this city; John H. Sinex, president of the Garrett-Buchanan Company; John B. Buzby, treasurer the William Mann Company, and Cooper H. Prinkett, assistant treasurer the William Mann Company. The appeal to Mr. Lee suggests the carrying out of the recommendations recently made by the Philadelphia Board of Trade to effect certain improvements in this vital artery of traffic over the Delaware River.

Garrett-Buchanan Co. Meets

The annual stockholders' meeting of the Garrett-Buchanan Company was held during the week. The election of officers resulted in the choice for another year of the old management: President and treasurer, John H. Sinex; vice-president and general manager, Morgan H. Thomas; second vice-president, Walter B. Buchanan; assistant treasurer, William E. Cole, and secretary, Lloyd Cowan. The directors are John H. Sinex, Morgan H. Thomas and Walter B. Buchanan. The Garrett-Buchanan delegates authorized to attend the convention were: Morgan H. Thomas, Joseph Weaver, Howard Satterthwaite, Edward Keller, Walter B. Buchanan. The firm has just placed in stock a very large line of calendars for 1920 for business advertising. A line of advertising fans for the summer season is ready.

Soldiers Return to Business

W. A. Hence, Director of Publicity of the D. L. Ward Company on January 30 received his discharge from the Sanitary Corps, Gas Mask Department. He has been assigned to the Philadelphia territory, in charge of production of the local manufacturing. Samuel W. Hodges, salesman, has been released from the navy and is back on the street. Another member of the sales force, Captain W. Russel Ketcham, who was wounded in the Argonne Forest, is back in the country and in the hospital at Camp Dix. He was in, Company M, Fourth Infantry, Third Division, which was cited for bravery at St. Mihiel and Chateau Thierry. He received his commission in April at Fort Niagara and was promoted to a captaincy on the field for bravery. The Ward delegation to the convention were G. W. Ward, W. W. Seary, E. T. Walter, W. A. Hence and T. J. Curry.

Another returned soldier with a splendid record is Harry Furlong, salesman for the Megargee-Hare Company, 12-14 South Sixth street. For several generations a Furlong has been in the cavalry service. Harry determined to keep up the family traditions. In the skirmish in Mexico, while in the United States cavalry, his horse slipped into a prairie-dog hole and he was injured. When the great war broke out Mr. Furlong tried to enlist, but was rejected as physically unfit. He managed, however, to get into the Twenty-eighth Division, 108th Field Artillery, as top sergeant, Camp Hancock, Georgia. During the week he received his discharge and now is back on the street.

General News of the Trade

James Andrews, Arthur Hayes, Thomas S. Furlong, Louis S. Megargee and T. M. Simpson attended the Paper Trade Convention.

C. C. Dorsey, brother-in-law of the Shryock brothers, constituting the firm of S. S. Shryock, and who recently moved to Downington from Annapolis, Md., to enter the Shryock mills with a view of learning the business from the bottom up, is ill of influenza.

The mill manager, Kurtz Robusser, also is on the sick list from influenza and therefore O. A. Shryock, who but recently recovered as did his brother, S. S. Shryock, Jr., had to take up the active management, while S. S. Shryock took charge of the Philadelphia offices. The mills are still running but 12 hours a day, a war-time basis, because labor conditions have made it impossible to resume full activity.

W. I. Larsen is the new Philadelphia salesman for the Angier mills, 106 North 13th street. He will look after the jobbing trade.

The Dill & Collins Company has had a very heavy demand for the booklet, non-technical in character and completely descriptive of the manufacture of paper, written by H. W. Taylor, vice-president. The work is authoritative, written in terse, simple language, is profusely illustrated and is most helpful to those dealing in paper in giving them such a survey of the production as to make them familiar with conditions and therefore better able to sell the product. Copies may be had by the trade on application to the Dill & Collins Company.

Another trade pamphlet in demand is that being distributed by the Paper Manufacturers Company as agents for Mosinee Kraft and other products of the Wausau Sulphate Fiber Company, Mosinee, Wis. The booklet illustrates in itself the various papers a unique feature being a scale of weights, approximate weights of rolls in various diameters, table showing the approximate running yards of the 9 and 15 inch diameter rolls. Large consumers of kraft may secure copies. The firm is the sole agent of the Wausau Company.

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The basketball team organized by employees of the Scott Paper Company has been making a record. It has won seven out of the nine games played this season. The captain is Lloyd E. Kauffman and the leading members are John D. Downham, forward; George R. Atkinson, manager, and John W. Lomas, center; William K. DeKalb, guard; S. Lewis Logan, forward; Lloyd E. Kauffman, guard, and William J. Pratt, forward. There are nine more games on the schedule. The executive committee of the Scott Company in general charge consists of A. H. Scott, vice-president, chairman; C. E. Fairbanks and H. Liebeck.

C. A. Burr of Burr Brothers, Delaware avenue, below Market street, is again at his desk after a week's illness from influenza.

CENSUS OF CANADA'S WATER POWERS

OTTAWA, Ont., February 3, 1919.—A census of the developed water power in the Dominion just completed by the Dominion Water Power Branch, in cooperation with the Dominion Census Bureau indicates a total developed water power capacity of 2,305,310 horsepower, and is several hundred thousand horsepower in excess of any estimate previously published.

Of the total waterpower developed, 1,727,471 horsepower is installed in central electrical stations, that is to say, in stations developing electrical energy for distribution and sale; 352,214 horsepower in plants owned and operated by pulp and paper companies, and 225,625 horsepower in manufacturing and general industrial establishments.

The central stations already constructed throughout the Dominion are designed for a machine installation of 530,000 horsepower in addition.

These figures do not include the 300,000 horsepower Queenstown plant, which the Hydraulic Power Commission of Ontario has under construction.

Per capita figures of hydro power developed for the Dominion show that Norway and possibly Sweden are the only countries where the per capita utilization of waterpower exceeds that of Canada. The most recent figures available for the United States would indicate a utilization of less than 100 hydraulic horsepower per thousand population, as compared with 276 horsepower per thousand population in Canada.

CERTAIN-TEED PRODUCTS CORP. STARTS NEW PLANT

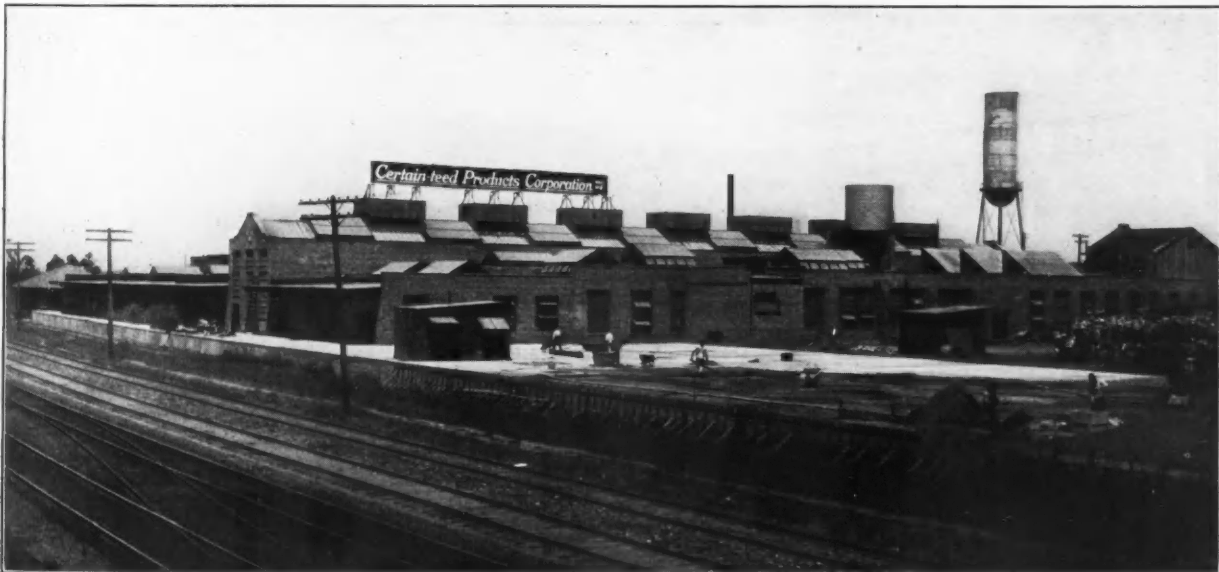
The new felt mill of the Certain-teed Products Corporation at Richmond, Cal., was started in September. The illustrations presented herewith show an outside view of the new plant and an interior view of the felt machine during its course of construction.

The felt machine is a Horne & Son 84-inch, two-cylinder machine, equipped with forty 48-inch dryer rolls. The machine is so designed, in fact the entire plant is so designed that felt is



INTERIOR VIEW OF CERTAIN-TEED PRODUCTS CORP.

produced along the most modern lines, the arrangement being such that raw materials are handled through the rag cutters, beaters, and over the felt machine in the most economical manner. The beater room is equipped with Dilt's beaters and two Shartle Brothers' Jordens. It is estimated that the new machine will produce a tonnage of 30 tons of felt pbr 24 hours.



EXTERIOR VIEW OF CERTAIN-TEED PRODUCTS CORP. AT RICHMOND, CAL.

“If It's Paper Get It At Andrews.”

R. P. ANDREWS PAPER CO.

WASHINGTON, D. C.

YORK, PA.

NORFOLK, VA.

*Correspondence solicited with mills desiring
connections in our cities.*

R. P. ANDREWS,
President and General Manager.

Oswego Falls Pulp and Paper Company

FULTON, NEW YORK

NEWSPRINT PAPER

ICE CREAM BOARD

OYSTER PAIL BOARD

BOTTLE CAP BOARD

MATCH BOARD

WOOD PULP BOARD

TEST CONTAINER BOARD

CHIP AND FOLDING BOX BOARD

FRUIT WRAPPERS

MILL WRAPPERS

SALES AGENTS FOR

SKANEATELES PAPER COMPANY, SKANEATELES, N. Y.

MILLS ON PACIFIC COAST RUN ALMOST AT CAPACITY

SAN FRANCISCO, January 30, 1919.—Pacific Coast paper mills are running almost full on news, wrappings, fruit paper and tissues. Prices are pretty well maintained and, although there will be a little uncertainty during the readjustment period following the war, manufacturers are optimistic as to the year's business. Some even predict that prices will go higher this year. Jobbers are holding off a little, with the war over. They will not buy paper in large quantities, as they do not wish to have big stocks while there is any probability of prices dropping.

The Coast mills will have to pay considerably higher prices for oil fuel this year, on new contracts.

Although there is comparatively little paper coming here from the East now, much interest is taken in the railroad freight situation, with higher rates proposed. Some jobbers are looking forward to future water competition via the Panama Canal.

The Export Situation

There has been some improvement in the export situation as far as freights are concerned, and there is more tonnage available on the Coast, although space cannot be secured on every vessel crossing the Pacific. The recent action of the United Shipping Board, in reducing freight rates about \$15 per ton from Pacific Coast ports to ports in Japan, China and Manila on Government owned vessels, has brought about a general reduction in ocean freights. For spot cargo, exporters can now obtain a pretty fair rate to Japan and China. The Australian market is firm and there are some inquiries from Java. Japan and China are still holding off, according to some exporters. More steamer space is now available for paper shipments to Australia and New Zealand. There has been an increase in the number of steamers released for the trade with the West Coast of South America.

Crown Willamette Paper Co. Busy

The Crown Willamette Paper Company is operating all of its plants on the Pacific Coast as nearly up to capacity as is practicable. Unusual conditions have prevailed during the past few months. There was a long dry fall followed by clear, cold winter weather. The water was so low in the Willamette River that the surplus stocks of ground wood pulp were exhausted. A good surplus is accumulated during the period of high water, each year, and it usually lasts until the fall rise in the river. Now the rivers are swollen by the rain and melting snow and are at the flood stage. The pulp grinders are busy and the mills are rapidly catching up with their supply of ground wood pulp, to supplement the sulphite pulp. The mills were short handed for several months, on account of influenza, but the labor situation is now almost normal. The plant at West Lynn, opposite Oregon City, is operating on news paper, with a daily output of about 200 tons. The big plant at Camas, Wash., is operating at about a normal rate of production, turning out large quantities of wrappings, bags, fruit paper and tissue, in addition to a daily output of 100 tons of news. The Columbia River is now at a high stage and the shortage of water power which prevailed for some time has been relieved.

To Manage Zellerbach Advertising

The West is a country of magnificent distances. This, possibly, accounts for the fact that many corporations on the Pacific Coast have for a long time operated their several branches as independent units to a greater or less extent. A change has come. Quite a few corporations along the Coast are placing all branches under centralized control to foster cooperation and coordination. Among the recent developments is the action of the Zellerbach Paper Company, with home office in San Francisco and branches (divisions now) in Oakland, Fresno, Los Angeles, San Diego, Portland, Tacoma, Seattle and Salt Lake. An announcement just issued by this company states: "In order

to better promote the interests of its several divisions on the Pacific Coast, the Zellerbach Paper Company announces the creation of a central advertising department and the appointment of Rollin C. Ayres as director of advertising, with headquarters in San Francisco.

Mr. Ayres has been engaged in the advertising business in San Francisco for many years, preparing and conducting advertising campaigns for clients with coast-wide connections.

Pacific Mills, Ltd.

The large modern plant of the Pacific Mills, Ltd., at Ocean Falls, B. C., is running right along, with a daily output of approximately 200 tons of news and about 40 tons of kraft paper. Much of the news paper is shipped to San Francisco. Some of the kraft paper, which is of superior quality, is exported, but there is a good market in the United States for the bulk of the output. The main difficulty at present with this plant is getting the paper to market. Shipments have to be made by water and two steamers on the Northern route have been disabled lately. The *Governor* ran on a reef and another steamer broke its crank shaft.

Hawley Pulp & Paper Co.

The Hawley Pulp & Paper Company's mills at Oregon City, Oregon, are running at practically full capacity on wrapping news, fruit paper, etc. It is learned that this company manufactured a considerable amount of paper for export during the past year, which helped out when the domestic demand was light. The Graham Paper Company is the sole selling agent of the Hawley company's products.

National Paper Products Co.

The new plant of the National Paper Products Company at Stockton, Cal., is in successful operation and a good market is developing. The quality of the goods turned out is excellent. Some export shipments of patent-coated board have already been made to the Orient. The company has salesmen working up business in Japan and other Oriental countries. Although high freight rates and Government restrictions made exporting difficult at first, conditions are now improving. Chip board of excellent quality is being made at Stockton. The fiber containers turned out are of very high quality. M. R. Higgins, president of the company, is much pleased with the goods and the outlook for business. John Creason, superintendent of the plant, has recovered from the effect of an operation for appendicitis. General Manager Mandel paid a visit to the company's San Francisco office during the week.

STARTS LOWE PAPER CO.

The cessation of the war has given back to the Philadelphia paper trade a well known character and a new business venture. Before the war began Morris P. Lowe was associated with Milton L. Macauley in business trading as the Keystone Paper Company, 148 North Third street. Mr. Lowe began his business career in January, 1910. When the call to the colors came both partners went to the front, the business being voluntarily liquidated. Mr. Lowe enlisted in the Signal Corps, U. S. A., and recently was honorably discharged. He has returned to the city and has established himself in the trade again as the Lowe Paper Company in the three story building, 33 Bank street. Rose Bloomer will be office manager. He will deal in coarse papers and twine and he proposes at an early date to expand considerably.

Mr. Macauley served in the Navy and expects to be discharged shortly, but whether he will re-enter business here or in New York has not been determined.

CHAS. F. BRAGG, President

GEO. E. CRAFTS, Treasurer

Orono Pulp & Paper Co.

Bangor, Maine

MAKERS OF HIGH GRADE MANILAS

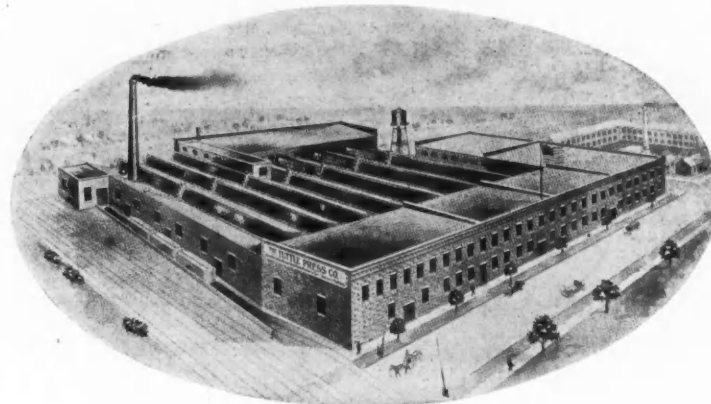
Kraft
 Bag
 Wrapping
 Coating
 Waxing
 Tissue
 Colored Specialties

Range of weights from 24 x 36—10 to 150 lbs.

Daily Product: 60 Tons Paper and 50 Tons Sulphite Pulp.

The Tuttle Press Company

APPLETON WISCONSIN



Mills at Ashland, Wis.

MANUFACTURERS OF

Plain Decorated Napkins, Plain Decorated Crepe Papers, Paper Towels,
 Milk Bottle Caps, Adding Machine Rolls, Box Covering Papers, Printed
 Tissue Wrappers.

CONDITIONS IN CHICAGO ARE REPORTED UNCHANGED

[FROM OUR REGULAR CORRESPONDENT.]

CHICAGO, February 3, 1919.—The condition of the paper market here showed little change last week. Reports indicate a good demand, but many inquiries are being made which do not develop into orders. The truth of the matter seems to be that buyers are not certain that lowest prices for the winter have been reached, and are inclined to play safe until they have made certain about this. They are buying little more than enough paper for their current needs. If present prices remain firm for a couple of weeks the buying will improve, but if further declines take place, the buyers will pat themselves on the back and declare that they guessed correctly, and will continue their waiting policy. Mills realize that the present condition of the market makes it imperative that prices should not become lower in the near future. The jobbers who had on hand large stocks when the war closed are selling them out quietly, but as rapidly as they can. They are buying little in the present market, and as all of the middle western jobbers were carrying good stocks when the conflict ended, it can readily be seen why there is not an overwhelming demand for paper at the present time. If there was any change in the market during the past week it was in bond papers. Bond papers were a little weaker. Book papers were firm for the first time in several weeks. News print shows much strength, and there is no chance for a decline, of course, in the price of this grade of paper.

Sell Lee Paper Co. Stock

James McGuirk, of the West Virginia Pulp and Paper Company, trustee for the creditors in the matter of the Lee Paper Company, 703 South La Salle street, has finished the work of selling the stock of the company for creditors. Mr. McGuirk succeeded in getting \$6,200 for the paper which, in view of the fact that the sale was forced, is regarded as a fine showing. The figure is close to the cost price of the paper. He received \$3,900 for the paper carried in stock at the La Salle street headquarters of the company, and \$2,300 for the warehouse stock. At the La Salle street location he was obliged to sell in a hurry, because of an expiring lease. Mr. McGuirk was offered \$1,800 several weeks ago by an eastern buyer for the whole stock of paper. The buyer said he knew the line, and declared no more than this amount could be realized for the paper selling in the open market. Mr. McGuirk refused the offer, with thanks, and then went ahead and got more than three times the amount offered.

Gaw O'Hara Envelope Co. in New Quarters

The Gaw O'Hara Envelope Company has just moved into its new home at Franklin and Sacramento avenues, a fine new red brick building, mill construction, 180 feet deep by 250 feet long. The building carries two impressive towers, 40 feet high, in which will be installed immense clocks. The building is equipped with the very latest type of machinery, which is placed so that all stock enters the building and moves in a circular direction, eliminating all lost motion. The welfare of the employees has also been taken care of, and a fine modern lunch room installed for their convenience. Four years ago the Gaw-O'Hara Company occupied one-half of the eighth floor at 425 South Wells street, a very limited space, and in this brief period has gone into its new home, occupying five times the space they originally started in. The progress is due to quality, service and judicious advertising.

General News of the Trade

Ray Russell, popular representative of the Marathon Paper Mills of Rothschild, Wis., has returned from a middle western

business trip, on which he met with his usual brand of success. Mr. Russell will be among those who will visit New York to attend the annual convention of the National Paper Trade Association and the American Pulp and Paper Manufacturers' Association.

Fred Dresskell, manager of the Chicago office of the Champion Coated Paper Company, visited in Cleveland last week. W. D. Randall, treasurer of the company, accompanied by Mrs. Randall, visited in the city during the week. H. W. Suter, manager of the cardboard department of the mill, has returned to Hamilton after spending a few days in the city.

A. D. Aiken, of Wright, Barrett & Stilwell, paper dealer of St. Paul, Minn., was among the visitors in the local market this week.

Owing to the fact that the Chicago Automobile Show is now being held, a large number of western paper men are expected in the city during the week. They plan to arrive a couple of days early, and visit the show on their way to New York to attend the paper trade convention. Mill men have received requests to make reservations for their customers and friends at the local hotels, and are having quite a time, owing to the crowded condition of the hostleries.

Douglas Wray, of the Douglas Wray Paper Company, has returned to the city after a three weeks' business trip among the mills.

Louis Dwyer, of the Seaman Paper Company, has returned from a trip among the mills.

Ed. French, of the French Paper Company, Niles, Mich., spent a couple of days in the city during the week.

W. E. Perry, representative of the Crocker-McElwain Company, of Mt. Holyoke, Mass., has returned to his office after a western business trip.

C. H. Phipps, representative of the Watab Pulp and Paper Company, has returned to the mill at Sartell, Minn., after spending a few days in this market.

Stewart Waring, manager of the paper mill of Sears, Roebuck & Co., is back in the city after an out-of-town business trip.

A. M. Forsythe, of the Forsythe Paper Company, has returned from a southwestern business trip and is planning to attend the eastern conventions.

Carl Hoffman, a former paper broker, died of pneumonia here this week, after an illness of a few days. Mr. Hoffman has not been in the field for several years, but in his day was well known in the trade. He handled bond and ledger lines.

Harry Williams, of the C. L. La Boiteaux Company, has returned from Cleveland, where he attended a meeting of the Western Paper Box Manufacturers' Association.

Judge M. Hawk, erstwhile Assistant Chief of Manufacturing Division of War Industries Board, recently returned from Washington, after having taken up the ruling on the use of the kraft envelope with the Third Assistant Postmaster, and indications are now that a new ruling for the use of natural kraft envelope will be made shortly.

D. F. Peck Paper Company has recently moved from the Fisher building to 866 Larrabee street.

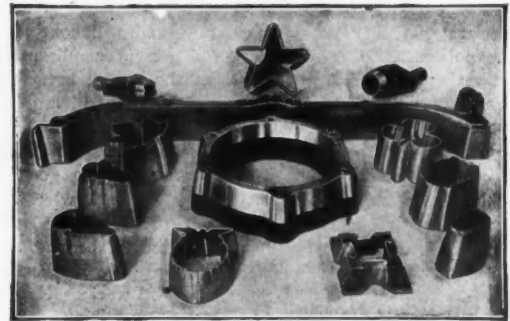
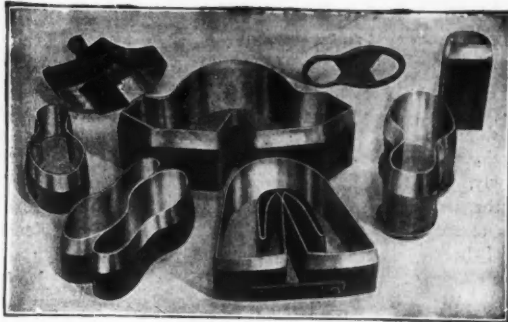
C. S. Thoms, of the Thoms Brothers Paper Company, is among those who plan to attend the eastern conventions.

Frank Borchers, of the Menasha Paper Company, who has been in the East, is expected to return to the city early next week.

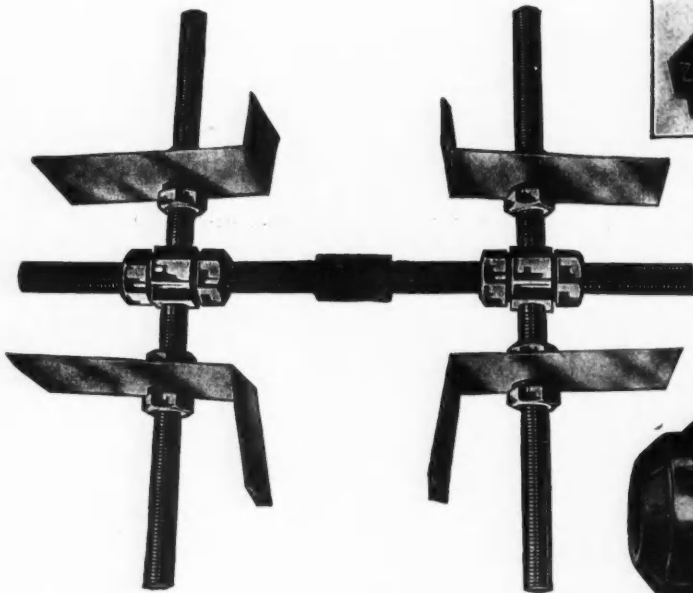
The Paterson Card & Paper Company, Paterson, New Jersey, has incorporated to manufacture paper of all kinds. The capital is placed at \$25,000.

CUTTING DIES

For Dieing Out Envelopes, Labels, Lithographs and Advertising Novelties, Boxes, Wrappers, Gaskets, Toys, Paper Napkins, Drinking Cups, etc., etc.



All Work Warranted to Give Satisfaction



We use the best of iron and steel stock, and manufacture strictly first-class dies.



We shall be pleased to furnish prices for any style of dies on receipt of paper patterns. Please state whether they are to be used under a machine or with a mallet.

THE HOGGSON & PETTIS MFG. CO.
NEW HAVEN, CONN., U. S. A.

AFTER INQUIRY SAYS PRICES WILL NOT MARKEDLY CHANGE

ATLANTA, Ga., January 30, 1919.—S. L. Sloan, president of the Sloan Paper Company, has recently been making a thorough inquiry into the paper situation, with a view to determining as accurately as possible what the conditions will be with reference to supplies and prices during 1919.

A very thorough canvass of the situation has caused Mr. Sloan to reach the conclusion that there is not likely to be any marked change in prices for some time to come.

Opinions From a Large Number of Manufacturers

"I took up the subject with a number of the largest manufacturers of paper," said Mr. Sloan, "and, while their replies varied, they practically all agreed that the cost of materials and labor are such as to effectually prevent any reduction in prices by the mills, and that the mills would be unable to operate on a lower price basis. The general opinion is pretty well expressed by one manufacturer, who said:

"The volume of orders on our books will keep us busy for some time, and we fully believe that by that time people will catch their breath and go on again. If domestic consumers, however, keep out of the market, we have for the present a large demand for export at apparently any figures, so long as the goods can be obtained. As long as this condition remains, there is no serious danger of a break in the market.

"There is really no reason in the costs of manufacture which would justify lower prices. Labor is still scarce and receiving maximum wages, and we do not think any change will take place in this respect this winter. All raw materials are high, and the wood now being cut in the forests for next year is costing more by a very substantial sum than that which is being turned into pulp today. The prices turned in on contracts beginning January 1, are higher than we are now paying, and subject to change on 30 days' notice. The manufacturer says they cannot come down, but may go up.

"We believe ourselves that, generally speaking, prices will remain firm; we do not look for much increase, neither do we expect a drop."

Costs More to Make Paper

"Another manufacturer wrote in this way:

"The manufacturer of paper is at this moment certain of only just one thing: namely, that for the early part of 1919 it will cost more to make paper than it is costing now. There has been a little bit of a shortage of sulphite pulp all through the year. There is not quite enough to go around, and there is little likelihood of this supply becoming any larger. On other materials the supply and demand is pretty nearly even, but prices all along the line are firm.

"Since August, 1914," continued Mr. Sloan, "there has been a tendency on the part of consumers to hold back their orders at the time when they would normally have purchased, until they realized that prices were going up and not down, and then a great volume of orders would be rushed in and the mills would advance prices sufficiently to stop the flood.

"There have been five of these periods of hesitation and subsequent hysterical purchasing since August, 1914, and there is now some indication that we are passing through the early part of a similar period, as there seems to be a tendency on the part of consumers to hold off, doubtless in the expectation of lower prices; and as these lower prices will not appear, there is likely to be another flood of orders and perhaps further advances in prices by the mills, since that is the course usually followed by the mills when they have booked all the orders they can handle.

"Thousands of firms have been so busy with war orders that they have not issued any catalogue or other printed matter for

from one to four years, and many of these must now issue catalogues and other printed matter as soon as practicable. If these firms withhold their purchases of paper in the expectation of lower prices, it seems certain that they will all be buying at once when they find out that prices are not going to drop, with the result that the avalanche of orders will be greater than we have yet seen, with a further advance in prices, just as has occurred before.

"And, besides the domestic business, and that done with South America, Australia and Japan, we now have England, France and Italy desperately in need of paper supplies, and those countries will take an immense amount as soon as it can be shipped to them.

Decrease in Immigration

"To those people who seem to think that the return of our soldiers to civil life will furnish a large surplus of labor, with consequent lower costs of manufacture, it may be well to point out that, for the twelve years prior to 1915, foreign immigrants, a majority of whom were laborers, were coming into the country at the average rate of about 1,000,000 each year; whereas, during the four years 1915 to 1918, inclusive, the average has been about 300,000 per year. For the four years, this makes a total falling off in immigration of 2,800,000, without taking into consideration the many foreign workmen who returned to their own countries in that period. And this reduction in immigration is likely to continue for a number of years, on account of the very high wages now being paid in foreign countries.

Wages High in Norway and Sweden

In Norway and Sweden, for instance, from which countries we formerly obtained some pulp for paper, wages are now higher than in the United States, and mechanical wood pulp was recently selling in those countries at about \$59 per ton, whereas, the same article in Canada is worth around \$38 per ton. In England it is worth around \$110 per ton. So it can be seen that an increase in the supply of ships is not likely to reduce the cost of pulp, since we are more likely to export pulp to those countries than to import the material from them.

"The low prices before the war were due to Swedish competition, as there was no duty on imported wood pulp, but, even if Swedish prices were low enough to justify importing from that country—which they decidedly are not—none of it could possibly come in until next June, even if we had plenty of ships, as navigation closes in that country on December 1, on account of ice.

"All of these facts—and they are facts," concluded Mr. Sloan, "have brought me to the conclusion that no one need expect any material decline in the prices of paper for some time to come; and the firm or individual who holds off his purchases of paper in the hope of lower prices is likely to lose money by it, besides losing the benefit of the paper which he could use to good advantage for his catalogue or other printed matter."

Although Mr. Sloan was seeking information only regarding conditions affecting the manufacture of and prices on paper, it will be readily seen that these same conditions bear very strongly on prices of other manufactured goods, and a study of the facts presented must lead to the conclusion that we are likely to see prices continue at about present levels for some time to come.

BOARD DIVISION MEETS

The annual meeting of the Board Division of the American Paper & Pulp Association was held in the State Apartments of the Waldorf-Astoria, on Wednesday afternoon. Only routine business was discussed after which an election of officers was held at which all of last year's officers were re-elected.

MAINE COATED PAPER COMPANY

Mill and General Sales Offices: RUMFORD, MAINE
New York Office: ROOM NO. 1040, FIFTH AVENUE BUILDING

NEW YORK
MANUFACTURERS OF

POLAR WHITE

ALSO

Coated Lithograph, Covers and all Grades
of Coated Book

AGENTS

Stone & Andrew, Inc., Boston, Mass.

Seaman Paper Co. Chicago, Ill. Seaman Paper Co. New York City

SPECIALISTS IN THREE LINES

Perkins Adjustable Blade Ventilating Fans

Used in Leading Mills throughout this country, Canada
and Mexico.

Perkins Patented Paper and Cotton Calender Rolls

With Unique Advantages distinguishing them from all
other Calender Rolls.

The Mullen Paper Testers and Jumbo Mullen Testers

Standard of the United States Government and the
Paper Trade of America.

B. F. PERKINS & SON, Inc., Holyoke, Mass., U. S. A.
Sole Manufacturers

Features of New Income Tax Measure

This Income Tax Department Is Conducted by Wolff, Miller & Co., Certified Public Accountants, at 1328 Broadway, New York—Questions on Income Taxes Submitted by Readers Will Be Answered If Addressed Either to the Lockwood Trade Journal Company, or Direct to Wolff, Miller & Co.—How the New Measure Will Affect Taxation of Corporations.

The Senate and House Committees are now in conference for the purpose of adjusting the differences in the tax bills as adopted by the House and Senate respectively. The House bill was designed to produce a revenue of \$8,000,000,000, while the Senate bill was framed to produce a revenue of \$6,000,000,000, in accordance with Secretary McAdoo's recommendation. It is almost certain that the Senate measure will be approved with but slight, if any modifications. A previous article dealt with the taxation of individuals and partnerships. It is our purpose to present in this article, in a non-technical manner, the important features of the new revenue measure as it will affect the taxation of corporations.

Under the proposed measure, corporations are subject to two kinds of taxes:

1. War Excess Profits Tax.
2. Normal Tax.

1. *War Excess Profits Tax.* The proposed law contemplates the calculation of this tax in two different ways, and the corporations are required to pay the higher of the two computations. These two methods are as follows:

- A. War Profits Tax.
- B. Excess Profits Tax.

The combination of the two resulting in the term "War Excess Profits Tax," as used in the law.

A. *War Profits Tax.* Under this method of calculation, the law taxes corporations to the extent of 80 per cent of increased profits of 1918, as compared with the average profits for the years 1911, 1912, 1913, known as the pre-war period. It is apparent that the Senate in making this provision, was of the belief that such increase in profits in 1918, as compared with the pre-war period, was in most cases attributable directly to war conditions. The amount of this tax is equal to 80 per cent of the difference between the net income for 1918, and the sum of the following:

- (a) The average amount of profits for the pre-war period, 1911, 1912, 1913.
- (b) Ten per cent of any increase of invested capital for 1918, as compared with the pre-war period (or less 10 per cent of any decreased capital).
- (c) \$3,000 specific exemption.

The sum of a, b and c, is designated in the law as the "War Profits Credit," which is the amount of income entirely exempt from taxation under this head. To illustrate, the war profits tax in the case given below is 80 per cent of the difference between the net income of 1918, amounting to \$100,000, and the war profits credit amounting to \$55,500, a difference of \$44,500 income taxable at 80 per cent, or a tax of \$35,600.

B. *Excess Profits Tax.* After making the above provisions, the question arose of the taxing of corporations which were very prosperous before the war, and therefore would show very little difference between the profits for 1918 and those of the pre-war period. Under the war profits method, the taxation of such corporations would be negligible even though the profits for 1918

were large. Hence, in order to tax such corporations, provision was made for excess profits taxes similar to the excess profits tax of 1917. This method allows a reasonable return upon the investment, which reasonable return is exempted from taxation, and taxes heavily any profits in excess of the reasonable return. The proposed law designates as a reasonable return 8 per cent of the invested capital, plus \$3,000 specific exemption. This reasonable return is known as the "Excess Profits Credit," and represents the amount which is non-taxable under this head. The balance of the net income after deducting the Excess Profits Credit, is taxable according to certain percentages and designated in the law as the "First Bracket" and the "Second Bracket." This results in a 30 per cent tax on income in excess of the Excess Profits Credit, but not exceeding 20 per cent of the invested capital (First Bracket), and 60 per cent of all net income in excess of 20 per cent of the invested capital (Second Bracket). For example, in the case below, the "Excess Profits Credit," or reasonable return would be 8 per cent of \$250,000 invested capital, or \$20,000, plus \$3,000 specific exemption, or a total excess profits credit of \$23,000, leaving a taxable balance of \$77,000, which is then taxable according to percentage outlined.

1. *War Excess Profits Tax.* A comparison of the War Profits Tax and the Excess Profits Tax in the case below, shows that the excess profits tax is greater, being \$38,100, as against only \$35,600 of the war profits tax. The war profits tax of \$38,100 is the amount of the war excess profits tax that this corporation will pay.

2. *Normal Tax.* The Normal Tax of the corporation is 12 per cent of the net income, after deducting from such Income the amount of the war excess profits tax, plus the specific exemption of \$2,000. In the case worked out here, the normal tax is 12 per cent of \$59,900 (which is the total net income of \$100,000, less the war excess profits tax of \$38,100, and a specific exemption of \$2,000), resulting in a normal tax of \$7,188.

Total Tax. Therefore, to determine the entire tax payable by this corporation, the war excess profits tax of \$38,100, and the normal tax of \$7,188, must be added, giving a total tax of \$45,288, which here is approximately 45 per cent of the profits earned for the year 1918:

Illustrative Case

Taxation of Corporation for the Year 1918 Under Proposed Law.
Basic Facts—

Invested capital in 1918.....	\$250,000
Profits for year 1918.....	100,000
Invested capital, pre-war period.....	125,000
Profits, pre-war period	40,000

In this case the tax would be calculated as follows:

A.—WAR PROFITS TAX.	
Profit for 1918.....	\$100,000
Deduct War Profits Credit:	
(a) Average net profits for pre-war period	\$40,000

J. R. Carter, Treas	DIRECTORS		H. L. Carter, Sec'y
C. A. Young	J. C. Kennedy	G. H. Lowe, Pres.	E. A. Carter
		W. L. Carter	

CARTER, RICE & CO.

CORPORATION

BOSTON

-:-

-:-

-:-

-:-

MASS.

PAPER MERCHANTS

KINGSPORT PULP CORPORATION

MANUFACTURERS OF

SODA PULP

KINGSPORT

.

TENNESSEE

(b) Ten per cent of increase of average invested capital:		
Averaged capital for 1918...	\$250,000	
Averaged capital — Pre-war period	125,000	
Ten per cent	\$125,000	12,500
(c) Specific exemption		3,000
Total exempt from tax.....		55,500
Amount taxable at 80 per cent.....		\$44,500
Amount of Tax, \$35,600.		
B.—EXCESS PROFITS TAX.		
Profit for 1918.....	\$100,000	
Deduct Excess Profit Credit—		
Eight per cent of invested capital of \$250,000.....	\$20,000	
Specific exemption		3,000
Total credit or amount of income exempt.....	\$23,000	
Amount of Taxable income (net) (\$100,000—\$23,000 equals \$77,000) as follows:		
Amount in excess of credit not greater than 20 per cent of invested capital—Tax 20 per cent—		
Twenty per cent of invested capital (\$250,000).....	\$50,000	
Less excess credit as above.....		23,000
(First Bracket) Balance, \$27,000 taxable at 30 per cent		\$8,100
(Second Bracket) Remainder of net income, \$50,000, taxable at 60 per cent.....		30,000
Total income \$100,000.		
Excess profits tax.....		\$38,100

Since the Excess Profits Tax is the larger of the two, the Corporation will pay a War Excess Profits Tax of \$38,100.

2. NORMAL TAXES.

Net income for the year 1918.....	\$100,000	
Deduct—		
Excess Profits Taxes	\$38,100	
Specific exemption	2,000	
		40,100
Amount of income subject to normal taxes at 12 per cent		\$59,900
Amount of Normal Tax, \$7,188		
TOTAL TAX.		
War Excess Profits Tax.....	\$38,100	
Normal Tax		7,188
Total tax.....		\$45,288

In order to protect the small corporations there is a limitation of the war excess profits tax which says that the war excess profits tax shall not exceed 30 per cent of the net income in excess of \$3,000, and no greater than \$20,000, plus 80 per cent of the amount of net income in excess of \$20,000. This, however, is not intended to increase the tax in any case as figured under the War Profits or Excess Profits methods. In the above case, if applied, this method would show the following tax:

Exempted income	\$3,000	
Taxable at 30 per cent.....	17,000	\$5,100
Taxable at 80 per cent.....	80,000	64,000
Net income	\$100,000	....
Amount of tax.....		\$69,100

Since the application of this clause results in a higher tax than

shown by the war excess profits tax, this limitation does not apply here. It is only where the taxes calculated according to this method are lower than the war excess profits tax that this tax will apply and be used instead of the war excess profits tax.

Special provision is made for the calculation of war excess profits taxes of corporations which were not in existence during the pre-war period, or where the profits during such pre-war period were less than 10 per cent of the invested capital.

Some of the noteworthy facts of this law discussed in our previous article on individuals and partnerships also apply to corporations, such as deducting losses sustained in one year and applied against the profits of another year, refund of taxes, revaluation of inventories, etc. There are a number of other special features which it is impossible to discuss at this time for lack of space, but which will be covered in succeeding articles.

Conclusion

It is evident that those corporations which did not keep proper books of account for the years 1911, 1912 and 1913, will be very much handicapped so far as this tax law is concerned, and it would be advisable in a great many cases to have the records of such years examined with a view to determine the exact income for such years so that the taxpayer will be fully credited for such earnings. This tax law practically means that the taxpayer must be very careful to keep his accounts in such shape as to enable his taxable income to be accurately determined.

SUGGESTS WEEKLY PAPER REPORTS

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., February 3, 1919.—The Federal Trade Commission has recently sent out the following communication to paper manufacturers in which it suggests that reports on paper production and stock on hand be sent in monthly instead of weekly. The communication follows:

"The Commission has under consideration the advisability of substituting monthly schedules for the weekly reports on production, shipments and stocks which you have been furnishing. This would necessitate the elimination of our mid-month reports, but would greatly reduce the work both for the mills and for the Commission.

"The Commission is desirous of making its statistical service as useful as possible to the manufacturers and does not wish to make the change above referred to unless it is agreeable to the mills which are furnishing the figures and getting the reviews.

"If you prefer to retain the weekly report instead of the proposed monthly report will you kindly notify the Commission by return mail. If we do not hear from you, we will assume that you have no objection to the contemplated change.

"If the proposed substitution is adopted, you will be notified and new printed schedules will be sent you. This change will not be made prior to March 1."

Officials of the Commission are receiving answers from the paper manufacturers intimating that if these figures are collected monthly instead of weekly that it will save much trouble and will simplify the mills' work very materially. It is expected that this new arrangement will go into effect about March 1 and this, of course, will cut out the mid-month report.

MASON-PERKINS INCORPORATES

The Mason-Perkins Paper Corporation has filed articles with the Secretary of State at Boston, Mass., to carry on the business of paper manufacturing, with capital stock placed at \$400,000. The incorporators are Eugene Carpenter of Falmouth, Charles Hamlin Carpenter of Bristol, V. H. and Nathan S. Day of Boston.

