

MEMBER OF THE A. B. C.  
FIFTIETH YEAR

# PAPER TRADE JOURNAL

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY  
ESTABLISHED IN 1872

Vol. LXXIII. No. 9 NEW YORK AND CHICAGO, SEPTEMBER 1, 1921 { Per Annum, \$4.00  
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**PARSONS TRADING COMPANY**  
*Paper Exporters*  
17 Battery Place New York  
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Havana Buenos Aires Mexico Rio de Janeiro Naples  
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**PAGE 23!**

  
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**PROTECTIVE PAPERS**  
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*Diamond Fibre Receptacles of all kinds*  
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All Kinds **WOOD PULP** Every Description  
Correspondence Invited!

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Sole Selling Agents for **Kraft Pulp and Easy Bleaching Sulphite**  
Bathurst Lumber Co. Ltd.  
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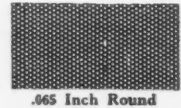
**INTERNATIONAL PULP CO.**  
NEW YORK CITY  
**ASBESTINE PULP** \* **FILLER**  
90% Retention  
REG. U. S. PATENT OFFICE

Entered as Second-Class Matter June 20, 1879, at the New York Post Office, Under Act of Congress, March 3, 1879.  
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**PULP AND PAPER**  
OF  
EVERY DESCRIPTION  
**HUDSON TRADING COMPANY**  
300 Madison Avenue  
NEW YORK  
ESTABLISHED 1888  
CABLE ADDRESS: "HUDTRACO," NEW YORK

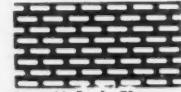
## Perforated Metal Screens For Pulp and Paper Mills

STEEL, COPPER, BRASS, BRONZE  
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punched for Centrifugal and  
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English Weave in Two, Three, Four, Five  
and Six Ply  
60 Inches to 176 Inches in Width  
Fine Faced Felts for Fine Papers  
Absolutely no Felt Marks in Paper  
TRIUNE Three Ply Felts for Coarse Papers



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can be applied to any make of  
Disc Barker. No matter what  
Disc Barker you may be operat-  
ing—the Lombard Barker attach-  
ment will add to its efficiency—  
saving in wood—easy operation.

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Waterville, Maine



# Bayless Manufacturing Corporation

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PULP AND PAPER MILLS AT AUSTIN, PA.



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QUALITY  
SULPHITE  
WRAPPING  
PAPERS

ALVAH MILLER, Pres. TOM T. WALLER, Vice-Pres.  
NATH'L L. MILLER, Secy-Treas.

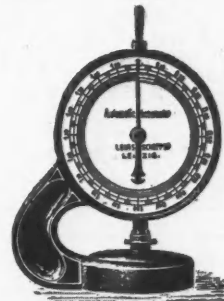
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Domestic and Foreign  
Ground Wood and  
Sulphite

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8" wide

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*Immediate Delivery*

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## "EXCELSIOR"

*Seamless Felts for  
fast running*

FELTS AND JACKETS

*Satin style Felts  
for fine finish*

1863

FOR EVERY GRADE OF PAPER  
CAMDEN, MAINE

1921



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Scandinavian Export Agents

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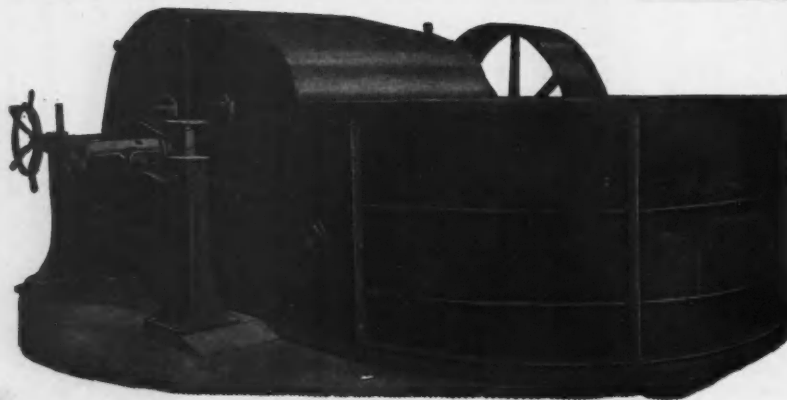


### FELTS and JACKETS

For Every Grade of Paper and Pulp

Correspondence and Orders  
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Manufactured at  
**SKANEATELES FALLS**  
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FULTON, N. Y., U. S. A.

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**BEATING ENGINES**  
**WASHING ENGINES**  
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Old style squares—Septem-  
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Improved self-opening—Octo-  
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GROCERS' BAGS**

**BARS—SHEETS—STRUCTURALS**

Channels

Beams

Angles

Tees

Plates

Maximum  
lengths  
60 ft.

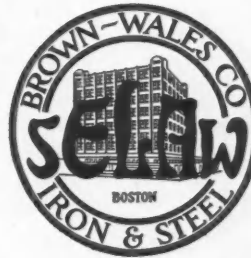
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Bolts

Nuts

Washers

Rivets



All material cut to length

Immediate Deliveries

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Branch Offices:  
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The extent  
of our production of  
High Grade  
**BLEACHED  
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insures uniform quality, prompt  
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**BROWN COMPANY**

Founded 1852

PORTLAND MAINE

Mills at Berlin, New Hampshire

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Woolworth Bldg.

CHICAGO  
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**APPLETON  
FELTS**

Quality Paper  
Quantity Production  
is another way of saying  
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**APPLETON WOOLEN  
MILLS**  
APPLETON, WIS.