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THOSE PRESENT AT THE NATIONAL PAPER TRADE MEETINGS

The following were present at the session of the National Paper Trade Association at the Waldorf-Astoria, Tuesday, February 4:

J. M. Abell, J. W. Butler Paper Company, Chicago, Ill.
C. F. Anderson, Anderson Paper & Twine Company, Altoona, Pa.

G. E. Beggs, Hubbs & Hastings Paper Company, Rochester, N. Y.

Arthur W. Blackman, D. F. Munroe Company, Boston, Mass.
H. L. Blake, Fort Hill Paper Company, Boston, Mass.

James E. Bradley, Bradley-Reese Company, Baltimore, Md.

J. A. Carpenter, Kansas City Paper House, Kansas City, Mo.

Hubert L. Carter, Carter, Rice & Co., Corp., Boston, Mass.

G. E. Caskie, Jr., Caskie Dillard Company, Lynchburg, Va.

H. H. Conklin, Georgia Irish Paper Company, Buffalo, N. Y.

A. J. Corning, Hubbs & Corning Company, Baltimore, Md.

Harry C. Davis, Whiting Patterson Company, Philadelphia, Pa.

Stark S. Dillard, Caskie & Dillard Company, Lynchburg, Va.

J. J. C. Downey, Zellerbach Paper Company, San Francisco, Cal.

A. E. Duberg, Domestic Mills Paper Company, 96 & 98 Reade street, New York, N. Y.

Albert M. Eaton, A. M. Eaton Paper Company, Boston, Mass.

C. R. Field, Field, Hamilton, Smith Paper Company, Omaha, Neb.

Roger I. Fisher, Fisher Brothers Paper Company, Fort Wayne, Ind.

James J. Flaherty, Great Falls Paper Company, Great Falls, Mont.

Frank E. Floyd, Crescent Paper Company, Indianapolis, Ind.

N. L. R. Gardner, R. L. Greene Paper Company, Providence, R. I.

E. C. Goldsword, The Globe Paper Company, Cleveland, O.

H. A. Grosvenor, R. H. Thompson Company, Buffalo, N. Y.

H. A. Grover, Kingsley Paper Company, Cleveland, O.

L. L. Hanlon, The Alling & Cory Company, Buffalo, N. Y.

Edward F. Herrlinger, Herrlinger & Company, Cincinnati, Ohio.

S. J. Hodgins, Central Topeka Paper Company, Topeka, Kan.

L. F. Hout, George Irish Paper Company, Buffalo, N. Y.

Robert Johnston, Old Dominion Paper Company, Norfolk, Va.

Ellis R. Jones, Kansas City Paper House, Kansas City, Mo.

M. F. Kirk, Southwestern Paper Company, Dallas, Texas.

D. S. Landau, Alling & Cory Company, 200 Fifth avenue, New York, N. Y.

V. H. Larsen, Crescent Paper Company, Indianapolis, Ind.

R. B. Laughlin, New York Paper Company, Baltimore, Md.

A. W. Leslie, The John Leslie Paper Company, Minneapolis, Minn.

J. Leslie, John Leslie Paper Company, Minneapolis, Minn.

Frank H. Merrill, Andrews Paper Company, Boston, Mass.

W. R. Mershon, Standard Paper Company, Milwaukee, Wis.

O. A. Miller, The Central Ohio Paper Company, Columbus, Ohio.

C. H. Morian, The J. L. N. Smythe Company, 30 South 6th Street, Philadelphia, Pa.

Robert J. McGregor, B. F. Bond Paper Company, Baltimore, Md.

H. E. Platt, J. L. N. Smythe Company, 30 South 6th Street, Philadelphia, Pa.

W. W. Platt, The Alling & Cory Company, Rochester, N. Y.

F. W. Power, Carter, Rice & Company, Boston, Mass.

Charles S. Proctor, Proctor Paper Co., Boston, Mass.

J. Albert Robins, Robins Paper Company, Baltimore, Md.

R. Roesch, The Union Paper & Twine Company, Baltimore, Md.

H. Newton Schillinger, Bradley-Reese Company, Baltimore, Md.

Edward Sebastian, Brown Paper Company, St. Louis, Mo.

Walter Seinsheimer, The Seinsheimer Paper Company, Cincinnati, Ohio.

H. J. Severance, Hubbs-Howe Company, Buffalo, N. Y.

A. W. Sielaff, A. E. Sielaff Paper Company, Milwaukee, Wis.

A. E. Stevens, Choep-Stevens Paper Company, Detroit, Mich.

Morgan H. Thomas, Garrett, Buchanan & Co., 18 South Sixth street, Philadelphia, Pa.

William W. Thompson, Choep-Stevens Paper Company, Detroit, Mich.

F. Bendel Tracy, Fort Hill Paper Company, Boston, Mass.

D. F. Teetor, R. M. Myers & Co., Rochester, N. Y.

Simon Walter, S. Walter, Incorporated, Philadelphia, Pa.

E. T. Walter, Jr., D. L. Ward Company, Philadelphia, Pa.

George W. Ward, D. L. Ward Company, Philadelphia, Pa.

Joseph S. Weaver, Garrett-Buchanan Company, 18 South Sixth street, Philadelphia, Pa.

W. S. Wilcox, D. L. Ward Company, Philadelphia, Pa.

T. F. Willis, Chatfield & Woods Company, Cincinnati, O.

F. W. Wilson, Blake, Moffett & Towne, San Francisco, Cal.

C. F. Wright, Wright, Barrett & Stilwell Company, St. Paul, Minn.

Edward H. Stone, Stone & Forsyth Company, Boston, Mass.

The following were present at the meeting of the National Paper Trade Association Wednesday, February 5:

J. M. Abell, J. W. Butler Paper Company, Chicago, Ill.

A. A. Adams, R. L. Greene Paper Company, Providence, R. I.

Charles Addoms, Miller & Wright Paper Company, New York, N. Y.

Joseph T. Alling, Alling & Cory Company, Rochester, N. Y.

B. M. Anderson, Carpenter Paper Company, Omaha, Neb.

Ross P. Andrews, R. P. Andrews Paper Company, Washington, D. C.

Oliver G. Bauman, R. H. Thompson Company, Buffalo, N. Y.

Leon Beck, Charles Beck Company, Philadelphia, Pa.

C. N. Bicknell, The Union Paper & Twine Company, Cleveland, O.

Fred E. Blunden, The Blunden-Lyon Company, Chicago, Ill.

B. F. Bond, B. F. Bond Paper Company, Baltimore, Md.

B. F. Bond, Jr., B. F. Bond Paper Company, Baltimore, Md.

Cutler Bonestell, Bonestell & Co., San Francisco, Cal.

Jas. E. Bradley, Bradley, Reese Company, Baltimore, Md.

Arthur L. Brown, The Diem & Wing Paper Company, Cincinnati, O.

John C. Burke, Baltimore Paper Company, Baltimore, Md.

Bert Carpenter, Carpenter Paper Company, Omaha, Neb.

J. A. Carpenter, Kansas City Paper House, Kansas City, Mo.

Hubert L. Carter, Carter, Rice & Co., Corp'n, Boston, Mass.

G. E. Caskie, Jr., Caskie, Dillard Company, Lynchburg, Va.

John A. Church, Cincinnati Cordage & Paper Co., Cincinnati, O.

R. M. Clements, Clements Paper Company, Nashville, Tenn.

P. H. Cifford, Lesh Paper Company, Indianapolis, Ind.

Thomas N. Cook, Cook-Vivian Company, Boston, Mass.

T. K. Cree, Alling & Cory Company, Pittsburgh, Pa.

D. C. Culbertson, Lewerth & Culbertson, 72 Duane Street, New York, N. Y.

F. B. Cummings, The Whitaker Paper Company, Boston, Mass.

Charles W. Dau, Carpenter Paper Company, Des Moines, Iowa.

Stark S. Dillard, Caskie-Dillard Company, Lynchburg, Va.

Harry F. Donahue, Molten Paper Company, Philadelphia, Pa.

J. J. C. Downey, Zellerbach Paper Company, San Francisco, Cal.

A. A. Duer, Barton, Duer & Koch Paper Company, Baltimore, Md.

C. R. Field, Field, Hamilton, Smith Paper Company, Omaha, Neb.

James J. Flaherty, Great Falls Paper Company, Great Falls, Mont.

F. E. Floyd, Crescent Paper Company, Indianapolis, Ind.

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 A. H. Geyler, Alling and Cory Company, Pittsburgh, Pa.
 W. N. Gillett, Chicago Paper Company, Chicago, Ill.
 H. L. Goodman, Stone & Andrew, Inc., Boston, Mass.
 H. F. Haise, Whiting Patterson Company, Philadelphia, Pa.
 A. C. Hall, John Carter & Co., Inc., Boston, Mass.
 A. E. Ham, A. Storrs Bement Company, Boston, Mass.
 Harper Paper Company, A. B. Murtha, 540 Pearl street, New York, N. Y.
 S. J. Hodgens, Central Topeka Paper Company, Topeka, Kansas.
 William H. Holden, Holden & Hawley, New York.
 Forest Hopkins, The Paper Mills Company, Chicago, Ill.
 Amandus Horn, The Chatfield & Woods Company, Pittsburgh, Pa.
 Robert Johnston, Robert S. Johnston, Old Dominion Paper Co., Norfolk, Va.
 Ellis R. Jones, K. C. Paper House, Kansas City, Mo.
 J. B. Jones, Western Paper Company, Omaha, Neb.
 B. A. Judd, Petrequin Paper Company, Cleveand, Ohio.
 R. C. Kastner, R. C. Kastner Paper Company, 109 Worth street, New York, N. Y.
 Frank A. Kearns, Bradner, Smith & Company, Chicago, Ill.
 Harold W. Keil, Swigart Paper Company, Chicago, Ill.
 Alfred Kinn, J. E. Linde Paper Company, 90 Beekman street, New York, N. Y.
 M. F. Kirk, Southwestern Paper Company, Dallas, Texas.
 J. B. Larkin, Federal Paper Co., Ltd., Montreal, Canada.
 Spencer Lathrop, Lasher & Lathrop, Inc., 29 Lafayette street, New York, N. Y.
 A. W. Leslie, The John Leslie Paper Company, Minneapolis, Minn.
 H. A. Lengnick, Baltimore, Md.
 John Leslie, The John Leslie Paper Company, Minneapolis, Minn.
 Fritz Lindenmeyr, Henry Lindenmeyr & Sons, New York, N. Y.
 D. Lindsay, Jr., Lindsay Bros., Philadelphia, Pa.
 B. W. Lipscomb, Richmond Paper Company, Richmond, Va.
 W. B. Littleton, Antietam Paper Company, Inc., Hagerstown, Md.
 E. A. McAfee, the John Leslie Paper Company, Minneapolis, Minn.
 M. D. McAlpine, Bradner, Smith & Co., Chicago, Ill.
 F. L. McClellan, F. L. McClellan Paper Company, Minneapolis, Minn.
 Robert J. McGregor, B. F. Bond Paper Company, Baltimore, Md.
 George McKinney, F. A. Flinn, Inc., 32 Beekman street, New York, N. Y.
 W. J. McLellan, Carter, Rice & Co., 246 Devonshire street.
 W. F. McQuillen, Storrs & Bement Company, Boston, Mass.
 E. L. Marston, Carter, Rice & Co., Boston, Mass.
 W. R. Mershon, Standard Paper Company, Milwaukee, Wis.
 Lieut.-Col. Albert M. Miller, the Central Ohio Paper Company, Columbus, Ohio.
 O. A. Miller, Central Ohio Paper Company, Columbus, Ohio.
 H. W. Morgan, Carter, Rice & Co., Boston, Mass.
 Edward S. Munroe, the Wilson & Munroe Company, Toronto, Can.
 R. E. Myers, R. M. Myers & Co., Rochester, N. Y.
 William Wesley New, R. C. Kastner Paper Company, 109 Worth street, New York, N. Y.
 Carl A. Newfang, Canfield Paper Company, 62 Duane street, New York, N. Y.
 George Olmsted, J. W. Butler Paper Company, 223 W. Monroe street, Chicago, Ill.
 Fred. J. Ostermeyer, Indiana Paper Company, Indianapolis, Ind.
 R. E. Parker, Parker, Thomas & Tucker Paper Company, Chicago, Ill.
 F. T. Parsons, B. F. Bond Paper Company, Washington, D. C.
 Robert A. Patrick, Seaman-Patrick Paper Company, Detroit, Mich.
 C. J. Post, Jr., S. M. Gladwin & Company, 82 Duane street, New York, N. Y.
 D. W. Pratt, J. W. Butler Paper Company, Chicago, Ill.
 Charles S. Proctor, Proctor Paper Company, Boston, Mass.
 B. E. Reeves, The Alling & Cory Company, Rochester, N. Y.
 I. H. Reid, The Diem & Wing Paper Company, Cincinnati, Ohio.
 R. E. Richards, S. P. Richards Company, Atlanta, Ga.
 Sabin Robbins, Sabin Robbins Paper Company, Middletown, Ohio.
 J. C. Robertson, Southern Paper Company, Richmond, Va.
 H. Satterthwaite, Garrett Buchanan Company, Philadelphia, Pa.
 H. Newton Schillinger, Bradley-Reese Company, Baltimore, Md.
 Morris Schlosser, M. & F. Schlosser, 130 West 24th street, New York, N. Y.
 W. W. Seary, D. L. Ward Company, Philadelphia, Pa.
 William T. Sibley, The Alling & Cory Company, Buffalo, N. Y.
 Andrew Simon, Charles Beck Company, Philadelphia, Pa.
 Arthur H. Smith, The Alling & Cory Company, Pittsburgh, Pa.
 A. Laurence Smith, The Union Paper & Twine Company, Detroit, Mich.
 George T. Smith, Richmond Paper Company, Richmond, Va.
 Thomas F. Smith, Louisville Paper Company, Louisville, Ky.
 Joseph D. Snell, Von Olker-Snell Paper Company, Boston, Mass.
 A. E. Stevens, Chope-Stevens Paper Company, Detroit, Mich.
 J. E. Stevenson, The Alling & Cory Company, Pittsburgh, Pa.
 W. B. Stevenson, A. Storrs & Bement Company, Boston, Mass.
 E. J. Stilwell, Minneapolis Paper Company, Minneapolis, Minn.
 P. A. Stuhreyer, The Diem & Wing Paper Company, Cincinnati, O.
 John D. Swigart, Swigart Paper Company, Chicago, Ill.
 George G. Taylor, Taylor Paper Company, Memphis, Tenn.
 D. F. Teetor, R. M. Myers & Company, Rochester, N. Y.
 A. C. Thomas, F. A. Flinn, Inc., New York, N. Y.
 Morgan H. Thomas, Garrett, Buchanan Company, 18 South 6th street, Philadelphia, Pa.
 R. O. G. Thornton, Virginia Paper Company, Richmond, Va.
 G. R. Tolen, Midland Paper Company, Chicago, Ill.
 W. L. Van Alstyne, Troy Paper Company, Troy, N. Y.
 H. E. Waite, John Carter & Co., Inc., 100 Federal street, Boston, Mass.
 George W. Ward, D. L. Ward Company, Philadelphia, Pa.
 Kit S. Warner, John F. Searle Company, 85-87 John street, New York, N. Y.
 M. H. Warren, The Arnold-Roberts Company, Boston, Mass.
 W. A. Mentz, D. L. Ward Company, Philadelphia, Pa.
 D. M. Whitelaw, Sabin Robbins Paper Company, Middletown, O.
 W. S. Wilcox, D. L. Ward Company, Philadelphia, Pa.
 F. K. Williams, Caskie-Dillard Co. (Inc.), Lynchburg, Va.
 B. W. Wilson, B. W. Wilson Paper Company, Richmond, Va.
 F. W. Wilson, Blake, Moffitt & Towne, San Francisco, Cal.
 C. F. Wright, Wright, Barrett & Stilwell Company, St. Paul, Minn.
 Frank J. Wright, Acme Paper Company, St. Louis, Mo.
 Charles A. Young, Carter, Rice & Co., Boston, Mass.

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E. J. SMITH APPOINTED STORE KEEPER

The American Writing Paper Company has appointed Edward J. Smith, manager of the Central Stores of the company. Mr. Smith comes to this city from Erie, Pa., where he was Chief Stores Keeper of Finished Stores at the General Electric Company plant. Under a new plan, of which he has a thorough knowledge he will reorganize and systemize the stores at the A. W. P. Co. Mr. Smith's connection with the General Electric Company dates back over a period of 14 years, seven years being spent at their Lynn plant and the remainder at Erie, where he started the company stores. Ninety-five thousand separate classifications were handled at the Erie plant, under the new system introduced by Mr. Smith.

SUCCESSFUL METHOD OF A BRITISH COMPANY

In the system used by a London engineering company all the machines have been invented by the company's managing director. The cutting machine, which is for cutting the paper from the original rolls into narrow strips, cuts the paper strips at high speed without overlapping, and as the tension is low very fine papers can be cut in the machine. The knives which are used are ordinary circular knives made from plished steel, and do not need resharpening, while the machine is so simple that it can be worked by unskilled labor.

Two systems of spinning frames are used, the one a ring, the other a flyer frame. The ring spinning frame can be run at 2,000 to 5,000 revolutions per minute, while the flyer frame can be run at 2,000 to 4,000 revolutions per minute. These machines are constructed with a moistening apparatus, which can be so regulated that various degrees of moisture can be given to different classes of paper. Solutions are used by which the paper, while being spun, can be waterproofed, and other chemicals can be added which make the yarn soft or rough as may be required for a particular pur-

pose. There is no waste on the British machines, which have individual stop motion on the spindles and an automatic arrangement by which the paper is lifted off the moistening roller if it breaks or the spindle stops. With these machines gears are furnished so that various twists ranging from 2 to 7½ per inch can be given.

SUPERINTENDENT SUMMERS GOES EAST

[FROM OUR REGULAR CORRESPONDENT.]

RICHMOND, Va., February 3, 1919.—Superintendent Summers goes East. James Summers, who for a good number of years superintended the Albemarle paper mills, Richmond, Va., has connected up with the Union Waxed & Paper Parchment Company of New Jersey as general superintendent. This is a large plant, and as Jim has a fine reputation as a specialty man he will have a wide field for his energies. His many friends in Richmond and elsewhere will be glad to hear of his success in his new venture.

Even the most enthusiastic supporters of the new paper-textile industry do not predict that paper will come into general use as a substitute for wool or cotton textiles. Undoubtedly the use of paper in German cotton and woolen mills during the war has not been insignificant. Probably paper has been used in cotton mills in the Central Empires for a variety of purposes for which cotton was formerly employed. It is not believed, however, that the German claims to perfection in the use of paper as a substitute for cotton are in all cases based on actual performance.

Aside from their value as a war-time substitute, then, the interest in the success of paper textiles in Great Britain seems to lie primarily in the possibility that they may be improved in other countries and eventually enter into competition with the long-established British textile trades.



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KALAMAZOO CONCERNS PROSPER

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., February 4, 1919.—Stockholders respectively of the Bardeen Paper Company, Wolverine Paper Company and MacSimBar Paper Company, Otsego, were informed at last week's annual meetings that these three concerns had passed through the most prosperous and profitable year in their history. In each case the reports were most flattering.

With all the strenuous war elements introduced, 1918 was shown to have been a wonderful period of business and profits. For each concern the gross earnings were considerably above the average for any corresponding period.

The Bardeen Paper Company expended over \$100,000 for improvements in 1918. A new water supply system of three artesian wells was installed while a new flume was built for the No. 2 mill. The bridge over Kalamazoo river is being rebuilt. No definite action was taken with regard to the erection of the two machine mill, a matter that one year ago was placed in the hands of the directors with authority to act. Practically all the board are in favor of this move and it is only a matter of months now before it will be officially announced as an actuality.

The stockholders of the MacSimBar Paper Company voted an increase in the authorized capital of the company from \$400,000 to \$800,000. No information, official, was forthcoming as what this action portends for the future, but it is believed it means to materially enlarge the present mill, probably through the addition of another board machine or the erection of a box factory.

During 1918 the MacSimBar mill was greatly improved and its production capacity enhanced by the erection of a new boiler plant, carrying four new boilers, also an increase in the capacity of the two board machines through the addition of many dryers.

Two new wax machines were added to the plant of the Wolverine Paper Company and other improvements made on that mill.

The election of directors and officers by the three companies resulted as follows:

Bardeen Paper Company: Directors, George E. Bardeen, F. G. Bardeen, M. B. McClellan, Otsego; George D. Cobb, Schoolcraft;

J. W. Thompson, Detroit; S. B. Monroe, W. E. Kidder, C. A. Peck, A. B. Connable, Kalamazoo; president, George E. Bardeen; vice-president and manager, S. B. Monroe; treasurer, C. A. Peck; secretary, George Gerphide.

Wolverine Paper Company: Directors, M. B. McClellan, C. A. Peck, A. B. Connable, S. B. Monroe, H. B. Hoyt, C. A. Buskirk, Guy W. Rouse, Forris G. Stevens, Perry K. Heath; president, M. B. McClellan; C. A. Buskirk, vice-president and treasurer; S. B. Monroe, secretary.

MacSimBar Paper Company: Directors, A. P. Thomas, M. B. McClellan, S. W. Simpson, George E. Bardeen, Otsego; George D. Cobb, Schoolcraft; F. C. Hall, Grand Rapids; J. W. Thompson, Detroit; W. E. Kidder, S. B. Monroe, S. G. Earl, J. A. Vanderveen, Kalamazoo; president, M. B. McClellan; vice-president, S. W. Simpson; secretary, A. P. Thomas; treasurer, George E. Bardeen.

CARD BOARD ASSOCIATION

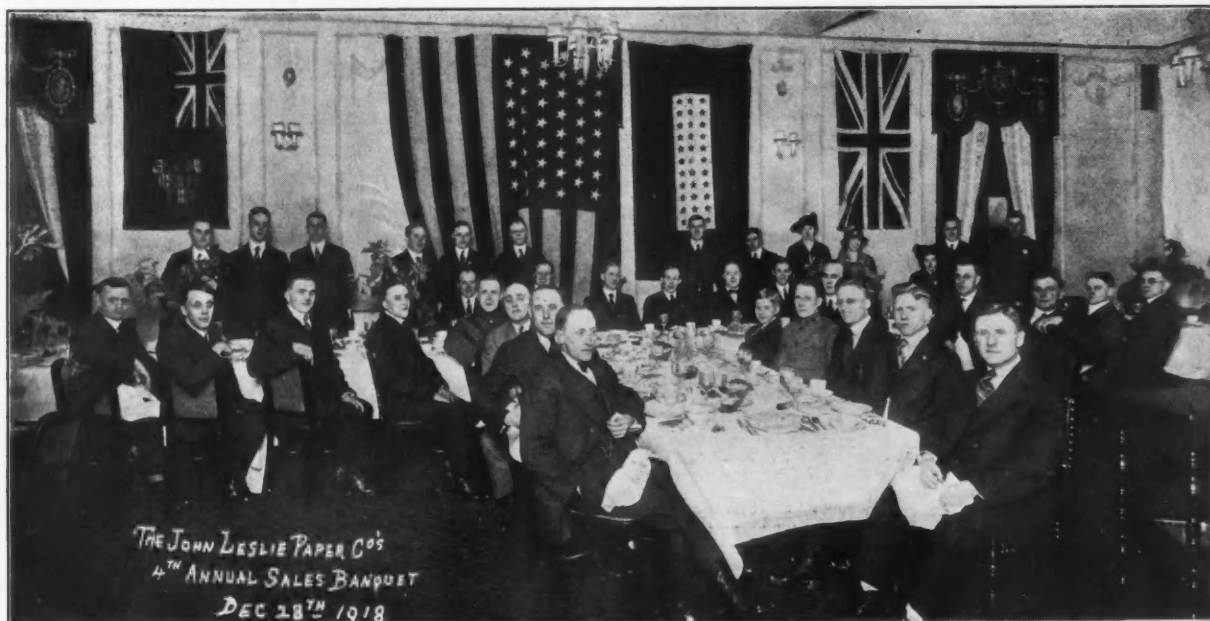
The first meeting of the Card Board Manufacturers' Association was held in the State Apartments of the Waldorf-Astoria last Wednesday morning. There were twelve firms represented at this meeting and outlines were drawn up from which trade customs will be made at a later date. The following officers were elected at this meeting: G. Frank Merriun, president; R. P. Colbert, vice-president, and J. A. Toew, secretary-treasurer.

JOHN LESLIE PAPER COMPANY MEETS

MINNEAPOLIS, Minn., February 3, 1919.—The John Leslie Paper Company held its fourth annual sales meeting recently. A group picture is shown herewith of the gathering.

The evening was entirely devoted to entertainment and consisted of short talks by several of the company's men who had been in the service, together with several entertainment features and some moving pictures which showed, in a very vivid way, the entire process of paper manufacture in the Cumberland Mills of the Warren Company.

As usual the meet proved a most enjoyable one.



PICTURE TAKEN AT THE FOURTH ANNUAL BANQUET OF THE LESLIE PAPER CO., MINNEAPOLIS.

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TENNESSEE PAPER MILLS, INC., BUILD FINE PLANT

The Tennessee Paper Mills, Inc., were organized in June, 1917. After considering a number of sites a 20-acre plot was selected in North Chattanooga, just across the Tennessee River.

Construction work on the buildings was started the last of August, and by the end of the year the buildings were well along toward completion and the machinery was arriving. The buildings are constructed of concrete and brick, and as an indication of the class of construction embodied a fire insurance rate of 8 cents per \$100 has been placed on the risk, which is one of the lowest rates in the State.

Expansion Arranged For

The buildings are designed to take care of the present equipment, and are so arranged that additional machinery can be added from time to time that will more than double the present capacity without the addition of any other buildings. The plans contemplate additional capacity, and space is left so other machines can be placed with a nominal cost for buildings.

The machine room is 304 feet long, and contains one 132" five-cylinder Horne machine. This machine is the very latest thing in paper mill machinery construction, and stands as a monument to the skill of the builders. It is fully equipped to turn out a full line of paper box boards of high quality.

The beater room is 75 x 185 feet with a basement under the entire room, which has a head room of 12 feet, making it an ideal place for the location of stuff pumps and chests. The beater room contains six Dayton Beater and Hoist Company's 1,500-pound beating engines and four Shartle Brothers Machine Company's Jordans. Everything in the beater room and basement is motor driven. The beaters are driven in pairs, one 150 h. p. motor for each pair. The Jordans are direct connected to 80 h. p. motors. The stuff pumps and chests are driven by smaller motors. All of the motor equipment is Lincoln Electric Company equipment. Each motor is fitted with a curve drawing recording ammeter, which indicates at all times just what power is being consumed by the machine it is driving.

Engine Room Equipment

The engine room contains a variable and constant speed engine built by the Brownell Company. These two engines furnish the power for the paper machine, and the exhaust steam is used for drying the product.

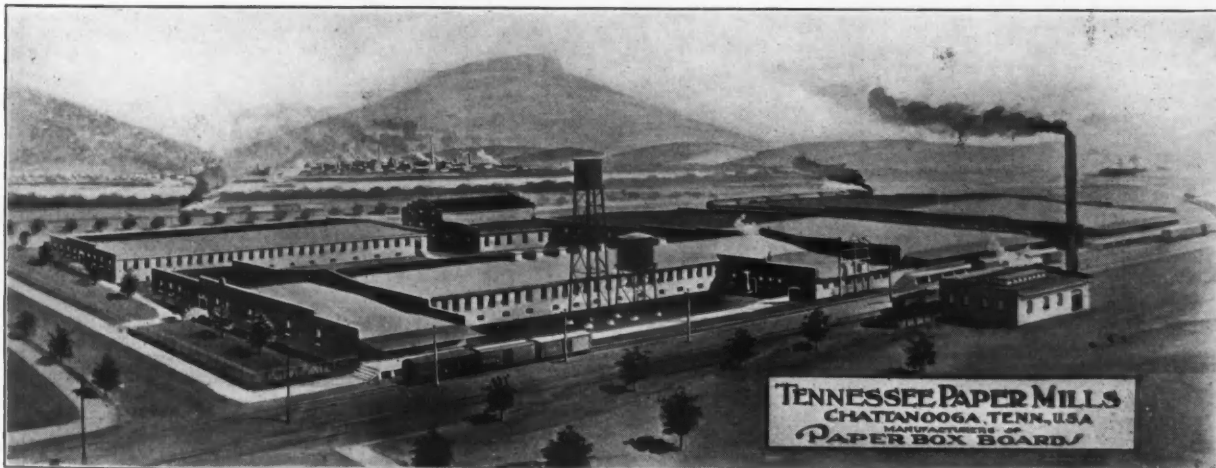


JOHN STAGMAIER.

In addition to the engines, feed water heater and pumps, in the engine room a well-equipped machine shop is fitted up to care for the every day repairs of the plant.

The boiler room contains two 300 h. p. Erie City high-pressure water tube boilers. One boiler only is used, and the other one is kept in reserve.

The Tennessee River, about 1,200 feet distant, furnishes an ideal



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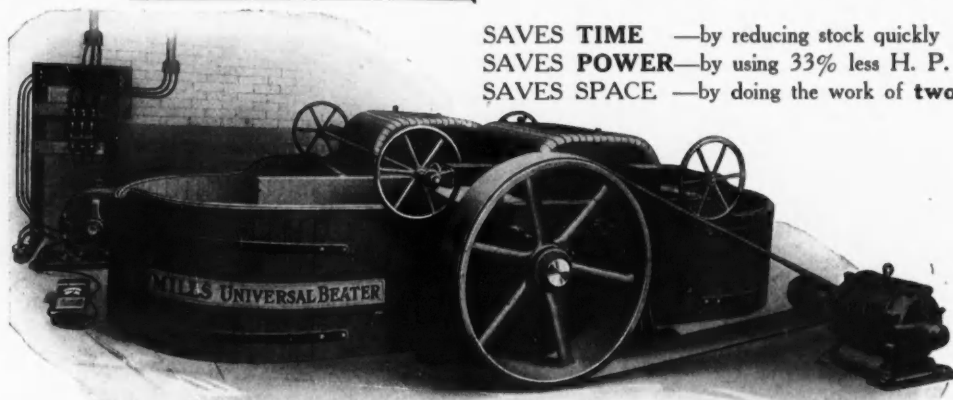
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outlet for the drainage of the plant, and in addition to a large well at the mill, a pumping plant of 1,000 gallons per minute is located at the river. This gives the plant a two-source water supply, which is a very valuable asset. The water from the river is exceptionally fine for manufacturing purposes, as there is little or no impurities in it when used in boilers; no scale forms in the tubes.

Good Railroad Facilities

The plant is amply supplied with railroad facilities. All the tracks on the property belong to the company. The switching is done by the Signal Mountain Electric Line, who acts as agents for the Southern Railway System.

This mill enjoys the distinction of being the only exclusive paper box board mill south of the Ohio River and east of the Mississippi River. The location is such that it will be able to reach a vast territory that is rich in textile industry, which is a large consumer of paper box boards.

John Stagmaier Heads Firm

John Stagmaier, whose picture accompanies this article, is one of the latest to enter the paper-making field. Mr. Stagmaier has

been a resident of Chattanooga for more than 40 years, and is identified with a number of the largest industries of the city. When the proposal of building a paper box board mill was presented to him he readily saw the possibilities of the business, and at once put his energy behind the proposition. When the company was organized it was the purpose to erect a modest sized plant, and the capital stock of the company was fixed at \$200,000, which was quickly sold. After going into the merits of the business it was decided to lay the foundation for larger things, and recently the capital stock was increased to \$300,000, all of which was taken immediately by the present stockholders.

Mr. Stagmaier devotes a great deal of his time and means to the charitable institutions of the city, gives largely of time and money to civic improvements and, after doing all of these things, finds time enough left to direct the policy of the leading wholesale grocery concern in the city.

A. M. Sheperd, vice-president and general manager of the company, has been engaged in the paper-making business for more than 30 years, and is not a stranger to a great many of the older dealers and consumers of the product.

COTTON CELLULOSE; STRUCTURE AND CONSTITUTION

At the last meeting of the Society of Dyers and Colorists in London, Messrs. Cross and Bevan dealt with the results of the destructive breakdown of cotton fiber to a powder under the process of beetling. In regard to the factors involved, it was noted that the fiber destroyed or "destructured" was a cotton fabric normally treated in bleaching and preparing the finish. It is certainly interesting to compare the effects of the breakdown of cotton to powder as described with the different result produced in papermakers' beating operations. Here the cellulose fibers are suspended in a relatively large mass of diluting water, and exposed to the complex actions of shock, pressure and shearing strains, producing a different effect on the pulp prepared for passing on the paper machine.

In connection with these various operations, it would appear that such hitherto neglected products as dust and debris, which collect around machines, should be collected and examined by paper chemists for cellulose constitution, and for any evidences of structural and chemical changes in the fiber.

Characters of the Powder

Chemical examination of the powder produced showed it to be a veritable "cellulose dust," possessing a general conformity with the properties of normal cellulose. In other words, a bleached cotton cellulose is reducible to powder by the mechanical action of shearing strains. As to the structural features, the powder resembles starch. It was markedly non-reactive to polarized light. Its inertness was emphasized by including shreds of a normal cotton cellulose in the same field of observation under the microscope.

Elementary and Proximate Composition

Special importance must be attached to the exact determination of the C,H₁ contents of the product. It was found that,

	(1)	(2)	(3)
C	44.57	44.40	44.46
H	6.24	6.23	6.24

calculated as to dry, ash-free substance. Thus it appears to be a new complex, as will be seen from the results of attack with soda solution (17.5 per cent. of NaOH)—

Alpha cellulose	44.2 per cent.
Beta cellulose	48.6 per cent.
Gamma cellulose	7.2 per cent.

a—Resisting solvent action.

b—Soluble, precipitated by acids.

g—Soluble, and remaining soluble in acidified saline solutions.

In view of the fact that a bleached cotton, that is, in the form of a normally bleached fabric, contains from 1.0 to 0.0 per cent. of the lower celluloses, these figures are the evidence of a profound modification—of a constitutional disruption, i. e., structural breakdown of the fiber. Longer contact with the alkali gave—

Alpha cellulose	53.5 per cent.
Beta cellulose	28.6 per cent.
Gamma cellulose	17.9 per cent.

The technical consequences of these observations are evident. Immediately involved are the various mechanical treatments of cellulose fibers, which subject them to pressure and strain. These are too numerous to describe in detail. It is clear that the more important of these are finishing operations proper. The operation of calendering, for instance, is calculated to produce changes, and it is the duty of the chemist to measure these as far as possible in such terms as constitute permanent comparative records. These operations may require close systematic revision. Regarding their pulverizing action, Mr. Cross suggested that the cellulose structure was broken up in an explosive manner. But, according to Harrison (Proc. Roy. Soc., 4, 94, 1918), this was due to the strain present in natural fibers. This view is substantiated by the fact that the powdered cellulose has little or no action on polarized light. Hence it is practically free from strains. As to the analogy between starch and powdered cellulose, it is notable that starch celluloses can be prepared which give the same reaction with zinc-chloride-iodine reagent as cotton cellulose. The amorphous character of cellulose, and a somewhat reactive character, are arguments in support of the theory of its high molecular weight.—*Journal of the Society of Dyers and Colorists.*

DUTY ON PAPER FOR MEXICO

The following report has just been received from Mexico by Government officials at Washington:

"Shortly before adjournment the National Chamber of Deputies enacted a law providing that in future the duty upon paper imported into the Republic should be paid in National gold or its equivalent instead of 'in kind,' as had been the case for several months under a special decree."

"The new law was approved by the President and went into effect soon thereafter."

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MANUFACTURE OF ASBESTOS CARDBOARDS

Translated for the Paper Trade Journal, from *Der Papierfabrikant*, August 9, 1918.

The manufacture of asbestos products, which for special reasons is complicated by numerous difficulties, has, up to the most recent date, been kept from publicity. However the great demand for the most varied products of this branch of manufacture has stimulated the growth of new plants in home and foreign countries, which has resulted in a wider and greater expansion of this branch of industry. Asbestos imported from Canada, Siberia, and Lapland has been employed for different purposes, for packing, spinning, and weaving, for the production of asbestos paper and millboards. As regards the asbestos produced in Italy and Bohemia, it may be said to have no importance as raw material in Germany, since it is of value only for filtration purposes.

Description of Process

I shall describe here a process of making asbestos cardboard, which is closely connected with methods of manufacture employed in the paper mills. This process should have a special interest today, an interest great in proportion to the use of this article for the equipment of fleets, for the protective packing on warships. All these requirements have reached the highest proportions at the present time.

The board mill as such is one of medium output. As a rule the mills making asbestos cardboard are a part of a chain of neighboring plants or spinning and weaving mills, from which all the waste is re-manufactured in the board mill. Asbestos fiber is costly, and therefore so valuable that it is necessary to figure out the smallest quantity of waste. On this basis, the dust of the sorting and preparing rooms, which contains only short, small particles of fiber, must be carefully collected by fans. The dust is then discharged into a dust chamber, and afterwards transferred with other fibres to the beating engine, where it is disintegrated again. In addition to the industrial value of the installation, the fans obviously have hygienic advantages. As raw material for making cardboard, the short fibered asbestos is usually the best in practice, while long fibered asbestos is employed in the manufacture of paper.

Must Be Utilized in Raw State

If the manufacture of cardboard is separate from spinning and weaving, the asbestos must be utilized in the raw state, and disintegrated in the kollergang. During disintegration the mineral matter and serpentine sand, which occasionally remain, are separated from the fibers and the latter are disintegrated fiber from fiber. The kollergang is made with running stone rollers composed of the best quality of granite. A careful sorting by partially interrupting the operation of the machine is necessary, for otherwise good fibers will soon be ground up. In many cases the kollergang has recently been fitted with a device by which the fibres when sufficiently ground and freed from sand and passed out of the trough of the machine during its operation, so that during the further grinding process only the raw, undisintegrated stuff remains behind. The power requirements of a kollergang with stone runners of five feet, four inches diameter, and fifteen inch face breadth and stone rollers six feet, five inches in diameter correspond to 5-6 H. P. Such a kollergang suffices for a two cylinder board machine. The vertical shaft rotates at a speed of 17-12 revolutions a minute. In the mill the beating engines, such as the kollergang and beater, are placed in a raised chamber or also on the first store floor of the mill, while the other machinery is set up in the basement.

It is advantageous to place the kollergang higher than the upper angle of the outlet of the beater, for this arrangement as-

sure a rapid emptying of the kollergang, if its outlet is connected with the beater by means of a wood or lead pipe. For in this way when a jet of water is thrown into the kollergang it discharges its contents; the beater is fed, and the kollergang is washed out at the same time. In the beater only the wet asbestos is disintegrated, the necessary additions are made and colored at the same time. The composition of the stuff consists as a rule of 80-90 per cent. asbestos, 10 to 20 per cent. kaolin and 3 per cent. kolloidin. To each case, according to the color desired, the stock is mixed with red lead or black graphite.

Fire-proof Asbestos Pulp

I may note that this mixture yields absolutely fire-proof asbestos pulp. If, however, the object is to produce a pulp which will serve as material for cardboard alone, and not as fire-proof substance, some cellulose and mechanical wood pulp may also be added. The addition of about 10 per cent. linen half-stuff will give the pulp greater strength without essentially impairing its fire-proof quality. In the beater, then, the materials mentioned above are reduced with water to a homogeneous thin suspension. For this operation the drum of the beater must have steel blades of possibly two-fifths of an inch thickness, with a peripheral speed of 30 feet a second. In other details the beater in constructed like that used in paper making. As the fiber is relatively tough and greasy, the result is that beating must be powerful and drive a heavy load before it. The best arrangement of the machinery is to have the belting wheel of the drum fall into the bearing, that is to say, the driving force should follow from below, since a driving force from above introduces a one-sided pressure of raising of the rolls, which does not exclude a heating of the bearings. If a drum washer is not provided, draining may be effected by means of an oscillating sieve, which must be fitted with an iron, or better, a bronze No. 8 sieve (Special sieve). Asbestos conveyed into the beater contains little dirt, it is already sufficiently clean to render washing in the strict sense unnecessary, or as it is carried out in the drum washer. Thickening of the stuff does not necessarily occur when it is passed through the oscillating sieve, which is fastened on to the roll bars. By means of the sieve the engine man has it in his power to make a strong, or weak pulp, and absolutely to avoid thickening. All beating engines are not adapted to the making of asbestos boards. The experiences which have been acquired with the low speed engines, for example, simply mean the failure of this system in the beating of asbestos. In addition, the output desired is regulated according to the size, or in other respects, according to the number of beaters. Usually the ordinary board machine consists of a two cylinder endless wire machine which has an output of 1,600 to 2,000 pounds of finished products in ten hours. Endless wire machines on account of rapid shutting down find a less frequent application in asbestos cardboard making, at least I am acquainted with only a single instance of their employment. For the production mentioned above a Holland type of beater with a 4,000 by 2,000 M. M. open space, and a roll 34 inches in diameter and 36 in width is the best. After two hours of beating—often sooner—the stock is ready for the stuff chest. By opening the grating in the lowest portion of the trough of the Hollander, the beaten stock after the addition of fresh water, is allowed to flow away into the stuff-chest under the beater. The consumption of water, as in paper making, is considerable. Manufacturers figure on 260 to 265 quarts of dilution water for the stock for every two pounds of

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finished product. A third of this water is completely lost, but by the use of a wheel to draw up the water and a pump for the water from the sieve about two-thirds may be used again.

The use of jets of water for cleaning, and the quantity required is not estimated here, but will receive special attention further on.

Capacity of Stuff-Chests

The stuff-chests should have a capacity twice to three times that of the beater, the base is hollowed away from the wheel. The cylinder of the chest rotates at a maximum of six revolutions a minute, and the power required figures up to about one and a half H. P. By means of the wheel, which is equipped with cast iron buckets containing six to eight quarts, the stock is carried up into a regulating box, that is, a discharge tank. The amount of stock discharged can be regulated by a paddle worked with a shaft and hand wheel. Stationary mixing chests are seldom met with today; they are in use where the local conditions demand it. They contain no pump, but consist of a tub-shaped chest in which a vertical cylinder revolves. The stock leaves the chest at the lowest portion, passes into a regulating box provided with a lever and floating ball, and then into a small drum.

As in the ordinary manufacture of boards, the water from the stock passes over the sand-table where knots and other impurities are caught, for which purpose the flow of stuff from the chests must have a slight natural incline. As regards the question whether rotary screens or flat button-catchers are the best, I must give the preference to the latter. A new button-catcher, which has been put on the market by a South German firm of machine makers, is combined with a sand-table. This device makes possible, by means of a broad, oscillating paddle, a complete and uniform agitation of the stock over the whole surface of the bronze plate of the button-catcher, and ensures a thorough and convenient cleaning, even during the operation of beating. The width of the slots in the straining plates is made according to the quality of the asbestos, that is, the length of fiber, the cut being from 0.8 to one millimeter. As the flat screen is made cheaper than the rotary screen, its advantage in this manufacture may be considered in the ultimate profits.

Resembles Ordinary Board Machine

Through troughs eight to ten inches wide, made of zinc plated sheet iron, or through pipes of cast or wrought iron, welded together and fitted with traps and valves, the dilute pulp is conveyed to the endless wire of the cylinder. This machine does not differ, as a whole, from the normal model of the ordinary board machine. Various apparatus, such as a third agitator where the stock passes to the machine, a special construction for the back-water conveying a steady and abundant flow of water from the sieve, are primary conditions of uninterrupted operation. The sieve cylinders (usually from 28.5 to 75.6 inches in diameter) are jacketed with a bronze wire of No. 4 or 5 mesh, and a No. 50 mesh of phosphorus bronze. The sheet from the sieve cylinders is shaken off on couch rolls made of common beechwood, and carried on the felt to the size rolls, from which the cardboard is removed in the usual manner. If an extremely thick grade of board is manufactured, the size rolls must be equipped with a device for raising the load. The two cylinder board machine with a force of 1.5 to 2 H. P., and a speed on the felt of 98 feet a minute, has, therefore, a variable drive. The felts must be very permeable, but strong, for the coarse, hard particles of asbestos quickly ruin the finer felt. A good wet felt should have a life of ten to twelve weeks. The good or bad finish of the manufactured product depends, in large part, upon the felts, so that it is essential that they should be kept clean and in good condition. Before passing through the press-felt, the returning felt is carried through a water bath, strongly beaten by the press and by washing with two spray jets, and then conveyed between two copper-plated cast or wrought iron press rolls, to remove the water. The press-felt should

preferably have bronze rolls instead of the wooden press weights, as the former protect the felt better. The rolls should run 120 revolutions a minute. In order to prevent too violent a vibration of the felt, the felt and rolls must be spaced accordingly. The spray jets are best worked under a pressure of one tone and a half atmospheres.

Water Required

At this point I come to the question of the water required. The shower pipes, made of copper or brass, are as a rule of one to one and a quarter inch size, have a jet from one-half to five-eighths inch, and a nozzle one-third to three-fifths of an inch, and require for each orifice per minute from four to five quarts. In figures it is estimated that the water required in manufacture and spraying in ten hours amounts to 140,000 or 150,000 gallons. Since water from the settling tanks, or even fresh water contain more or less small mineral impurities, which must be reckoned with, and which choke the small nozzles, it is advisable to brush out the pipes every day, for they are easily removed and adjusted, and to blow steam through them every eighth day. It would require too much space to dwell upon the details of every machine, and I resume the description of manufacture.

Dry Content of Board

The cardboard as it is taken from the size rolls has a dry content of 38 to 43 per cent. It is laid between press cloths, conveyed directly on the press wagons and when it has reached the necessary post height, is passed under the hydraulic press. Hydraulic presses of this kind are of medium size with a maximum pressure of 24 pounds on two-fifths of an inch square, which is wholly sufficient for practical drying. The belief that, by raising the pressure, a greater degree of squeezing out of water is attained, is erroneous. By means of the above named pressure the dry content of boards is increased to a point where it weighs about 50 per cent. For the grade of drying the pressure is not alone a measure, but in a special degree the carrying out of the operation of pressing and its duration. This operation should begin with a gradual and comparatively light pressure, which is slowly raised between pauses to the highest point. For good drying three to four hours are required. If the sheet is subjected to a higher pressure than that mentioned above, small spots almost always result, for the water has not sufficient time to escape; the boards also stick together easily, which is a defect that readily occurs in asbestos boards. Fifteen pieces per wagon are transferred to the plates of the press, that is a board for each four inches of post height. The press pump, when the pressure has reached a given height, automatically draws the stock out of the larger tank and discharges it into the smaller from three to four H. P. are required for 150 to 180 revolutions a minute.

Most Practical System

From the hydraulic press, the asbestos boards are conveyed on rolling wagons to the drying room. Without entering upon the details of the different systems of drying, I will only mention that I consider only one system as practical, convenient, and lasting, and that is the drying of cardboard in the draining conduits according to the system of Schilde-Herzfeld of Gorlitz, and the E & M Company of Bautzen. The system generally works well. These arrangements, of course, take up more room than drying cylinders, which are still met with in spite of many adverse opinions. Asbestos boards, it is true, are never snow white when artificially dried, as they are when dried in the sunlight, which bleaches equally cloth and boards, and gives to them opacity, flexibility or velvety handle, and color, but this method of drying belongs to the past. The process of drying in conduit drains should be adequately known in manufacturing circles, but in the interest of a complete description of cardboard making, I shall not venture upon an account of this method.

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Paper Statistical Service of Trade Commission

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Written Especially for the Annual Number of the Paper Trade Journal by Dr. E. O. Merchant.

The paper statistical service of the Federal Trade Commission was begun in the fall of 1917 in order to secure accurate information for the use of the various branches of the government in connection with the war programme, as well as to provide such information to the industry. The scope of the work was enlarged from time to time as the need arose, until the whole industry was covered in a comprehensive way.

Character of Reports Sent Out

Weekly and monthly reports are received from a large number of informants from which the following reports are issued monthly:

1. *Review of the News Print Market*—covers production, shipments, and stocks of manufacturers, stocks of jobbers and publishers, manufacturers' and jobbers' prices, imports and exports, etc. This report is compiled from weekly schedules received from each of the 35 domestic manufacturers operating 57 mills and from monthly reports from the same manufacturers as well as from about 250 jobbers and 863 publications.

2. *Review of the Book Paper Market*.—covers the same information for the Book Paper Industry. This report is compiled from weekly schedules received from each of the 45 domestic manufacturers operating 77 mills and from monthly reports from the same manufacturers as well as from about 250 jobbers and 588 consumers, including periodicals, printers, and commercial users.

3. *Statistical Summary*—covers the production, shipments, and stocks of all grades of paper. This is compiled from weekly reports received from each of the 820 paper mills in the United States.

4. *Publishers' Statistics*—covers the circulation and advertising statistics of all daily, weekly and monthly publications having a circulation of 5,000 copies or more. This report is compiled from monthly schedules received from 863 publications using news print and 500 publications using book paper.

5. *Production and Stocks of Wood Pulp*—This report is compiled from monthly reports for 170 companies operating 306 mills.

6. *Production and Stocks of Wall Paper*—This report is compiled from weekly reports of 18 hanging paper manufacturers and monthly reports of 39 wall paper printers.

In addition to the above monthly reviews, the commission has issued mid-month statements showing the production, shipments and stocks of news print and book paper.



DR. E. O. MERCHANT.

Sent to Large Mailing List

These reviews are sent out to a large mailing list as fast as issued. They are also printed in full in the PAPER TRADE JOURNAL and other trade papers in the United States and Canada.

The entire work on these statistics of the paper industry is done by a small clerical force equipped with modern office appliances, such as adding machines, addressograph, mimeograph, folding and sealing machines, etc., and costs the government only a few thousand dollars a year to maintain.

Government Attention to Paper Industry

After our entry into the European War, first one branch of the government and then another turned its attention to the paper industry because of its importance and essentiality. The Fuel Administration became interested because of the large tonnage of fuel consumed by paper mills, the United States Railroad Administration because of the large number of freight cars required to keep the mills running, the War Trade Board and the Shipping Board because of import and export problems, and finally the War Industries Board found it necessary to set up a Pulp and Paper Division to deal with the various perplexing problems that arose in this industry and to co-ordinate all governmental activities. In all these instances, the statistical information which the Commission had collected and was collecting proved very valuable. There was serious talk at first of curtailing the output of paper mills, but the statistics showed that this was inadvisable. Instead, it was found necessary to speed up the mills and curtail consumption.

From reports which the commission has received it appears that these statistics have also been of real value to producers, merchants and consumers in the conduct of their business. A careful perusal of these reports as they are issued should result in a more satisfactory buying and selling policy throughout the paper industry.

Promptness, Accuracy, Completeness

In developing this statistical service the commission has aimed to fulfill three important requisites, viz.: promptness, accuracy and completeness. It is appreciated that current statistics to be of value must be issued promptly, and all the six reports mentioned above are issued between the 12th and 20th of the month for the month preceding. This requires system and speed in the handling of the schedules. Trade associations have experienced

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difficulty in getting in promptly 50 schedules or less. The commission is undertaking to handle several thousand schedules at the same rate of speed.

Advantage of Commission

The commission has a great advantage over voluntary associations in conducting a statistical service of this kind in that it can secure reports from the whole trade, while the voluntary association is limited to its membership. Likewise, the government can combine reports from producers, merchandisers and consumers. Reports made to the government are received in the strictest confidence and their accuracy is assured, for the false reports invite the penalties of the law. In the paper industries the commission has relied upon the hearty co-operation of the trades, and this reliance has been fully justified.

The principal difficulties which the commission has encountered have been due to the large number of schedules handled. Thus far, for instance, it has not been possible to include exactly the same number of publishers in the totals for each month and get the report out on time. Efforts are being made to reduce to the minimum the variation in the number of schedules included in the totals so that strict comparison can be made from month to month.

Suggestions Requested

The statistical service will be continued so long as it appears to be useful to the public and wherever possible the schedules will be simplified so as to reduce the work involved in filling them out. Suggestions to this end as well as to any improvement looking toward greater usefulness are constantly invited from the parties most directly at interest.

Send in your order now for Lockwood's Directory of the Paper, Stationery and Allied Trades.

KALAMAZOO TRADE NOTES

(FROM OUR REGULAR CORRESPONDENT.)

KALAMAZOO, Mich., February 3, 1919.—Charles H. Wright, of the paper jobbing and brokerage firm of C. H. Wright & Son, was the guest of honor at the wind-up luncheon of the Kalamazoo division of the American Protective League, held Friday noon at the New Burdick Hotel. Mr. Wright has been chief of the local division and a most capable and fearless official. The members were glad of an opportunity to express to him their good will and proper recognition for his work.

F. M. Hodge, president of the Kalamazoo Paper Company, was toastmaster of the affair. A. B. Connable, treasurer, reported a balance of \$250 on hand, which was given to charity. The affair was entirely informal and thoroughly enjoyable. The Kalamazoo division, on account of the proximity of this city to Camp Custer, has had a great deal of work to do. Mr. Wright, as chief, has given unstintingly of his time and energies, carrying out orders to the letter and doing a great many things with no thought of remuneration of any kind.

Henry Ford, the motor king, has purchased ten dam sites on the River Rouge, between Dearborn and Northville, Mich., of which he intends to convert into power to operate a similar number of small factories, each making a tractor part.

The Lansing plant of the Michigan Power Company has been purchased by the bondholders' protective committee. The price figures up \$1,451,000 made up of \$150,000 cash, \$150,000 receivers' certificates assumed and \$1,151,000 of outstanding bonds. The city of Lansing will take over a portion of this property, to be added to its municipal plant. The valuation of that portion has not been determined as yet.

Daniel Daverin, superintendent of the Montrose division of the Provincial Paper Company, Ltd., Thorold, Ontario, was the guest of his brother-in-law, Caleb B. Forsythe, of this city.

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WE are on the eve of great business prosperity. We cannot escape it. America must keep step with the demands of the whole world. After the war of 1812, a period of restriction, business increased fifty-fold. The Franco-Prussian war tripled the number of our work-shops, doubled our employees and brought increased business and wealth to the American people.

What now.....can you not see?.....Be prepared.....

Extend and better your connections—but, above all, be an optimist and smile. We will have an **ERA OF ABOUNDING PROSPERITY, IF WE ONLY WILL IT.** If we are all convinced that business is going big, from this day forth big it will be. The pessimist may delay, but he cannot alter the situation. Actually there is no place for him in the business world today.

America's opportunity to serve is at hand—likewise the reward of good service.

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"There is nothing good or bad but thinking makes it so."

HILL CLUTCH EQUIPMENT

"Hill Clutch Equipment" is the name of a series of bulletins that The Hill Clutch Company, Cleveland, Ohio, issue at regular intervals. Each issue describes an installation of their well



known line of power transmission machinery that contains some interesting features.

Bulletin No. 8, just recently issued, is of particular interest to paper mill men, as it illustrates and briefly describes the power transmission equipment of the three large paper mills located at Monroe, Mich.—all of which was furnished by The Hill Clutch Company. These three companies are: The River Raisin Paper Company, Monroe Binder Board Company and the Boehme &

Rauch Company. Beater lines, machine lines, pump and screen lines are all illustrated. They will be glad to furnish this Bulletin No. 8 to any of our readers requesting same.

T. P. CHAPMAN'S ANNIVERSARY

[FROM OUR REGULAR CORRESPONDENT.]

St. Louis, Mo., February 3, 1919.—The wedding anniversary and birthday of T. P. Chapman, president T. P. Chapman Paper Company, was celebrated by the Chapaco Club, an organization of all the employees of that company, at their regular monthly meeting at noon last Saturday. Refreshments were served by the company, and there was singing by one of the young ladies of the office and a short talk by Mr. Chapman.

These affairs are held in a recreation room, in which there is a piano and talking machine, to which other features will be added, including a library. Every third month they have a family affair, which is attended by members of the families of employees, and at which there is an elaborate entertainment. The employees issue their own paper, called the "Chapaco Bulletin."

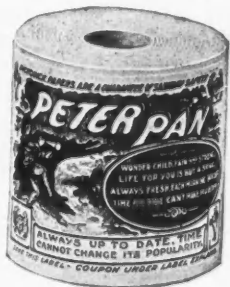
J. P. Collins has been made manager of the paper bag and tissue department of the Graham Paper Company, to succeed J. E. Stoker, who became sales manager of the Tuttle Press Company, Appleton, Wis. Mr. Collins is a native of St. Louis, and was with the local branch of the Johns-Manville Company for the last fifteen years. Mr. Stoker departed Thursday to take up his new duties.

Joseph Connor, of the American Cording Mills, Elkhart, Ind., called on the trade here last week.

James P. Jensen, of Brehn & Jensen, of Omaha, was a visitor in St. Louis.

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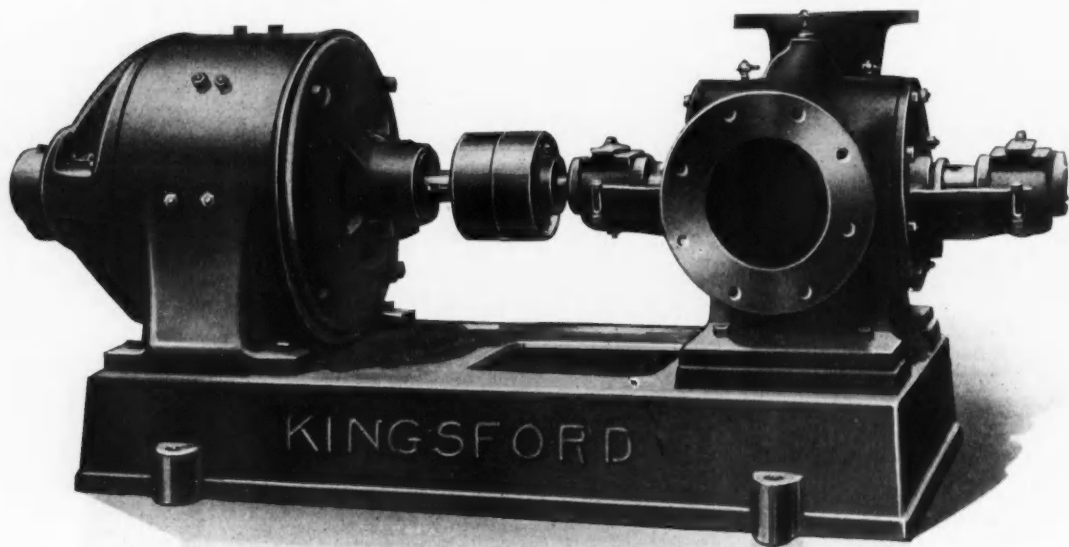
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OSWEGO, N. Y.

FAIR DEMAND FOR SMALL LOTS IN ST. LOUIS

(FROM OUR REGULAR CORRESPONDENT.)

ST. LOUIS, Mo., February 3, 1919.—Carload orders of bags and coarse papers are few and far between these days. However, the demand for less-than-carload shipments, especially small lots, has reached a very large volume in the aggregate within the last few weeks, and warehouse men report that this has been rather satisfactory. The hand-to-mouth buying thus continues, but the amount of it is well worth while. This is regarded as a good thing for both manufacturer and jobber at this time, making the necessity for a guarantee of prices unnecessary, and on the other hand, there is no possibility of great loss if the market should decline.

There seems to be a disposition among some jobbers in St. Louis to cut prices, but this has not had the effect of producing any more business. Its only result has been a scramble for what business would be placed, any way.

The situation as to printing papers is reported to be more encouraging. The demand for both mill and warehouse shipments shows an increase, and fair-sized quantities are being bought.

IMPROVEMENTS TO UNDERWOOD MILL

PLATTSBURG, N. Y., February 3, 1919.—A visitor to the Underwood Paper Mills and the Plattsburg Wall Paper Company, or what is commonly known as the "Main Mill," will be more than surprised at the magnitude of things being done there.

The improvements to the properties that have been made represent not only heavy monetary investment, but are of a character that represents stability and permanence being a building of two stories 80 by 90 with plenty of light and modern equipment, two additions to the beater room, a new building for a supply store with a pump basement, a new boiler house with two 150 H. P. boilers, old wood walks and old wood floors renewed with concrete.

Since the wood flume went out with the high water of last spring the concerns have been contending with most difficult conditions of high water in the Saranac River, building a reinforced concrete flume, along with new gates and gate racks, and the character of the work speaks for itself to those who should visit the plant, and see for themselves what is being done without any fuss.

The Plattsburg Wall Paper Company, which for some economic reasons removed to Glen Falls in the summer of 1917 came back to Plattsburg last July and they have increased their facilities by building an addition of 125 by 25 feet and installing one new print and two grounding machines besides replacing two of the old print machines with new ones of larger and improved type.

From Mr. Adriance was obtained the information that the company eventually intends to install a new and larger paper machine and are considering plans for the erection of homes for its employees close to the plant.

URGE RIVER NAVIGATION

The fight in Congress for river navigation to Holyoke is still on. Last week Senator Weeks and Congressman Gillett of this district appeared before the Senate Commerce Committee urging a favorable report on Senator Week's amendment to appropriate \$1,870,000 for improvement of the Connecticut River between Hartford and this city. Representative Allen T. Treadway, who was unable to be present, submitted a statement in favor of the proposed amendment.

No decision, it is expected, will be taken until after Congress passes a general water power bill which will permit private capital to construct dams and locks, but Mr. Weeks and Mr. Gillett urged that improvements to the Connecticut should be incorporated in the River and Harbors Bill so that private capital might be ready to meet conditions when the water power bill should pass.

Local paper manufacturers are heartily in favor of this navigation project and have strongly advocated this step for years.

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The Cornish China Clay Industry

Before the War the Production of China Clay Was Perhaps Cornwall's Much Flourishing Industry—After a Few Months it Is Believed That it Will Again Become So—The Revival of the Industry Is Expected to Be Brought About in Large Measure by the Associated China Clays, Ltd., the Registered Name of the New Combine of the China Clay Industry—Devon and Cornwall.

Written Especially for the Annual Number of the Paper Trade Journal by W. Trethewey.

The armistice which is a good augury for the ultimate peace of the world came as a good relief to those of us who inhabit the British Isles and none the less to our cousins of the United States to whom we owe an imperishable debt of gratitude as a nation for the great valor and sacrifice so opportunely displayed. Nationally and commercially speaking the United States has been one of our great assets, particularly from the China clay trade point of view and had there been more shipping available our exports would have kept up much better than they have.

Before the war the production of China clay was, perhaps, Cornwall's most flourishing industry. After a few months' reconstruction it will become so again. China clay is very largely a product peculiar to our own county. Clay of a sort can be got elsewhere but when the best is required they must come to Cornwall for it. Thus to a very large extent the China clay merchants possess a monopoly in a product of great value in many branches of manufacture.

Those engaged in a proprietary capacity in the China clay industry have suffered terribly through the war, many companies having been brought to the verge of financial embarrassment. As wages have increased, it cannot be said that the clay producers have been unmindful of the very hard times through which their workmen have passed, and if those increases have not compared with the increase in the cost of living, it has been because of the fact that the clay firms were not in a financial position to bear it.

Hope for Big Development

The closing months of the year 1919, it is confidently hoped by all associated with the China clay trade, will mark an interesting and most important era in the history and development of this famous industry. The fact that China clay holds the field as one of the cheapest raw materials obtainable and that it is an indispensable product in such large industries as pottery and porcelainware, in the manufacture of all classes of paper and also extensively employed in bleaching and the production of cotton and a variety of chemicals as well as many other uses, makes it one of the most valuable of raw materials on the market.

Before the war the Cornish clay producers were subjected to a very spirited competition for various continental and other markets, and now after reflection such competitive anxiety has been proved to have been quite unnecessary. It is hoped that those clay merchants who are now associated with the latest scheme will never allow themselves to be disturbed again by such fears of competition or substitution. These are mere bogies produced by those who are desirous that the China clay producers should continue to be a disorganized and competitive crowd of salesmen. The new scheme which has been introduced is considered to have been the best and up to the time of writing it has given the highest satisfaction. It was not hastily

adopted, but after six months' deliberation and by such practical unanimity that it augurs well for its future success and utility.

Associated China Clay, Ltd.

The "Associated China Clays, Ltd.," is the registered name of the new combine of the China clay industry of Devon and Cornwall, which partakes of the nature of a "Cartelle" for a minimum period of seven years. Common adversity may be said to have been the immediate cause of bringing into effect this important project. The enormously increased cost of production with no corresponding rise in the selling prices was bearing far too heavily upon the trade generally for the capital invested to withstand; and as I have already remarked many of the firms were faced with heavy financial propositions.

The "Associated China Clays, Ltd.," will be controlled somewhat after the manner of a "clearing house." Not only will the selling prices be fixed and the quantities for the various markets be allocated but railway and shipping facilities will be obtained to the best advantage and regulated accordingly. It is even contemplated that at no distant date the new combination may regulate the deliveries of china stone and the distribution of china clay cask and sacks, and that a purchasing board or department may be established, which should be to the mutual benefit of both the producers and consumers. The powers of the combine taken under the articles of association are both wide and comprehensive and reflects the highest credit on the part of those clay merchants who not only conceived the idea of such a scheme but brought it to such a satisfactory consummation. The registered officers of the "Associated China Clays, Ltd.," are at L'Austell and for this purpose the commodious and historic mansion known as "The Old House" has been acquired and its control of the trade took effect from January 1, 1918.

Among the Benefits

Among the numerous benefits which the consuming market should soon derive is the continuity of deliveries and uniformity of quality under commitments entered into. The new scheme has also this further merit to commend itself that it does not countenance the limitation of production in order to create an artificial scarcity for the purpose of inflating the prices. The only way in which the output will be limited is simply the demands of the market. With the pooling of interests in one central organization, and the setting up of machinery for seeking, developing, and fostering markets, the demands for china clay in the future should be largely augmented. Energies that have been spent in competition in the past between each other should now be applied in the extension of markets and particularly those of the United States and in accordance with which alone will the output of china clay be limited.

In what the china clay trade have been doing since the war the producers have received the benediction of the Board of

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PAPER is made for printing, and not as a thing complete in itself. Not every paper maker would keep on making the paper he does if he had to print the paper he makes. It is not by accident that our loft-dried papers go thru the printing press with such ease and sureness. Any sheet that couldn't go thru the press can't go thru our sheet calender rolls. If there is any stopping to be done we'll do it here instead of in the printshop.

Our guiding principle is, "Forethought in the Paper Mill Saves Trouble in the Printshop."

We are ready for 1919.

If you feel that "Forethought in the Paper Mill" is the thing you want, we shall be glad to receive samples of any grade you may wish to replace—now or later.

Write us a letter at least. We like letters. Some are on file that read better than orders.

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HOLYOKE, MASS.

New Sizes and Weights on Cover Paper—and why

So many papers have changed recently in size and weight that we feel a word of explanation is desirable on the changes made necessary in our four covers.



THE conference committee of the National Paper Trade Association and the Cover Paper Manufacturers Association were anxious to standardize the sizes of cover paper.

The executive council of the United Typothetae of America recommended and endorsed the two sizes 20 x 26 and 23 x 33. This matter was then placed before the executive committee of the National Paper Trade Association, who unanimously endorsed and recommended that it be accepted. Just previous to the signing of the armistice, the Pulp and Paper Section of the War Industries Board was about to notify the Cover Paper Manufacturers to adopt the two sizes given above. In view of the above, the Cover Paper Manufacturers Association has adopted these two sizes and will manufacture their lines to conform. Therefore, as this action has [the unanimous endorsement of the printer and paper merchant as voiced thru their national organizations, we feel sure that our decision will be approved by our distributors and their customers. Also as a feature of this change, stock lines will be manufactured only on the following Substances:

Basis 20 x 26—25, 35, 40, 50, 65, 80, 90.

We have, of course, some of the old sizes and weights on hand of practically all our covers and can continue to furnish until stocks are exhausted. New sample books and announcements will be sent as soon as possible on all lines.

Effective January 10th, the new sizes and weights on our Covers will be:

INTERWOVEN COVER

Single Thick 20 x 26 — 50 and 65 lb.
Single Thick 23 x 33 — 73 and 95 lb.
Double Thick 20 x 26 — 130 lb.
Double Thick 23 x 33 — 190 lb.

INTERNATIONAL COVER

23 x 33 — 95 lb.
Future runs that we make on this line will be made in this new size. We shall always be glad, however, to make 23x29—84 or 20x26—65, when running, in not less than 1,000 pound lots of a color.

UWANTA COVER

20 x 26 — 65 and 80 lb.
29 x 40 — 130 and 160 lb.
23 x 33 — 95 lb.

WICKER COVER

Single Thick 20 x 26 — 50 and 65 lb.
Single Thick 23 x 33 — 73 and 95 lb.
Double Thick 20 x 26 — 130 lb.
Double Thick 23 x 33 — 190 lb.

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SERVICE  LINES

Trade. During the past year one of the leading members of the Commercial Intelligence Department of the British Government, addressing a body of manufacturers, declared that in the coming commercial war the combination of firms engaged in particular industries is of the first importance and would be of incalculable value to all concerned and as the china clay industry was among the very first to adopt this principle and also the formation of a national council for the china clay and china stone industries, it shows the keen desirability of our Cornish china clay merchants to move with the times.

Comprises Twenty Members

This national council for china clay and china stone industries was formed as a result and in conformity with the Whiteley reports and comprises twenty members equally divided between employers and employed, and had been established with a view to better organization and closer working with the employers and the employed and the negotiation with various Government departments.

The functions of the national council are by no means limited to matters affecting the conditions of labor. They will include the restoration and advancement of the productive capacity; peace problems; prior claims to raw materials; machinery essential to the industry; financial facilities for the cementing and extension of trade; new outlets for future business, and every possible use of china clay and its refuse in the manufacture of new articles of commerce as well as the absorption of surplus stores that may be available on resumption of normal conditions. In general, the council may be regarded as a national movement applying itself to matters affecting the commercial, industrial and manufacturing needs of the industry.

Has Rendered Effective Service

Already the China Clay National Council has rendered effective service to the trade in various ways, especially in regard to the methods of recruitment and transmission of exports.

The successful formation of the "Associated China Clays, Ltd.," has, as one of the producers remarked, just after the meeting at which the agreement was arrived at, given the liveliest satisfaction to all who are in any way interested in its prosperity. The scheme penalizes no one and marks quite a new era for all associated with the trade whether as capital, producer or worker. While matters may even now take some time to adjust themselves the benefit cannot long be delayed now and the full benefits will be felt very shortly as a great boom in the trade is confidently anticipated. One of the strongest points of the new scheme is that all markets will be well considered and prices adopted with such moderation that nothing but the best results could possibly accrue.

Fortunately for the china clay industry those gentlemen who compose the new board of management, are well tried and experienced in the trade and will be found fully qualified to pilot the trade to victory and further success.

An article of mine which recently appeared in the *British Paper Maker* may probably serve to elucidate this subject more fully as it contained the impressions of one of the best known gentlemen in the trade. It was as follows:

Opening Months of 1918

Throughout the various vicissitudes which the Cornish clay industry has passed since the commencement of the war, no period has been fraught with greater consequences than the opening months of 1918. The latter months of 1917 marked an important epoch in the clay trade, it is true, by the unanimous endorsement of the "Cartelle" system, but it was in the practical administration of this new scheme rather than the theoretical side of it that created a suspicion of anxiety, and which demanded the best brains, and commercial acumen of the leaders

of this great industry generally. The old regime of competition would have been incompatible with the condition of the present time and individual firms would never have stood the strain of the increasing demands made by the Government since the commencement of the war.

At the outset the clay merchants were faced with an unenviable financial prospect caused by the sudden collapse or suspension of their continental markets, of which Germany herself was a great debtor. This was followed by the call of our country for the men, and few industries had a more healthy and sturdier race of young and patriotic fellows than was found among the Cornish china clay workers; consequently there was a laudable rush to the colors, and the trade received the warm eulogiums of the military authorities upon their fitness and exemplary loyalty. Later on a further demand was made upon this industry by the Government to supply the labor for the iron ore mines in the county districts of Lincoln and Northampton, at the request of the Ministry of Munitions and needless to say this demand was readily complied with to the great satisfaction of that department generally and Dr. Addison, its chief controller in particular.

Consequently about 1,000 of the best workmen were transferred to this new sphere of activity. It was such momentous questions as these and the serious depletion of the workmen, together with the increasing railway and shipping restrictions that confronted the china clay merchants and which necessitated a unification of action if their interests were to be conserved and the great china clay industry sustained. The demands made upon the clay producers as well as their employees have invariably elicited a loyal and hearty response and it was while the leaders of the industry were deliberating in one body on these and other complicated matters that a scheme for the united control of the trade was first considered.

Efforts of Messrs. Stocker and Sessions

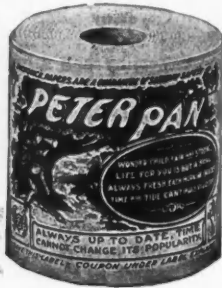
The unremitting efforts of Mr. T. Medland Stocker, chairman, joint managing director of "The West of England and Great Britain China Clay Company, Ltd.," and Mr. Walter Sessions, the managing director of the North Cornwall China Clay Company, Ltd., were only partially realized in the consummation of the "Associated China Clays, Ltd.," toward the end of 1917. This showed a very remarkable advance, even exceeding the most sanguinary expectation, and once more indicated that the good old county motto "one and all" was more than a legendary expression.

The success of the new amalgamation will undoubtedly rest in the continuity of those efforts which have already achieved such important results. The Cornish china clay industry has been controlled for years past by a body of gentlemen of the highest reputation in civic life as in the administration of the affairs of the trade and within the past decade this body of controllers has been augmented by one or two business magnates of other large industrial concerns. These have infused new ideas to the advancement of the industry generally and on the new "combine" I have solicited the opinion of those gentlemen. I refer to Mr. Walter Sessions, managing director of the North Cornwall China Clay Company, who has taken a lion's share in moulding the largest developments of Cornwall's chief industry; and to whom no small amount of credit is due in sustaining the trade and keeping the flag of that industry flying. In the course of the interview Mr. Sessions said:

No Firm Basis of Unity

"The china clay industry is a trade which has never had a firm basis of unity, and consequently could not possibly be expected to withstand and eventually overcome indiscriminate competition; thus its prosperity could only be regarded as inter-

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mittent, irregular and very unreliable. Those who derived benefit from such singleness of purpose were the factors and consumers who while bleeding the trade to its ultimate death, had little or no respect for those who allowed the industry to be exploited through lack of any policy; of reasonable trading. The state of war with its accompanying restrictions of trade and the entire collapse of normal conditions, accentuated the need of cohesion among producers and for the first time in its history the clay industry as a whole was faced with a grave disaster.

"In order to avoid such an unparalleled situation it became imperative that the serious position which had thus arisen should be considered in unison and without delay. Quite early in the year 1917 a scheme was brought forward and after the indefatigable efforts the assiduity of those interested and Mr. Sessions in particular, we can realize the 'Associated China Clays, Limited' matured and in full work as a 'Cartelle.'

Its Working Effects

"It behoves one at the present moment to examine its working effects and the nature of this important organization. The predominating feature has been the establishment of an adequate all-round advance in prices in order that the considerable increase in the cost of production should be met and one other advantage of equal importance has been the spirit of unity among all of the members associated with this absorbing movement."

Temporary Measure

Although this innovation has given unbounded satisfaction since its inception to those who give the closest attention to the results so far achieved will understand that the present solution is such that the "Cartelle" cannot be regarded other than a temporary expedient. The tendency of the "Cartelle" has been simply to keep each producer revolving upon his own confined axis without freeing the situation from individual suspicion and speculative efforts to secure an advantage over others. Producers were never brought so closely together as under the present circumstances and before any unexpected event overtakes them it is very essential that the unity thus moulded and which still prevails may be further cemented by a still deeper consolidation of the forces and that some form of financial combination may evolve.

Wise and Prudent Scheme

It has been generally admitted their new system is only a temporary war measure and all associated therewith have to acknowledge that it was possibly the wisest and most prudent scheme to begin with. Personal views on the measure were waived spontaneously and each and everyone worked loyally to bring the "cartelle" into the highest standard of perfection as their powers permitted them.

Without reflecting with injustice upon those who advocated the "Associated China Clays, Ltd.," or working in any way contrary to its continued successful prosecution considerable attention has been given to case for amalgamation. The advantages accruing from the formation of such a combine upon a sound financial basis have been recognized by many of the Cornish clay producers, but the difficulties to be surmounted loyally and otherwise are numerous and weighty. The basis of valuation requires to be established very cautiously, and with this object in view some producers have defined a certain method which includes an actuary's figures based upon similar relative results together with an inspection of one another's properties. Unfortunately, the result of the negotiations upon these lines between a few of the producers are still tentative, and in order to create a definite scheme of combine without undue delay, efforts are still being pressed to arrive at some amicable understanding upon a common basis that should be generally accepted.

Possibility of General Endorsement

It is firmly believed, that if the inevitable complications between certain china clay companies can be satisfactorily adjusted, credence would speedily be given to a financial arrangement which ought to meet with a general endorsement of the whole trade. Before any such scheme can be expected to meet with the desired acceptance generally, it is of the highest importance that all associated with the china clay industry should see with unmistakable clearness the advantages to be obtained.

"It would be very selfish to look at this subject for the present alone," said Mr. Sessions. "The future welfare of the trade ought to weigh in all deliberations. The methods and manners of the past days are gone," he declared, "and no one in the trade should have the least desire for the resurrection."

"No one in the whole industry can afford to ignore the situation as a whole, more than the individual can be permitted to escape his social obligations to the state."

Definite Possibilities

"The china clay industry has definite possibilities as a combined force, which it can never hope to obtain under cramped and restricted working conditions. Facilities must be found for producing clay more cheaply and internal competition must be totally eliminated so as to be in a position to meet foreign developments. Demand must be increased and better prices obtained than hitherto. Employers of labor ought to be in a position to work together with organized labor to the mutual advantage of both sides.

This aspect of the situation as well as the necessity of having the china clay industry qualified to be represented upon conventions when conferring or negotiating with Government departments has been met by the inception of the National Council for the China Clay and Stone Industries of Cornwall and Devon which has already received the benediction of the Ministry of Reconstruction.

Not the least among the advantages appertaining to a combine will be the stock market quotations, which would render holding readily negotiable and hereby establish a valuable asset. To reduce the cost of production means not only a large saving in the coal consumption and other materials, but there ought to be no serious difficulty in expediting the drying operations. To create new methods would necessitate the employment of the best engineering ability for the close consideration of such matters as tunnel driving or tunneling, filter-presses and gas producers and in this direction the new prospect would be serving a useful and beneficent purpose to the whole trade and community. The extension of the china clay market will involve research and chemical assistance to manufacturers of goods such as rubber, soap, asbestos, glass as well as a larger variety of others who are using the Cornish clay more as an experiment than as an established ingredient.

Counteract German Influence

One of the most important problems as soon as the normal conditions return will be to counteract German influence and capital which will be undoubtedly, devoted, among other things, to china clay in other countries. Where the competitive policy is removed better prices could easily be obtained and in some cases considerable reduction could be advisedly made at times and in some markets for certain qualities of clay. Specialized advertising is also needful and no industry can survive without it. Such a policy of development and enterprise could have nothing but the warmest commendation from the royalty owners or land-holders and with the progress foreshadowed in this article, there is no reason why it should not mark quite a new era for those actually associated with the trade and it should provide a much wider scope and more enhanced positions for the rising

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talent in the industry than has ever been the case under the old regime.

The British Government is very pronounced on the necessity of combination on legitimate lines as being the only hope of the future for dealing equitably with labor, and for taking a recognized position in deliberations when approached on any important subject. In combination lies the expansion of the trade, by which the china clay industry can alone lift itself from its narrow confines to take its place among the first industries in the world.

M. S. WILDER OUT OF REMINGTON CO.

WATERTOWN, N. Y., February 3, 1919.—Mark S. Wilder, who has been the president of the Remington Paper & Power Company since its organization, severed his connection with that corporation on January 1 and has been succeeded by Dan R. Hanna, of Cleveland, Ohio.

News of the change in the company became known in business circles in the city for the first time today. The Remington Company is owned by the Hanna interests of Cleveland, who were interested in the company about two years ago by Mr. Wilder.

Mr. Wilder was the organizer of the present company in bringing the millions of the late Senator Mark A. Hanna into the business. The Remington Paper & Power Company was formed from the three Remington companies, which existed here for several years under the management and ownership of the late Charles H. Remington and his father, C. R. Remington, the Remington-Martin Company, the Raymondville Paper Company and the Norwood Paper Company.

After the death of Charles H. Remington the companies became in financial straits during the period of depression, and Mr. Wilder, who was known as an able manufacturer of paper

and of power companies, was chosen receiver. He brought the companies out of financial chaos and set about reorganizing them under the name of the Remington Paper & Power Company after he interested the Hannas.

Mark A. Hanna II and Carl H. Hanna, grandsons of Senator Hanna and sons of Dan R. Hanna, of Cleveland, were to become the active forces in the company and were elected vice presidents. Mr. Wilder said that he had now remained with them about two years and that it seemed a good time at the first of the year to clean up the business and retire leaving them in control. "I have not been active in the company for some time, anyway, and it appeared to me to be a good time to retire. I have a large number of interests of my own to look after and I shall continue to devote my attention to them and rest for a while at least."

Mr. Wilder is one of the controlling stockholders of the Diana Paper Company, the Malone Light & Power Company, and has valuable power interests on the Oswegatchie river in addition to being an officer of one of the Carthage banks and a director of several of the local banks.

Dan R. Hanna will remain in Cleveland and will not be active in the company, said Vice President Mark A. Hanna. Carl H. Hanna, who is now overseas in a regiment of engineers with which he went at the beginning of the war, is expected to return soon and take up his duties in the management of the company.

"To Buyers of Printing" is the heading of an advertisement in the daily papers of St. Louis signed by 49 printing companies, announcing that "increased cost of commodities and factors of printing production, including a substantial wage increase which became effective January 3, compel a corresponding increase in the printing prices of St. Louis, in line with increases forced by the same conditions in other cities of the country."

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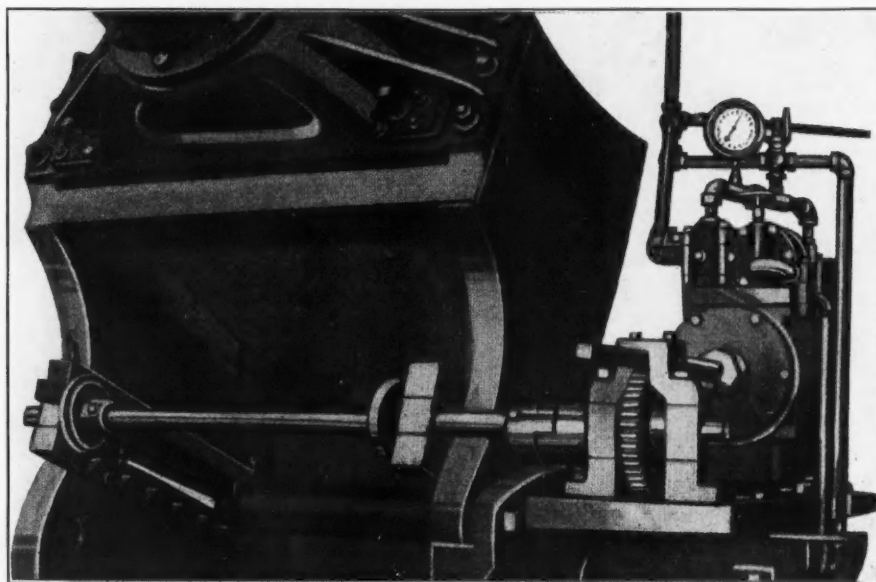
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FOR WOOD PULP STONES



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determined
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Gives a Predetermined "Dress"

THIS means more pulp, better pulp, less waste, more uniform production and the elimination of the most disagreeable job in your mill.

By a single movement of the valve lever, the burrs move up to the stone, take a certain amount of pressure, stay there for an indicated time and return to their original position.

This operation may be varied through any range of pressure, any length of time, and any style or cut of burr may be used.

When you have determined the correct method of dressing any particular stone, it can be duplicated by the most unskilled man in your mill.

The burr extends across the entire face of the stone, consequently there are never any high spots or ridges to make sliver.

The stone dressed with this machine *must* run absolutely true at all times.

Both the time and pressure elements controlling the action of the burr can be changed instantly, permitting *any* variation in dress necessary to obtain any desired result.

The burr is always perfectly parallel with the surface of the stone—this, and the elimination of the transverse motion of the burr across the stone practically doubles the life of the burrs.

This method increases the life of the stone and the very small amount of waste gives the highest percentage of pulp from the amount of wood ground.