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DE-FIBERING AND DE-INKING PROCESS

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Height of Machine Over All, 12 Feet

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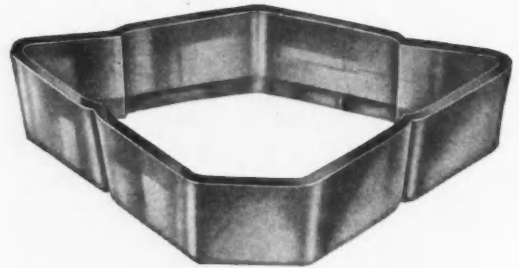
Agents for Canada, Brantford, Canada.

Produces Strongest, Brightest and Best Pulp Obtainable from Waste Papers.

Capacity—12 to 15 Tons in 24 Hours

It de-fibers and liberates ink and color in one operation. It separates ink and color from fibers, instead of rubbing, grinding or kneading them in.

It separates ink and color from fibers, instead of rubbing, grinding or kneading them in.



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THE kind that cut clean and stay sharp. Independent Dies are made by specialists of highest skill, from carefully selected steel, and we guarantee every one of them to be free from flaws or defects of any kind. They are accurate, efficient, durable. They are steadily growing in popularity, as is proven by the fact that our factory is running full time with the largest force in our history.

Besides envelope dies, we make label dies, circular dies in all sizes, elliptical, oval, square and irregular shapes. We take especial pride in producing odd and intricate designs.

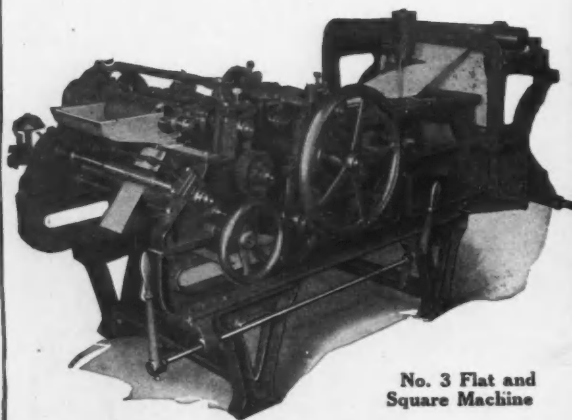
Ask us to quote prices on unusual shaped dies. Write for descriptive folder of stock dies, which we always have on hand, ready for immediate shipment.

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To make all sizes of Flat and Square Bags. Also sacks in 1/16, 1/8 and 1/4 bbl. sizes. Very fast and compact. The bag is made complete from a roll of paper.

DESCRIPTIVE FOLDER AND SAMPLE BAGS ON REQUEST



No. 3 Flat and Square Machine

**FISCHER MACHINE COMPANY**

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for **PAPER**

Newport Acid Bordeaux B Conc

AND

Newport Paper Red 2 B

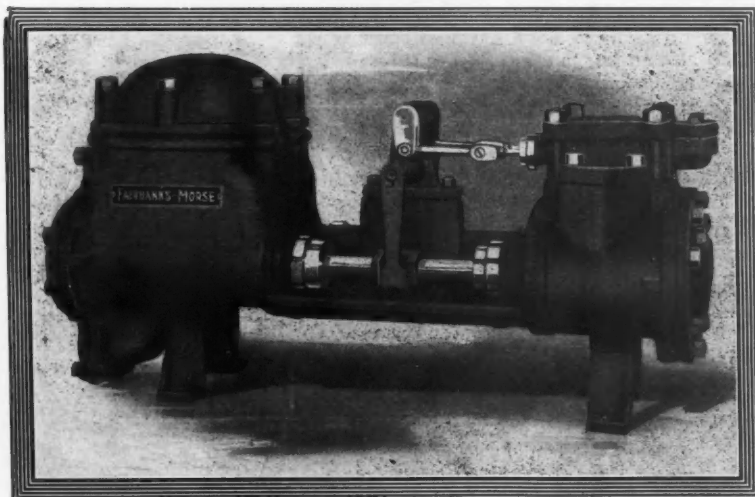
TWO PRODUCTS OF GOOD COLORING  
POWER FOR BOTH LIGHTER AND  
DEEP SHADES.



**NEWPORT CHEMICAL WORKS, Inc.**  
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Branch Sales Offices—Boston, Philadelphia, Greensboro, N. C., Chicago, Providence

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*Use this Proven Pump for  
Boiler Feeding and  
General Service*

This duplex piston pattern steam pump is suitable for boiler feeding and similar service where pressure does not exceed 150 pounds.

Fairbanks-Morse pumps have proven their dependability and economy in every industry under the most severe conditions.

# Fairbanks, Morse & Co.

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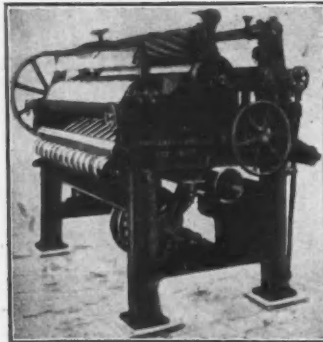
THE CANADIAN FAIRBANKS-MORSE CO., LTD., MONTREAL



**Oil Engines - Pumps - Electric Motors and Generators - Fairbanks Scales - Railway Appliances - Farm Power Machinery**

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PAPER MILL MACHINERY  
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Revolving Paper Cutters—Rag Cutters—Cylinder Paper  
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*Calender*  
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*For all grades of stock*

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Naturally, the belts slip on the pulleys and loss of power and production results. The animal hair surface of "Camel Hair" Belting *sticks* to pulleys, wet or dry. The tightly woven fabric absorbs moisture without injury to the belt.