We would be very glad to receive your inquiries and assure you they will have our very best attention

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Container Club Is Formed in Chicago

Is Composed of Prominent Manufacturers of Corrugated and Solid Fibre Containers and Will Take Over the Activities of the Corrugated-Fibre Association and the Fibre Shipping Container Association, Which Organizations Recently Voted to Disband—The Club Intends to Expand and Develop New Activities for the Benefit Not Only of Its Individual Members But for the Industry at Large

At a meeting of prominent manufacturers of Corrugated and Solid Fibre Containers, held in Chicago on January 16-17, 1919, an association to be known as "The Container Club" was formed. It will take over the activities of the Corrugated-Fibre Association and the Fibre Shipping Container Association, both of which have been disbanded, and many of whose members will be identified with the new association. It will also have for members a number of manufacturers who were not members of either of the old associations.

Voted to Disband

At a meeting of the War Service Committee of the War Service Board, held in Atlantic City on December 17, 1918, it was voted to disband the board on January 1, 1919, because the board was organized only for the purpose of serving the Government and the industry in its relations with the Government for the period of the war, and the war being practically over, it was decided that it would be beyond the authority of the board to continue its activities, especially in view of the fact that in all probability a number of its members only joined because of a spirit of loyalty and service and were opposed to organization work on any other basis. However, as many manufacturers realized the importance and desirability of one combined organization, 100 per cent. representative of the industry, particularly through the reconstruction period, efforts were made through the War Service Committee to bring this about. These efforts, however, met with failure, although all representatives present expressed themselves as favoring in principle an organization that would include all of the manufacturers.

Purposes of the Club

The "Container Club" developed as a result. It intends not only to take over the activities of the two associations referred to, but further, it will expand and develop new activities, for the benefit not only of its individual members, but also for the industry at large.

The following is quoted from its bylaws to indicate its intent:

ARTICLE II.

Section 1. Objects.

(a) To develop and maintain a proper standard of quality of fibre shipping cases, both corrugated and solid and of the raw materials entering into their manufacture.

(b) To cooperate with and assist the carriers by a strict system of inspection and reporting to the railroad inspection bureaus, with the object of disclosing and eliminating the manufacture and use of unsafe containers and of all shipping cases not complying with railroad classification rules.

(c) To cooperate with shippers in devising the most suitable containers for various commodities and the best means of packing and sealing them.

(d) To develop scientific research work, to secure a standardization not only of the corrugated and solid fibre shipping cases

themselves, but also of all the materials entering into their manufacture.

(e) To develop uses of corrugated and solid fibre shipping cases in proper fields, and to give immediate and special attention to the formation of proper organization and facilities for developing and handling the sale and shipment of corrugated and solid fibre products for use in foreign countries, and to extend the use of corrugated and solid fibre cases as containers for export of goods from this country.

In specifying the foregoing objects it is not the intent to strictly limit the purposes or activities of this association thereto, but to indicate in a general way only those which now seem fitting to clearly set forth. It is the intent and purpose of this association to promote at all times the general welfare of the industry in any legitimate way which from time to time may seem best to it, and to that end it will rely upon the spirit in which it has been organized, to wit: a genuine spirit of confidence, cooperation and harmony amongst its members. With that in view it is the intent that these bylaws shall always be liberally construed to conform to such spirit and intent.

Main Office of the Club

The main office of The Container Club will be in the Transportation Building, 608 South Dearborn street, Chicago, Ill., where the following officials will have their headquarters:

Geo. R. Browder, traffic manager; W. S. Salt, secretary-treasurer; A. J. Neumann, assistant secretary-treasurer.

Officers of the Club

The following is a list of the officers:

Geo. W. Gair, vice president Robt. Gair Company, Brooklyn—president.

Sidney Frohman, president Hinde & Dauch Paper Company, Sandusky, Ohio—vice president.

J. P. Hummel, president Hummel & Downing Company, Milwaukee, Wis.—vice president.

G. H. Wood, president River Raisin Paper Company, Monroe, Mich.—vice president.

Frederick A. Norris, vice president The Thompson & Norris Company, Brooklyn, New York—vice president.

The president, with the four vice presidents, form the Executive Committee.

List of the Members

The following is a list of charter members:

American Box Board Company, American Fibre Package Company, Division, American Corrugating Company, Division, Grand Rapids, Mich.

The Ashtabula Corrugated Box Company, Ashtabula, Ohio.

Bird & Son, Inc., East Walpole, Mass.

Buffalo Box Factory, Buffalo, N. Y. Fenton Fibre Box Co., No. Tonawanda, N. Y.



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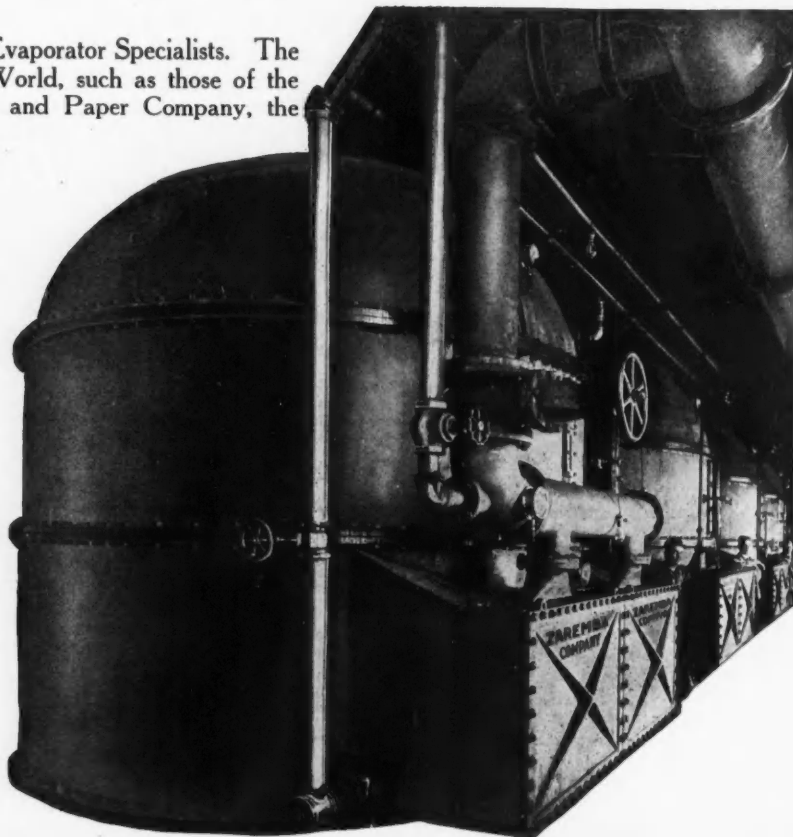
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Write us for the names of the mills in your locality that are operating Zarembo Evaporators. Find out about them from first hand investigation, then let your own good judgment decide.



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 Robert Gair Company, Brooklyn, N. Y.
 The Hinde & Dauch Paper Company, Sandusky, Ohio.
 The Hunt-Crawford Company, Coshocton, Ohio.
 Hummel & Downing Company, Milwaukee, Wis.
 Kansas City Fibre Box Company, Kansas City, Kan.
 Kieckhefer Box Company, Milwaukee, Wis.
 Lawrence Paper Manufacturing Company, Lawrence, Kans.
 Omaha Fibre & Corrugated Box Company, Omaha, Nebr.
 The Richardson Paper Company, Lockland, Ohio.
 River Raisin Paper Company, Monroe, Mich.
 The Thompson & Norris Company, Brooklyn, N. Y. The
 Thompson & Norris Company, Boston, Mass. The Thompson &
 Norris Company, Brookville, Ind.
 Sefton Manufacturing Corporation, Chicago, Ill.
 Waldorf Paper Products Company, St. Paul, Minn.

NEW ANGLE TO NEWS PRINT CASE

WASHINGTON, D. C., February 3, 1919.—A rather new angle has come to light here in connection with the reopening of the news print case before the Federal Trade Commission in that the Attorney General in his letter to the Federal Trade Commission asks that the Commission make "an investigation and determination of new prices or terms of contract beginning with August 1, 1918." The publishers, on the other hand, petitioned the Attorney General to reopen the case "for a re-examination and determination of new prices as of May 1, June 1 and July 1," in addition to the August figures. The question "What is the answer?" is being asked here by those most interested in this case.

In this connection the letter which the Attorney General wrote to the Federal Trade Commission asking that the case be reopened which was as follows, is interesting:

"Referring to the agreement, dated November 26, 1917, between Thomas W. Gregory, the Attorney General of the United States, and the several manufacturers of news print paper, I have the honor to ask the Federal Trade Commission for an investigation and determination of new prices or terms of contract beginning with August 1, 1918. I am making this request because I have been petitioned by the American Newspaper Publishers' Association so to do, and they will take the laboring oar in presenting their case to you in this investigation as they did under the prior one. Their petition to me is based upon substantially the same facts as are set forth in their petition for a rehearing before you, dated December 27, 1918."

A letter has been sent to Henry A. Wise, of New York City, who represented the majority of the news print paper manufacturers at the hearings already held in this matter and also to Thomas L. Philips, who represented the Minnesota & Ontario Power Company, another party at interest.

In these letters the Commission calls the attorneys' attention to the proceeding insofar as it has gone, and sends copies of all of the communications. The Commission, in part, says:

"It is considered advisable that before any steps are taken in the rehearing requested that all parties to the proceedings meet with the Federal Trade Commission for a conference in reference to plans of procedure and at the direction of the Commission I fixed the 11th day February, 1919, at 10:30 A. M., at the office of the Commission as the date and place for such conference."

The National Paper Tube Company, Wilmington, Delaware, has incorporated to manufacture paper tubes, cones, spools, textile goods, etc. The capital is placed at \$350,000.



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New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,

WEDNESDAY, February 5.

The New York market has been very quiet this week, but as the annual convention of the paper and pulp industry is now being held here, merchants are not paying as much attention to business as they ordinarily would. It is the general opinion in the trade that business will improve to a great extent after the convention is over, and the market, which has been dull since the armistice was signed, is expected to become much stronger.

The demand for news print continues fairly strong and the market for this grade of paper is firm. There has been no change in quotations reported, and prices are not expected to drop at present. The writing paper market remains practically unchanged. Prices have been maintained throughout the week, but the demand is still very poor. The tissue market is in practically the same condition. The demand continues very light, but prices for all grades of tissues have not changed.

Prices for coarse papers have been steady since their decline of last week, but the market for these papers is still very poor. Dealers continue to be optimistic, however, and an improvement in this market is looked for in the very near future.

The board demand is still very poor. At present there is really no fixed market for board. Quotations are very low, and dealers believe that a large order could obtain board at figures below quantity; all other grades are extremely dull.

Chemical Pulp

There has been no change in the condition of the local chemical pulp market. Dealers report that the demand has not changed to any appreciable degree during the week, and quotations on the whole, are the same as they were a week ago. The market is expected to improve greatly after the convention, however, so dealers are not discouraged in the least. Kraft is at present the only grade of chemical pulp that is being sought in any great quantity; all other grades are extremely dull.

Ground Wood

Conditions in the ground wood market have not improved this week. The market has rather shown up a trifle weaker than it has been, and there have been some reports of ground wood being sold as low as \$28 a ton. These instances are rare, however, and they are merely cited to show that at least the market has not strengthened. There continues to be a strong undertone to the market, caused by the fact that there is every reason to believe that there will be a shortage of pulp wood in the near future. The fact that this winter has not been as severe as past winters has permitted grinders to carry on operations more extensively than they have been doing, and as a result there has been a small surplus of ground wood stored up. This is the only reason that dealers can give to account for the fact that the market is as weak as it is at present. The market price for mechanical pulp continues \$29 in the East, and \$31 in the West.

Rags

New rags continue in poor demand, while old rags have again shown signs of strength. The writing and roofing mills are busy at present, and as a result there has been a fairly large demand for most grades of old rags. There has been a great deal of fluctuation in rag quotations this week, and several grades of new rags have shown a decline, while, on the other hand, an advance has been noted in quotations of old rags. Several grades of shirt cuttings are bringing lower prices this week, while quotations on repacked whites and roofing stock have advanced slightly.

Dealers believe, however, that in the near future there will be a better demand for all grades of rags, and at that time an advance in all quotations is looked for.

Old Waste Paper

The demand for most grades of paper stock has been light this week. There has been but little buying done, and consumers seem to be content, for the present at least, to purchase only enough paper stock to meet their immediate requirements. Mills at present are only buying waste paper at prices suitable to themselves, and dealers have so far been forced to either sell at these prices or not at all. Dealers are, however, still optimistic about the future, and an improvement in conditions is expected very shortly.

Bagging

There has been no change in the condition of the market for bagging. The demand has improved to a certain extent on all grades of bagging, but this improvement has not as yet been strong enough to be considered a market factor. Prices have for the most part remained stationary this week, and there has been practically no change in bagging quotations.

Twine

The twine market continues steady. The demand for all twines is not very heavy, but conditions are such that manufacturers can not, for the time at least, lower prices. Manufacturing costs are high, and raw materials are scarce. After the next jute crop is harvested, however, twine prices will probably be lower.

KALAMAZOO PAPER FIRMS MEET

(FROM OUR REGULAR CORRESPONDENT.)

KALAMAZOO, Mich., February 3, 1919.—The Kalamazoo Vegetable Parchment Company held its annual meeting Tuesday afternoon, January 28. It was the first gathering of the stockholders since the completion of the new mill and brought out an unusually large attendance, many coming from out of the city.

"The House That Jake Built," the popular name given the new Parchment mill, is one of the real show places of the paper-making industry and the stockholders were afforded opportunity to inspect it thoroughly. Reports of the officials showed the past year has been a very prosperous one, while the outlook for 1919 is exceptionally bright.

Important changes were made in the election of the board of directors and officers for the ensuing year. In the case of the directors, death had removed John J. Knight, one of the founders of this industry in Kalamazoo and a man who had played an important part in its growth and expansion. Clare H. Stearns was named to succeed him. The other directors are Jacob Kindleberger, W. O. Jones, C. S. Campbell, W. M. Loveland, Charles A. Peck, A. B. Connable, Frank H. Milham.

The naming of the officers saw Mr Kindleberger returned as president and general manager, Frank Mossteller, formerly of the Whittaker Paper Company, Cincinnati, now sales manager of the Parchment, was made first vice-president, succeeding W. O. Jones. The office of second vice-president was created, the incumbent being James A. Greenlee, manager of the Chicago branch of the company. The secretary is S. Ward Kennedy, the treasurer, C. S. Campbell.

No changes whatever in officers or directors were reported as result of the annual election of the Bryant Paper Company. Those named follow: Directors, Frank H. Milham, Noah Bryant, C. A. Fox, W. B. Milham, H. B. Kauffer, Charles Clarage, Joseph E. Brown, Glenn S. Allen, E. M. Irish, Kalamazoo, and E. L. Brooks, Cleveland; president, Frank H. Milham; vice-president, Noah Bryant; secretary-treasurer, C. A. Fox.

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Waterville, Maine

Waste Material Dealers Have Enjoyable Dinner

Eleventh Annual Banquet of the Waste Material Dealers' Association at the Hotel McAlpin Wednesday Evening, in Many Respects Most Successful in the History of the Organization—Dining Room Is Beautifully Decorated with the National Colors and Flags of the Allies—No Speech Making, But Vaudeville Entertainment of High Class Character—List of the Concerns Represented at the Dinner.

The eleventh annual banquet of the National Association of Waste Material Dealers, was in many ways the most successful banquet that this association has ever held. From a standpoint of attendance it was the largest banquet that the association has ever held, and it is estimated that more than two hundred and fifty members and their guests were on hand.

The affair took place on Wednesday evening in the Grand Ball room, on the twenty-fourth floor of the Hotel McAlpin. The members started gathering in the lobby of the hotel at 7 o'clock, but it was not until 8 o'clock, that every one was seated, and the festivities started. From the time that the affair started, until the last man had gone home, the affair did not lag for a minute, and there was something doing all the time.

The dining room was beautifully decorated, and the flag of our country and the flags of the allies, were hung in conspicuous places around the room. There was a jazz band on hand, which provided music, to liven things up, and from time to time the melodious voices of the diners were heard joining in with the music.

No After-Dinner Speeches

The program differed slightly from that given last year, in that there were no after dinner speeches made. When the guests first assembled, Frederick H. Chase, who was chairman of the banquet committee, announced that there would be only one speech made during the evening, and that this speech would be made by "Manny" Saloman, and would consist of just six words. When the applause had subsided, Mr. Saloman, speaking on behalf of the committee, said, "We're glad to see you here." Mr. Saloman later admitted that it was only because of long experience in doing business with the Western Union Telegraph Company, that he was able to make such a concise speech.

Vaudeville Entertainment

After the dinner had been finished, a vaudeville entertainment was given which consisted of a variety of acts which ranged from the singing of the quartet from Rigolletto, down to the comedian who told the joke about the Scotchman who lectured on prohibition. After the conclusion of the vaudeville entertainment, the various members lingered for a while, around the banquet hall, talking "shop" and then all went home well satisfied.

Among Those Present

The following concerns were represented at the dinner:

American Wood Pulp Corporation, Atterbury Bros. Inc., Atterbury & McKelvey, J. Anderson & Company, Nathan E. Berzen, E. Boxboard & Lining Company, Butterworth & Company, Castle, Gottheil & Overton, V. G. Cantasano & Bro., Geo. Carrizzo & Company, Chase & Norton, P. Cardinale & Son, Daily Mill Stock Reporter, Darmstadt, Scott & Company, A. De Angelis, Inc., Michael Flynn, Gatti, McQuade Company, Gotham Paper Stock Company, D. M. Hicks, Inc., Main Paper Stock Company, George W. Millar & Company, O'Meara, Maurice Company, Onondaga Trading Company, PAPER TRADE JOURNAL, Paper Mill, A. Salomon, Inc., Walden Mott Company, A. Vincenzo, P. Garvan & Company,

A. C. Loveland & Company, Hartford Conn., R. Goldstein & Company, Baltimore and New York, Penn Paper Stock Company, Philadelphia; Barousky Company, Holyoke; W. A. Coles Paper Company, E. B. Thomas & Company, American Strawboard Company, Ira L. Beebe & Company.

A. J. MORAN IS PROMOTED

Alfred J. Moran, who was recently put in entire charge of the firm of E. B. Thomas & Co., Inc., paper stock dealers of 100 Hudson street, has had a varied and active career since he entered this world some forty-two years ago. E. B. Thomas & Co., in addition to their trade in paper stock, also deal in foodstuffs and Mr. Moran has been taking charge of the food department since Mr. Thomas sailed for Europe early in January.

Mr. Moran is well known in the trade not only as manager and

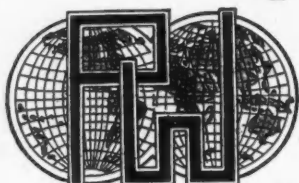


ALFRED J. MORAN.

treasurer of E. B. Thomas & Co., but also he is quite active in various associations in the trade. He is treasurer of the Waste Merchants' Association of New York, chairman of the Waste Paper Division of the National Association of Waste Material Dealers and a member of the executive committee of the latter organization. In addition to his various activities in the trade, Mr. Moran has also made himself prominent in politics and patriotic service. He was formerly Captain Adjutant of the Home Defense League of the 159th Precinct, Brooklyn, and Treasurer of the Fourth Liberty Loan Committee for that same district. He is a special inspector of the Automobile Bureau, Secretary of State's office, and he is also a Commissioner of Deeds for the City of New York.

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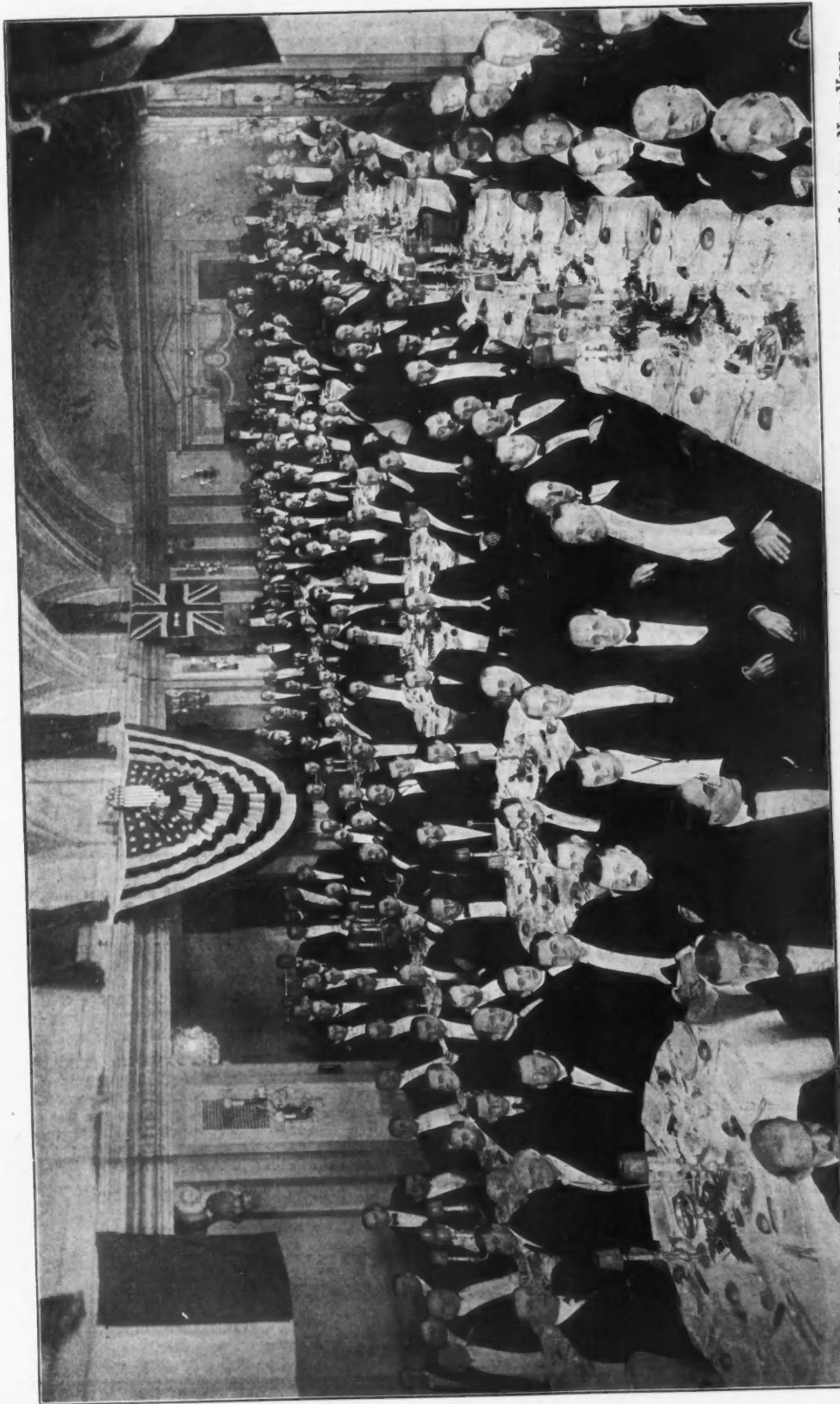
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BANQUET OF THE NATIONAL ASSOCIATION OF WASTE MATERIAL DEALERS HELD WEDNESDAY EVENING, FEBRUARY 5, 1919, AT THE HOTEL McALPIN, NEW YORK.

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With the opening of the new era American Commerce is welcome at every port of the seven seas. Our shipyards are launching the best fleet of merchant ships intelligent labor and engineering can build; to carry that commerce to those ports; and our Navy, soon to be second to none, will insure that fleet and commerce the continued freedom of the seas.

But what quality of products shall our magnificent merchant marine carry over seas? Will the Merchandise in her hold command the same respect as the Flag on her mast? Will the universal respect won on the battlefield be lost in the market? Will our invincible Navy be proud of the products she protects? Will truth and justice, honest values prevail? If you manufacture something that can be sold in another country you will partly answer.

Swenson evaporators are found in many foreign countries, and many repeat orders come from those countries. Swensons are giving honest service and the products our evaporators produce are the highest in quality. Swensons are the choice of the men who operate them as well as the engineering and cost departments, whether in America or over seas.

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Technical Association Has Big Banquet

Largest Dinner in the History of the Organization Is Held Tuesday Evening in the East Ball Room of the Hotel Astor—Judge Charles F. Moore Was Toastmaster and Program Included Many Speakers Who Are Widely Known Throughout the Country for the Work They Have Done in Science, as Well as Men Prominent in the Paper Industry—List of Those Present at the Dinner.

The largest dinner that has ever been held in the history of the Technical Association of the Pulp and Paper Industry, was held in the East ball room of the Hotel Astor, on Tuesday night, February 4. There were one hundred and fifty members and their guests present and the banquet hall was literally crowded to the doors. The war atmosphere which made itself prevalent during the banquet last year, has not entirely disappeared, and men in uniform were seen at various tables throughout the room. The menu this year, however, was not a Hooverized one, and both meat and wheat were served in abundance.

Judge Moore Is Toast Master

The Hon. Charles F. Moore, acted as toastmaster, and there were many speakers on the program who are widely known throughout the country for the work they have done in science. Foremost among these was Dr. C. P. Steinmetz, of the General Electric Company, a man who has a nation-wide reputation as a chemist and engineer.

George W. Sisson, Jr., president of the American Paper and Pulp Association, was the next speaker on the program. Mr. Sisson delivered a brief talk on the Influence of Technical Men in the development of the Pulp and Paper Industry, and was followed by Ernest R. Behrend, president of the Hammermill Paper Company; Robert B. Wolf, of the Emergency Fleet Corporation; Justus A. B. Cowles, president of the Pejebscot Paper Company, and Winifred F. Robertson, of W. F. Robertson & Co., all of whom delivered extemporaneous addresses.

Among Those in Attendance

The following is a list of those who attended the dinner:

Table A

S. F. Acree, G. J. Armbuster, E. R. Armstrong, W. H. Artz.

Table B

O. Bache-Wiig, Dr. H. P. Baker, W. E. B. Baker, L. F. Barsaloux, E. R. Behrend, O. L. Berger, F. C. Boyce, Paul DeC. Bray, H. J. Buncke, S. L. Bush.

Table C

Ross Campbell, W. B. Campbell, H. P. Carruth, L. C. Carter, Chemical Paper Mfg. Co., Chemical Paper Mfg. Co., Frederick C. Clark, Norman Clark, T. Clark, D. G. Coimbra, J. C. Corcoran, Justus A. B. Cowles, W. W. Cronkhite.

Table D

W. L. Davis, Jr., J. A. DeCew, Charles Dickinson, C. W. Drake, A. B. C. Drew, George F. Drew, T. W. Dunn.

Table E

Harry D. Eliason, George C. Emigh, Robert W. Evans.

Table F

Henry E. Fletcher, W. A. Forman, H. C. Frisbie, Chas. P. Fritts.

Table G

I. J. Gartland, Wm. H. Gesell, E. P. Gleason, P. P. Gooding, John H. Graff, Martin L. Griffin, H. W. Guettler, H. P. Guild.

Table H

Everett G. Ham, C. S. Hamersley, H. H. Hanson, Robt. O. Harper, Geo. H. Harvey, Geo. H. Harvey (guest), Geo. H. Harvey (guest), Raymond S. Hatch (guest), J. L. Hayden, Bryce M. Hess, R. P. Hill, J. H. Houghton, R. W. Hovey, C. F. Howell, W. N. Hurlburt, Edward Hutchins.

Table J

S. C. Jennings, G. D. Jenssen, B. Johnsen, W. O. Johnson.

Table K

T J Keenan, R. S. Kellogg, Chas. A. Kent, F. P. Klund, H. L. Kutter.

Table L

Stuart D. Lansing (guest), W. J. Lawrence, R. D. Lowering.

Table M

E. J. McDonnell, R. H. McKee, E. K. Mansfield, W. R. Marshall, J. O. Mason, E. Matheson, G. H. Mead, A. Y. Meeker, A. R. Meeks, Lester E. Milkey, J. G. Morgan, Charles F. Moore, James P. Munroe.

Table N

M. Neilsen, A. W. Nickerson, W. A. Nivling, W. L. Nixon, V. E. Nunez.

Table O

Oil, Paint and Drug Reporter, Official stenographer, Chas. R. Otterson, Chas. R. Otterson (guest) 3.

Table P

Paper, Inc., Paper Mill, PAPER TRADE JOURNAL, L. J. Parant.

Table R

Edward O. Reed, A. F. Richter, Geo. A. Richter, Geo. Robertson, W. F. Robertson, J. F. Rooney, W. S. Rooney, Capt. J. D. Rue, A. N. Russell.

Table S

Frank C. Sammet, Justus C. Sanburn, Thomas H. Savery, Jr., Carl Schneider, J. L. Seede, Geo. W. Sisson, D. E. Scott, Ralph M. Snell, Geo. K. Spence, J. W. Spotten, John Stadler, S. A. Staeger, Geo. A. Stebbins, Dr. C. P. Steinmetz, J. Newell Stephenson, Robert J. Strathern, Henry E. Surface, E. Sutermeister.

Table T

Howard S. Taylor, C. K. Textor, John Traquair, E. C. Tucker, W. E. Truesdell.

Table U

United States Paper Maker.

Table W

J. M. Wade, J. H. Wallace, E. B. Wardle, Sidney D. Wells, Geo. E. Williamson, S. L. Wilson, Carlile P. Winslow, Geo. S. Witham, Jr., H. J. Wittenson, Jr., A. D. Wood, Robt. W. Wolf, J. C. Wright, W. A. Wylde.

Table Y

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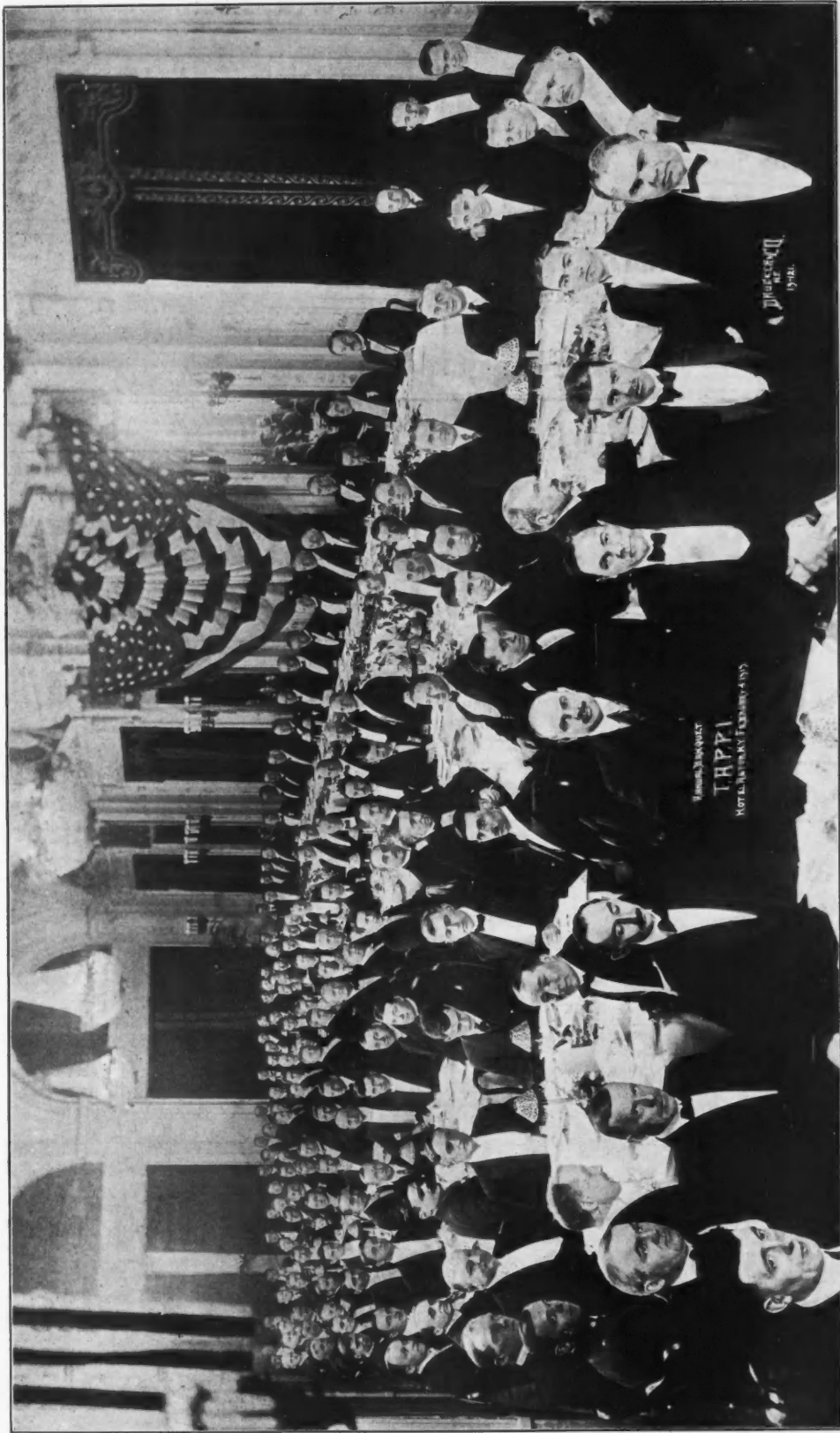
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BANQUET OF THE TECHNICAL ASSOCIATION OF THE PAPER AND PULP INDUSTRY HELD TUESDAY EVENING, FEBRUARY 4, 1919, AT THE HOTEL ASTOR, NEW YORK.

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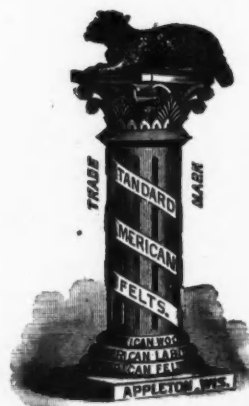
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National Paper Trade Association Dines

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As a post bellum affair, the ninth annual dinner of the National Paper Trade Association was all that could be asked. The Hooverized banquets of the past year made this one stand out in marked contrast for the epicures particularly but for all those who were present it will remain a concrete proof of the fact that we won the war.

The Waldorf-Astoria has seen many brilliant affairs but perhaps none more perfect than this. The ball room, balcony and gallery was crowded with diners and beautifully gowned and attractive ladies formed a goodly proportion of those present.

A Gala Occasion

Wednesday evening, February 5, was probably a most fortunate choice, for this gala occasion as the visitors to the great metropolis had not yet had time to experience the fatigue that follows a whole convention week with its incessant demands on ones energies. There was wine, ladies and song, one no more than the other, and perhaps that helped to make the evening the real success that it proved.

The high spirited youths from Western Pennsylvania headed by the famous John D. Swigart, ably assisted by the Army and Navy were perhaps not the least prominent members of the party and the competition they gave the admirable entertainers provided the occasion was both whole hearted and genuine. A spirit of camaraderie and good fellowship prevailed everywhere but it was for the boys in the balcony to call it to the surface and they did it with a spirit that brought back memories of the old days before the war.

Excellent Entertainment

The official entertainment given under the direction of the United Booking Offices of America included such stars of the stage as Clifton Crawford, Charles Olcott, The Four Haley Sisters, The Carsinos and Lois, Josephine and Tyler Brooke and it would not be fitting to tell all about this occasion without stressing the fact that Henri Conrad's orchestra of New York and Newport fame furnished the music of the evening. Throughout the dinner the entire company joined in singing the popular songs of the past few months and the indefatigable Mr. Murray proved a great success as a song leader.

After dinner the company adjourned to the Astor gallery where dancing maintained for several more hours and to say that that part of the program did not receive its full share of attention and afford a real part of the evening's entertainment would be rank inaccuracy.

Those Who Were Present

If you were not present just see what you missed seeing and who you missed dancing with. Read the appended names included in the list of guests and you will realize that you missed probably the most successful dinner ever held by the National Paper Trade Association:

Table A

J. M. Abell, S. R. Abrams, A. A. Adams, John F. Adie, Mr. and

Mrs. Charles Addoms, Mr. and Mrs. Everett Addoms, A. P. Allen, Joseph T. Alling, R. L. Allison, B. M. Anderson, Mrs. C. C. Anderson, C. F. Anderson, J. W. Anderson, John A. Andrew, James Andrews, R. P. Andrews, Fred R. Ayer.

Table B

H. F. Badgley, Aaron Bagg, Mr. and Mrs. John L. Bagg, Mr. and Mrs. Charles H. Baldwin, Mr. and Mrs. D. K. Ballou, Norman Bardeen, Mr. and Mrs. Abner Baron, L. Baron, Mr. and Mrs. Samuel T. Baron, Mrs. Charline Daly Barnet, Mr. and Mrs. Nicholas J. Barrett, Nicholas J. Barrett (two guests), Mr. and Mrs. F. L. Barstow, Mr. and Mrs. George Barton, Mr. and Mrs. Richard Bauer, Mr. and Mrs. George Beatty, Mr. and Mrs. Leonidas Beck, George W. Becker, Thomas Beckett, George E. Beggs, S. A. Benedict, C. N. Bicknell, C. N. Bicknell (two guests), Lou Bittner, W. M. Blackford, Howard L. Blake, Mr. and Mrs. Fred Blunden, B. F. Bond, Mr. and Mrs. B. F. Bond, Jr., J. T. Bonham, Mrs. L. R. Boswell, H. L. Bowes, Fred Boyce, Charles S. Boyd, Mr. and Mrs. C. J. Brainard, Mr. and Mrs. John Brannan, George Breeze, Mr. and Mrs. B. C. Broderick, W. F. Bromley, Mr. and Mrs. Robert Brooke, Mr. and Mrs. Arthur L. Brown, F. W. Burbank, E. W. Burke, John C. Burke, Mr. and Mrs. F. T. Burkhardt, Mr. and Mrs. George R. Burkhardt, M. O. Byrne.

Table C

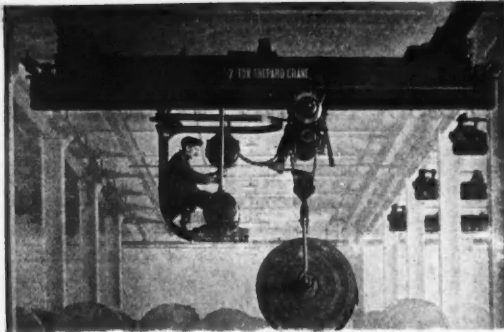
Mr. and Mrs. Angus Cameron, Miss Helen Cameron, Mr. and Mrs. James A. Cameron, Mr. and Mrs. James E. Campbell, James A. Canfield, Martin Cantine, Mr. and Mrs. H. Caplin, Mr. and Mrs. J. A. Carpenter, G. E. Carpenter, A. P. Carter, James Richard Carter, Mr. and Mrs. Hubert L. Carter, Winthrop L. Carter, H. P. Carruth, G. E. Caskie, Jr., Mr. and Mrs. Frank C. Cate, C. W. Chabot, L. K. Chamberlain, J. D. Chappell, L. G. Chelf, Hugo Christiansen, F. C. Clark, Jesse W. Clark, George Clarke, Mr. and Mrs. R. M. Clements, Mr. and Mrs. P. H. Clifford, Charles H. Clinton, Mr. and Mrs. Arthur D. Coffin, Mr. and Mrs. A. H. Cohen, William B. Collins, A. M. Collins Manufacturing Company (three guests), Mr. and Mrs. G. F. Commerdinger, Mr. and Mrs. Thomas N. Cook, E. W. Copelin, A. J. Corning, Charles F. Corning, Mr. and Mrs. J. P. Coyle, George D. Cox, George E. Crafts, Mr. and Mrs. H. T. Crawford, Dick Crotteau, Mr. and Mrs. Robert S. Crump, Mr. and Mrs. H. H. Curtis.

Table D

A. B. Daniels, Mr. and Mrs. Charles W. Dau, H. C. Davis, Mr. and Mrs. W. O. Day, S. S. Dillard, Charles T. Dole, George W. Dollarhide, Harry F. Donahue, Harry W. Doremus, Mr. and Mrs. W. F. Doyle, Mr. and Mrs. A. E. Dubey, Miss Gertrude Dubey, Theodore W. Dunn, Mr. Dunton.

Table E

H. M. Earing, Mr. and Mrs. H. A. Earle, Mr. and Mrs. P. W. Eason, Walter M. Eastman, Mr. and Mrs. George A. Eastwood, Mr. and Mrs. Albert M. Eaton, W. E. Ebbetts, F. J. Edmonds, Mr.



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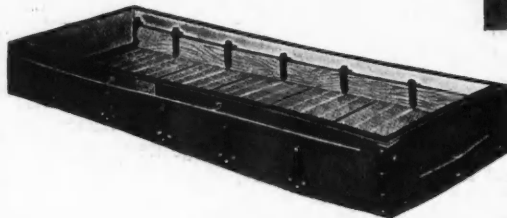
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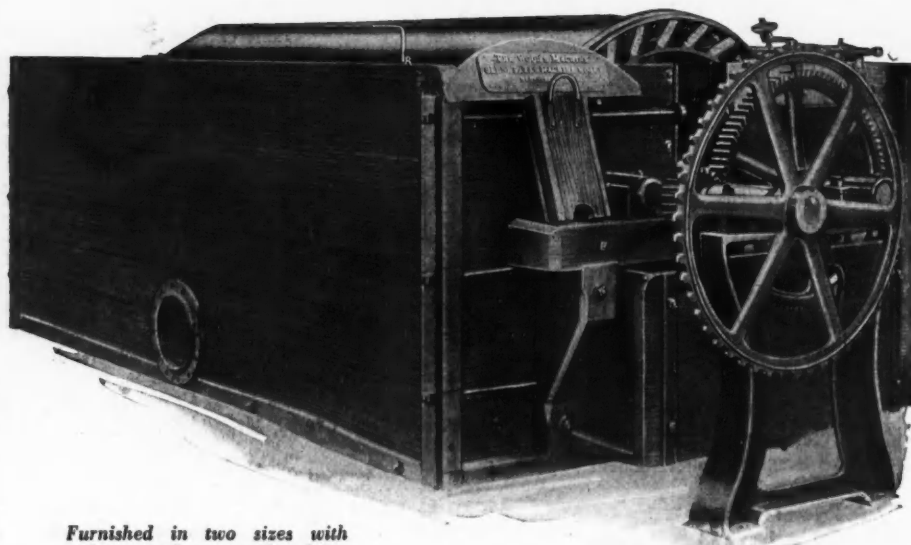
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Works automatically
 No couch roll
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THOSE PRESENT AT NATIONAL PAPER TRADE DINNER

and Mrs. John H. Eick, Mr. and Mrs. E. F. Eilert, Mr. and Mrs. H. W. Ellerson, Mr. and Mrs. E. L. Engle, Mr. and Mrs. Maxwell Hall Elliott, J. S. Ely, Henry Emery, William S. Epply, W. F. Ernholt, Mr. and Mrs. Clark Everest.

Table F

R. H. Fales, C. R. Field, R. H. Fisher, Roger Irving Fisher, Mr. and Mrs. James J. Flaherty, Mr. and Mrs. F. E. Floyd, Fort Hill Paper Co. (2 guests), Mr. and Mrs. Frank Max, John Q. Franz, Mr. and Mrs. M. H. Friemark, A. E. Fuhlage, Mr. and Mrs. Thomas S. Furlong.

Table G

Arthur M. Gabel, George A. Galliver, Mr. and Mrs. Charles Gardner, L. R. M. Gardner, Mrs. N. L. R. Gardner, Mr. and Mrs. Samuel Garner, Garrett-Buchanan Co. (guest), George D. Gaw, C. W. Gaudiner, George F. German, Albert Gilbert, Mr. and Mrs. W. M. Gilbert, Mr. and Mrs. George Gilkey, Mr. and Mrs. W. N. Gillett, P. Glatfelter, Mr. and Mrs. G. H. Gleason, Mr. and Mrs. H. L. Goodman, Mr. and Mrs. E. D. Gould, Mr. and Mrs. Charles J. Grant, J. S. Grant, M. H. Grassly, W. A. Gray, J. A. C. Groner, Henry J. Guild.

Table H

M. L. Haggerty, Mr. and Mrs. Arthur C. Hall, Miss Caroline Halsey, Mr. and Mrs. Arthur E. Ham, Kenneth Hamilton, J. W. Haraux, Mr. and Mrs. Robt. O. Harper, Mr. and Mrs. Henry L. Harrington, Thos. Harrington, Mr. and Mrs. H. F. Harrison, Frank J. Harten, A. Hartung, N. Hawes, Judge M. Hawk, N. O. Hayes, Mr. and Mrs. L. F. Hayward, Charles F. Heaphy, Henry C. Henchey, Mr. and Mrs. A. P. Henry, Mr. and Mrs. Edw. F. Herrlinger, Wm. J. Herrmann, Theodore Herzer, Mr. and Mrs. A. F. Hess, Mr. and Mrs. Arthur H. Hill, Mr. and Mrs. Berton C. Hill, Mr. and Mrs. S. J. Hodgins, Mr. and Mrs. Wm. H. Holden, Forest Hopkins, N. R. Hopkins, Miss Mary Hopson, Mr. and Mrs. Amandus Horn, Frank B. Howard, Mr. and Mrs. W. H. Howe, W. H. Howes, Charles F. Hubbs, Frank Hull, Garret P. Hynson, John E. A. Hussey, B. E. Hutchinson.

Table J

F. T. Jamison, Mr. and Mrs. Arthur L. Janes, A. S. Jenkins, DeForest Jetmore, Mr. and Mrs. J. B. Jones, E. V. Johnson, Frederick Johnson, Gustave Johnson, Mr. and Mrs. E. C. Johnston, George S. Johnston, Robert Johnston, Robert S. Johnston, A. L. Joseph, Mr. and Mrs. Jos. H. Joyce, F. A. Juckett, B. A. Judd, W. D. Judd, Mr. and Mrs. R. Lewis Julian.

Table K

Mr. and Mrs. R. C. Kastner, Mr. and Mrs. R. C. Kastner, Jr., T. J. Keenan, Harold W. Keil, Mr. and Mrs. Wm. B. Keith, M. J. Kelley, Raymond Kelly, Mr. and Mrs. Ralph Keenan, R. C. Kettles, J. C. Kimberly, J. Kindleberger, Mr. and Mrs. Alfred Kinn, Mr. and Mrs. Charles Kinnerman, Mr. and Mrs. L. C. Kinrich, Myron F. Kirk, C. W. Knode, S. C. Knode, Mr. and Mrs. G. P. Knott, Mr. and Mrs. M. L. Kratz, W. H. Krone, Charles Kuenster, Mr. and Mrs. John F. Kuster.

Table L

A. C. Lamb, George V. LaMonte, A. D. Lamson, Davis S. Landau, J. B. Larkin, J. B. Larkin (guest), Mr. and Mrs. Thos. Lathrop, A. Laubscher, Fred A. Leahy, Alfred Leeds, J. A. Lemmon, Mr. and Mrs. Henry A. Lengnick, Arnett W. Leslie, John Leslie, C. W. Lewis, Jas. A. Leyden, C. E. Lincoln, Bertram Linde, Miss Elsie Linde, Mr. and Mrs. John E. Linde, Mrs. Kate S. Linde, Fritz Lindenmeyr, Mr. and Mrs. David Lindsay, Jr., B. B. Linton, Linton & Scott (guest), B. W. Lipscomb, E. E. Lloyd, James Logan, Mr. and Mrs. Joseph Lowe, Mr. and Mrs. H. C. Lucas, G. Lucie, Kenneth Lyons, Mrs. Wm. T. Lyons, Curtis E. Lyter.

Table M

Mr. and Mrs. F. Machlin, R. D. Magill, Mr. and Mrs. L. E. Maglathlin, Mr. and Mrs. F. W. Main, Mrs. R. W. Magna, J. C. Mallalieu, Mr. and Mrs. W. J. Mann, Charles Manshel, G. A. Manz, Mr. and Mrs. M. E. Marcuse, Mr. and Mrs. Jas. S. Masterman, Alex. W. Maynes, B. B. Megargee, Mr. and Mrs. Louis S. Megargee, Fred Meilby, E. J. Merriam, Mr. and Mrs. Frank H. Merrill, Mr. and Mrs. H. H. Meyer, Mr. and Mrs. Herbert E. Meyer, Mr. and Mrs. Otto T. Meyer, Lt. Col. Albert M. Miller, Franklin E. Miller, O. A. Miller, John R. Miller, M. F. Montague, Frank L. Moore, Oliver J. Moore, Warren Moore, Edw. S. Moores, Rock P. Moran, H. W. Morgan, C. H. Morian, G. Stanley Morse, H. A. Moses, Frank Mossteller, Stanton Mott, Edward S. Munroe, W. N. Munroe, Mr. and Mrs. F. A. Murphy, Wm. Murray, Arthur B. Murtha, Walter B. Murtha, E. A. McAfee, Fred L. McClellan, C. B. McGrath, Robert J. McGregor, George McKinney, O. B. McLean, A. A. McIlvain, Mr. and Mrs. Frederick McMurray, Jos. M. McNulty, Mr. and Mrs. Wm. F. McQuillen.

Table N

Mr. and Mrs. J. Nacht, Mr. and Mrs. Emmett H. Naylor, A. H. Nevius, Mr. and Mrs. Wm. Wesley New, D. H. Newell, C. A. Newfang, A. Newman, Hubert B. Newton, D. A. Nicholson, Mr. and Mrs. Dan Nolan, H. P. G. Nostrand, Mr. and Mrs. E. S. Norton.

Table O

Mr. and Mrs. George Olmsted, Mr. and Mrs. David O'Meara, Mr. and Mrs. Maurice O'Meara, Mr. and Mrs. William O'Meara, George B. O'Neill, Fred J. Ostermeyer.

Table P

Felix Pagenstecher, PAPER TRADE JOURNAL, Raymond E. Parker, Frank T. Parsons, E. G. R. Paulini, Mr. and Mrs. R. Q. Pease, Mr. and Mrs. W. E. Perry, Harvey E. Platt, Walter W. Platt, Edward J. Plunkett, Mr. and Mrs. L. D. Post, Michael Pomerance, F. W. Power, Wm. C. Powers, D. W. Pratt, Mr. and Mrs. Harry Price, Chas. S. Proctor, Mr. and Mrs. J. W. Purtill.

Table R

A. P. Ramage, Mr. and Mrs. C. P. Randall, A. E. Rankin, Mr. and Mrs. W. J. Raybold, H. A. Raynor, B. E. Reeves, Mr. and Mrs. I. H. Reid, Mr. and Mrs. Stanley B. Resor, Mr. and Mrs. H. H. Reynolds, J. C. Reynolds, Russell E. Richards, Mr. and Mrs. William C. Ridgway, John B. Rieg, Frank Rinck, Carl Riordan, R. B. Rising, Mr. and Mrs. J. C. Robertson, J. Albert Robins, A. R. Roe, R. Roesch, P. H. Rogers, Mr. and Mrs. Sidney S. Rogers, A. H. Rose, Wm. T. Rossell, Thos. M. Royal, J. R. Russell.

Table S

Chas. H. Sage, Wm. Salzer, Stephen S. Sauer, L. E. Sayre, Jr., H. Newton Schillinger, Fred Schlosser, Morris Schlosser, Mr. and Mrs. Alvin L. Schmoeger, C. H. Scherske, Miss Selma Schworer, Mr. and Mrs. F. L. Scott, Col. Walter Scott, Mr. and Mrs. Harvey Self, H. J. Severance, Chas. A. Shaw, Dr. and Mrs. C. E. Shaw, T. S. Shaw, G. W. Sheridan, Valentine Shuler, Mr. and Mrs. W. T. Sibley, Andrew Simon, Mr. and Mrs. A. Simon, H. A. Simpson, Mr. and Mrs. Geo. W. Sisson, Jr., Louis Sisson, Wm. B. Sleigh, S. L. Sloan, D. Fred Souders, Jr., A. Lawrence Smith, Albert R. Smith, Austin Smith, Eugene H. Smith, Mr. and Mrs. G. A. Smith, Geo. T. Smith, Mr. and Mrs. Roger D. Smith, Thos. F. Smith, W. H. Smith, C. W. Spickerman, Mr. and Mrs. J. H. Stannard, H. Starr, Mr. and Mrs. Wm. Steadman, Oscar Steinbach, Eugene A. Steinfeld, Mr. and Mrs. A. E. Stevens, Capt. and Mrs. Frank L. Stevens, Jos. E. Stevenson, Mr. and Mrs. W. B. Stevenson, Mr. and Mrs. L. B. Stewart, Benj. W. Stewart, Mr. and Mrs. A. J. Stewartson, E. J. Stilwell, Mr. and Mrs. Henry

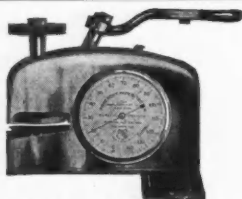
(Continued on page 375.)

EASTERN MANUFACTURING COMPANY
 Manufacturers of
WRITINGS—BONDS—LEDGERS
 Linen Finish Papers a Specialty

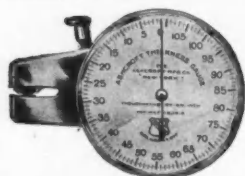
General Sales Office:
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 NEW YORK CITY

Mills:
 Bangor, Maine
 Lincoln, Maine

Western Sales Office:
 1223 Conway Bldg.,
 CHICAGO, ILL.



**The Ashcroft
 Paper Tester**



**The Ashcroft
 Thickness Gauge**

Actual necessities for all those who make, sell or purchase paper in any form. The thousands in daily use testify to their efficiency.

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 29 North Jefferson Street Chicago, Ill.
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 Canadian Sales Agents: The Canadian Fairbank's Morse Co., Montreal and Toronto.

**FORD
 Export Service**

OUR foreign connections have unexcelled facilities for intelligently promoting sales. Our home organization is composed of men with wide and practical export experience.

We have direct agents at all principal points.

THE FORD CORPORATION
 Exporters of Paper

Singer Building New York City

ESTABLISHED 1842

FOURDRINIER WIRES

DANDY ROLLS
 CYLINDER
 MOLDS

CHENEY BIGELOW WIRE WORKS

SPRINGFIELD, MASS.

MANUFACTURERS

Brass, Copper and Wire Cloth,
 Bank and Office Railings and Grille Work

National Paper Products Co. Starts New Mill

New Plant Is One of the Finest Laid Out and Best Equipped Board Mills in the Country—In Spite of Many Difficulties the Immense Plant Was Completed in Record Time—Electrical Installation Is More Elaborate Than Has Been Heretofore Common in Paper Mills But the Results Obtained Have, it Is Said, Justified the Expense—A. E. Mandel Is General Manager.

Notwithstanding all the difficulties attendant upon new construction during the past year, the immense plant of the National Paper Products Company was completed in record time.

First Board Produced November 20

The building operations began January 15 and the installation of machinery July 15, and on November 20 the first sheet of board came off the machine.

This mill is probably the most complete of its kind in the country. Its equipment consists of one 124-inch, six-cylinder Beloit machine, ten 2,000-pound beaters, driven individually by 100-h.p. motors, six mammoth Jordans, three of which are direct connected to 150-h.p. motors, and three belt driven from the line shaft.

Elaborate Electrical Installation

The electrical installation is more elaborate than has been heretofore common with paper mills, but the results obtained have more than justified the expense.

The principal product of the mill will be container board, which will be converted into fibre shipping cases in the plant operated in conjunction with the board mill. The equipment for this department consists of a 116-inch Beloit paster and the latest type of container machinery.

The interior of the plant is white enamel throughout.

What the Firm Manufactures

The National Paper Products Company is now operating mills and factories at Stockton, San Francisco, Los Angeles and Carthage, New York.

The Carthage mill is making tissue, toilet paper and public service towels.

The San Francisco factory makes corrugated products, public service towels, paper cans, envelopes and a general line of paper specialties.

The Los Angeles factory is devoted entirely to the manufacture of chemicals.

A. E. Mandel in Charge of Stockton Mill

A. E. Mandel, who is general manager of the Stockton mill, has had twenty years' experience in the board business, sixteen of which were spent with the Boehme & Ranch Company at Monroe, Mich. During that period he visited numerous mills throughout the country, with the result, undoubtedly, that many, if not all, of the weak points of other mills have been eliminated in the new plant of the National Paper Products Company. Some, in fact, who are competent to judge, say that this new plant is the finest laid out and best equipped board mill in the United States.

AT NATIONAL PAPER TRADE DINNER

(Continued from page 373)

Streibert, Mr. and Mrs. W. E. Strobel, Worthy Stuart, W. H. Stuart, P. A. Stuhreyer, H. W. Suter, John D. Swigart.

Table T

Mr. and Mrs. E. P. Taddikin, Roger B. Taft, Mr. and Mrs. Geo. G. Taylor, Mr. and Mrs. F. E. Taylor, D. F. Teetor, A. C.

Thomas, Morgan H. Thomas, Howard Thompson, James Thompson, Mr. and Mrs. Richard H. Thompson, Wm. Thompson, Geo. R. Tolen, C. W. Townsend, F. Bendel Tracy, Joseph Turpin.

Table U

Union Paper & Twine Co. (3 guests), C. K. Urquhart, Jr.

Table V

Benj. S. Van Wyck, Howard W. Vernon, Paul E. Vernon, Mr. and Mrs. F. H. von Ullrich.

Table W

Mr. and Mrs. Chas. C. Walden, Sr., Chas. C. Walden, Jr., Tom Walden, Mr. and Mrs. E. C. Walker, Jas. L. Wallace, Thomas Compton Walsh, Simon Walter, J. H. Wantling, Mr. and Mrs. K. S. Warner, Mr. and Mrs. Mark H. Warren, Mr. and Mrs. Thos. E. Warren, Mr. and Mrs. A. Warshow, Mr. and Mrs. John B. Watkins, Stuart W. Webb, Mrs. Theo. Weicher, E. H. Weihenmayer, Melville S. Welt, Percy E. Weston, Mrs. C. Wheeler, G. W. Wheelwright, Jr., Chas. P. White, L. O. White, Mr. Whitely, Mr. and Mrs. E. H. Whiting, Mr. and Mrs. A. E. Whiting, Frank B. Whiting, Geo. A. Whiting, Mr. and Mrs. S. R. Whiting, S. R. Whiting, R. A. Wight, Mr. and Mrs. W. S. Wilcox, Mr. and Mrs. Albert Wilkinson, E. T. Wilkinson, F. C. Wilkinson, G. B. Wilkinson, Miss Lavonne Wilkinson, Mr. and Mrs. Chas. W. Williams, Miss Charlotte Williams, F. K. Williams, Mrs. James Williams, R. C. Williams, Mr. and Mrs. L. S. Williams, Mr. and Mrs. B. W. Wilson, Miss C. T. Wilson, Mr. and Mrs. F. W. Wilson, N. W. Wilson, Mr. and Mrs. W. J. Wilson, Jr., S. L. Willson, W. C. Wing, J. T. Wolohan, H. J. Wood, E. L. Woods, Miss Wright, Mr. and Mrs. C. F. Wright, Mr. and Mrs. E. E. Wright, Emory M. Wright, Mr. and Mrs. Frank J. Wright.

A. P. Ziegler.

Table Z

NEWS PRINT PRICE EXTENDED IN CANADA

[FROM OUR REGULAR CORRESPONDENT.]

OTTAWA, Ont., February 4, 1919.—The government has extended the fixed price of news print until the end of March. The order-in-council ordering that \$69 a ton shall be the price charged to Canadian publishers was passed on Saturday. This two months' period is expected to give ample opportunity to clear up the investigation designed to decide what would be a fair permanent price.

The news print control tribunal will likely have its judgment out this month. It will take a long time to decide on the merits of the intricate questions raised at the sittings by counsel for the paper manufacturers and publishers. The manufacturers want the price increased from \$69 to \$80 a ton and the publishers want it reduced to \$50. Interesting speculation is taking place in news print circles as to what the judges will decide. The manufacturers are confident of an increase.

Commissioner Pringle has his book print paper troubles now. He is going to take up the investigation into prices of paper for magazines and trade papers again at the urgent request of the publishers of these periodicals. The first sitting takes place in Toronto.

Double Your Factor of Safety



OF all the equipment you have to buy, none perhaps is more important than your Belting.

You'll double your factor of safety on this item and you will decimate your belting troubles of the past if you'll equip your mill with

Test Special Rubber Belting

It's a product of three-quarters of a century of progress in the Mechanical Rubber Goods field, and the trade mark it bears means it meets the high standards of its makers.

Long lived, strong, uniform in construction and always runs true. Built to last in gruelling service. It will solve your Belting problems.

THERE ARE MANY OTHER VITAL FEATURES YOU SHOULD KNOW ABOUT. WRITE US FULLY ON YOUR REQUIREMENTS.

NEW YORK BELTING & PACKING CO.

MECHANICAL RUBBER GOODS

New York

Boston

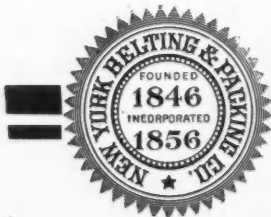
Chicago

Philadelphia

Pittsburgh

St. Louis

San Francisco



Canadian Associations Meet

Pulp and Paper Association, Technical Section and Forestry Organization Hold Annual Gathering in Montreal

F. J. Campbell, the Retiring President, in His Address, Reviewing the Work of the Year, Showed That the Association Had Accomplished Much Constructive Work—J. A. Bothwell, of the Brompton Pulp and Paper Co., Elected President, and George Chahoon, Jr., of the Laurentide Co., Vice-President—Educational Campaign for Workmen Is Strongly Urged—Technical Section Has Interesting Meeting.

The annual meeting of the Canadian Pulp and Paper Association was held in Montreal this week, being the culmination of a series of meetings held here during the week, representing all branches of the pulp, paper, forestry and lumber interests in the Dominion. Never before have so many men interested in these great and growing industries gathered together in Canada, and the annual meeting of the association was successful beyond all anticipations, both as regards the attendance, and as marking a definite, united and progressive step in the advancement of the industry.

Retiring President's Address

F. J. Campbell, the retiring president, in calling the meeting to order, faced a large audience, who showed by their enthusiastic applause that they appreciated the untiring efforts and initiative he has shown during a most strenuous year in advancing the interests of the association and its members. It would be admitted, he said, that the past year had been the most important in the history of the association. Thanks to the ungrudging and able work not only of the officers, but of a great many of the members, he thought he might say without the slightest egotism that it had also been one of the most successful years—an opinion which was warmly endorsed. Mr. Campbell continued:

"Beginning with the Newsprint Section, not only the Chairman, George McKee, but every member in it has devoted a large amount of time and attention to the problems which it had to face. At this time last year, like the Allies, we had our backs against the wall and were confronted by the most unjust price regulation ever perpetrated in this country. After constant and persistent effort by all concerned, aided by the able work of our counsel, some measure of relief was obtained and all concerned are still working to gain something more adequate.

"The Chemical Section had some cause for anxiety early in the year, owing to complications in the sulphur situation, caused by the war. The well-founded arguments of the members finally convinced the Government, who decided not to interfere with present arrangements. During the year Mr. Riordon tendered his resignation as chairman of this section, but was prevailed on to serve out his term on the understanding that he would then be relieved. Mr. Riordon has served this Association in almost every office and thanks are due to him for the large amount of interest he has taken in our work.

"Improved organization and the establishment of trade customs has been brought about in the Board, Mechanical, Pulp, Wrapping and Coated Paper Sections, of which you will hear in due course from Captain Acer, Mr. Taylor, Mr. Wilson and Mr. Pauline, while the organization of the Felt Section in charge of Mr. Graves is so good as to be a model.

"A great deal of work has been done in the Book and Writing

Section, not only by Mr. Waldie and Mr. Rolland, but by every individual member. An excellent code of trade customs has been fully established. Early in the year an investigation into prices of book paper was begun, but has since been dropped. Possibly unjust restriction can only be maintained by the unfair use of journalistic influence.

"In the Technical Section, Dr. Bates, Mr. Thorne, Mr. Sabaton and others have done much active work. An effort has been made to effect an arrangement by which the industry would become actively associated with the Forest Products Laboratory. It seems regrettable that some good working basis cannot be established. The Sub-Committee on Technical Education made considerable progress for which thanks are due to Mr. Crossley and Mr. Carruthers.

"Last but not least, our newest Section, that of Woodlands, has rapidly become an unqualified success under the guidance of Mr. Power and Mr. McLean. Their September meeting was one of the best attended, and the most enthusiastic meetings held under the auspices of this Association. Much practical work was discussed, and only a mill man can understand the joy with which this meeting listened to Mr. Dalton when he told how he had put one over on the manufacturing end."

Mr. Campbell dealt with the manner in which the difficulties of the threatened embargoes, the car supply, and the supply of coal had been successfully coped with, and proceeded:

Organization Matters

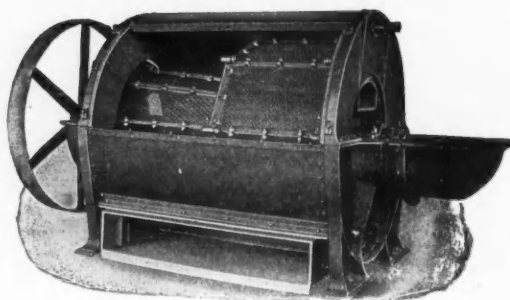
"I wish to express my appreciation of the able and enthusiastic work of Mr. Dawe and Mr. Beck. Mr. Dawe has administered the office of the Association in an efficient and business-like manner. Thanks largely to his efforts, we have at last been accorded an intelligent classification of paper imports, and the many returns called for by various departments of the Government have also been consolidated. Mr. Dawe has been active in getting out the various bulletins with which you are familiar, and while carrying on his duties he has, at all times, given courteous and prompt attention to the many calls upon him by our members and others.

"The work of Mr. Beck as our publicity representative has been most valuable. Mr. Beck began by getting what publicity he could for us, and succeeding in getting more than we expected; at the same time he started in to lay a solid foundation for his work by acquiring figures and other data bearing on the problems before us. On his own initiative, and by really brilliant work he laid before us a mass of material of value to the Association, a great deal of which proved to be of the utmost importance to our counsel. While Mr. Beck is employed by the News Print Section, there is a suggestion before you to enlarge the scope of his work.

"IMPROVED" KNOTTER

for the first screening of sulphite, sulphate or ground wood pulp

We shall be glad to furnish data and samples of the work this machine will do in actual use.



Knotter Design No. 2

The cost of power and upkeep is extremely **small** and the results are very satisfactory.

WE ASK A THOROUGH INVESTIGATION

IMPROVED PAPER MACHINERY CO.

NASHUA, N. H., U. S. A.

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ENGINEERS

of

DEVONSHIRE GROVE, OLD KENT ROAD, LONDON

ENGLAND

Well-known in the Paper Trade of Great Britain, France and Belgium, are open to undertake the manufacture, and, if desired, the marketing of light and medium Machines and Appliances for the Paper Trades.

"There are many problems before us that call for attention and effort. The first of these is the question of taking care of our own men who have been at the front and of giving our assistance to the whole problem of re-establishment, which calls for the serious consideration of this Association and of every member in it. It is apparent that, for well-understood reasons, returned soldiers cannot immediately fall into the regular routine of civilian life, but it is being demonstrated daily that by the exercise of patience and effort on the part of the employers and foremen, the majority of these men will soon fit into their former occupations and become more valuable than before.

"The matter of more publicity of our industry is open for consideration. The News Print Section engaged Mr. Beck to look after their publicity interests about a year ago, and some other work has also been done, apparently with good results. A general campaign with a view of maintaining optimism and encouraging the use of Made-in-Canada paper, has been proposed and seems to merit approval.

Rail and Ocean Freight Rates

"The question of railway and ocean freight rates is of vital importance to this industry and demands serious and immediate attention. Ocean freight rates, although showing some reduction, are still 700 per cent higher than pre-war figures. Our railways are still operating under conditions hastily instituted as a war measure, which seriously affect operating costs. It is obvious that as we are competing with the world in pulp and paper, it is of vital importance that inland and ocean transportation be obtainable by us at rates proportionate to those obtained by other countries.

The Enormous Consumption of Pulpwood

"The general public are of the opinion that Canada has unlimited timber resources. Those of us connected with the industry know that when due allowance is made for what is inaccessible and what has and is burned and cut, the question of a continuous supply will be a very serious one within a comparatively short time. The amount of wood used in the industry has increased during the last fifteen years by 475 per cent, and is now approximately 3,000,000 cords a year, inclusive of exports. If this increase continues at the same ratio, and the indications are that it may increase at a greater ratio, we shall be consuming in the course of 15 years over 14,000,000 cords of pulpwood per annum. As it is being demonstrated that our cut-over forests are not reproducing the sorts of wood we require, the importance of conservation cannot, therefore, be over-estimated.

"The amount of wood used in the industry, including that exported to the United States, is estimated to have increased by 475 per cent during the last 15 years and now amounts, approximately, to 3,000,000 cords a year. It is, perhaps, too much to expect that the next 15 years will see a proportionate development in the industry, but allowing for an increase merely on the basis of 10 per cent per annum, our consumption of pulpwood at the end of the next 15 year period will be at the rate of 7,500,000 cords a year, which is greater by more than 2,000,000 cords than the present annual consumption of pulpwood by the United States. Since it is being demonstrated that our cut-over forests are not reproducing the species of wood we require, the necessity and importance of proper attention to conservation cannot be over-estimated.

The Question of Labor

"The relations between employers and employes in this industry have been kept on a high plane—if these relations are to be maintained the questions involved must be handled with care; we are prepared to give labor all that conditions permit, but if the governmental restrictions against which we are fighting continue to hamper us, anyone can see that it will be difficult, if not impossible to extend, that consideration to labor that is so desirable at the present time.

"In conclusion, I thank you for the support accorded the Association's various officers and bespeak the same cordial assistance for my successor. Now that our industry has assumed such a vast importance, and is becoming recognized for what it is, I trust that the Association will continue to receive the endorsement and support from its members that is now being accorded, thereby insuring the continuance of its service in building up the industry and increasing the value of its work from year to year."

Mr. Bothwell Elected President

J. A. Bothwell, of the Brompton Pulp & Paper Company, was unanimously chosen president for the ensuing year, Mr. Campbell being given a hearty vote of thanks for the energetic manner in which he had carried out his presidential duties.

George Chahoon, Jr., of the Laurentide Company, was elected vice president, with the understanding that he will be the president next year. A. L. Dawe was re-elected secretary, and the directors were re-elected by acclamation.

An Extensive Advertising Campaign

Following up the suggestion in Mr. Campbell's address, it was practically decided to carry on an extensive newspaper advertising campaign during the coming year to promote the use of Canadian-made papers, in place of imported papers. The whole matter was referred to the executive, with power to go ahead.

A Representative in England

It was announced that an invitation had been received from the Canadian Trade Mission in London to send a representative of the paper industry to England to aid in the export of pulp and paper products to Europe. The matter was referred to the incoming executive, with power to act.

Educational Campaign for Workmen

The Committee on Education brought in a report recommending that text books be secured and distributed free of cost among the men at the different mills throughout the country, giving practical lessons on the manufacture of pulp and paper. It was also suggested that night school be established in mill towns whereby the men would be given an opportunity of learning the technical end of the business. It was pointed out that if this programme could be carried through to a successful conclusion it would give a great impetus to the Canadian pulp and paper industry and be a general tonic to the business.

The meeting voted approval of the proposal. The sum of \$5,000 will be expended on text-books this year, and a similar amount was promised for the following year. The entire campaign is to cost (according to the chairman of the Technical Section) \$30,000, which will be provided as required.

The text-books required do not at present exist, and their preparation will be worked out in co-operation with a number of American pulp and paper men, and others will be invited to participate and get the benefit. A complete system of vocational education will be provided.

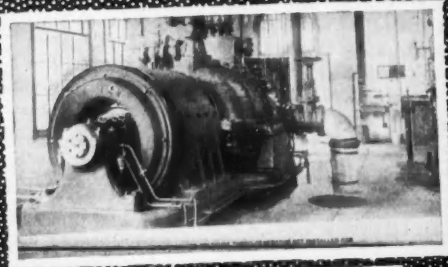
Abolition of Government Regulation

Following up a suggestion from the News Print Section, it was decided to memorialize the Dominion Government in favor of the abolition of all Government regulation of the industry as and of the 1st of March, 1919, this memorial to be presented by a delegation consisting of George M. McKee, chairman of the News Print Section; H. A. Thomas, of the J. R. Booth Company; Sir William Price, of Price Brothers, Limited; P. B. Wilson, of the Spanish River Pulp and Paper Mills, Ltd., and J. A. Bothwell, of the Brompton Company.

News Print Section

George M. McKee, as chairman of the News Print Section, presented the following report:

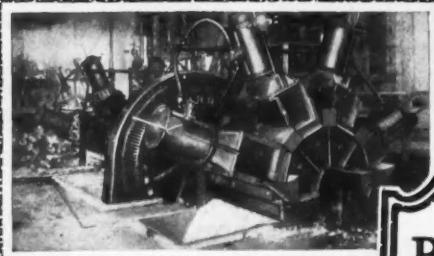
The year just closed has been one of great activity for the



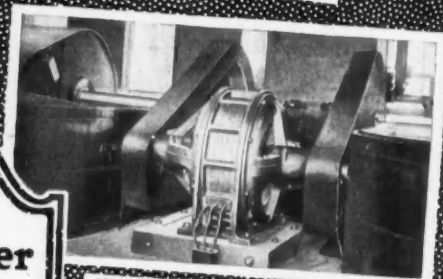
600-kw., 1800-r.p.m., Mixed Pressure Turbo-generator; Parsons Paper Company, Holyoke, Mass.



Motor-operated Wood Conveyor, Finch Pruyn Company, Inc., Glens Falls, N. Y.

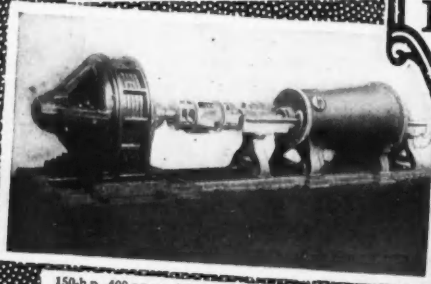


Two 1200-h.p., 240-r.p.m., 440-volt Synchronous Motors, each motor direct connected to two 4-pocket grinders. Inland Empire Paper Company's Plant, Spokane, Wash.

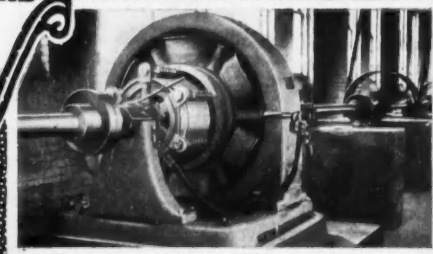


150-h.p. Induction Motor Driving Two Beaters through Chain Belts. Kimberly-Clark Company, Kimberly, Wis.

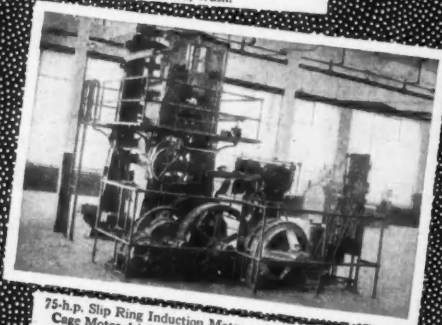
Typical G-E Pulp & Paper Mill Installations



150-h.p., 400-r.p.m., 440-volt Slip Ring Induction Motor driving Mammoth Jordan. Inland Empire Paper Company, Millwood, Wash.



One 100/225-h.p., 275/500-r.p.m., 220-volt Variable Speed Direct Current Motor direct connected at both ends to line shafting driving variable speed end of paper machine. Consolidated Water Power and Paper Company, Grand Rapids, Wis.



75-h.p. Slip Ring Induction Motor and 7 1/2-h.p. Squirrel Cage Motor driving 50-in. 9-roll stack paper calendar. Strathmore Paper Company, Worcester, Mass.



15-h.p., 600-r.p.m., 550-volt Slip Ring Induction Motor and Panel for Plater

General Electric Company

General Office: Schenectady, N. Y.

News Print Section of this Association; all of the mills have been running at practically full production, averaging throughout the twelve months period 97.7 per cent of maximum capacity, resulting in a total production of 699,310 tons for the fourteen companies reporting to the Section, as compared with a production of 602,905 tons for 1917. During the year there was one new machine started in the East and two or three on the Pacific Coast. From present indications, few new machines can be put into operation during the present year, and the chances are that production for this year will be only slightly higher than last.

The Section has been particularly active in defending its members in the news print investigations before the Controller at Ottawa, and the Federal Trade Commission at Washington, these investigations requiring almost the entire time and attention of some of our members. The Federal Trade Commission, acting as arbitrators, handed down its findings and award June 18, 1916, fixing the price of roll news at \$3.10 per 100 lbs., from April 1, 1918. This award was appealed for review to the Judges of the United States Circuit Court for the Second Circuit, acting as reviewing arbitrators. On September 25, 1918, the reviewing arbitrators made findings and fixed the price of roll news at \$3.50 per 100 lbs. Subsequent to the findings of the Federal Trade Commission, there was submitted to the Commission conclusive evidence to the effect of changes in rates of wages, freight rates, and wood costs since April 1, 1918.

This evidence was taken under consideration by the Commission, and on October 19, 1918, they handed down supplemental findings, fixing the price of roll news at \$3.75¼ per 100 lbs., as of July 1, 1918.

In spite of the thorough discussion of the subject, and the clearness of the reasoning in the reviewing Judges' findings, there still seems to be a general inability, or unwillingness, on the part of consumers to understand why the price of news print paper has advanced, and they are now attempting to have the whole question opened up again.

The Ottawa investigation has been more annoying and complicated to our members, involving, as it did, the question of differentials in the distribution of the Canadian tonnage. Happily, the matter of differentials was settled, for all time, by agreement, among all the mills excepting one. The payment of the differential to this mill (the Fort Francis Pulp and Paper Company), as well as the final fixing of a Canadian price, is now in the hands of the Appeal Tribunal for their consideration.

All of these investigations have been a matter of heavy expenses to our Section, involving an expenditure for the year of over \$33,000 for the Canadian investigation, with further heavy payments to be made; in addition, the signatory mills to the Federal Trade agreement have been called upon for very much larger payments for the Washington hearings.

The Publicity Department of our Section has been of great assistance to the entire industry, in the distribution of a number of valuable bulletins, and the publication of many special articles placing the facts before the public, and I am sure it will be admitted by all that the percentage of people who appreciate the value of the paper industry in our country has been increased to an astonishing degree by this means and should be increased and extended to other sections of the industry.

The outlook for the news print industry during the reconstruction period is good, as compared with many other industries. There are no evidences of over-capacity, and stocks are not large. Furthermore, there will probably be a considerable rebound in the printing and publishing industries. They have been repressed by war conditions, and a reaction is due. The market for a number of years has been entirely in the manufacturers' hands, while the future will require clear-headed salesmanship to maintain a selling price to give a profit over the increased cost of production which must continue throughout the present year.

Report of Chemical Pulp Section

The report of the Chemical Section was in part as follows: During the year the Port Arthur, Mattagami, Fraser and Whalen Sulphite Mills came into operation as well as the New Brunswick and Colonial Sulphate Mills. All of these seem to be sharing the growing success of the industry. There is only one mill under construction at present, the Kipawa Mill, which will make 100 tons per day of bleached sulphite.

Cost of production in Canada is now probably decidedly lower than in Europe, reversing the pre-war relation. While costs of labor and material have greatly increased here, they have not increased as much as in Europe, where wood is said to be costing \$30.00 a cord, coal \$30.00 a ton, and the cost of money has risen to almost the same level as Canada, and taxes will probably be higher for some time to come. Russia, which was the main source of wood, is not in business, and Germany and Austria, who were the chief producers of high grade pulps, will not be important factors for a while.

The equalization of interest rates affords another argument for that which has long seemed desirable, viz., that the Canadian chemical pulp industry should not hesitate to lay up stocks. Much more equitable conditions in manufacture, quality and price would probably result from such a course.

The war period has witnessed progress in methods of acid-making and in the tumbler barking of wood, the one improving quality and the other increasing output and diminishing accidents and cost. In the chemical pulp mills of Ontario particularly, accident prevention has developed to a gratifying extent and the general movement looking to the safety, comfort and happiness of employees is going steadily forward.

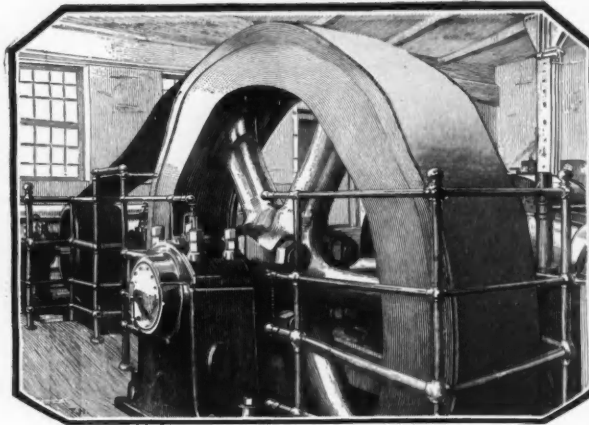
The chemical pulp industry of America, and more particularly of Canada, stands today on the threshold of a great development. Newsprint has long since passed into the category of staple commodities, of which America not only supplies her own wants, but has much to spare for export. Now it is the turn of chemical pulp. Ten years ago a large part of the chemical pulp consumed in America was imported from abroad, the proportion which Canada supplied to the paper industry of the United States was quite small. Today, according to latest figures available from the United States Government, a relatively small quantity of chemical pulp is coming from abroad to the United States, while the quantity which Canada has supplied to our neighbors to the south has grown very rapidly.

Shipping conditions have no doubt played a great part in the restriction of imports from overseas, but even though abnormalities in this respect largely disappear in the course of the next year or two, reduction in ocean freights will be of much greater stimulus to Canadian exports than to imports from abroad.

In the fiscal year ending March 31, 1908, the value of chemical wood pulp exported by Canada to all countries was less than \$1,500,000. Canadian Government figures so far available point to a total export of over \$25,000,000 for the fiscal year ending March 31, 1919. This compares very favorably with the exports of printing paper, which will probably attain a total of \$30,000,000 in the same period.

The situation has now arrived that Canada has just about filled the requirements of the United States outside of that country's own production. Canada will doubtless hold that trade if a good quality standard is reached. Canada should now go after the trade of other countries to which she can reasonably export with a view ultimately to holding a great part of the world's trade in chemical pulp. Encouragement is given to this view by the fact that the exports of Canadian chemical pulp to Japan, for instance, have grown from a scant \$100,000, in the 12 months ending March, 1913, to almost \$2,000,000 in the 8 months ending November, 1918.

The domestic demand for chemical pulp continues to grow.



Doing the thing that "Couldn't Be Done"

This Graton & Knight Spartan 24" double belt was installed in July, 1912, on a generator drive in the plant of the Bosch Magneto Co., Springfield, Mass. The extremely short pulley centers caused some belting men to throw up their hands and say, "It can't be done." But this Spartan Belt has been doing it successfully for more than six years. Now, note its low cost. At the purchase price per foot, the bill figures ninety-six cents per week, or .004½ per delivered horsepower per week.

The above result, at so low a cost, is due to the Graton & Knight standardization—using the right belt for the work to be done, at a price that it ought to cost—no more and no less. Economy in belting means the longest and best service possible under given conditions. We make all kinds of leather belting for all uses—large or small.

The nature of the drive always governs the wear of any belt. Two belts of exactly the same quality on two different drives will make showings varying greatly in length of service. Using Graton & Knight Standardized Series Leather Belts means full delivery of power for every dollar invested.

The G. & K. Idea is economy through standardization. It means the right belt in the right place. For example, Spartan—the belt illustrated—is especially adapted for hard drives, high speed over small pulleys, intermittent loads and where belts are subjected to the action of water, steam, chemical fumes, oil

and grease and other agencies destructive to ordinary belting. It may be that you are using too good a belt for some purposes and belts not good enough for another. Cost Equalization will spell Economy for you in capital letters.

One factor in the solution of **your** belting problems is the use of belting made from properly tanned leather. The hide of a steer is Nature's tough, elastic, resilient protection during years of activity. G. & K. tanning **preserves** all of those qualities. Nothing can really take the place of the matted fibre of leather which locks and unlocks in response to the demands of expansion and contraction, to the very end of its life.