Paper mill engineers will see the advantage of overcoming "slip" and securing long belt-life with "Camel Hair" Belting.

To identify the genuine "Camel Hair" Belt, a copper wire is built into the center of each. Look for it.

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Established 1890



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If you have ever used *any* of the Bolton products, Fly Bars, Bed Plates, Jordan Fillings, or Knives of any kind, you found them *HIGH GRADE* in quality and finish and economical in cost.

You can order any of the Bolton Quality line and know that you will find same equally *High Grade*, equally *well finished*, and equally *economical*.

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*High Grade Fly Bars, Bed Plates, Jordan Fillings and Knives*

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IN STEEL AND ALLOYED METALS

For Pulp and Paper Mills



Elevator Buckets, Conveyor Flights  
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“Papers made in the Adirondacks”

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92" trim Cylinder machine for Heavy Papers .010 to .025 56" trim Fourdrinier machine for Medium Weight Papers  
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White and Colored Papers for Special Requirements

We also will stock two cover lines—one pattern paper line—one box cover line.

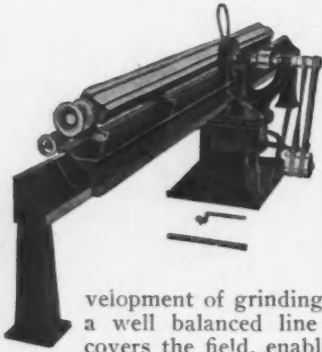
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### IMPROVED CONSTRUCTIONS



A carefully developed line of automatic and hand knife grinders of all sizes and types.

Representing three large plants which have specialized over a long period of years, in the development of grinding machines, we have a well balanced line which completely covers the field, enabling exact choice in either light or heavy grinders for straight wheel, cup wheel, ring wheel and adjustable chuck with block wheel grinding.

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### STEEL BELT LACING

Best for Every  
Type of Belting

Nothing  
Needed But a  
Hammer

The  
Strongest  
Belt Lacing  
On Earth

Double Staggered  
Tooth Incomes  
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"Never  
Lets Go"



### The Choice of Master Engineers

ALLIGATOR Steel Belt Lacing is specified by Master Engineers the world over, because they have found it the most simple, efficient and economical medium for lacing all belts from tape to 1/2-inch thickness. Only a hammer required to apply it. Three minutes average time makes a permanent, flexible joint, with two working surfaces, that is stronger than any other known.

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Manufacturers also of the famous FLEXCO-LOK Steel Lamp Guards.

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ALBANY FELTS are adapted for every type of Paper and Pulp Machine, and for every kind of stock. Every one is made of Pure Wool of the very best quality.

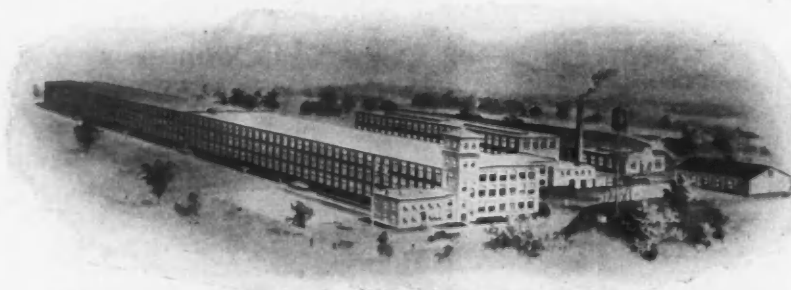
Twenty-five years' experience in making Paper Makers Felts and Jackets has shown us how to make them as best suited to the needs of various kinds of machines and stock.


Every possible effort is made to give our customers the best satisfaction and to weave into our Felts and Jackets the longest possible life.

ALBANY,

ALBANY FELT COMPANY

NEW YORK







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Fort Howard Quality Product includes Genuine Crepe Napkins, Flat and Folded; Genuine Crepe Toilets; Genuine and Semi-Crepe Towels; Semi-crepe Napkins and Toilets; Plain Tissue Napkins and Plain Tissue Toilets, Count and Weight Rolls in machine Glazed and Cylinder.

**Fort Howard Paper Co.**  
Green Bay, Wis.



## INTERSTATE Pulp & Paper Co.

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NEW YORK, N. Y.

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*Domestic and Export*

Newsprint    Book    Writing  
Bond            Wrapping  
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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.

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Annual Production 20,000 dry tons

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Tonnage available for prompt and future delivery—Wire for prices



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*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.

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We offer a full line of

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and furnish precise directions on application for

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Half a century's experience enables us to furnish goods answering requirements and to give reliable service

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# TEXAS GULF SULPHUR

**99½ Per Cent. Pure**

Produced from one  
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# COLLINS MANUFACTURING COMPANY

SAMUEL R. WHITING, Pres. and Treas.

Manufacturers of

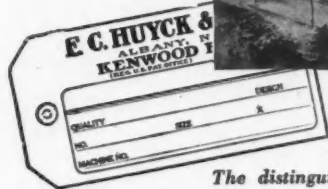
**LOFT DRIED PAPERS  
LEDGERS  
BONDS  
WRITING PAPERS**

**Mill: North Wilbraham, Mass.**

**Main Office:  
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Holyoke, Mass.**

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Strength and Openness  
are two Kenwood advantages of  
particular importance to the  
paper maker.



*The distinguishing mark  
of Kenwood Felts.*



**F. C. HUYCK & SONS  
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SOLE AGENTS in the UNITED STATES, CANADA, MEXICO and CUBA for  
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ALSO



SOLE AGENTS in the UNITED STATES, CANADA, MEXICO and CUBA for  
**FINNISH WOOD PULP UNION, HELSINGFORS, FINLAND**  
 a combination of the foremost Ground Wood Pulp and Board mills in Finland, makers of various kinds of boards and dry and wet Brown and White Mechanical Wood Pulp.