It will save you money to let us recommend belts for every drive in your plant. Then, in buying, specify "Graton & Knight—Brand or equal." This does not commit you to buying our belts. It does put your buying on the one economical basis—that of the work to be done.

Write for booklet on Standardization as applied to Belting

THE GRATON & KNIGHT MFG. COMPANY, Worcester, Mass., U. S. A.

Oak Leather Tanners, Makers of Leather Belting, Lace Leather, Packings, and Specialties

Atlanta	Chicago	Detroit	Kansas City	New Orleans	New York	Pittsburgh	Seattle	Leicester, Eng.
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GRATON & KNIGHT

Standardized Series

LEATHER BELTING

Tanned by us for belting use

Not only does it enter into grades of paper ranging from sheathing to wood bonds—and every increase in demand for these products expands the demand for chemical pulp—but new uses are constantly appearing. Explosives, aeroplane varnish, bandages and absorbent pads, which grew largely out of the war, probably mark only the beginning of a new series of products in which chemical pulp will be an important factor. Such are textiles, artificial silk, paper containers, and the numerous developments of the box board industry. Chemical pulp bids fair to make anything from a tin can to a suit of clothes.

Barometers of industrial and financial conditions, such as the steel industry, point to fair weather, and while the problems of reversion to a peace basis will give anxiety, the chemical pulp industry in Canada should enjoy prosperity and assist materially in the upbuilding of the Dominion in the years of reconstruction.

Mechanical Pulp Section

J. H. Acer, in his report of the Mechanical Pulp Section, said: "Last year could hardly have been considered a satisfactory one for the groundwood mills, as a whole.

"During the first four months the demand was good, but the unfortunate lack of cars resulted in very light shipments. By the time cars could be obtained in the Spring the demand had fallen off, due to the fact that United States mills were able to grind practically to full capacity, and other causes. When the full figures are out it is altogether likely 1918 will fall far short of 1916 and 1917, although it will probably equal 1915.

"In my experience groundwood mills are very much hampered by the fact that there is no recognized system of testing pulp. I understand the Technical Section has this matter under consideration, and I can only urge that they arrive at a decision with the least possible delay. I take it for granted that the Canadian method will be co-ordinated with the American."

Book and Writing Section

The report of the Book and Writing Section stated that it was very gratifying to hear one of the largest Canadian buyers publicly state that in his opinion no other class of consumer throughout the world had been as well taken care of during the four years of the war as the Canadian users of paper. This testimony, the report continued, is all the more noteworthy because at the beginning of 1918, certain publishers of trade and class magazines made allegations to our Government to the effect that the book mills were charging exorbitant prices; were part of an illegal combination, etc., with the result that the Government appointed a Commissioner to investigate these allegations. This caused our mills a great deal of work and time when the responsible officers were fully occupied in looking after their normal business. The only result has been that the Commissioner has not found that any of the complaints were founded on fact.

During the past year, the Book and Writing Section has adopted standard substance numbers in both writing and book papers, and these are now incorporated in the trade customs. We acknowledge with thanks the helpful co-operation of the Canadian Paper Trade Association in the adoption of these standard bases, as well as in other constructive measures. It is submitted that the time has now arrived when we should consider whether it would not be for the general welfare of the paper trade to have the paper dealers affiliated with the Papermakers' Association.

The book and writing mills, during the past year, came to the conclusion that they should sell their goods on a f. o. b. mill basis, and where equalization is necessary, freight allowances may be made. We have also adopted the American Association's classification of rags, and we hope that this will be beneficial to the rag dealers; to the paper mills, and to the paper consumers.

This Section strongly endorses the advertising campaign of the

Pulp & Paper Association. We realize that the war has brought our people closer together than they have been in the past, and Canadians would prefer to use Canadian-made products. It is, therefore, our duty to let them know what lines are made here.

In conclusion we beg to state that it is our opinion that we shall come through our reconstruction period with little or great disturbance exactly in proportion to the measure of co-operation we adopt with one another and with our customers.

Report of the Board Section

John F. Taylor, Chairman, reporting for the Board Section, said:

The Board Mills have come through a very satisfactory year. The total production of all grades of board by the various mills was 86,944 tons, an increase of 6,100 tons, or about 8.4 per cent over the year 1917, which shows a good increase. Of this tonnage 64,477 tons were sold in Canada, 17,438 tons exported and the balance, viz. 5,029 tons was used by the various mills themselves.

We have not been able to get any very accurate figures as regards imports of board, for as most of you know the old Customs Classification was not of much service in this respect and in a great many cases it has been impossible to get the quantities imported. The only item in which we have been able to get the quantities is that of straw board, and we find for the year ending March 31, 1917, there were 4,538 tons of straw board imported against 4,849 tons for the year ending March 31, 1918, so that taking an average of these two tonnages the quantity imported for the year 1918 would be 4,688 tons and the average value of straw board imported for these two years is \$220,095.00.

With regard to other importations—card board and mill board, not pasted or coated, was imported for the year ending March 31, 1917, to the value of \$225,580 and for the year ending March 31, 1918, \$253,223 making an average which we may safely take for the whole of 1918 of about \$239,400. No quantities are given for either of these items and as values have been steadily increasing for the last two or three years, it is impossible to estimate the quantities imported.

From the above figures the total importations of card board, mill board and straw board shows an average of approximately \$460,000 per annum during the last two years for which returns are available. The Customs Department has put a new classification into effect so that commencing from April 1, next, we expect to get fairly accurate information in future both as regards quantities and values.

No new board mills have been built and while orders have fallen off somewhat since the turn of the year, most of the mills continue to be booked ahead, some of them being as much as three months behind on orders.

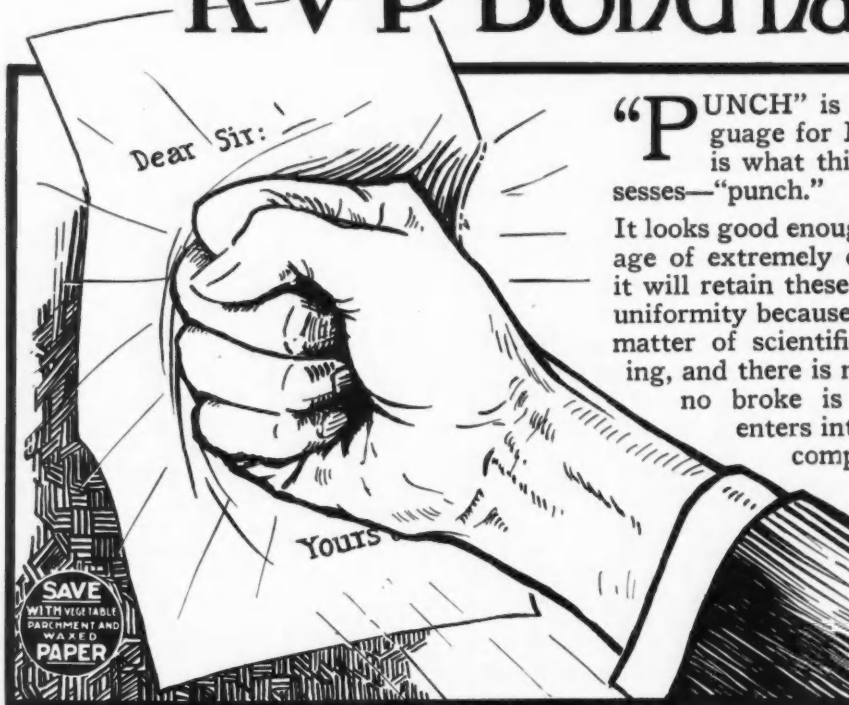
A very cordial relationship continues to exist between the board mills and the box makers and we are looking forward to an even more successful year than the last.

Report of Coated Paper Section

George W. Pauline, reporting for the coated paper section said:

The Government restrictions put into force, by the War Industries Board of the United States, were fully discussed at our meetings, and although no Government measure was applied in Canada, it was felt that it was only good sense and common decency to our friends across the line, to follow suit voluntarily. So with some modifications to suit the requirements of the Canadian Trade, the American restrictions were unanimously adopted. They have been strictly adhered to, and have been the means of correcting a number of abuses, that preciously were considered a necessary evil. Altogether they have been very successful, and have worked beneficially to mill and consumer alike. Under the circumstances it is felt advisable to continue permanently many of these restrictions, and embody them in the General Trade Customs.

K-V-P Bond has "punch"



Dear Sir:

Yours

SAVE
WITH VEGETABLE
PARCHMENT AND
WAXED
PAPER

"PUNCH" is just good "Yankee" language for REAL GUTS. And that is what this new K V P Bond possesses—"punch."

It looks good enough now to win the patronage of extremely conservative houses—and it will retain these identical good looks and uniformity because the pearly whiteness is a matter of scientific computation and mixing, and there is no element to change it—no broke is used—all NEW stock enters into it. Have you seen and compared it?

KALAMAZOO VEGETABLE PARCHMENT CO.
Kalamazoo, Michigan

"Makers of Vegetable Parchment, Waxed Paper, and the world's finest UTILITY" Bond."

Foreign Trade Information

We are actively interested in the expansion of foreign trade, and will be glad to extend all possible aid to present importers and exporters or to those who contemplate entering the foreign field.

Our facilities in this respect are extensive and are at your command. If you desire any information regarding foreign trade development we will be pleased to supply it.

The First National Bank of Boston

Capital, Surplus, and Profits, \$27,000,000

Resources . . . Over \$250,000,000

Branch at Buenos Aires, Argentina

The mills were all fully employed throughout the year, and were taxed to capacity to keep up with the demand.

Export inquiries have been very numerous, and in some cases orders were accepted and filled.

There has been a slight easing off in business since hostilities in Europe ceased, no doubt caused by the fact that in some instances, stocks were fairly heavy, and in others by expectations of a drop in prices. We do not look for any change in this respect, for the present, at any rate, as manufacturing costs to-day are higher than ever before.

It only remains for us all to carry on with spirit of optimism during the period of reconstruction, to ensure the success and prosperity of Canada, and keep her in the front rank, as a part of the Great British Empire which to-day stands higher than ever in the eyes of the World.

Felt Paper Section

G. M. Graves, chairman of the Felt Paper Section, said that the good attendance at the meetings indicated the interest of the members in the welfare of this industry as a whole. He continued:

We have not escaped troubles and vicissitudes experienced to a greater or lesser degree by all manufacturers, such as fuel supply, freight difficulties, shortage of labor, etc., but the hearty co-operation of all members and the assistance given each other in extreme emergency has all accrued to our mutual benefit.

We have proven again that this country does not produce rags enough to supply the industry, although we were obliged to be constantly on guard to prevent embargo permits being issued by the Government at Ottawa for shipment out of the country. We are very gratified to acknowledge again our indebtedness to the Canadian Pulp and Paper Association, which has through Mr. Dawe so ably and vigorously protested the granting of these permits.

The classification of rag stock has generally been maintained and being universally recognized as the standard of grading. This is a source of gratification to the responsible rag packer and dealer, as well as to the felt manufacturer.

The year 1918 has been a very satisfactory one, both in volume of business and fairness of price, and we are looking forward to the year 1919 with the expectations and hopes of another year fully equal or better in business.

Wrapping Paper Section

F. H. Wilson, chairman of the Wrapping Paper Section, reported that generally speaking, conditions in the Wrapping Paper business continued good during the year 1918.

Towards the end of March and in the middle of May, due to increase in costs, prices on the cheaper grades were advanced, and in the middle of July and in the middle of September it was again found necessary to slightly increase the prices on the cheaper grades as well as on No. 1 Manilla and Fibres.

Prices have been, and are at present, well maintained, and although due to the uncertainty in general trade conditions caused by the Armistice, there is a tendency on the part of buyers to not commit themselves for more than actual requirements, yet the outlook is favorable for a continuance of stable conditions throughout the present year.

Report of Technical Section

Dr. John S. Bates, of the Forest Products Laboratory, chairman of the Technical Section, reported that the Committee on Education (T. L. Crossley, chairman) had worked out a concrete plan to give promising men in the mills a chance to learn and develop. An International Committee on Text Books with George Caruthers as chairman was ready to prepare monographs on paper-making suitable for correspondence courses. The plan was the result of thorough consideration and hard work on the part of various members with long experience in technical education. The association now had an opportunity to make the plan a reality,

and there would be no mistake in supporting such a fundamental movement. He continued:

The Committee on Standards (R. W. Hovey, acting chairman) has submitted a number of analytical methods for trial in the mills.

The Committee on Testing Moisture in Pulp (E. B. Slack, chairman) has investigated certain methods and is making recommendations to the trade.

The Committee on Samples (A. L. Dawe, chairman) is withholding action until there is an opportunity to collect European samples of pulp and paper.

The Committee on Statistics (S. L. Burns, chairman) has done excellent work in preparing further charts and tables in direct co-operation with the Bureau of Statistics and the whole industry will have the benefit in the forthcoming bulletin on pulp and paper statistics.

The Committee on Mechanical Standards (John Stadler, chairman) has laid plans for working up specifications covering the more important machinery and materials used in the industry as suggestions to the mills.

The Committee on Programme (Olivier Rolland, chairman) has looked after the meetings during the year.

Membership has been affected by the war, there having been nine resignations and five retirements by enlistment during the year. Eleven new members have been elected, making a net membership of 102.

The technical men are ready to take their vital place in reconstruction and development. Quality of product and efficiency of manufacture will be the basis of progress.

The Woodlands Section

The report of the Woodlands Section was as follows:

Although the youngest member of the family, this Section is growing rapidly and has now 43 members representing the largest operators in the country.

The first general meeting was held in February, 1918, jointly with meetings of the various protective associations and also the Canadian Forestry Association, and we have been fortunate this year in having the same arrangements.

The only meeting held during the year was the Fall Conference which was held in Montreal on September 20, 1918, and which was well attended by representatives from all over the country.

Much discussion took place of a constructive nature and the opportunity was taken to formulate several resolutions to the Government and to appoint committees for special work.

One resolution which was sent to the Government's officials at Ottawa read as follows:

"Resolved that this meeting desires to express its appreciation of the good work that has been carried out by Mr. Swaine of the Entomological Branch in connection with his researches carried out in conjunction with the Conservation Commission. The research work in the destruction of woods by insects is of the most valuable nature to Canada and in the opinion of the Woodlands Section of the Canadian Pulp and Paper Association should be heartily supported.

"Be it further resolved that the Government be urged to give similar consideration to the question of the fungus diseases that are attacking our trees in all parts of Canada, inasmuch as 60 per cent or 70 per cent of balsam is affected with heart-rot applying equally to freehold as well as Crown lands. It appears to the Woodlands Section to be a matter that should receive immediate and careful attention from the necessary departments."

A reply was received on November 30, 1918, from the Forestry Branch at Ottawa which says in part:

"Before the war the Forestry Branch worked out a broad general plan for carrying on field investigations of silvicultural problems, which would include the study of the effects of fungi. An advisory committee was appointed to assist in the direction of this work and particularly to co-ordinate all the scientific investigative

**It's Been
Proven**

Acid Proof Wood Pipe

Experts have put the best of themselves into the making of WYCKOFF ACID PROOF WOOD PIPE, the premier piping for paper mills—first, in strength, in durability, in capacity, in economy.

There is much to say about WYCKOFF—and paper mills throughout the country are glad to say it. Let us send you a few proofs.

**A. WYCKOFF & SON CO.,
ELMIRA, N. Y., U. S. A.**



Let's get acquainted

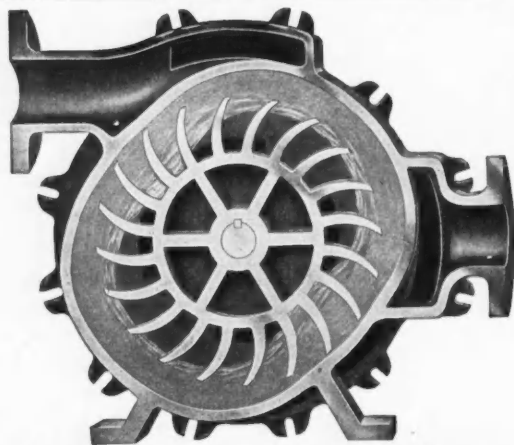
**Tell us
what you have
to sell—we may
need it**

*The world-
our market*

Fred C. Strype

Domestic & Export
WRAPPING
PAPER

320 Broadway New York, N.Y.



The Nash Hydro-Turbine Vacuum Pump and Its Advantages

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

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

For Particulars Address

THOMAS H. SAVERY, Jr.

1614 Republic Bldg.

Chicago, Ill.

Sale of Pulpwood Lands In Northern Ontario

The Lake Superior Corporation and Algoma Eastern Railway Company are open to negotiate for the disposal of certain lands,

Approximately 682,000 Acres

situated for the most part in that section of Northern Ontario known as the Clay Belt, and comprising the Townships of Storey, Lange-marck, Dowsley, Nassau, Shetland, Staunton, Orkney, Maglavery, Caithness, Rykert, Doherty, Whigham, Coppell, Newton, Dale, McOwen, Frater.

The lands in question are accessible to the Algoma Central, Trans-Continental, Canadian Northern and Canadian Pacific Railways, and should be of particular interest to pulp and paper makers, also to settlers, in view of their agricultural possibilities.

General information will be furnished and plans exhibited at the office of Mr. Alex. Taylor, secretary of the Lake Superior Corporation, 1428 Bank of Hamilton Building, Toronto, or at the office of Mr. G. A. Montgomery, vice-president of the Algoma Eastern Railway Company, Sault Ste. Marie, Ont.

work of this kind that might be done by any of the forestry organizations in the country. It was not possible, however, to arrange the practical development of this scheme on a very comprehensive scale on account of the loss of technical men due to the war. Consequently just at the present moment I do not feel that we are in a position to give direct assistance in the investigation that you refer to, but it is hoped to organize this work on a permanent basis as soon as possible.

"Even if it were possible to arrange for this work to be undertaken at the present time by the staff of the Forest Products Laboratories, it would only be a temporary arrangement. It would involve considerable loss of effort, as it would be necessary for the men of that staff to undertake a laborious preparation, only to drop the work later on when the permanent scheme is gone ahead with."

A committee composed of Messrs. E. Wilson, Grogan, Valkmar and W. G. Power was appointed to confer with the Technical Section on the ways and means of utilizing hard woods.

A committee consisting of E. Wilson, J. M. Dalton, P. W. Buchanan, M. R. Kane and P. F. Kenny was also appointed to investigate logging conditions and to report back to the annual meeting. This report has been brought before the Woodlands Section and should lead to improved conditions.

The encouragement and support received by the section leads the council to expect wider interest in the coming year.

Secretary-Treasurer's Report

A. L. Dawe, the secretary-treasurer, in submitting the financial statement for the year ending January 31, 1919, expressed his gratitude to the members for their whole-hearted co-operation in the various undertakings of the year.

A continued spirit of co-operation will be all that is necessary, he said, to tide us over the period of transition, since the industry was equally to the fore in times of peace as well as war.

He found on referring to the production statistics of some 20 mills who report each month to the association that their total stocks on hand on December 31, 1918, were 2,953 tons as against 4,364 on January 1, 1918.

The export business of these 20 mills was 20,000 tons or 12.4 per cent of the total production of 160,416 tons.

The balance sheet showed assets amounting to \$10,623.31, and after allowing for all liabilities there remained a surplus of \$5,137.15.

The report was adopted.

At the Luncheon

Following the business meeting, a luncheon was held in the Ritz-Carlton Hotel, under the presidency of J. A. Bothwell. A short jocular speech was made by Henry A. Wise, counsel for the United States news print manufacturers in the Federal inquiry.

Speeches at the Banquet

There was a big attendance at the banquet in the evening, marking the close of the annual meeting. J. A. Bothwell presided, and with him at the head table were Sir William Price, Sir John Willison, Henry A. Wise, George Chahoon, Jr., J. B. White, George Carruthers, John F. Ellis, F. J. Campbell, Carl Riordon, Capt. Dudley Malone, U. S. N., George H. Montgomery, K. C., S. J. B. Rolland and Brigadier-General J. B. White, D. S. O.

The New President's Speech

J. A. Bothwell, the new president of the association, made a striking speech. He said:

A year ago, when we met together, we were confronted with a situation entirely different from that which, happily, confronts us today. At that time our country was still at war. While nobody, and least of all the members of this association, had any doubt as to the ultimate and successful issue of the war, none could say how long a time might elapse before the ends we were fighting for would be achieved, nor could they say as to what additional

sacrifices we might meanwhile be called upon to endure. Fortunately, that is now all past history. It is true that peace is still in the making, but the collapse of the enemy was so complete and so overwhelming that his resumption of hostilities is not only improbable but also impossible. His ability to make war has been permanently, and let us hope, everlastingly smashed. In the language of the street, he has been licked to a standstill.

We are here today at the threshold of a new era—a new era in the relationship of nation to nation, of people to people; a new era in the relationship of our industries one to another; a new era in the relationship of government to business, and of business to government; and, particularly, a new era in the relationship of capital to labor and of labor to capital.

In regard to the broad questions affecting international relationships and to those issues whose outcome will affect the welfare of the peoples at large, we can safely leave them in the hands of the statesmen now assembled across the seas and engaged in their solution. With the mightiest and the most intelligent nations of the earth in one accord as to the desirability of the abolition of war and the establishment of a permanent peace, and fully in agreement upon the principle of arbitration of disputes between nations as of disputes between individuals, we may assume that the outcome of the deliberations now in progress will be one to assure not alone present peace but also that lasting tranquility and recognition of the sovereign rights of humanity that will speed world progress in all things material and intellectual, and spiritual advancement for the people everywhere.

The New Era for the Industry

Leaving those great issues, then, in the hands of those best fitted to work out their solution, we may be pardoned perhaps if we take advantage of this gathering to devote some small consideration to the new dawning era as it affects, or may affect, the particular industry which we represent, and in whose welfare we are so vitally concerned.

A year ago, when we met together, our positions as manufacturers of pulp and paper products was not as favorable as it is today. It is true that our industry then, as now, was producing to its utmost capacity; that it was giving highly remunerative employment to thousands of workers; that it was contributing largely to the financial necessities of the Government in carrying on a war making unparalleled demands upon our country's resources; that it was supplying commodities vitally needed at home, as well as carrying on an export commerce greatly to the advantage and enhancement of Canada's credit abroad. I will not weary you with figures—which are well known to most of you—except to say that our total production for the current fiscal year now drawing to a close will reach a value of not less than \$120,000,000 and that our total exports for the period will amount in value to about \$100,000,000, an increase of more than 25 per cent over the preceding year. Last, but not least, we had contributed our just proportion, and more than our proportion, of the stalwart sons of the Dominion who had donned the khaki and crossed the seas to fight their country's battles. The number of men so contributed by this industry, even before the enforced military service act came into operation, is computed to have exceeded three thousand, with a great many more added since.

Political Persecution

But notwithstanding all this—notwithstanding our contributions to the national welfare in every form and to the full extent of our abilities—our cheerful compliance with every obligation laid upon us, no matter how onerous its character—we found that we were still being made the victims of a political persecution, such as no other industry in Canada was submitted to. We were being harassed and persecuted not alone in our own country—where, indeed, we had every right to look for a complete measure of protection and support—but also in the country to the south of us where, with some of our fellow manufacturers in that country,



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we were being treated with the same lack of consideration. It is unnecessary for me to review the proceedings which we were compelled to defend before the Federal Trade Commission, or to refer to the most unfair and most unsatisfactory outcome of those proceedings insofar as the Commission was concerned. But it is worth while recalling that once we were permitted to take our case before a judicial tribunal—a tribunal uninfluenced by political considerations and unamenable to newspaper pressure—we began to receive treatment more commensurate with our rights as business men, as manufacturers and as citizens. At last we felt that we were getting a square deal. And let me say right here that we have never been afraid, that we have never been reluctant to have our rights passed upon by the courts, either those of Canada or those of any other country. We have objected and we do most strenuously object to being used as a political football, either here or elsewhere. We do object to this industry being singled out from all others for the liquidation of political obligations incurred by the politicians in office for the benefit of publishers of newspapers who may or may not have helped to put them there. We see no reason why we should not be permitted to run our own business, divorced altogether from politics and politicians, subject only to the same laws and regulations that apply to similar businesses. We want to be treated just as other industries are treated; nothing more and nothing less.

Whole Industry Threatened

This brings me back to our own country. A year ago we were still confronted in Canada with a situation which, if it were not speedily righted, threatened to put some of us out of business. The Government has undertaken to require us and to compel us to sell our products at a price not only below the market price but in some cases below the cost of production—at a price that left little or no margin upon which we could do business. Special orders-in-council had been passed directed solely at this industry, containing enactments that could not have stood before a Parliament of disinterested representatives. We were threatened with heavy fines and with the confiscation of our properties if we failed to obey. We fought for the privilege of taking our case, as had been permitted in the States, before a judicial tribunal, and in this, after long delays and overcoming many obstacles, we at last succeeded.

What we have lost in a financial way on account of these vexatious and unnecessary proceedings, large as the amount is—(I have been shown a compilation which indicates that for the period from March 1, 1917, to July 1, 1918, alone, we were compelled by Government fiat to sell paper in Canada at a loss of nearly \$900,000 as compared with the arbitrary price prevailing under Government regulation in the States, and of nearly a million and a half dollars as compared with the prices prevailing in the open market)—it is small and unimportant as compared with the general set-back sustained by the industry and the partial demoralization of our export market in consequence of this unfair treatment. I will not refer to the enormous expense and the untold annoyances we have been put to in order to defend our right to do business. These are also well known to all of you.

The Most Iniquitous Feature

But before I leave this subject I want to revert for a moment to what must appear to all fair-minded Canadians as the most iniquitous feature of the whole proceedings. This, to my mind, rests in the fact that our Government is allowing itself and its machinery to be used for the purpose of hammering down the selling price of the products of one of its leading industries in its principal export market. While members of the Government are going up and down the country making speeches urging greater production, a wider utilization of our raw materials and increased exports, as necessary to the country's salvation, in Ottawa they are doing their best to hamstring the one industry which is in a

position to "bring home the bacon." We all know that there has been and is the closest sort of co-operation, defensive and offensive, between the newspaper publishers of the States and those of Canada, and that this united influence has been exerted against the manufacturers upon the governments of both countries. The bulletins issued by the associations of publishers of the two countries give conclusive evidence that this is so. I will take the time to quote just two brief extracts out of more than a score from the American Newspaper Publishers' Association bulletins in support of what I say. In a bulletin numbered 3827, issued January 26, 1918, the American newspaper publishers say:

"It is well known that the Federal Trade Commission and Controller Pringle in Canada are working very closely together and the prices to be fixed will be affected by this close co-operation and exchange of information."

And again:

"Our position has been reinforced by the action in Canada this week, noted elsewhere in this bulletin, the Paper Controller fixing the price until the end of April, 1918, at \$52 a ton, retroactive until July 1, 1917, and before that time at \$50 a ton."

Ask United States for New Inquiry

We have, furthermore, the recent petition of the American publishers to the Attorney-General of the United States, asking him to order the Federal Trade Commission to start a new inquiry, based upon evidence obtained in Canada by employees paid by the Canadian Government. This proposed new inquiry is for the sole purpose of lowering the price of Canadian-made paper in the United States. Yet the petitioners make the astounding demand that the Canadian Government be asked to participate in these new attacks upon the Canadian paper industry in that country, with a view to ruining its market there. Effrontery could hardly go farther, although it cannot be denied that our own Government has invited the affront by the scandalous treatment they have allowed to be meted out to the industry at home.

Many Publishers Are Fair

I would not give the impression, however, that all newspaper publishers are unreasonable or unfair in this matter. In fact a large proportion of American newspaper publishers have lately shown a disposition to dispense with their antagonisms and to do business with the paper manufacturers on a business basis, recognizing that eventually business principles must prevail between two industries, so closely allied and so dependent on each other. In Canada we are still wide apart, although even here there are publishers who do not approve of the application of political coercion to what is essentially a business situation. We have one of these exceptional newspapers in Montreal in the *Montreal Gazette*, which has always treated our industry with impartiality and the utmost fair play. The big French newspapers, *La Presse* and *La Patrie*, also are to be commended for their attitude toward us, as well as others I might mention. But what I want to say is that the quarrel is not of the manufacturers' making, and that we have no desire whatever to prolong or continue it, nor do I believe, in the long run, that the publishers as a whole will be found desirous of keeping up a fight which, eventually, can result in good to nobody.

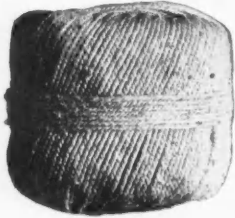
No Excuse Now for Regulation

In concluding my reference to this subject, let me say that in my opinion whatever excuse may have existed (and I do not for a minute admit there was any) for Government regulation of the paper industry—even on the showing of the publishers themselves—it no longer exists. The Government should take its hands off the industry, both at home and abroad. They should permit it the same opportunity to work out its own salvation that is enjoyed by every similar industry doing business in Canada.

The Labor Situation

A word or two about the labor situation. We are all aware that

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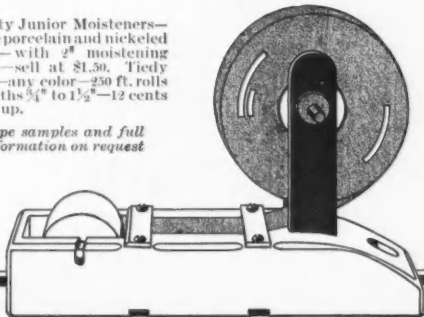
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the conclusion of the war has brought a more or less serious industrial crisis in most of the countries involved. In our own country the withdrawal, during the last four years, of hundreds of thousands of men from industrial pursuits and the transfer of thousands of others from their normal occupations to the making of war materials, created an abnormal demand for labor, almost impossible to supply. During that period, also, wages rose to abnormal heights. The end of the war brought about a necessity for a readjustment all along the line. In a few months from now the supply of labor will, in all probability, greatly exceed the demand, no matter what means are taken to absorb it. It should be our part, as it should be the part of every employer of labor in Canada, to see to it that this readjustment of labor conditions is made with as little friction and with as little hardship and confusion as the circumstances will allow. Our industry has undoubtedly suffered in the recent past by the insufficiency of satisfactory labor. We shall now be able to make good our deficiencies in this respect, and thereby to increase our output. Our first care should be to keep faith with those of our men who went into the army. On their return places must be found for them, equal in every respect to those which they surrendered in order to serve their country. After that, as good citizens, we should, and we assuredly will, do our utmost to absorb whatever surplus labor may be available. It is unthinkable that any man in Canada who wants to work should be unable to find fair employment. Already our association has taken steps in the right direction, and I am sure that each one of us is already co-operating in the movement and will continue to do so.

The Waste of Pulpwood

There is one other subject to which I should like to direct attention for a few moments and that has to do with the question of our raw material. I am not going into an abstruse discussion of the subject, although it is of sufficient importance to justify a great deal of attention and discussion, but I do want to allude to one or two facts in connection with it. We are all aware of what has befallen the paper-making industry in the States, through a too-prodigious use of their pulpwood. We are aware, too, that our own supply of pulpwood is being consumed at an alarmingly rapid rate. I do not refer solely to its employment for the legitimate purpose of conversion into marketable commodities, so much as to its export in its unmanufactured state and particularly to its wanton and unnecessary destruction for no good purpose whatever. Every year thousands of young but valuable spruce trees, owned, it is true, by settlers and other private individuals, are chopped down, their tops cut off and sold for a few cents apiece and carted off to our towns and cities, there to serve for an hour or two's festival use. Not only is this an unnecessary waste of good material, but it also denotes short-sighted economy upon the part of the land owners who permit it to be done. These young trees potentially have a much greater value than is represented by the price paid for them when used in this way. In a few years' time, left to develop, they would have a market value many times greater than in their undeveloped state, while, at the same time, their use as raw manufacturing material would contribute to the welfare of all. We are continually being urged to employ scientific methods in tree-cutting and to replant as far as is practical in order that there may not be a complete exhaustion of the supply, but here is a case where young growing trees are needlessly and uselessly sacrificed by the thousands, apparently without anyone raising the least objection. Our forestry departments could do no better service than in putting a stop to the practice.

Other speakers were Sir John Willison, F. J. Campbell, Brigadier General White, George Carruthers, George W. Irwins, Jr., and Capt. Malone.

Meeting of the Technical Section

On the day previous to the meeting of the association proper, the annual meeting of the Technical Section was held, when a

number of interesting papers on technical subjects were read.

The Forestry meetings held in Montreal on the two days preceding the annual meeting of the Canadian Pulp and Paper Association were of a most interesting nature, and were attended by many members of the association. Hon. Sydney Fisher, ex-Minister of Agriculture, presided at a Forestry Conference in the Windsor Hotel on Wednesday. At this conference it was decided to ask the Government to use the aerial resources at its disposal for fire protective purposes in the forest areas.

Other resolutions called for all the railways to be brought under the jurisdiction of the Railway Commissioners regarding the rules and regulations for the fighting of the forest fire hazard; for an accurate Government survey of all standing timber in Canada and for the development of a permanent forest policy.

Addresses were delivered by Major Barrington Moore, New York; F. J. Campbell, of the Canadian Pulp and Paper Association; Dr. How, Dr. Golding, and Ellwood Wilson; W. Gerard Power, president of the Canadian Lumbermen's Association; Hon. W. R. Brown, Berlin, N. H., of the Brown Corporation, and Hon. Dr. Smith, of New Brunswick.

Quebec Forest Association

At the annual meeting of the Quebec Forest Association in Montreal on Thursday, the following officers were elected: Chairman Robert P. Kernan, of the Donnecona Company, Quebec; vice-chairman, Marshall P. Small, of the Laurentide Company, Grandmere; councilors, R. F. Kenney, Buckingham; A. J. Price, Quebec, and Ellwood Wilson, of the Laurentide Paper Company, Grandmere.

Brigadier-General J. B. White, D. S. O., of the Riordon Company, gave a short review of the work of the Canadian Forestry Corps, with which he served in France, and expressed the hope that Canada would now go into the work of tree planting and re-afforestation in earnest.

With regard to the value of wood, General White said that the victory of the Allies was largely due to the utilization of the great forest reserves in France, and Great Britain, which supplied much necessary timber while saving large shipping space. The situation with regard to timber supply, he said, had become so serious that in 1916 Canada had been asked to supply forestry units of 56 companies, who were sent. They did splendid work, providing 210,000 tons of timber. This work was due to the foresight of the French Government in planting her great forests, which proved of incalculable value in the war. In one district alone, where he was occupied, there were eleven billion feet of pine in a country which had previously been a sand waste. As to the utilization of timber, the Huns had made full use of the wood in the lands they had occupied. All through the occupied territory of northern France they had installed saw mills, and in one forest alone 11 mills had been established, which had cut up the forests and sent 30,000,000 feet of timber to Germany. In every other occupied district they had systematically put in saw mills and despoiled the forests. He suggested that re-afforestation work should be taken up at once in Canada, and that returned soldiers should be put on this work. Every dollar spent on the work, he said, would bring back a great return in years to come, and, if necessary, pressure should be used to induce the Government to take the matter up.

In a discussion on his address, it was suggested by Mr. Ritchie that as some 94 per cent. of the fires in Canadian forests were caused by smoking, there should be legislation against smoking in the woods. General White promptly registered a protest, saying that if the men were not permitted to smoke they would not go into the woods to work.

The following committee was appointed to investigate and report on the disposal of "slash": Angus McLean, F. C. White-man, Mr. Dalton, of the St. Maurice Co.; Brig.-General White, W. Gerrard Power, and Mr. Black, of the J. R. Booth Company.

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Editorial

Vol. LXVIII. New York, Thursday, February 6, 1919 No. 6

FORTY-SEVENTH YEAR

The Convention Number

This Annual Review and Convention Number is the largest ever printed in the history of the PAPER TRADE JOURNAL. It contains 430 pages, as compared with 398 pages in the issue of last year, which at that time was the largest issue of this paper that had ever been published.

This issue will prove not only interesting as casual reading to everyone connected with the paper industry, but will also make a valuable work of reference. It contains reviews of all the more important branches of the industry for the past year, which have been prepared by representative members of the trade, and reviews of the industry in various sections. It contains also valuable technical articles written by men prominent in their particular branch of the industry, the proceedings of the various meetings of the American Paper and Pulp Association, the Technical Association of the Pulp and Paper Industry, the National Paper Trade Association, etc. It contains also illustrations and descriptive matter of the improvements to plants and new construction work that has been going on in the industry during the past year.

Last, but not least by any means, this issue contains an enormous volume of advertising, which is not less interesting and valuable than the reading section of this number. With hardly an exception all the leading concerns which do business with paper men are represented in these advertising pages, thus forming a directory which cannot fail to be very greatly appreciated.

The 1919 Annual Review Number of the PAPER TRADE JOURNAL will be certain to be preserved by paper men long after its date of issue.

The Year in Review

The numerous interesting reviews regarding conditions in the paper business printed elsewhere in this issue of the PAPER TRADE JOURNAL emphasizes the fact that the industry during the past 12 months has experienced probably the most unusual year in its history.

The war naturally very greatly disturbed economic conditions and the paper trade along with other lines was handicapped in consequence. It was reasonable to expect this but it is certainly true that paper makers suffered more serious inconveniences than they anticipated.

The Government embargoes and regulations came with startling frequency and were of such a character as to test the courage of even the paper making fraternity whose business trains them not easily to be quitters. Fuelless Mondays, regulations regarding the varieties of paper that might be manufactured and the commandeering of plants for the manufacture of ammunitions are only a brief list of the inconveniences that the paper manufacturers were subjected to during the year by the Government.

In addition to this, lack of labor, scarcity of fuel and decidedly poor transportation facilities, all helped to make the lot of the paper makers anything but a happy one and will cause the year just past to be remembered with anything but pleasure.

These conditions were accepted philosophically, however, as it was realized that the most important business before the country was the winning of the war. Happily this has been accomplished.

What about the future? is the question that now arises. The reviews in this issue of the PAPER TRADE JOURNAL and the addresses at the Convention almost uniformly indicate that paper men are optimistic.

Business, it is acknowledged, is not good. It has not been good since the signing of the armistice but it has not been as bad as it might have been and it is reported in some sections of the trade that it is slightly better than it was.

If correctly reported this indicates that buyers have lost confidence that very materially lower prices will be available soon, or that they so greatly need supplies that they are forced to buy. It is an encouraging sign in either case and it is to be hoped that this condition will continue to develop.

Successful Convention

As was expected, the annual convention of the American Paper and Pulp Association, which was concluded Thursday evening, was in practically every respect the most notable in the history of the organization. The attendance was large, the various reports and papers were prepared with special care and in numerous ways there was manifested an increasing interest in the work of the Association and its affiliated bodies.

It has, of course, been the great desire of everybody in the paper industry to win the war just as quickly as possible. But the cessation of hostilities came at an unexpectedly early period, so far as most people were concerned, and consequently probably disturbed business more than had the trade been more prepared for this happy event. Because of this reason some paper men from more or less remote sections of the country who have not always been in the habit of attending conventions have been attracted to New York to get their bearings, as it were, and by ascertaining the consensus of opinion of the paper men, throughout the country, become the better prepared to handle conditions in the particular sections where they happen to be located. Most men in the industry believe that there is no occasion to be disturbed about existing conditions and contact with these persons cannot fail to have a stabilizing influence on some of the trade who have not been inclined to take a hopeful view of things.

The year just passed has been a most trying one in the industry. Many demands of an unusual character have been made on the Association and these have been attended to in a most painstaking and efficient way by the officers of the Association, all of whom have been glad at all times to do whatever they could in promoting the best interests of the industry. President George W. Sisson, Jr., and Secretary-Treasurer L. B. Steward are to be especially commended on their successful administration of the affairs of the Association in a year when intelligence, discretion and faithfulness were especially required.

TRAFFIC ASSOCIATION TO OPEN OFFICE

The Paper Traffic Association of New York recently organized has sent the following circular to the trade:

NEW YORK, February 3, 1919.

To the Paper Traffic Association of New York.

Gentlemen:

Thirty-three members having joined this organization, your committee feeling that a going concern accomplishing results is a better drawer of additional members than promising circulars, has decided to hire an office and start at work.

The committee has secured the services of Mr. A. C. Westfall, long a resident of New York, who has been for eight years head of the Cadillac Motor Car Company, Traffic Department, of Detroit—a position which brought him into close touch with the needs of rapid movement of material from mill to factory and gave him a thorough knowledge of traffic movement. He comes to us well recommended.

But we want and to insure success must have more members. Will not each one of you endeavor to get another or more members? Approach by 'phone, call or letter anyone outside of this printed list in the Paper Trade. If you find the idea of having a traffic man of value to you, sell it to someone else and send in their application on enclosed card.

We may have to raise the dues—your action in getting members will perhaps prevent this. Pick out a name absent, but of value, and write him.

The announcement is signed by the committee composed of:

Paul E. Vernon, Paul E. Vernon & Company; W. B. Murtha, Harper Paper Company; O. F. Marquardt, Dill & Collins Company; Alfred Kinn, J. E. Linde Paper Company.

The following are members of the association:

Alexander Holden Paper Company, American Writing Paper Company, F. W. Anderson & Company, Inc., Thomas Barrett & Son, Beekman Paper & Card Company, R. G. Benedict, Blauvelt-Wiley Paper Manufacturing Company, Clement & Stockwell, O. V. Cole Paper Company, Coy, Hunt & Company, Dill & Collins Company, F. A. Flinn, Inc., Garfield Paper Company, Harper Paper Company, Herrmann Paper Company, Lasher & Lathrop, J. E. Linde Paper Company, Henry Lindenmeyr & Sons, Manhattan Card & Paper Company, Merriam Paper Company, George W. Millar & Company, Miller & Wright Paper Company, Parsons & Whittemore, Inc., Royal Card & Paper Company, Safepack Mills, John F. Sarle Company, Inc., The Seymour Company, Sutphin Paper Company, Union Card & Paper Company, Vernon Bros., Paul E. Vernon & Company, White-Burbank Paper Company, Inc., Wilkinson Bros. & Company.

CONSTITUTION FOR PAPER TRAFFIC LEAGUE

The executive committee of the Pulp and Paper Traffic League which was formed January 8 at Buffalo, has drafted the following constitution:

The name of this organization shall be the Pulp and Traffic League.

The object of this League is to secure fair and reasonable transportation rates, rules and practices of general application, and to otherwise conserve the traffic and transportation interests of its membership through co-operation and negotiation with the governmental authorities and the carriers, and where necessary, by formal action before the properly constituted authorities.

Those eligible to membership are the traffic representatives of pulp, paper and board manufacturers in the United States and Canada. Application for membership should be made to the Secretary who will report same to the Executive Committee which latter will pass on the application.

The officers shall be a President, Vice President, Treasurer, Secretary and an Executive Committee composed of the foregoing officers and three additional members. Said officers and members of the Executive Committee shall be elected at the annual meeting of the League, shall hold office for one year or until their successors are chosen.

President: It shall be the duty of the President to preside at all regular or special meetings of the League and at meetings of the Executive Committee and to perform such other duties as may be assigned to him by the Executive Committee.

Vice President: The Vice President shall perform the duties of the President in the latter's absence or inability from any cause or when called upon by the President.

Treasurer: He shall collect and disburse dues or assessments which may be authorized by the Executive Committee or by the League membership.

Secretary: He shall keep the minutes of the annual or special meetings of the League, and of the Executive Committee; issue calls for meetings of the League; issue and distribute proceedings of all meetings and conduct the general correspondence of the League.

Executive Committee: It shall conduct all the detail business of the League and shall be empowered to take necessary action in cases of emergency and shall make recommendations to the membership of the League from time to time as to action necessary to properly conserve the general traffic interests of the membership.

The members shall pay annual dues of \$5.00 on or before February 1st of each year for the purpose of meeting expenses of the League for stationery, postage, printing and other incidental expenses.

Special assessments shall be levied when in the judgment of the Executive Committee it is necessary to do so for the purpose of providing funds for meeting an emergency which adversely affects the general interests of the members. Such assessments shall be levied on a pro rata basis of tonnage of outbound shipments of manufactured products.

Annual meetings of this League shall be held in the month of January, at such time and place as may be determined by the Executive Committee. No other stated meetings of this League shall be held, but special meetings may be called by the Executive Committee, at such times and places as may be determined by it.

These articles may be changed by a majority vote of the membership.

The officers of the organization are W. B. Hurlbut, president; A. H. Campbell, vice president; G. L. Myers, treasurer, and T. T. Webster, secretary.

EDWIN BUTTERWORTH & CO.

MANCHESTER, ENGLAND

Packers of all kinds of

PAPER STOCK, COTTON WASTE AND GUNNY BAGGING, BUFFALO SIZING, Etc.

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Boston Office, 136 Federal St. New York Office, 132 Nassau St.

CHARLES H. WOOD, Sr. U. S. Mgr. LEWIS JENNINGS, Manager

"WATERBURY"

Felts-Jackets

ORISKANY, N. Y.

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

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Imports and Exports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

FEBRUARY 4, 1919.

SUMMARY.

Cigarette paper	22 cs.
Tissue paper	30 cs.
Printing paper	42 cs.
Drawing paper	7 cs.
Wall paper	3 cs.
Hangings	6 cs.
Miscellaneous paper	43 cs.

CIGARETTE PAPERS.

Wilkinson Bros. & Co., Mississippi, Havre, 10 cs.
P. Lorillard & Co., Mississippi, Havre, 12 cs.

TISSUE PAPER.

Rose & Frank Co., Celtic, Liverpool, 11 cs.

T. Meadows & Co., Celtic, Liverpool, 3 cs.
R. Hoe & Co., Minnekada, London, 4 cs.
Rose & Frank Co., Adriatic, Liverpool, 12 cs.

PRINTING PAPER.

Oxford University Press, Adriatic, Liverpool, 17 cs.
B. F. Drakenfeld & Co., Adriatic, Liverpool, 17 cs.
Wood & Brooks, Adriatic, Liverpool, 8 cs.

DRAWING PAPER.

Favor Ruhl Co., Minnekada, London, 7 cs.

PAPER.

Reene Angel Co., Minnekada, London, 23 cs.

WALL PAPER.

F. L. Kraemer, Ixion, London, 3 cs.

PAPER.

C. A. Johnson & Co., Celtic, Liverpool, 20 bls.

PAPER HANGINGS.

W. H. S. Lloyd & Co., Minnekada, London, 6 bls.

CHINA CLAY.

Moore & Munger, Sierra Morena, Fomey, 565 tons.
J. M. Higman, Sierra Morena, Fomey, 217 tons.
G. Knowles & Son, Sierra Morena, Fomey, 208 tons.
Baring Bros. & Co., Sierra Madre, Fomey, 1,044 tons.

BAGGING AND OLD ROPE.

M. O'Meara, Minnekada, London, 70 bls. bagging.
E. Butterworth, Mississippi, Havre, 207 bls. old rope.
C. Y. Kellar, Mississippi, Havre, 345 bls. old rope.

T. F. HART PAPER COMPANY, Inc.

MUNCIE, INDIANA

MANUFACTURERS OF

**Straw Board
Chip
News**

**Single or Double Lined Board
Box Board
Specialties, etc.**

Domestic and
Export

Mill:
Albany, Indiana

Starch

Paper manufacturers generally recognize the value of **starch** in the manufacture and coating of paper.

To obtain definite results in any desired direction in the preparation of paper, not merely a difference of grade, but a difference of kind or variety of **starch** is required.

Our carefully controlled and thoroughly standardized processes enable us which the paper industry has found to produce exactly the various **starches** economical and efficient.

Corn Products Refining Company
17 Battery Place New York

Starch

NORTHERN BRAND

BLEACHING POWDER (HIGH TEST)

CAUSTIC SODA 76-78% N. Y. & L.

MICHIGAN ELECTROCHEMICAL COMPANY

OFFICE AND WORKS—MENOMINEE, MICHIGAN

HOWARD BOND

WATERMARKED

Color Brilliant : Strength Wonderful

THE HOWARD PAPER CO.
URBANA, OHIO

ORR FELTS AND JACKETS

ALL ARE GIVING SATISFACTION ON

NEWS AND FAST RUNNING MACHINES

THESE FELTS ARE WOVEN ENDLESS

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



For
Deane of Holyoke
Condenser Pumps

Voorhees Rub-Steel Valves

**ARE THE BEST
IN PAPER MILL SUCTIONS**

Spring guides for angular positions.
Brass bushed stud-hole protection.
Soft and toughest rubber seating with

That Backbone of Steel

VOORHEES RUBBER MFG. CO.

18-50 Bostwick Ave.

JERSEY CITY, N. J.

LAPIDOLITH

TRADE MARK

Will Dustproof and Wearproof Your Concrete Floors

Every paper mill should protect its concrete floors against the disintegrating action of trucking and chemicals by using Lapidolith.

Lapidolith is flushed on like water and without interrupting work it will harden

and dustproof your floors as it has done in scores of paper mills and in thousands of factories.

Unskilled labor can apply Lapidolith or we will have the work done under our supervision.

Used for Years

Lapidolith has been used for years and is guaranteed. We list a few paper factories whose floors have been hardened by Lapidolith:

American Writing Paper Co., Holyoke, Mass.
Smith Thompson Company, Hoosick Falls, N. Y.
A. P. W. Paper Company, Albany, N. Y.
York Haven Paper Company, York Haven, Pa.

Frank L. Miller Paper Company, Dowington, Pa.
Kalamazoo Label Company, Kalamazoo, Mich.
Advance Bag Company, Middleton, Ohio.
Whiting Paper Company, Holyoke, Mass.

Write for free sample, literature and testimonials to Department 30.

L. SONNEBORN SONS, Inc. : 264 Pearl St., New York

Beveridge Paper Co., Ltd., Mill Supply Dept., Montreal and Quebec

Also Manufacturers of Cemcoat, the Washable Wall Coating.

THE HILL CLUTCH CO.

The Line Shaft Equipment You Install

should combine highest efficiency with dependability and low cost of maintenance

The Smith Type Hill friction clutch is recognized to be the superior of any other type of clutch for **hard service**.

It has been proven repeatedly that a Hill Clutch will start larger loads as compared to their rated capacity than any other make.

In most installations the clutch is required to "**start the load.**"

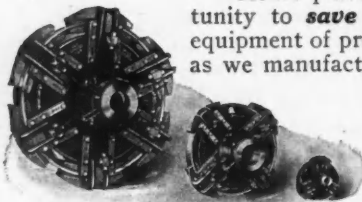
The design and action of the Hill Collar Oiling Bearing will immediately appeal to you.

The Hill Collar Oiling Bearings have the highest efficiency of any self oiling bearing on the market.

Furnished in all styles of rigid and ball and socket mountings.

After bearing is first filled with oil it requires no further attention other than to add a little more oil once every four or five months.

At no place in your plant is there greater opportunity to **save power** than by installing line shaft equipment of proper design and highest efficiency such as we manufacture.

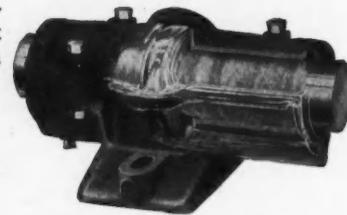


9 to 1,300 H.P. at 100 R.P.M.

Send for Catalog

The Hill Clutch Co.
CLEVELAND, OHIO

New York Office: 50 Church Street



Hill Collar Oiling Bearing
Cleveland Type

Bleached and Unbleached
WOOD PULP
 of every description

M. GOTTESMAN & COMPANY

18 East 41st Street

INCORPORATED
 ::
 Established 1886

NEW YORK, N. Y.

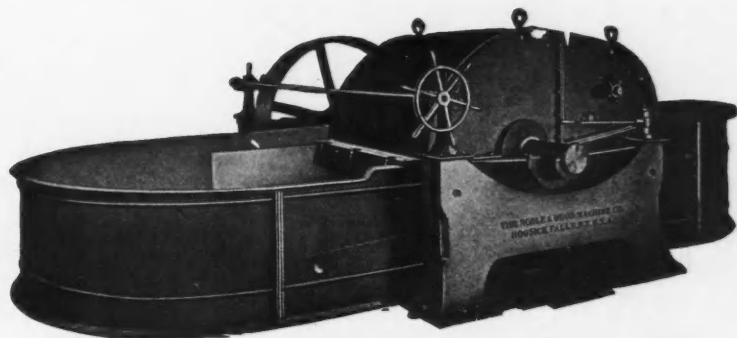
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 Washing Engines
 Mixing Engines
 Breaking Engines
 Cooking Engines

Wood or Iron Tubs; adapted
 to every paper mill condition

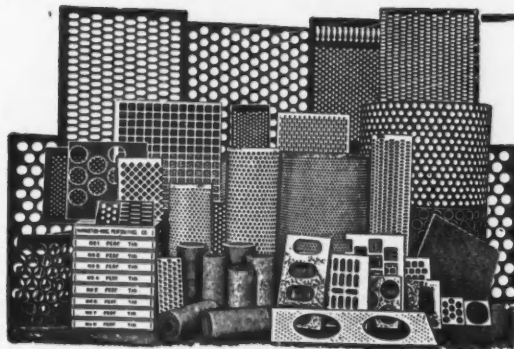
Jordan Engines—
 (5 Sizes)

Board Machines

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



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**PERFORATED
 METALS**

Paper and Pulp Mill Screens
 STEEL, IRON, COPPER, BRASS, BRONZE

FOR

Centrifugal and Rotary Screens—Drainer Bottoms—Filter Plates—Pulp Washers, etc. All sizes and shapes of holes in many thicknesses and dimensions of sheets. Accuracy in all details and excellence of quality at lowest consistent prices.

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618 NORTH UNION AVE., CHICAGO, ILL.

114 LIBERTY ST., NEW YORK, N. Y.

1872**1919**

We are prepared to deliver promptly in any desired quantities the following:

AURAMINE
BASIC GREEN
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METHYL VIOLET
ORANGE
BASIC NEWS BLUE

BISMARCK BROWN
PULP COLORS
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CAUSTIC SODA
CASEIN
BLEACHING POWDER

A. KLIPSTEIN & COMPANY
 644 Greenwich St. New York City

We are the largest Dealers
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BLEACHED, EASY BLEACHING

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UNBLEACHED SULPHITES

—also—

Spruce and Poplar Groundwood

Samples and quotations upon request.

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PLIBRICO
JOINTLESS

**Increase Your
 Power Output**

PLIBRICO is a jointless, plastic, one-piece furnace lining that will increase the efficiency of your boiler at least 15%. Expansion and contraction are neutralized so that it remains permanently crackless and break-proof. It will prevent the loss of heat and waste of fuel due to excess air.

Lasts longer and easier and less expensive to install than firebrick.

Write for full particulars.

Jointless Fire Brick Co.

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 Canadian Agents:
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Manufacturers of Colors

For the Paper Trade

WE HAVE TO OFFER

**METHYL VIOLET
 POWDER AND CRYSTALS
 HIGHEST CONCENTRATION**

**BISMARCK BROWN Y AND R
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 SPECIAL CONTRACTS FOR 1919**

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ZOBEL COLOR WORKS, Inc.
 38 Water St. New York City

Factories: Brooklyn, N. Y.

Branch Offices: Chicago, San Francisco,
 Boston, Shanghai, Calcutta



Manufacturers of

Coated Cardboard, Boxboard and Lithograph Paper, including Lithograph Blanks, Postal Card Stock, Tough Check, Railroad, Thick China, Transluents and Menu Board.

Our Boards and Papers lie flat, hang straight, and register because they are made right.

Orders for regular or special sizes are given prompt attention. Quality guaranteed.

TRY US AND SEE

EASTERN SALES OFFICE, 501 Fifth Avenue, NEW YORK CITY



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EXCLUSIVE SALES AGENT
OF THE

LARGEST COATED BOX BOARD MILL
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MANUFACTURING EXCLUSIVELY

**CLAY COATED
FOLDING
BOX BOARDS**

OF EVERY DESCRIPTION.

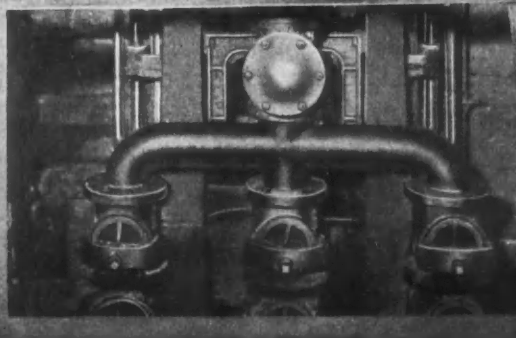
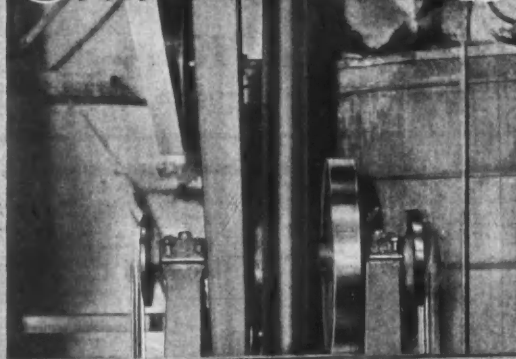
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ASTOR TRUST BUILDING

501 FIFTH AVENUE, AT 42ND STREET, NEW YORK

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GOULDS PUMPS
FOR EVERY SERVICE



15 Years Faithful Service IN THE Hammermill Paper Plant

THIS Goulds 8x10 Triplex Stuff Pump was installed in the great Hammermill paper plant in Erie, Pa., in 1903. With the exception of Sundays it has been in continuous operation day and night ever since, handling the paper stock to a paper-making machine. Of course it has had the wear and tear of 15 years' service, but it has given good service and bids fair to last for many years to come. Goulds Pumps are rugged, long-lived and very economical to maintain—as to efficiency, they are unsurpassed, as attested by thousands of important installations.

Our Engineering Department will gladly assist you with information on any pumping problem.

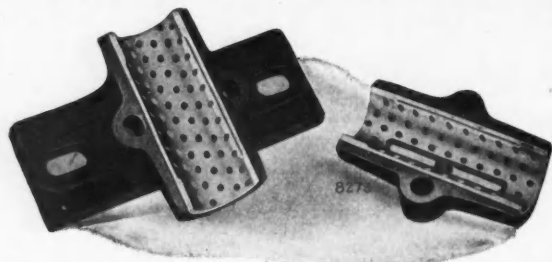
The Goulds Manufacturing Co.

Main Office and Works:

SENECA FALLS, NEW YORK

New York, 16 Murray St. Boston, 58 Pearl St. Chicago, 12-14 S. Clinton St. Philadelphia, 111 N. 3rd St. Washington, D. C., 38 Munsey Bldg. Pittsburgh, 636 H. W. Oliver Bldg. Atlanta, 3rd Nat. Bank Bldg. Houston, 1001 Carter Bldg.

RANDALL GRAPHITE SHEET LUBRICATOR



Manufacturers of Paper Mill Machinery will find Randall an ideal device to incorporate in the bearings as standard equipment.

ENABLES you to utilize all the advantages, and economies of graphite and is incorporated in babbitt bearings as they are poured, without changing the construction in any way—preventing hot bearings—eliminating shutdowns, loss of production, cost of frequent rebabbiting, running bearings three to four times longer than plain babbitt.

This lubricator is being used in the bearings of Jordans, Calenders, Dryers, Beaters, Rag Cutters, Pumps and Transmission.

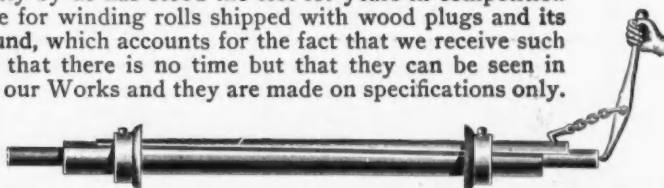
Write for list of users and bulletin.

RANDALL GRAPHITE SALES CO., 818 West Lake Street, Chicago, Ill.

THE BAKER & SHEVLIN

Patent Split Winder Shaft

as manufactured exclusively by us has stood the test for years in competition with all other shafts made for winding rolls shipped with wood plugs and its equal has not yet been found, which accounts for the fact that we receive such frequent orders for them that there is no time but that they can be seen in process of manufacture in our Works and they are made on specifications only.



BAKER MANUFACTURING CORPORATION

Formerly BAKER & SHEVLIN Co.

Established 1881

SARATOGA SPRINGS, N. Y.

Riordon Sales Company, Ltd.

MONTREAL

Sales Managers

T. J. STEVENSON

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"Merritton" Moist Bleached Sulphite. We can ship on the day orders are given us, at a moderate price.

TRY A SAMPLE CAR

Also Hawkesbury Easy Bleaching Sulphite and stronger grade in wet pulp. Especial attention given to spot shipments and export trade.

High Grade American Paper Clay

Uniformity and High Retention
Low in moisture, Mica and Grit

Miner Edgar Company : 30 Church Street : New York City
Exclusive Sales Agency of Edgar Bros. Co. MINES



Eagle Knife and Bar Works

JOHN W. BOLTON & SONS, Inc.

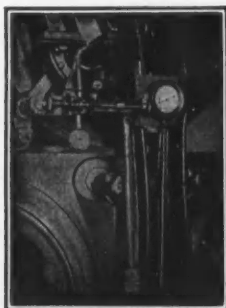
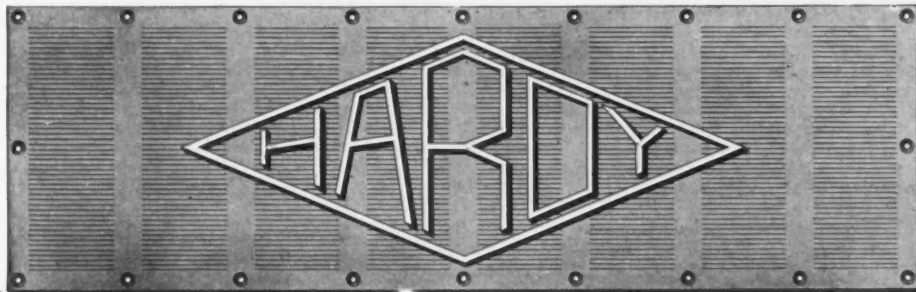
HIGH GRADE

Knives, Bars, Plates and Jordan Fillings
OF EVERY DESCRIPTION

High Grade Steel Products
for Use in Paper Mills

LAWRENCE, MASS.

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



WE ARE SAFE IN OUR PROPOSITION

YOU'LL MAKE NO MISTAKE IN ACCEPTING IT

PICKLES DRYING REGULATOR

will do everything we claim for it and more. The test costs you nothing until you are satisfied. Many mills tried one and now have every machine equipped. Write for list of users and other information.

W. F. PICKLES, Buckland, Conn.

THE NAVAL STORES INDUSTRY AND AFTER-THE-WAR CONDITIONS

The effect of the European war upon the great majority of commodities produced in America was to increase radically and repeatedly their market price.

The effect on the Naval Stores industry was exactly opposite. The price of turpentine and rosin steadily declined. This was due primarily to the practical cessation of exports to foreign countries, which normally furnished an outlet for approximately 55 per cent of production. For a time both turpentine and rosin were selling below the cost of producing them, while the prices of other commodities were soaring.

This adverse condition, coupled with the enormous increase in wages and the cost of raw materials, brought about the inevitable—hundreds of producers in the South closed down. The result was that the pre-war production of 670,000 barrels (50 gallons) of turpentine and 2,230,000 barrels (500 pounds) of rosin was reduced in 1918 (Government estimate) to 299,000 barrels of turpentine and 996,700 barrels of rosin.

Even with all other conditions favorable, it is impossible materially to increase in a single season the production of turpentine and rosin, for the reason that

the methods employed in the production of Naval Stores make it necessary to plan operations an average of three years ahead. As a matter of fact, a critical situation confronted turpentine producers prior to the outbreak of hostilities in Europe, due to the fast diminishing supply of timber, the available remaining supply resting largely in the hands of lumbermen. In the times past and in sections where the turpentine operator preceded the lumberman, there were no restrictions on the volume of Naval Stores production. Today the lumberman controls the situation, and on Government advice, he will permit his timber to be turpented only as fast as he saws it. Consequently, while the production of Naval Stores may under favorable circumstances be somewhat increased this year over last—possibly 15 to 20 per cent—the operator cannot today and never again will control the volume of production of turpentine and rosin.

The present situation in the Naval Stores industry may best be shown by the following table, which gives the pre-war production and consumption, with a comparison of Government's estimate of the 1918 production:

	Turpentine	Rosin
Average Annual Pre-War Production	670,000 bbls.	2,230,000 bbls.
Average Annual Pre-War Exports	359,000 "	1,354,000 "
Average Annual Pre-War Supply for		
Domestic Requirements	310,000 "	876,000 "
Estimated Production for 1918	299,000 "	996,700 "

Naval Stores, especially rosin, are essential in so many industries, directly and indirectly, both here and abroad, that while the industry seeks to take care of the future domestic consumption, it will unquestionably be necessary to make provisions for an early movement to replenish the stocks in other countries, which have been greatly depleted. Granting that the production in this country this year may be increased 15 to 20 per cent over that of last, there will be a crop of 1919 of only approximately 260,000 barrels of turpentine and 1,200,000 barrels of rosin. The domestic demand must soon make itself strongly felt, and with stocks in consumers' hands in this country far below normal, all indications point to an ultimate demand that will greatly exceed production.

In the face of the foregoing facts, it behooves the

consumer to survey the situation carefully. Sound business judgment would certainly seem to impel him to place his orders before the certain foreign demand more forcibly manifests itself. It is vital to the consumer at reasonably staple prices—AND THAT IS POSSIBLE ONLY WHEN THE INDUSTRY IS ABLE TO OBTAIN A REASONABLE RETURN ON PRODUCTION.

Every consumer and every producer of turpentine and rosin is urged to give these facts his earnest consideration. This statement is published by the Turpentine & Rosin Producers' Association for the purpose of bringing to the attention of producers and users of Naval Stores the truth regarding the industry and its future, so that each may act as his best judgment dictates.

TURPENTINE AND ROSIN PRODUCERS' ASSOCIATION

NEW ORLEANS

LOUISIANA

IMPORTANT

The paper quotations presented herewith are more or less nominal, as most of the mills have withdrawn quotations, due to unusual conditions.

Market Quotations

NEW YORK Trade Securities

Bid and asked quotations of securities listed on the Stock Exchange of companies engaged in the manufacture of paper as reported on February 4, 1919, are as follows:

Table listing securities with columns for Bid and Asked prices. Includes American Writing Paper Company, International Paper Company, and Union Bag and Paper Corporation.

Paper

Table of paper prices including Bond, Ledgers, Writing, News-f. o. b. Mill, Book-f. o. b. N. Y., Kraft, and Fibre Papers.

Mechanical Pulp

(F. O. B. Pulp Mills.) No. 1 f. o. b. Mill. 29.00 @ 32.00

Chemical Pulp

Table of chemical pulp prices including Sulphite (Foreign) and Sulphite (Domestic) with various grades and bleaching options.

Domestic Rags

Table of domestic rag prices including Shirt Cuttings, Cottons, Whites, and Roofing Stock.

Foreign Rags

Table of foreign rag prices including New White Cuttings, Unbleached Cottons, and German Blue Linens.

Bagging

Table of bagging prices including Gunny No. 1, Foreign, and various types of mixed strings.

Twines

Table of twine prices including India, Dark, Light, B. C., Italian, Finished Jute, and Papers Makers' Twine.

CHICAGO

[FROM OUR REGULAR CORRESPONDENT.]

Paper

Table of Chicago paper prices including Mill Price to Jobbers, No. 1 Rag Bond, Sulphite Bond, and various types of writing and ledger paper.

Old Waste Papers

Table of old waste paper prices including Shavings, Flat Stock, and Bogus Wrappers.

PHILADELPHIA

[FROM OUR REGULAR CORRESPONDENT.]

Paper

Table of Philadelphia paper prices including Bonds, Ledgers, Writings, and various types of book and ledger paper.

Old Papers

Table of Philadelphia old paper prices including Manila Shaving, Manila Sul., and various types of news and ledger paper.

Rags

Table of Philadelphia rag prices including Old White, Blues, and various types of mixed gannies.

Roofing Bags

Table of roofing bag prices including No. 1, No. 2, and No. 4.

Bagging

Table of Philadelphia bagging prices including Gunny No. 1, Foreign, and various types of mixed strings.

(Continued on page 406)

The Mathieson Alkali Works, Inc.

WORKS AT

SALTVILLE, VIRGINIA, and at
NIAGARA FALLS, NEW YORK

“Eagle-Thistle” Brand BLEACHING POWDER

HIGH TEST

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

LIQUID CHLORINE

Pure, anhydrous, in improved and convenient packages.

Soda Ash

48 per cent. and 58 per cent.

Caustic Soda

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

Bicarbonate of Soda

Packed in Kegs, Barrels or Bags; also Cases

Arnold Hoffman & Company, Inc.

SOLE AGENTS

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

Want and For Sale Advertisements

HELP WANTED

WANTED—"The Wortendyke Mfg. Co., of Richmond, Va., Manufacturers of Paper Bags, Twines from Paper, Toilet Papers, and Paper Towels, desire men to work their line with the jobbing trade on a commission basis, in the following cities: Boston, Chicago, St. Louis, Kansas City, San Francisco, Providence, R. I. Other territory also open."

WANTED—Two diffuser men, two cookers, two wet machine men and two men for handling wood barking machines. Apply, Southern Fibre Company, Portsmouth, Va.

WANTED—One good, all-around Paper Mill Millwright for small mill in Connecticut. Address, Box 975, care Paper Trade Journal.

WANTED—Backtender; two-tour mill, water finish fibre. Must handle paper 400 feet a minute. Address Box 976, care Paper Trade Journal.

WANTED—One Head Beaterman; two-tour mill, water finish fibre. Must know colors. Address Box 977, care Paper Trade Journal.

WANTED—Two back tenders for water finish; eight hours; state experience and references. Address Box 978, care Paper Trade Journal.

WANTED—Master mechanic for two-machine mill; state age, experience, salary and give references. Address Box 979, care Paper Trade Journal.

WANTED—A first-class wood room foreman for sulphite mill department. Up-to-date in every respect. Must have a man capable of making own repairs when necessary. Address Box 990, care Paper Trade Journal.

WANTED—One good, steady machine tender on light weight straw boards; wages, \$4.00 per day of eight hours. Address the Coshocton Straw Paper Co., Coshocton, Ohio.

WANTED—Are you interested in a better connection? If so, communicate with us. We are in a position to find openings for you and negotiate confidential preliminaries in your behalf with strict privacy and no risk to present connection. Our service covers such positions as executive, technical or selling. Write for particulars. The National Service Bureau, Times Plaza Station, Brooklyn, N. Y.

WANTED—Experienced Wood Pulp salesman wanted by large import house in New York. Must be thoroughly familiar with Pulp business. All communications treated strictly confidential. Address, Box 992, care Paper Trade Journal.

WANTED—A first class millwright; a good all around man for paper mill. Address, Box 993, care Paper Trade Journal.

WANTED—Sulphite foreman; must be a reliable man with experience either in slow or quick cook process. This offers a steady position for a capable man. Address, Box 949, care Paper Trade Journal.

WANTED—Night boss for a pulp mill in Canada; 8 grinders and 6 wet machines; married man preferred; good wages will be paid to a steady, reliable man. Address, Box 951, care Paper Trade Journal.

FOR SALE

One (L) 10 x 12—Brownell Variable Speed Engine—good as new. One thousand other items for the Paper Maker. Address, The Shartle Bros., Machine Company, Middletown, Ohio.

HELP WANTED

WANTED—Experienced 3 mould cylinder machine tender wanted, who understands making Bristols, tags and cover. Mill located in central states. Steady work for first class man. Address, Box 952, care Paper Trade Journal.

WANTED—Sulphite cook with quick or slow cook experience wanted. Good, steady position for right man. Eight-hour tour. Address, Box 953, care Paper Trade Journal.

WANTED—Two machine tenders for 90" Harper machine running tissue and light weight specialties, good wages and steady work. Address, with references, Box 957, care Paper Trade Journal.

WANTED—An experienced cylinder machine tender. Must understand the making of Tissue. Wages 65 cents per hour. Three tours. Write Box 928, care of Paper Trade Journal.

WANTED—Mechanical Engineer with experience in pulp and paper mill maintenance repairs and construction who can organize, cut down costs, show results. Address Box 933, care of Paper Trade Journal.

WANTED—Machine tenders and back tenders for making roofing felts and building papers, 8-hour shifts. Must be able to furnish good references. Address Box 937, care of Paper Trade Journal.

SPECIAL OPPORTUNITY—Growing machine works wants practical man with energy, and ideas, and ability, who can furnish designs for machines for general use in paper mills. An arrangement will be made for remuneration to increase as sales do. Address Box 885, care Paper Trade Journal.

WE require First Class man for tying up paper in Finishing Department. Steady position for reliable man. Box 721, care of Paper Trade Journal.

SITUATIONS WANTED

WANTED—Recently discharged soldier desires position as purchasing agent, assistant to jobber or manufacturer; has had several years' experience in this line. Address Box 981, care Paper Trade Journal.

WANTED—Practical soda pulp and paper mill superintendent would like position with progressive mill where system and efficiency is essential. Have had twenty-two years' experience in soda pulp work; recently completed building a modern mill and started operations, also employed by Government during war period. Can furnish very best references; sober and industrious. Address Box 982, care Paper Trade Journal.

WANTED—Superintendent desires to make a change. Eighteen years' practical experience on Kraft and all grades tissues machine and second process crepeing; experienced on Fourdrinier and Cylinder machines, Edwards and Hawley Fuller attachments; good on colors; best of references furnished. Address Box 983, care Paper Trade Journal.

WANTED—Recently graduated chemical engineer desires position in plant process control and development work. Experienced in cellulose research problems. Address Box 984, care Paper Trade Journal.

WANTED—Young man wishes position as a board machine tender. Have just been discharged from service. Address Box 985, care Paper Trade Journal.

WANTED—Assistant Superintendent or boss machine tender wants position with a reliable company. Has had ten years' practical experience and technical training; 28 years old, married, American, now employed. Will be able to take position March first. Address Box 986, care Paper Trade Journal.

WANTED—Position as machine tender or tour boss; well up on roofing boards and express. Married, sober, steady and can furnish best references. Address Box 987, care Paper Trade Journal.

WANTED—All around assistant to New York manager of a large mill, several years' experience, desires new connection in similar capacity. Address Box 991, care Paper Trade Journal.

(Continued on page 409.)

FOR SALE

PAPER MACHINES—One 74" four cylinders, 3 Presses, 15 Dryers, 1 stack of Calenders, Reel Sitter, Winder, Marshall Drive.

DRYERS—14 36" x 84", 15 36" x 68", 3 48" x 100", 4 48" x 111".

PAPER SHEET CUTTERS—1 112" Finlay, 1 62" Horne, 2 63" Hamblet, 1 49" Finlay, 1 53" Finlay, 1 44" Hamblet, 2 44" Finlay, 2 42" Finlay.

REAM CUTTERS—1 50" Dayton Seybold, 1 46" Acme, 1 46" Sheridan, 1 36" Sheridan, 1 48" Sheridan.

SLITTERS—1 137" Kidder, 1 108" Kidder, 1 62" Kidder, 1 62" Meisel, 1 48" Black & Clawson, 1 96" Pusey & Jones sliiter and single drum Winder.

WET MACHINES—One 48" Wet Machine for board, one 72" Sandy Hill, one 72" Bagley & Sewall.

SUPER CALENDERS—2 63", 1 60", 1 54", 4 48" Norwood.

FLATERS—1 Norwood 40".

MACHINE CALENDERS—1 72" eleven rolls, 1 68" five rolls, 1 60" three rolls, 1 37" seven rolls, 1 48" six rolls.

PRESSES—6 Hydraulic Presses, 2 Holyoke Screw Presses.

JORDANS—1 Jones Wagg Majestic, 2 Horne, 1 Emerson.

BEATERS—6 Jones, rolls 61" dia. x 48", never used; 4 Noble & Wood, rolls 72" dia. x 44"; 2 Horne, rolls 48" dia. x 44"; 1 Horne, 60" dia. x 48".

PUMPS—1 Deane Water Power Pump, 10" x 10" triplex, 2 Deane triplex stock pumps, 8" x 8".

SHREDDER—1 Leather Shredder, 1 Jeffrey 30" x 30" Chip Crusher.

SOBENS—1 12 plate Harmon open side, 2 10 plate New Success, 1 12 plate New Success, 1 8 plate New Success, 1 Sandusky Centrifugal Screen. Lot of Screen Plates.

ENGINES—1 Flakhill Corliss 18" x 42", 1 8" x 12" Ball, 1 Cooper Corliss Cross Compound, 14" x 26" x 36". 1 Cooper Corliss Cross Compound, 1 1" put nam, 12" x 30", 1 Corliss, 10" x 24".

CYLINDER MOLDS—1 30" x 119", 5 30" x 74", 3 30" x 80", 2 30" x 72", 1 30" x 63".

1 Union Machine Co. Kollergang.
12 Three Pocket Grinders.
1 96" x 14 1/2" Millspangh Suction Roll.
2 Stevens Digesters.
1 Rotary Boiler, 7' x 21" 6".
2 42" Waldron Coaters.

FRANK H. DAVIS

175 Richdale Ave., Cambridge B, Mass.

FOR SALE

BEATERS—40x36" with iron tub, 17' long, two 65x54, one 42x42, one 48x48, 4 Clafins. New Umpherstons.

CALENDERS—Five roll 48", 9 roll 63", 7 and 9 roll 72", 3 roll 80", 9 roll 80", 9 roll 84", 7 roll 86". Four roll friction.

COATER—One 43" double Waldron coater.

CUTTER—100" Finlay, 72" Dillon, 68" Black & Clawson, 84" Moore & White, 48" Holyoke. One T & S rag cutter. Several ream cutters.

CYLINDER MOULDS—Two mulds 30" dia., 78" face.

DRIVES—One Moore & White No. 9 A.

DRYERS—26 new shells 36" dia., 124" face; 3 new shells 36" x 76"; also three 36 x 36 with frames, etc.; four 28 x 62" all ready to set up. Lot of odd dryers.

DUSTERS—One 6 bowl Holyoke revolving, also two railroad dusters.

JORDANS—Emerson & Horne type Jordans.

MACHINES—One 72", 2 cylinder machine.

PUMPS—One triplex self-contained suction pump, one 1,000 gal. Worthington, tank pump 10 x 15 x 15 x 18 Knowles, fifteen fan pumps. New stock pumps, single and duplex.

ROTARIES—About ten horizontal rotaries; three Globe rotaries.

SCREEN—One Wandel screen. Also a lot of other machines which have not yet been listed. Write us for anything you want.

Lot of new split pulleys, sprocket chains, cone pulleys. Some new wooden pulleys with friction clutches.

Mills Machine Company
LAWRENCE, MASS.

(Continued from page 408.)

SITUATIONS WANTED

WANTED—Young man (25) having eight years' experience in the paper, card-board and envelope business, now honorably discharged from service in the U. S. Army, seeks connection with a concern engaged in that line of business. Will consider suitable proposition, either in New York City or elsewhere in the United States. Address, Box 993, care Paper Trade Journal.

WANTED—New York City paper man would consider business association with established broker or mill agent, or would represent mill. Experienced in sales management, credits, buying, importation. References exchanged. Address, Box 957, care Paper Trade Journal.

WANTED—Superintendent, who can handle help and repairs and is able to get results. Thoroughly understands container, straw combination boards and felt for saturating. Can give good references. Address, Box 960, care Paper Trade Journal.

WANTED—Tissue Paper advertiser wishes to get into touch with mill producing tissues for carbon paper making. Write in first instance to "Tissue Paper," care Goulds Advertising Offices, 54, New Oxford St., London, England.

WANTED—Young, energetic experienced man, 28 years old; desires position with reputable concern as salesman or assistant colorer of box board and paper specialties. Address, Box 962, care Paper Trade Journal.

WANTED—Night boss or machine tender in mill making all grades of box boards, roofing, sheathing and wrapping papers. Address, Box 963, care Paper Trade Journal.

WANTED—Beater engineer wishes to make a change from his present position. Experienced on bonds, ledgers, tissue and all grades of box boards. Married, steady and sober. Address, Box 969, care Paper Trade Journal.

WANTED—Superintendent desires position; fifteen years' experience on all grades of combination and container board. Good executive and of mechanical ability. Can furnish best of references. Address, Box 973, care Paper Trade Journal.

WANTED—Position by first-class fourdrinier machine tender as boss machine tender, or night or day foreman; good on upkeep of mill and would consider good paying position running machine. Address Box 943, care Paper Trade Journal.

WANTED—Position as superintendent. Experienced on book. Engines sized writings. Kraft and sulphite, eight weight papers. Can give references. Address Box 920, care Paper Trade Journal.

WANTED—Position as manager or assistant manager. Have held responsible positions in engineering and manufacturing departments of Paper, Board and Sulphite Mills. Address Box 921, care Paper Trade Journal.

GROUND Wood Superintendent (machinist by trade) desires position. Experienced in every detail of construction and installing machinery, operating and maintaining; familiar with cost system; capable of handling men; able to take full responsibility to secure results. Temperate and reliable; can give the best of references. Address Box 899, care Paper Trade Journal.

FOR SALE

Ten new fifteen hundred pound Jones beaters; eight used fifteen hundred pound and nine one thousand pound Downington beaters, with washers; five Noble and Wood Monarchs Junior Jordans; two ten and three twelve plate screens; thirty cypress stuff chests with agitators; ten stock pumps. T. W. Kneeland Co., Room 808, 39 Cortlandt St., New York, N. Y.

FOR SALE

FOR SALE—Sale of old material at the U. S. Navy Fleet Supply Base, South Brooklyn, N. Y.—There will be sold at the Navy Fleet Supply Base, South Brooklyn, N. Y., material belonging to the Navy condemned as unfit for use therein, consisting of 210,000 lbs. bleached drill and twill cuttings, 180,000 lbs. Indigo blue denim cuttings, 75,000 lbs. bleached nainsook cuttings, 32,000 lbs. unbleached drill and canvas cuttings, 25,000 lbs. 18-oz. blue woolen cloth Kersey and Melton cuttings, 20,000 lbs. blue cap end cuttings, 6,000 lbs. 18-oz. blue worsted warp and wool filled cloth cuttings, 6,000 lbs. mixed woolen and worsted cuttings, 7,000 lbs. cotton silesia and Italian cloth, jute and flax lining canvas and cotton cord cuttings, 5,000 lbs. mixed cloth cuttings, 50,000 lbs. burlap bags, 15 tons baled kraft paper, 15 tons manila paper, 45 tons baled miscellaneous paper, 18 tons mixed twine, 18 tons strap iron, 19,500 lbs. salt pork with oak containers, 4,500 broken packing cases and 14,400 lbs. butter. The sale will be for cash to the highest bidder by sealed proposals to be opened at 10:00 A. M., February 20, 1919. Schedules containing form of proposals and terms of sale can be obtained upon application to the Disbursing Officer, Fleet Supply Base, South Brooklyn, N. Y. Joseph Daniels, Secretary of the Navy. 1-20-19.

FOR SALE—Two sheet cutters for sale, English make, 50" wide, complete and in good condition. Any reasonable offer accepted. Address, Box 961, care Paper Trade Journal.

FOR SALE—Mill at Lancaster, Pa. Equipped with 72" Fourd. machine, beaters, engines and ample steam and water power. Sprinkler equipment. Now operating under lease. Possession on 90 days' notice. Will sell machinery separately. Apply to the York Card & Paper Company, York, Pa.

PAPER MACHINERY FOR SALE

6 White Oscillating Screens, with new oscillating device.
8 Plates 10 x 24", cut .0014.
2 Auxiliary White Screens.
4 Plates 10 x 24", cut .0018.
1 New York Safety Steam Engine, Upright, 125 H. P. Cylinder 16 3/4" Bore, 18" Stroke. Flywheel 98" Diam., 18" Face.
3 Holyoke Machine Co. Platers 36" Rolls.
1 Fan (Blower) made by B. F. Sturtevant Co. of Boston, Mass. Diam. 72" x 40" wide; 37/16" Bearings 12" long; casing outside dimensions, 42", 8' 6" x 7' 2".
All in good condition. Prices low. Address Parsons Paper Company, Holyoke, Mass.

WANTED

High class book paper salesman to develop department. Great opportunity and liberal salary to right party. New York territory. Direct mill shipments only. All replies confidential. Address, Box 955, care of Paper Trade Journal.

FOR SALE

One 104" Kidder Slitting Machine
Perfect Condition.
Low Price.
Write at once. Box 990, care Paper Trade Journal.