*Get the most for your money by getting next to our qualities and prices!*

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MEMBER OF THE A. B. C.

# PAPER TRADE JOURNAL

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

**FIFTIETH YEAR**

PUBLISHED EVERY THURSDAY BY THE  
**LOCKWOOD TRADE JOURNAL COMPANY, INC.**

LESLIE R. PALMER, President

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Thursday, September 1, 1921

## Table of Contents

### News of the Trade:

	PAGE
Production of Paper for July.....	16
Agents of Hammermill Meet at Erie.....	18
Abitibi Power and Paper Co. to Be Largest News Plant.....	20
Riordon Co. Affairs.....	20
Effect of Fordney Bill.....	20
Booth Mills Shut Down.....	20
Big Hydro Plant Completed.....	20
Fraser Companies' Annual Report.....	20
Development in Newfoundland.....	21
To Manufacture Paper Barrels.....	21
Siam to Have Experimental Paper Mill.....	21
New England Salesmen to Meet.....	21
Woodpulp Dumping Probe by Treasury Department.....	22
More Inquiries for Paper in Philadelphia Market.....	24
Low Government Bids Affect Business.....	24
Co-operative Buying by Printing Trade.....	24
International Paper Co. Increasing Production.....	26
Eight Mills Now Operating.....	26
K. V. P. Co. to Erect Community Building.....	26
Paper Demand More Active in Toronto.....	28
Splendid Exhibits Made in Paper Trade.....	28
Provincial Forestry Station Display.....	28
Action in Timber Returns is Withdrawn.....	28
Fire Destroys Large Pile of Pulpwood.....	28
Woods Wages Reduced.....	28
High-Grade Paper Mills Resuming.....	30
Questions on Cost Standardizing.....	32
Improved Process of Cooking Sulphate.....	34
New York Trade Jottings.....	36
News of the Chicago Trade.....	36
Gem City Boiler Co. Making Small Heaters.....	36
Short Cuts to Power Transmission.....	36

	PAGE
Theory of Atmospheric Evaporation.....	38
Increasing Efficiency of Water Power Plants.....	38
Huttens' Attempt at Gelatinization.....	38
Current Paper Trade Literature.....	46
Recent Incorporations.....	48
New Factory for the Liberty Paper Company.....	48
Black, Clawson Co.'s Business Expanding.....	48
Cut Price of News Print.....	48
Sutherland Company Reports Good Business.....	58

### Editorial:

The Anti-Dumping Law.....	40
Canadian Paper Exports Decrease.....	40

### Obituary:

Eugene Francis Crowe.....	30
Frank Wiley Farrell.....	30
John S. Koster.....	30

### Special Article:

Utilization of Cellulose Waste Liquors.....	42
Selling and Manufacturing Methodically.....	52

### Market Review:

New York Market Review.....	58
Market Quotations.....	59
Miscellaneous Markets.....	62

Want and For Sale Advertisements, Pages 64 and 65

## PRODUCTION OF ALL PAPER DURING THE MONTH OF JULY

According to Statistics Furnished by the Federal Trade Commission, Stocks of Wrapping, Bag and Tissue Increased During the Month—News Print Stocks Equaled Six Days' Average Output, Book Paper Stocks Equaled Twelve Days' Average Output, Paper Board Mill Stocks Equaled Ten Days' Average Output, and Wrapping Paper Stocks Equaled Twenty-five Days' Output.

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., August 31, 1921.—The attached tabulation is a summary of production, shipments and stocks of paper mills in the United States for the month of July, 1921, compiled by the Federal Trade Commission. This summary is compared with the month of July, 1920, 1919 and 1918, and the average production and stocks based upon the production and stocks for the years 1918, 1919, and 1920. The mills have been classified for convenience into twelve groups according to the grades of paper made. Some mills making several grades appear in more than one group which causes duplication in the body of the tonnage tables in the number of mills.

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

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

### Tonnage Summary

Production, shipments and stocks of paper, by grades, for the month of July, 1921, compared with July, 1920, 1919, and 1918, and with average production and stock:

Grade	Number of mills	Stocks on hand of first of month		Production Net tons	Shipments Net tons	Stock on hand end of month Net tons
		Net tons	Net tons			
<b>News Print (Standard and Special Grades of News):</b>						
July, 1921.....	92	26,629	94,247	95,357	25,519	
July, 1920.....	89	23,990	129,853	131,821	22,022	
July, 1919.....	76	26,115	113,929	111,819	28,225	
July, 1918.....	67	26,161	108,523	109,772	24,912	
Average.....			112,925		23,763	
<b>Standard News:</b>						
July, 1921.....	74	22,104	86,139	87,279	20,964	
July, 1920.....	74	20,976	118,810	120,659	19,127	
July, 1919.....	54	20,023	101,850	98,548	23,325	
July, 1918.....	50	19,812	98,223	99,400	18,635	
Average.....			101,650		19,528	
<b>Book (M. F., S. S. C. and Coated):</b>						
July, 1921.....	90	40,253	48,527	51,211	37,569	
July, 1920.....	94	22,099	95,526	95,076	22,549	
July, 1919.....	92	36,186	75,613	77,787	34,012	
July, 1918.....	94	30,707	66,177	65,379	31,505	
Average.....			78,125		28,328	
<b>Paperboard—Total—(Straw, Fibre, Leather, Chip, etc.):</b>						
July, 1921.....	240	68,097	112,265	115,642	64,720	
July, 1920.....	249	37,860	218,771	217,534	39,097	
July, 1919.....	246	62,018	169,593	174,051	57,560	
July, 1918.....	233	38,630	175,550	173,942	40,238	
Average.....			168,575		45,530	
<b>Boxboard:</b>						
July, 1921.....	36	33,189	83,450	85,736	30,903	
July, 1920.....	149	16,361	161,453	160,595	17,219	
Average.....			112,600		19,303	
<b>Wrapping (Kraft, Manila, Fiber, etc.):</b>						
July, 1921.....	153	61,139	45,090	44,519	61,710	
July, 1920.....	150	21,710	73,487	72,832	22,365	
July, 1919.....	169	68,912	63,769	74,030	58,651	
July, 1918.....	149	37,407	67,211	65,828	38,790	
Average.....			61,000		49,488	
<b>Bag (all kinds):</b>						
		Stocks on hand of first of month		Production Net tons	Shipments Net tons	Stock on hand end of month Net tons
		Net tons	Net tons			
July, 1921.....	45	3,159	6,661	6,626	3,194	
July, 1920.....	40	2,662	19,055	19,616	2,101	
July, 1919.....	42	4,523	15,934	16,401	4,056	
July, 1918.....	31	3,184	14,976	14,697	3,463	
Average.....			15,375		2,365	

<b>Fine (Writing, Bonds, Ledgers, etc.):</b>					
July, 1921.....	107	40,808	16,327	17,750	39,385
July, 1920.....	113	27,272	34,078	33,911	27,439
July, 1919.....	116	41,898	30,036	31,603	40,331
July, 1918.....	101	25,241	30,994	28,161	28,074
Average.....			29,975		31,835
<b>Tissue (Toilet, Crepe, Fruit Wrappers, etc.):</b>					
July, 1921.....	93	8,056	12,238	12,209	8,085
July, 1920.....	100	5,510	16,850	16,993	5,367
July, 1919.....	91	9,027	14,685	14,971	8,741
July, 1918.....	82	5,362	12,664	12,610	5,416
Average.....			12,975		6,453
<b>Hanging (No. 2 Blank, Oatmeal, Tile, etc.):</b>					
July, 1921.....	22	9,538	4,459	4,996	9,001
July, 1920.....	55	1,112	9,037	8,768	1,381
July, 1919.....	22	7,125	6,643	7,259	6,509
July, 1918.....	18	4,240	5,305	6,083	3,462
Average.....			7,325		3,296
<b>Felts and Building (Roofing, Sheathing, etc.):</b>					
July, 1921.....	52	10,528	17,425	17,518	10,435
July, 1920.....	55	11,900	33,053	32,430	12,523
July, 1919.....	53	9,030	29,402	29,858	8,574
July, 1918.....	41	5,791	23,272	23,077	5,986
Average.....			25,425		8,571
<b>Other Grades (specialties not otherwise classified):</b>					
July, 1921.....	100	20,580	13,190	13,844	19,926
July, 1920.....	95	14,184	28,808	28,379	14,613
July, 1919.....	77	13,854	19,260	18,852	14,262
July, 1918.....	45	5,214	21,955	21,127	6,042
Average.....			21,425		12,784
<b>Total—of all grades:</b>					
July, 1921.....		288,787	370,429	379,672	279,544
July, 1920.....		168,299	658,518	657,360	169,457
July, 1919.....		278,688	538,864	556,631	260,921
July, 1918.....		181,937	526,627	520,676	187,888
Average.....			533,125		203,373

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

The following stocks were reported on hand at terminal and delivery points on July 31st in addition to the mill stocks shown in the tabulation: Book Paper, 3,321 tons; Fine, 190 tons; Wrapping, 26 tons; Standard News, 95 tons; and "Other Grades," 159 tons.

Stocks of Wrapping, Bag and Tissue increased during the month. Stocks of all grades reported by manufacturers at the end of July amounted to 283,335 tons, including the stocks at terminal and delivery points. In addition to these stocks, jobbers and publishers reported news print in stock and in transit aggregating 199,599 tons.

### Ratio of Stocks to Average Production

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

News print paper mill stocks equal 6 days' average output. Book paper mill stocks equal 12 days' average output. Paper board mill stocks equal 10 days' average output. Wrapping paper mill stocks equal 25 days' average output. Bag paper mill stocks equal about 5 days' average output. Fine paper mill stocks equal 33 days' average output. Tissue paper mill stocks equal 16 days' average output. Hanging paper mill stocks equal 31 days' average output. Felts and building paper mill stocks equal 10 days' average output. Miscellaneous paper mill stock equal 23 days' average output. Total paper mill stocks of all grades equal about 13 days' average output.

### Imports and Exports

The imports and exports of all grades of paper for June, 1921, compared with June, 1920, as shown by the records of the Department of Commerce, were as follows:

Imports:	June, 1921		June, 1920	
	Pounds	Value	Pounds	Value
News print.....	92,440,327	\$4,928,573	117,478,620	\$5,062,900
Book paper.....	39,513	4,206	16,594	9,699
Wrapping.....	1,427,122	72,159	486,576	49,877
Hanging.....		34,231		41,585
All other grades (a).....		254,455		255,900
<b>Exports:</b>				
News print.....	1,202,538	73,860	10,407,116	656,884
Book paper.....	2,152,708	248,013	7,559,857	1,089,865
Paper board.....		168,763		387,788
Wrapping.....	1,805,406	141,125	5,609,937	694,473
Bag.....		42,409		222,701
Tissue.....		177,092		699,178
Hanging.....		79,361		351,913
All other grades (a).....		11,369		104,484
Total imports.....		\$5,293,624		\$5,389,961
Total exports.....		1,325,754		5,034,903

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



News print is the only grade of which the United States is a heavy importer. The bulk of this tonnage, the value of which amounted to \$4,928,573 for June, 1921, is imported from Canada. The value of the exports of news print in June, 1921, amounted to \$73,860, which is about 1.5 per cent of the news print imported.