MISCELLANEOUS

WANTED—At once, one-three dryers, about 50" face, with or without frames; also one die cutting press. Address, Box 965, care Paper Trade Journal.

KOLLERGAN—One second hand koller-gang wanted. Address, Box 966, care Paper Trade Journal.

Second Hand Machinery For Sale

2—Solid chilled rolls 10" dia. x 54 3/4" face, 3" journal 4 1/2" long.
1—Pusey & Jones drier 36" dia. x 118" face.
7—Rice Barton & Fales driers 48" diam. x 120" face.
1—Tank 122 1/2" x 132 1/2", tapers 13"-6".
1—2" Tabor pump.
1—10" Buffalo Blower.
1—Tin shear-foot press (Maxam).
1—Maxams lining machine.
1—Maxams conveyer for tin cans.
1—Maxams flanger for tin cans.
1—Maxams rolling machine for tin.
1—Maxams cover press for tin cans.
1—Maxams 6" Power Former for tin cans.
1—Special Horne Reel 10 1/4" dia. for an 86" Mach.
2—Pull rolls 12" dia. x 120" face.
1—14" Fan Pump with pulley and drive chain and extra impeller (Cross).
1—Bundy Steam Trap No. 86.
1—Gould Power Pump 1 1/2" x 12.
1—Gould Triplex Pump 7 x 10.
1—Ross Pony Mixer.
1—Waldron Single Strainer.
1—Millsapugh Suction Roll 137 1/2" x 14 1/2".
2—12/4 Rich Drag Knife Machine.
1—Set Coating Calendar Rolls.
1—20" diam. x 120" face.
1—24" diam. x 120" face.

Apply to
BIRD & SON, Inc.,
East Walpole, Mass.

FOR SALE

New Equipment, never installed.
2 36" Cylinders, 102" face.
1 36" Cylinder Vat.
4 12"x104" Couch Rolls, Rubber Covered.
4 10"x105" Primary Baby Press Rolls, R. C.
1 16"x105" Baby Press Roll, Rubber Cov'd.
3 11"x105" Baby Press Roll, Rubber Cov'd.
2 10"x105" Baby Press Roll, Iron.
2 14"x105" Baby Press Roll, Iron.
2 8-Plate Screen, Complete.

Fort Wayne Corrugated Paper Co.
Fort Wayne, Ind.

FOR SALE

One (1) Williams Patent Crusher and Pulverizer Co.'s

No. 2XX Special Ideal Shredder.

Complete with automatic feeder, No. 40 Cyclone collector, No. 40 fan, piping and counter-shaft for feeder. Machine and accessories are intact, having been in use only one month. Total weight about 24,000 lbs. Box 991, care Paper Trade Journal.

EFFICIENCY ENGINEERING BY EFFICIENT ENGINEERS

FREDERICK L. SMITH

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**PULP AND PAPER MILL
ENGINEER****HARDY S. FERGUSON**

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" ENG. INST. CAN.

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PAPER, PULP AND FIBRE MILLS,
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ESTIMATES OF COST,
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VALUATIONS.**Timber Lands Bought and Sold.
Timber and Pulp Wood Estimates.****R. R. BRADLEY,**
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TIMBER ESTIMATES**JAMES W. SEWALL** Old Town, Maine**JULES WOLBRETTE**DOMESTIC PAPER EXPORT
**ARE YOU GETTING YOUR SHARE OF
THIS MARKET'S BUSINESS?**

Write me—

THOMAS L. TOMLINES

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M. AM. SOC. M. E.
M. CAN. SOC. C. E.*Mill Architect and Consulting Engineer*

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SPECIALTY:Paper, Pulp and Fibre Mills
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New York, N. Y.

WILLIAM T. FIELDConsulting Engineer
Watertown, N. Y.

DESIGNS ESTIMATES EFFICIENCY REPORTS

FRANKLIN PAPER CO., HOLYOKE,
MASS.

Manufacturers of

Index Bristols, White Bristol Blanks, Etc.**Arthur D. Little, Inc.***Chemists and Engineers***CAMBRIDGE : MASS.**The most frequent troubles that we meet with in
paper mills are due to lack of standardizing processes.
Things are not done just the right way to get just the
right product. The thing desired is obtained—and then
again it is not—and nobody knows why. Then is the
proper time to write to us and find out what it will cost
to get us to study the matter. That information is free.

Directory

Cards under this heading will be charged for at the rate of \$30 per annum for each card of three lines or less, payable in advance. Each additional line \$10.

Architects and Engineers.

CAREY, JAMES L., Paper Mill Architect and Engineer, 208 North Laramie Ave., Chicago, Ill.

CHAPMAN, C. A., Inc., Paper Mill Architects and Engineers, 28 Jackson Boulevard E., Chicago, Ill.

FERGUSON, HARDY S., M. Am. Soc. C. E., Consulting Engineer, 200 Fifth Ave., New York.

HARDY, GEO. F., M. Am. Soc. M. E., Consulting Engineer, 309 Broadway, New York.

SNOW, S. M., Mill Architect, Engineer, Paper and Pulp Mills. Steam and Water Power plants. 55 Kilby street, Boston, Mass.

JOSEPH H. WALLACE & CO., Industrial Engineers, Temple Court Building, New York. Manufacturing Plants and Power Developments. Reports of Industrial Properties, Appraisals, etc.

Bale Ties.

WILSON, H. P. & H. F., Manufacturers of Steel Wire Bale Ties, for baling all compressible material. 544 West 22nd Street, New York City.

Boards.

MILLER PAPER CO., FRANK P., high grade specialties. Boards. East Downingtown, Pa.

Metal Skylights and Ventilators.

WE manufacture metal skylights and ventilators for paper and pulp mills. **E. VAN NOORDEN CO.**, 944-52 Mass Ave., Boston, Mass.

Rags, Paper Stock, etc.

BERLOWITZ, PAUL, 132 Nassau Street, New York. Importer of Rags, Bagging, New Cuttings.

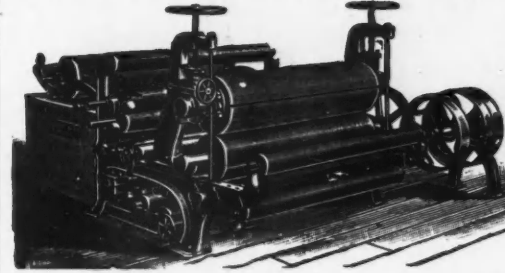
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Manufacturers of **PAPER MILL MACHINERY**

LEE, MASS.

Revolving Paper Cutters Rag Cutters Cylinder Paper Machines Washing and Beating



Engines
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Fan and Stuff Pumps
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Marshall Drives
Slitters and Rewinders
Reels
Dryers with Improved Packing Boxes
Wet Machines
Gun Metal and Rubber Rolls
Rolls Reground

FLYNN, MICHAEL, 54 Columbia Street, Brooklyn, N. Y.

GOLDSTEIN, R. & SON, Baltimore, Md. Cotton Rags and Paper Stock.

GRUNDY & SONS, LTD. JAMES, Chorley, England, supply new and old rags of highest quality for paper makers. Enquiries solicited.

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JACOB & CO., Alexander, Wapping, London, England. Supply all classes Waste Papers and Shavings, Paper Making, Rags, etc. Correspondence solicited. Paris Office, 3 Cite d'Hauteville.

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

MCGUIRE, MICHAEL, 100 and 102 Tenth Avenue, New York.

ROSENBAUM, INC., L., 316 Lafayette St., New York City. Packers exclusively of new cuttings.

SIMMONS, JOHN, SONS, Paper and Paper Stock. 28 and 30 South Marshall Street, Philadelphia, Pa.

Special Machinery.

DIETZ MACHINE WORKS, experienced builders of special machinery with well equipped modern shop, can quote low prices in machine building. Send drawings, 126-128 West Fontaine Street, Philadelphia, Pa.

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

Straw Pulp.

SCANDINAVIAN-AMERICAN TRADING CO., Produce Exchange, New York. All other kinds of Pulp.

BUY MORE THRIFT STAMPS



REPLACE MEN

in your storeroom for piling cases, barrels, bales, etc., by using a Revolverator.

Write for Bulletin No. PT49

REVOLVATOR CO. 357 Garfield Avenue Jersey City, N. J. Sales Agent for N. Y. Revolving Portable Elevator Co.

Penn Paper and Stock Company

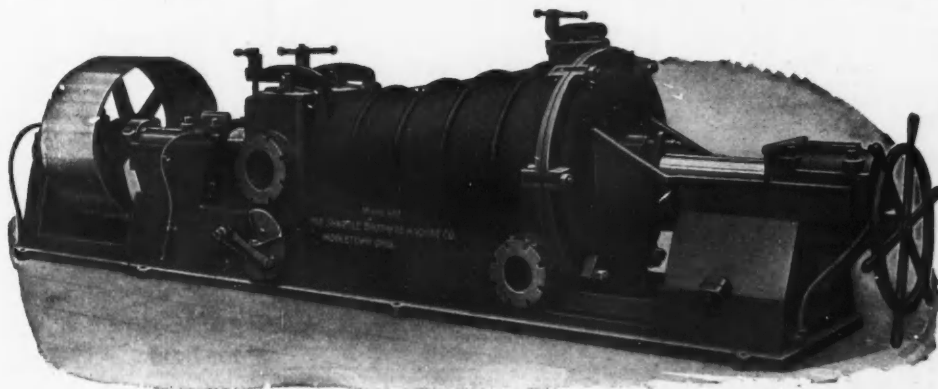
Packers of All Grades of Waste Paper

206 N. DELAWARE AVENUE PHILADELPHIA

Job Lots, Rejections, Side Rolls Wanted

SPOT CASH paid for jobs in bond paper, white or colors, any grade that will cut down to 11 x 17, any weight. Send samples, with lowest spot cash prices. No lot too small, and none too large.

MIDWEST PAPER CO., 732 Federal St., Chicago, Ill.



The **Shartle Bros. Machine Co.** Middletown Ohio

**HAMMERMILL
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**HAMMERMILL
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**HAMMERMILL
SAFETY**

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always under good pressure, always bountiful, 365 days in the year, can best be obtained by installing a Caldwell Latticed Column Tower.

The Caldwell Latticed Column Tower is as dependable, trustworthy and **enduring** as a tower can be built. When you think of a skyscraper, you think of **permanence**. The Caldwell Latticed Column Tower is built on the same principle—latticed steel construction, the highest type known to engineering science. It's a good, honest, serviceable tower, designed by engineers and backed by our experience of over thirty years in building tanks and towers.

The Caldwell Latticed Column Tower is higher in price than many other towers, but its additional service and **economy** offset the difference many times over.

The illustration shows a Caldwell Latticed Column Tower installed for Peninsular Paper Co., Ypsilanti, Mich.

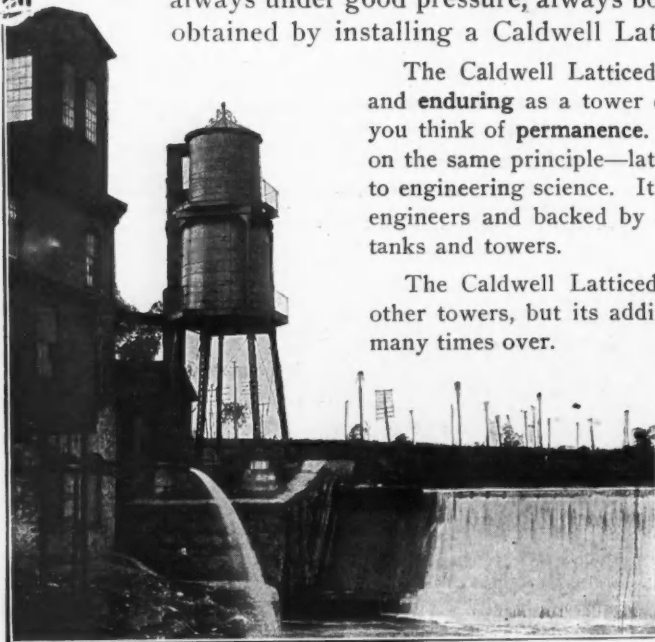
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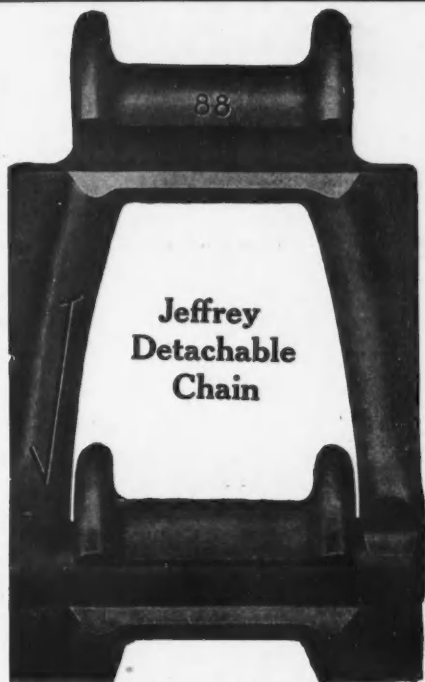
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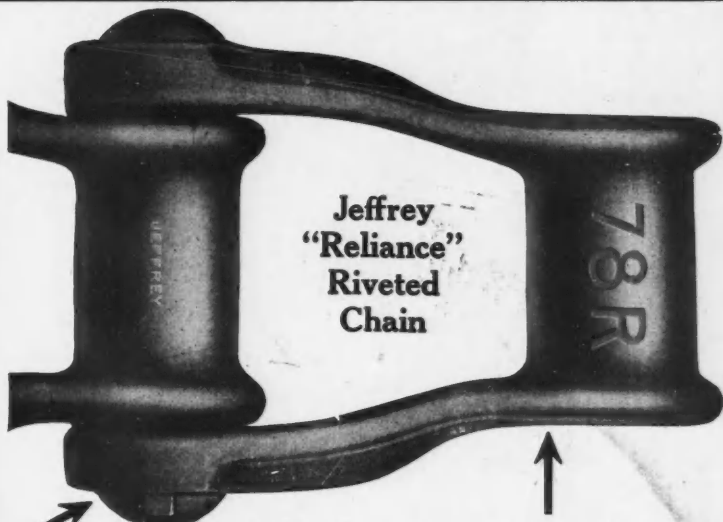
Caldwell
**TANKS
AND
TOWERS**





Jeffrey Detachable Chain

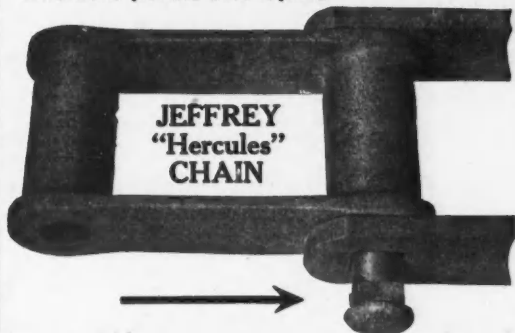
A Detachable Chain with Jeffrey Quality entering into every process of its manufacture. Suitable for many types of Elevators, Conveyers and Drives. Attachments provided when required.



Jeffrey "Reliance" Riveted Chain

Note the Double Keyed Pin Head to prevent the pin from turning.

Wide wearing shoe on bottom side of the link.



JEFFREY "Hercules" CHAIN

The Jeffrey Square Shank Pin Construction eliminates all rocking motion in the side bar.

The hard smooth steel pins with the Square Shank fit into perfectly Square Holes. The bearing surface is the Full Width of the pin.

We are the originators of this type of Chain and have been building and improving it for 25 years.

JEFFREY CHAINS

For Paper and Pulp Mill Service

In Handling Logs, Pulp Wood, Pulp Laps, Straw, Wood Chips, Packages, etc.

Correct Design, High Grade Materials, Modern Processes and Treatments, and Thorough Inspection assure correct pitch and maximum strength.

We have tested and experimented for 36 years and know the right chain for each service. Let Jeffrey Engineers co-operate with you in planning an equipment to meet your requirements.

Write for Chain Catalog and Price List, No. 211-D

The Jeffrey Manufacturing Co.

931 North Fourth St.

Columbus, Ohio



D-1

Jeffrey Malleable Roller Chain with Attachments D-1 and M-1 with T is an excellent chain for Dry Straw Carriers and Apron Conveyers for handling Packages and Freight.

M-1 with T



Pipe Swivel Attachment

T1



Flat and Round Link Chain

An All Steel Welded Chain. Generally used for Elevators and Drag Conveyers handling wet and dry straw, coal, etc.

LOBDELL CAR WHEEL CO.

Wilmington, Del., U. S. A.

Manufacturers
of**Chilled
Rolls for
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Machines**Rubber
Brass
Copper
Flour, Oil
and Ink
Mills, Etc.**CALENDERS**FURNISHED COMPLETE
FITTED WITH PATENT **ELECTRIC MOTOR LIFT**

Grinding Machines for Rolls of All Sizes

The Heller & Merz Co.

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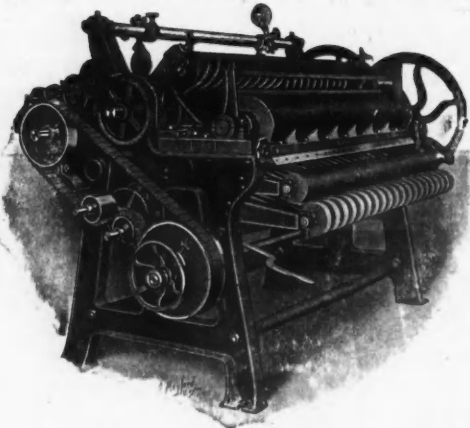
We can furnish all

AVAILABLE COLORS

to advantage.

Paper Cutters

Single, Duplex and Diagonal



Cutter Knives Patent Top Slitters

HAMBLET MACHINE CO.

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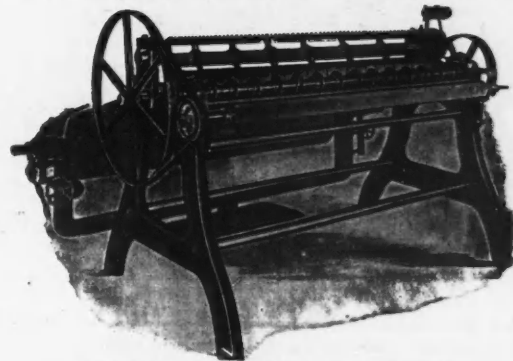
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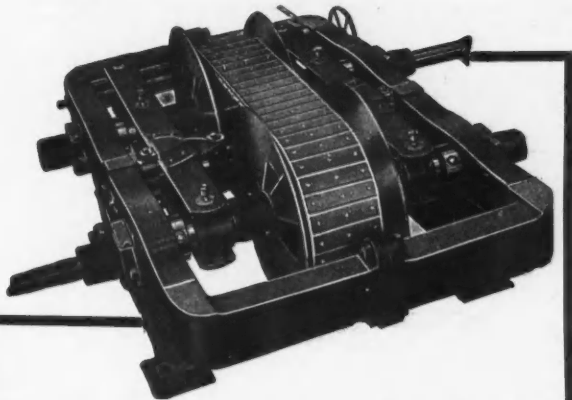
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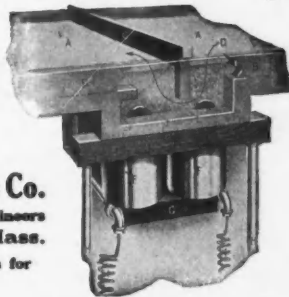
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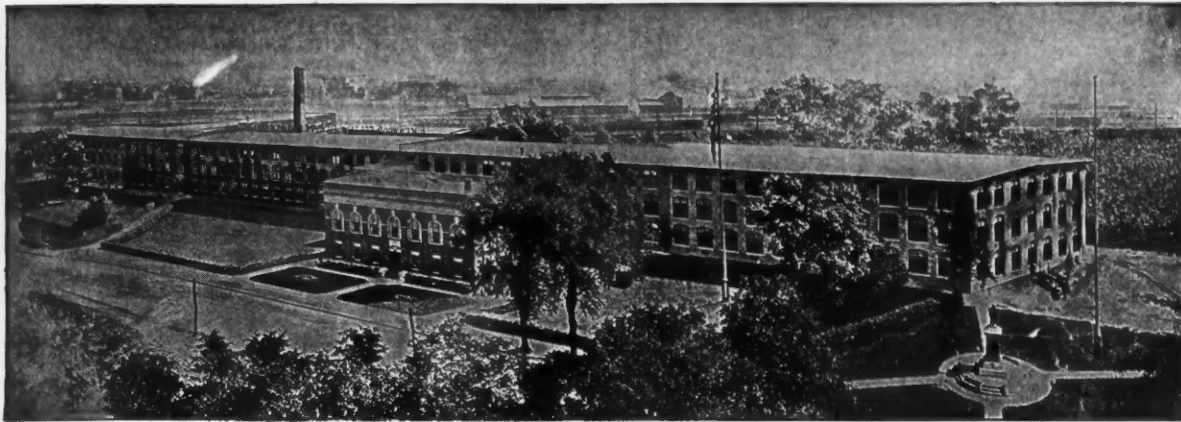
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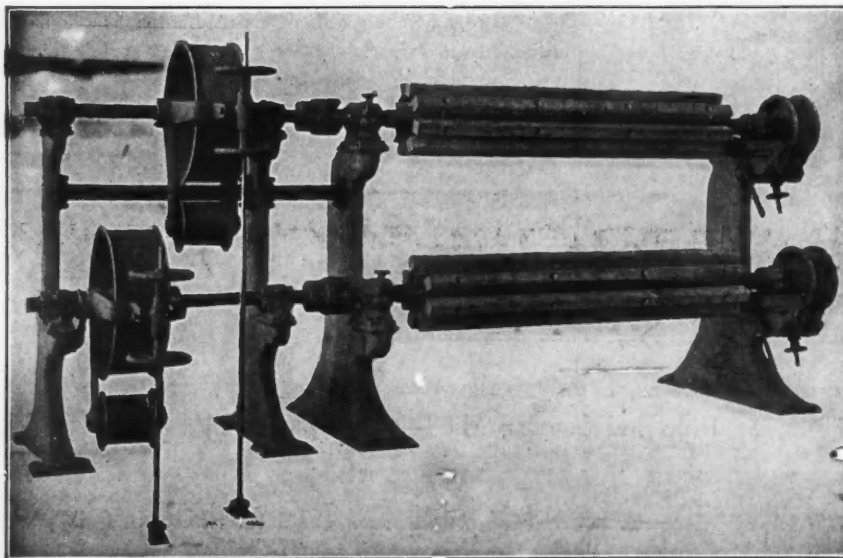


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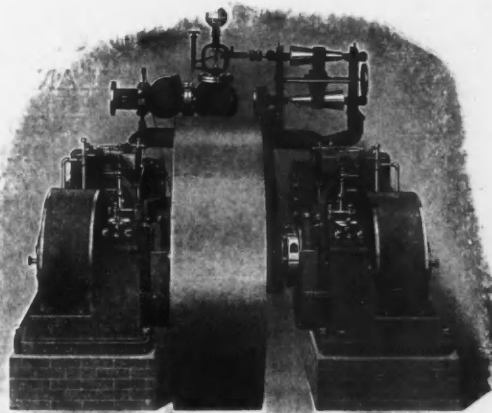
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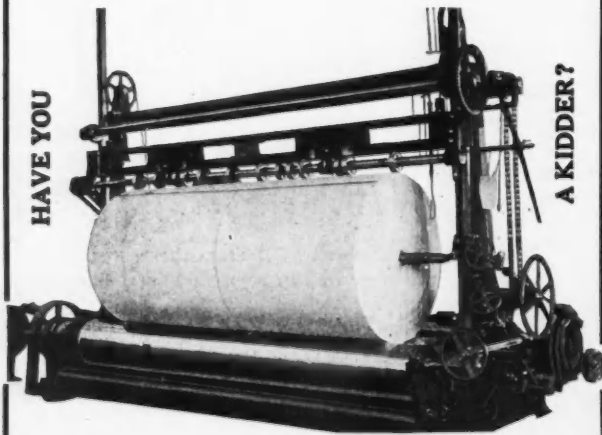
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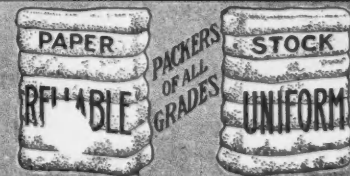
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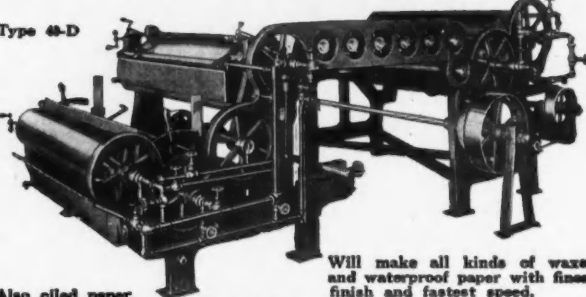


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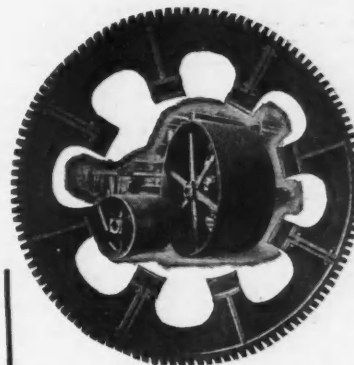
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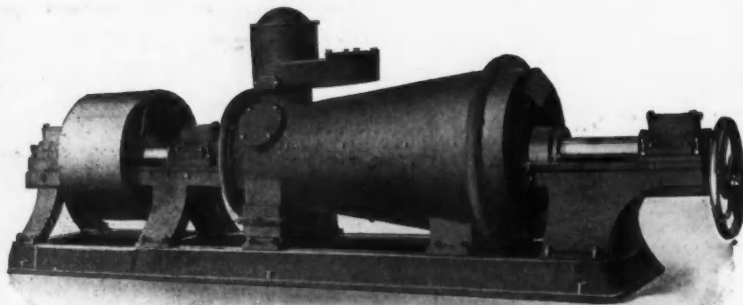
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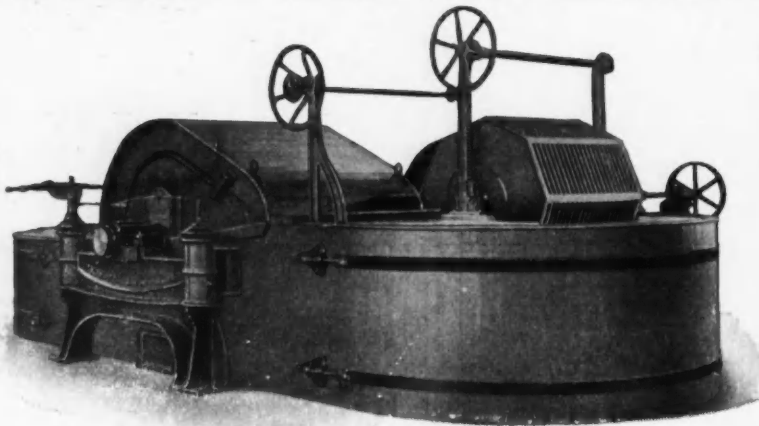
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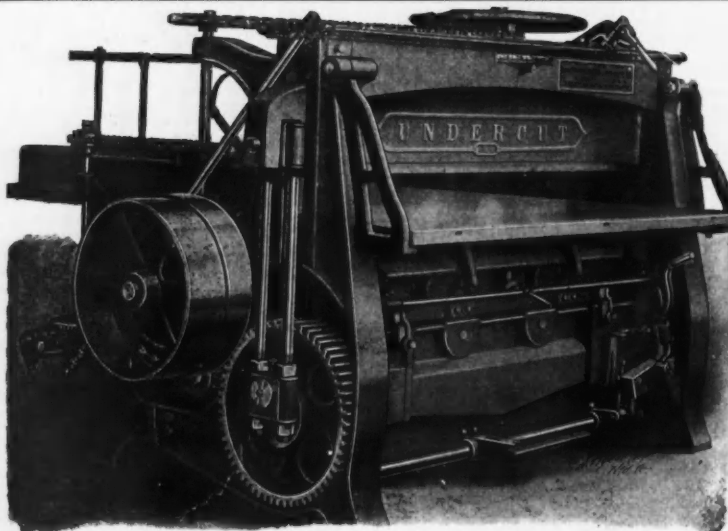
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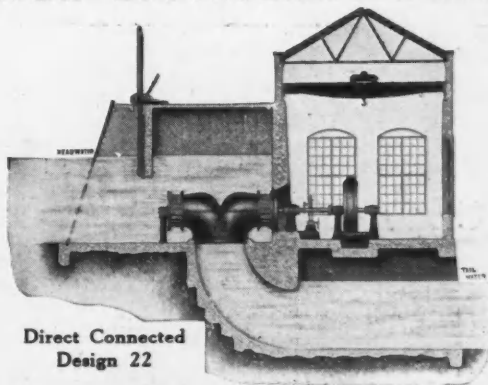
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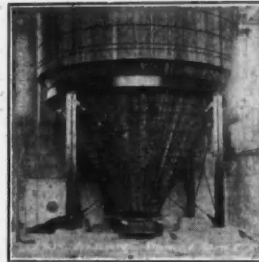
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ALPHABETICAL LIST TO ADVERTISERS

	Page.		Page.		Page.
Aberthaw Construction Co.	246,	Goulds Mfg. Co.	401	Patton & Co., Inc., J. F.	415
Advertisers Paper Mills	247	Graton & Knight Mfg. Co. The	382	Peerless Trading Co.	320
Albany Pelt Co.	62	Grissinger Machine Works	422	Penn Paper & Stock Co.	411
Albermarle Paper Mfg. Co. The	188	Groveton Mfg. Co.	328	Pennsylvania Salt Mfg. Co.	118
Albermarle Stone Co.	24	Gumbinsky Bros. Co.	427	Perkins & Sons, Inc., B. F.	316, 427
Allen Paper Co., A. C.	326			Pettebone-Cataract Paper Co.	324
American Coating Mills	359, 401	Hamblet Machine Co.	42, 414	Pickles, W. F.	403
American Mfg. Co.	390	Hamilton & Hansell, Inc.	360	Pioneer Paper Stock Co.	421
American Steam Gauge & Valve Mfg. Co.	50	Hammermill Paper Co.	240, 412	Port Huron Sulphite & Paper Co.	302
American Wood Pulp Corp.	96, 423	Hampden Glazed Paper & Card Co.	343	Potdevin Machine Co.	419
American Writing Paper Co.	370	Hampshire Paper Co.	264	Rhineland Paper Co.	254
Andersen & Co., J.	106, 370	Hardy, George F.	170, 410	Price Bros. & Co., Ltd.	262
Andrews Paper Co.	200, 426	Hardy & Sons Co., Wm. A.	27, 403	Price & Pierce, Ltd.	112, 360
Appleton Machine Co.	426	Harrington & King Perforating Co.	399	Pringle & Co., Inc., W. M.	420
Appleton Wire Works	90, 427	Hart Paper Co., Inc., T. F.	396	Pulp & Paper Trading Co.	106, 366
Appleton Woolen Mills	370	Hart Trading Co.	184		
Arabol Mfg. Co.	108, 426	Haverhill Box Board Co.	288	Racquette River Paper Co.	340
Arnold, Hoffman & Co.	407	Heller & Merz Co.	414	Randall Graphite Sales Co.	402
Ashcroft Mfg. Co.	374	Hill, Bertron Co.	348, 401	Rantoul & Co., C. W.	180
Atterbury Bros., Inc.	142, 423	Hill Clutch Co.	78, 398	Reeves Pulley Co.	417
Auer & Twitchell	270, 364	Hock & Co., J. Francis	334	Rexford Paper Co.	362
		Hoggson & Pettis Mfg. Co.	314, 362	Rhineland Paper Co.	254
		Hollingsworth & Vose Co.	226	Riordon Sales Co., Ltd.	298, 402
Bagley & Sewall Co.	266	Holyoke Machine Co.	22	Riker, J. L. & D. S.	426
Baker Mfg. Corp.	274, 402	Howard Paper Co.	190, 397	Rising Paper Co., B. D.	Inside back cover
Ball Engine Co.	419	Hubbs & Co., Chas. F.	296	Roberts Mfg. Co.	354
Banker, John W.	71	Hudson Trading Co.	64, 362	Robertson Paper Co.	288
Bayless Mfg. Corp.	370	Huyck & Sons, F. C.	86, 87, 418	Ryther & Pringle Co.	80, 81
Bedford Pulp & Paper Co.	344				
Bermingham & Prosser Co.	150	Imperial Bagging Co.	423	Salomon Bros. & Co.	416
Biggs Boiler Works Co.	100, 101, 421	Improved Paper Machinery Co.	36, 37, 373	Salomon, Inc., A.	419
Bird Machine Co.	126, 127	Inman Mfg. Co., Inc.	120	Sandusky Foundry & Machine Co.	94
Black-Clauston Co.	178, 418	International Pulp Co.	326	Sandy Hill Iron & Brass Works	390
Bloomer Bros. Co., Inc.	308, 423	Interstate Pulp & Paper Co.	370	Savery, Jr., Thos. H.	82, 172, 386
Bond Paper Co., B. F.	338	Island Paper Co.	166	Scandinavian-American Trading Co.	66, 370
Bowsher Co., N. P.	416			Schorsch & Co.	420
Bradley, R. R.	410	Jacob & Co., Alexander	420	Seaman Paper Co.	148, 360
Bredt & Co., F.	360	Jeffrey Mfg. Co.	413	Sewall, James W.	410
Brown Co.	98, 368	Jessup & Moore Paper Co.	234	Shartle Bros. Machine Co., T.	116, 117, 408, 411
Brown Paper Co., L. L.	230	Jointless Fire Brick Co.	400		
Browne & Stuart Co.	334			Shepard Electric Crane & Hoist Co.	208, 372
Bryant Paper Co., The	182	Kalamazoo Vegetable Parchment Co.	138, 384	Shryock Bros.	338
Buchanan & Bolt Wire Co.	252, 417	Keith Paper Co.	73	Shuler & Benninghofen	154, 427
Buffalo Foundry & Machine Co.	295	Keller Co., E. J.	176, 416	S K F Ball Bearing Co.	74, 75
Butterworth & Co., Edwin	395	Kelley Co., Henry C.	332	Smith Co., S. Morgan	306
		Kidder Press Co.	420	Smithe Machine Co., F. L.	362
Cable Excelsior Wire Mfg. Co., Wm.	4, 427	Kingsford Foundry & Machine Co.	342	Smith, Frederick L.	410
Cady & Co., E. J.	393	Kingsport Pulp Corp.	318	Smith Paper Co.	326
Caldwell & Son Co., H. W.	423	Klipstein & Co., A.	400	Smith & Winchester Mfg. Co.	196, 424
Caldwell Co., W. E.	412	Knowlton Co., M. D.	284, 422	Sowenborz & Sons, L.	398
Cameron Machine Co.	48, 410	Kuttroff, Pickhardt & Co., Inc.	32, 423	Southern Paper Co.	322
Caper's Sons, Inc., A. M.	38, 423			Srinivasachari, P. T.	425
Carew Mfg. Co.	264	La Boiteaux Co., C. L.	421	St. Regis Paper Co.	194
Carter, Rice & Co. Corp.	318	Lagerloef Trading Co.	360	Standard Paper Mfg. Co.	29
Carthage Machine Co.	140, 141	Lake Superior Corp.	386	Star Clay Co.	427
Castle, Gotthell & Overton	415	Langston Co., Samuel M.	34, 420	Stearns Lumber Co., A. T.	426
Central Mfg. Co.	294	Leffel & Co., James	425	Stebbins Engineering & Mfg. Co.	122
Central Ohio Paper Co.	330	Lewis Co., J. P.	136	Storm & Bull, Inc.	232, 419
Champion-International Co.	14	Liberty Paper Co.	391	Stratford Paper Co.	256
Chemical Paper Co.	346	Lindsay Wire Weaving Co.	56, 421	Strobar & Burger	417
Cheney Bigelow Wire Works	114, 374	Little Co., Inc., A. D.	410	Strype, Fred C.	386
Claffin Engineering Co.	144	Lobdell Car Wheel Co.	156, 414	Superior Chemical Co.	422
Clark & Son Machine Co., H. C.	411	Lombard & Co.	31, 425	Swenson Evaporator Co.	152, 366
Collins Mfg. Co.	76, 415				
Continental Paper Bag Co.	30	Main Paper Stock Co., Inc.	416	Taggarts Paper Co.	419
Converters Paper Co.	353	Maine Coated Paper Co.	316	Taylor-Logan Co., Papermakers	20
Corn Products Refining Co.	396	Marathon Paper Mills Co.	58	Taylor, Stiles & Co.	168
Craig & Co., H. G.	244	Marden, Orth & Hastings Co.	356	Textile Finishing Machinery Co.	18, 364
Craig-Becker Co., Inc.	272, 400	Marquardt, Inc., F. G.	160	Ticoonderoga Machine Works	46, 47
Crane, Z. & W. M.	450	Mayer Coating Machine Co.	422	Ticoonderoga Pulp & Paper Co.	132
Crane & Co.	246	McEnery Paper Co.	390	Tileston & Hollingsworth Co.	322
Crocker-McElwain Co.	346	McEwan Bros.	54	Tomlines, Thos. L.	410
Crotteau Co., Dick	351	McMahon & Co.	304	Train, Smith Co.	360
Curtlee & Bro., Inc.	351	Meincke, A. M.	104	Trans Oceanic Trading Co.	258
Cutter Mfg. Co.	214	Meisel Press & Mfg. Co.	420	Turpentine & Rosin Producers Association	404
		Mendelson Bros. Paper Stock Co.	419	Tuttle Press	312
Davis, Frank H.	408	Merrimac Paper Co.	212	Tyler Co., W. S.	380, 422
Dayton Beater & Hoist Co.	421	Miami Paper Co.	286		
Detroit Sulphite Pulp & Paper Co.	162	Michigan Electrochemical Co.	396	Union Bag & Paper Corp.	210
Dexter & Sons, C. H.	186	Midwest Paper Co.	417	Union Iron Works	422
Diamond State Fibre Co.	202, 362	Miller & Co., Geo. W.	366	Union Screen Plate Co.	32, 33, 372
Dickinson, Thos. L.	425	Millers Falls Paper Co.	268	Union Sulphur Co.	242, 420
Dicks-David Co., Inc.	77, 368	Mills Machine Co.	330	Union Talc Co.	424
Diem & Wing Paper Co.	266	Miner-Edgar Co.	403	United States Envelope Co.	70
Dietz Machine Works	12, 415	Mississquoi Pulp & Paper Co.	366	United States Talc Co.	416
Dillon & Barnes	416	Moore & White Co., The	336		
Dillon Machine Co.	60, 61, 424	Morey & Co., Inc.	360	Vanderbilt Co., R. T.	360
Dixie Paper Mills	344	Munising Paper Co.	119	Van Noorden Co., E.	44, 368
Downingtown Mfg. Co.	40, 41, 424			Van Chemical Co.	425
Draper Bros. Co.	414	Nashua Gummed & Coated Paper Co.	102, 364	Vickers Patents, Ltd.	378
Dryden Pulp & Paper So., Ltd.	228	National Paper Products Co.	31	Victory Bag & Paper Co.	128
DuPont de Nemours	388	National Waterproofing Co.	158, 426	Vitale & Rothery	410
		Nekossa-Edwards Paper Co.	130	Voorhees Rubber Mfg. Co.	397
Eagle Knife & Bar Works	84, 403	New England Tank & Tower Co.	426		
Eastern Mfg. Co.	218, 374	Newton Falls Paper Co.	350	Wallace & Co., Jos. H.	339, 410
Eastwood Wire Mfg. Co.	back cover, 427	New York Belting & Packing Co.	376	Warren & Co., S. D.	220
Elixman Core Co.	290	New York Oversea & Chemical Co.	69	Warren & Irgang Co.	248
Emerson Mfg. Co.	415	New York Oversea Co., Inc.	131, 360	Waterbury Felt Co.	224, 370
Esleack Mfg. Co.	198	New York & Pennsylvania Co.	357	Waterbury & Sons, H.	205
Ewing Co., H. Norwood	341, 348, 409	New York Revolving Portable Elevator Co.	417	Waterous Engine Works Co.	238
		Niagara Paper Mills	276	Waterville Iron Works	362
Fallulah Paper Co.	302	Noble & Wood Machine Co.	359	Wausau Sulphate Fibre Co.	51
Fantus Bros.	423	Northern Paper Mills	296		
Farnham Mfg. Co.	304	Norwood Engineering Co.	280, 416	Wayagamack Pulp & Paper Co.	Insert between 50, 352
Farrel Foundry & Machine Co.	425			Western Paper Stock Co.	421
Feculose Co. of America	326	Oakes Co., Roland T.	417	Weston Co., Byron	206
Federal Paper Stock Co.	422	Orono Pulp & Paper Co.	312	Whitaker Paper Co.	216
Ferguson, Hardy S.	308, 410	Orr Felt & Blanket Co.	236, 397	Whiting Paper Co.	324
Field, Wm. T.	384	Oswego Falls Pulp & Paper Co.	310	Whiting Paper Co., Geo. A.	72
First National Bank of Boston	204	Oswego Machine Works	422	Whiting-Plover Paper Co.	72
Fitchburg Paper Co.	374	Oxford Paper Co.	164	Williams & Co., C. K.	427
Flower City Tissue Mills Co.	146, 364			Williams & Co., Chas. W.	220
Ford Corporation	374	Pagel & Co., Inc., A. J.	16	Winkler & Bro., Isaac	417
Forsythe, Cale B.	330	Paper Manufacturers Chemical Co.	182, 183	Wisconsin Wire Works	300
Franklin Paper Co.	410	Paper Manufacturers Co., Inc.	110, 426	Wolbrette, Jules	410
		Parsons Paper Co.	320	Wortendyke Mfg. Co.	28
General Electric Co.	380	Parsons Pulp & Lumber Co.	420	Wyckoff & Son Co., A.	386
Gilbert Paper Co.	134	Parsons Trading Co., Inside front cover	360		
Gilbert Paper Co., Frank	278	Parsons & Whittemore	364	Yale & Towne Mfg. Co.	391
Gilman & Co., I.	350	Paterson Parchment Paper Co.	174		
Gleeson, Thomas E., Inc.	370			Zaremba Co.	292
Glens Falls Machine Works	358, 372			Zobel Color Works, Inc.	400
Gottesman & Son, M.	3, 399			Zuhlke, Paul C.	414

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