Book paper, news print, wrapping paper, fine paper and paper-board were the principal grades exported, the combined value amounting to \$808,853 for June, 1921.

The value of the total imports of all grades was about 2 per cent more than for May, 1921. The value of the total exports for June, 1921, was \$3,709,149 less than the value of the exports for June, 1920, and \$3,967,870 less than the value of the imports for June, 1921.

**Loss of Production**

The idle machine time reported to the commission is shown by grades in the tabulation attached. This tabulation does not include the machines in 62 mills which were closed down completely. The reasons tabulated for lost time are lack of orders and repairs. "Other reasons" include lack of coal, lack of water power, etc. The time lost in July, 1920, is given by grades and reasons for purposes of comparison.

Grade	Lack of Orders		Repairs		Other Reasons		Total	
	1921	1920	1921	1920	1921	1920	1921	1920
<b>News Print:</b>								
Number of machines.....	11	0	13	17	21	3	45	20
Total hours idle.....	1,770	0	909	869	2,552	402	5,231	1,271
<b>Book Paper:</b>								
Number of machines.....	131	0	14	13	7	47	152	60
Total hours idle.....	31,355	0	3,578	1,098	1,510	1,766	36,244	2,864
<b>Paperboard:</b>								
Number of machines.....	214	13	31	72	49	117	294	203
Total hours idle.....	57,351	3,524	7,151	7,315	13,683	21,458	78,185	32,297
<b>Wrapping:</b>								
Number of machines.....	63	1	27	45	27	30	117	76
Total hours idle.....	13,436	576	2,993	2,707	4,848	2,009	21,277	5,292
<b>Bag:</b>								
Number of machines.....	12	0	9	6	7	3	28	9
Total hours idle.....	3,211	0	814	456	675	304	4,700	750
<b>Fine:</b>								
Number of machines.....	107	0	36	25	11	45	154	71
Total hours idle.....	29,991	0	8,712	2,090	2,060	3,964	40,763	6,054
<b>Tissue:</b>								
Number of machines.....	34	0	36	36	21	26	91	62
Total hours idle.....	8,386	0	5,343	2,313	3,494	2,935	17,223	5,248
<b>Hanging:</b>								
Number of machines.....	3	0	2	1	0	8	10	9
Total hours idle.....	2,360	0	296	11	0	1,499	2,656	1,510
<b>Felts and Building:</b>								
Number of machines.....	37	1	8	11	6	20	51	32
Total hours idle.....	9,394	68	773	1,417	1,469	2,699	11,636	4,184
<b>Other Grades:</b>								
Number of machines.....	67	1	17	7	7	21	91	29
Total hours idle.....	11,078	576	3,587	594	1,350	2,765	16,015	3,935
<b>Total number of machines</b>	<b>684</b>	<b>16</b>	<b>193</b>	<b>235</b>	<b>156</b>	<b>320</b>	<b>1,033</b>	<b>571</b>
<b>Total hours idle.....</b>	<b>168,333</b>	<b>4,744</b>	<b>34,156</b>	<b>18,870</b>	<b>31,441</b>	<b>39,801</b>	<b>233,930</b>	<b>63,415</b>

**Louisiana Celotex Co. to Start**

NEW ORLEANS, La., August 29, 1921.—The Louisiana Celotex Company, according to the *New Orleans Item*, is just about to start its plant at Marrero, on the west bank of the Mississippi River, opposite Audubon park.

More than two years have been spent by the officials of this company in perfecting the process that will convert bagasse into "made" lumber. The plant that has just been completed is filled with the very last word in machinery and everything is in readiness to manufacture the largest single board in the history of the world.

The plant that has just been completed, and which is but the first of a series of units, was built at a cost of over a half a million dollars. The plant is 1,000 feet long and 125 feet wide, and under this roof there is a power plant, engine room, boiler house, an 800 foot dryer, and a main manufacturing room, also other necessary accessories, such as storage and water tanks, reservoirs and outbuildings.

The manufactured article is known as an insulating board and has been given the trade name of "Celotex," adopted as a designation of the product as the name suggests the cellular character of

the material. It comes from the rollers in standard thicknesses of one-half and one-quarter of an inch and is ordinarily cut into sheets four feet wide by eight and 12 feet in length, so that they may be handled practically.

The officers and those responsible for the formation of the new company are all men who have been actively engaged in the fiber and insulating industry for many years, and are: B. G. Dahlberg, president; J. K. Shaw, vice-president; C. G. Muench, vice-president; T. B. Munroe, vice-president; C. F. Dahlberg, treasurer and T. E. Dahlberg, assistant to the president.

**Sues American Wood Pulp Corp.**

[FROM OUR REGULAR CORRESPONDENT.]

DAYTON, O., August 29, 1921.—Charging false representation, the Miami Paper Company of West Carrollton has just brought suit against the American Wood Pulp Corporation of New York, demanding damages amounting to \$63,000, the sum representing the price paid on several hundred tons of sulphite, alleged to be of inferior quality to that specified in the contract.

The petition states that W. W. Sunderland, president of the company, entered into a verbal agreement with the New York

company by which the West Carrollton firm was to be supplied with 350 tons of sulphite of a certain grade.

It is charged that during his absence the purchasing agent of the Miami company signed a written contract presumably based on the verbal agreement, but in reality different, it is charged. According to the petition, the disparity was not discovered until after the sulphite had been paid for.

After using more than 100,000 pounds of the sulphite, the Miami company discovered, it is charged, that it had been duped "through false representation."

**Graham Paper Co. Damaged by Fire**

DENVER, Colo., August 24, 1921.—Fire believed to have been caused by lightning which struck a fuse box on the second floor practically gutted the warehouse of the Graham Paper Company, 1539-41 Blake street, shortly after 3 o'clock Wednesday morning.

R. J. Marlow, district manager of the company, estimated the damage at \$60,000, while District Fire Chief P. J. Boyne made a report to the effect that the damage to the contents of the building was \$20,000 and to the structure \$8,000.

## AGENTS OF HAMMERMILL CO. HAVE CONFERENCE AT ERIE

Nearly One Hundred Paper Merchants Attend Tenth Annual Conference of Well-Known Paper Concern at Erie—Gathering in Point of Attendance and in Other Respects Is One of the Most Successful Ever Held by the Firm—Interesting Speeches Are Made by President Behrend and Other Officials of the Company and Well-Known Paper Men—List of Those Who Attended.

[FROM OUR REGULAR CORRESPONDENT.]

ERIE, Pa., August 29, 1921.—Representatives of nearly 100 paper jobbing concerns throughout the United States gathered at Erie, Pa., on August 24 for three days of combined business and pleasure. The meeting marked the tenth annual convention of Hammermill Paper Company agents. These meetings have come to be recognized for their national significance to the paper trade in general, and this one marked the high tide in the success of the company in bringing about the best possible relations between it and its sales agents.

### Welcomed by President Behrend

The visitors were welcomed by E. R. Behrend, president of the Hammermill Paper Company, at the first afternoon session on Wednesday.

"The figure ten plays an important part in human affairs," said Mr. Behrend, in opening the session, "and we feel that it is a particularly appropriate numeral to be attached to this year's meeting of Hammermill agents. We are indebted to Mr. Einstein in having enriched our vocabulary by giving us the word 'relativity.' We are told by scientists that this world of ours is some sixteen hundred million years old. In a relative sense, the ten years which we have been coming together in annual meetings is a very short space of time as compared with the great age of our world, but to us it is an important period. Hammermill's importance in the business world really started with the first of our annual meetings ten years ago. Our associations with our agents and particularly with

your advisory committee, leads us to pay a high tribute to the ability of those who represent you on that committee.

"For many years artists have been content to represent a horse jumping a fence by certain positions of its body. The motion picture slowed down so that we may study, motion by motion, this fence jumping, shows us that the artists' conception is not an exact picture of any single position of the horse's body at any moment but rather a composite of several motions. In observing the trend of business, we may realize from this study of the motion picture that we do not have at any moment a conception of individual things but rather a composite idea of many things which are taking place in the business world. It is a sort of mental or intellectual illusion.

"We find that there is a great tendency to look too much to our government for remedies for our business ailments. Government, we must remember, is not the creator but the creature of the citizens which it represents.

"Many suggestions come from different sources for turning losses into profits in times like the present. There is one thing, however, which is the prerequisite of all the necessary qualities we must possess to face the present situation constructively. It is courage. Cervantes, the Spanish philosopher, said some five hundred years ago, 'He who loses wealth, loses much; he who loses a friend, loses more; he who loses courage, loses all.'"

### Remarks by Other Speakers

N. W. Wilson, vice-president of the Hammermill Paper Company, gave a review of happenings and conditions in the business world during the past twelve months and of how the paper trade had set about to meet the changing conditions.

W. S. Epply, sales manager, spoke of the selling problems connected with the changing business conditions, and further outlined the subjects covered by the 1921 convention.

C. W. Chabot, advertising manager, spoke of advertising plans for the coming year.

Wm. J. Boardman, vice-president of the George Batten Company, New York, spoke on the part that advertising plays in sales.

In the evening dinner was served on the lawn of Kahkwa Park Inn, overlooking the lake. The Hammermill band, under the direction of Charles Little, entertained the visitors.



GROUP PICTURE TAKEN AT THE TENTH ANNUAL CONFERENCE

At the agents' meeting on Thursday morning R. P. Andrews, of the R. P. Andrews Paper Company, Washington, D. C.; Spencer Lathrop, of Lasher & Lathrop, New York, and J. A. Carpenter, of the Carpenter Paper Company, New York, were re-elected to succeed themselves on the agents' advisory committee. E. A. Petrequin was re-elected chairman of this committee.

#### Twilight Party Thursday

The business proceedings closed on Thursday evening with addresses by E. R. Behrend, E. A. Petrequin, W. F. McQuillan, Spencer Lathrop, Mayor Miles B. Kitts of Erie, R. P. Andrews and W. H. Johns. The addresses of the evening were short and informal and served as *hors d'oeuvres* for the twilight party that followed "for those who enjoy that sort of thing." Needless to say, the representative of the PAPER TRADE JOURNAL was among those who did and can recommend the evening's performance to those who were not there to "enjoy that sort of thing."

#### Athletic Events Friday

Athletic events marked the close of the conference on Friday. Over a hundred guests stayed for golf, baseball, quoits, shooting, etc., at the Kahkwa Club. At 6 P. M. or thereabout, dinner was served in the ballroom of the club and E. R. Behrend delivered the prizes to the winners of the various events, fittingly closing one of the most successful get-togethers that any paper company has had with its representatives throughout the country.

#### Among Those Present

Among those who attended the conference were the following: W. T. Sibley and M. L. Kratz, Alling & Cory Company, Buffalo; A. H. Seyler, A. H. Smith, K. P. Weber, Alling & Cory Company, Pittsburgh; Harold Austin, B. E. Reeves, Alling & Cory Company, Rochester; R. P. Andrews, Al Tennyson, R. P. Andrews Paper Company, Washington, D. C.; B. R. Moore, R. P. Andrews Paper Company, York, Pa.

D. F. McIntosh, American Paper Exports, Inc., New York; J. E. Stonebraker and W. B. Littleton, Antietam Paper Company, Hagerstown, Md.; Wm. H. Johns, W. J. Boardman, F. R. Feland, Chas. J. Babcock, Egbert White, George Batten Company, New York; J. W. Beckman, Beacon Paper Company, St. Louis; Harold Helmer, Beecher, Peck & Lewis, Detroit; M. Greenbaum, Beekman

Paper and Card Company, Inc., New York; W. J. Hermann, J. J. Imholz, E. A. Bouer Company, Milwaukee.

Richard S. Bull, R. Wadsworth, Bradner-Smith & Co., Chicago; I. W. Carpenter, I. W. Carpenter, Jr., Carpenter Paper Company, Omaha; F. E. Miller, Central Ohio Paper Company, Columbus; Karl S. Mooning, Central Ohio Paper Company, Toledo; S. J. Hodgins, Central Topeka Paper Company, Topeka; Fred F. Fox, Harvey Wegherst, F. E. Floyd, Crescent Paper Company, Indianapolis.

P. A. Stuhlreyer, Diem & Wing Paper Company, Cincinnati; B. C. Broderick, Dobler & Mudge, Baltimore; C. M. Yates, F. J. Weissinger, Dudley Paper Company, Lansing, Mich; P. M. Duggan, Durico Paper Company, Erie; E. R. Carpenter, Dwight Brothers Paper Company, Grand Rapids; T. H. Epes, Epes-Fitzgerald Paper Company, Richmond, Va.; Geo. McKinney, A. W. Shaw, R. Hildebrandt, C. K. Urquhart, Jr., A. C. Thomas, F. A. Flinn, Inc., New York; L. R. M. Gardner, T. C. Gregory, R. L. Greene Paper Company, Providence.

Roger B. Taft, Hammermill Paper Company, New York; Fred Stutzman, Geo. W. Hoffman, Holland Paper Company, Buffalo; W. H. Howe, Buffalo; Eugene J. Cooper, John B. Binley, Jermain B. Porter, Sydney T. Jones, Hudson Valley Paper Company, Albany; Clare Irwin, Irwin Paper Company, Quincy, Ill.; Harry G. Keffer, Walter Johnson, Johnston Paper Company, Harrisburg; J. A. Carpenter, Kansas City Paper House, Kansas City, Mo.; E. V. Johnson, P. P. Kellogg & Co. Div., Springfield, Mass.

Spencer Lathrop, T. S. Lathrop, R. R. Lasher, Lasher & Lathrop, Inc., New York; John Leslie, H. L. Montgomery, John Leslie Paper Company, Minneapolis; Fritz Lindemeyer, A. W. Green, Henry Lindemeyer & Sons, New York; James J. Anderson, B. J. Megargee, Megargee Bros., Scranton, Pa.

T. E. Morris, National Envelope Company, Waukegan, Ill.; Robert S. Johnston, Old Dominion Paper Company, Norfolk; R. C. Aultman, E. C. Palmer & Co., New Orleans; E. A. Petrequin, Petrequin Paper Company, Cleveland.

Thomas R. Fort, Jr., Thomas W. Price Company, Philadelphia; B. W. Lipscomb, Ernest C. Mead, Richmond Paper Company, Richmond; W. A. Rhodes, S. P. Richards Company, Atlanta; A. B. Sherrill, James McCracken, J. Seckel, E. J. Irwin, Riegel

(Continued on page 22)



THE AGENTS OF THE HAMMERMILL PAPER COMPANY, ERIE, PA.

## ABITIBI POWER & PAPER CO. TO BE LARGEST NEWS PLANT

**Largest News Print Machine in the World Was Recently Started at the Big Plant at Iroquois Falls and When All the Machines Are Tuned Up to Full Capacity the Mill Will Produce More News Print Per Day Than Any Other in the World—Proposed Fordney Tariff Continues to Interest Canadian Paper Men—Fraser Companies Issue Good Report—Other Canadian News.**

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., August 31, 1921.—During the last two months the Abitibi Power and Paper Company has put three new machines into operation. At present its capacity has been brought up to 444 tons per day, but when the machines have been tuned up to their proper speed, the output will be 500 tons. It is expected that this capacity will be reached in a couple of months from now, and then the company at Iroquois Falls will be the largest news print mill in the world. One of its seven machines is now the largest news print machine in the world. Five hundred tons of paper for twenty-four hours means twenty carloads each day turned out of the mill.

The enormous output of the seven paper machines can be realized better in measurements, perhaps, than in tonnage. With all seven machines running full capacity they make a sheet of paper every minute which, if cut one foot wide, would be 12.7 miles long. In every hour this sheet one foot wide would be 763 miles long. In every twenty-four hours this sheet one foot wide would be 18,288 miles long, or more than two-thirds of the way around the earth at the equator.

No. 6 machine, the largest news print machine in the world, has a length of 220 feet, the width of the machine at the couch rolls is 235 inches. The Fourdrinier wire is eighty feet long. It has three presses, the felt on the first and third being forty-seven feet long, and on the second, sixty-five feet long. Some idea of the weight of these machines can be gathered from the fact that the calender stock, including the frame and eight rolls, weighs 100 tons, and the dryer sections weigh 400 tons.

The machine was built by Chas. Walmsley, of England, and was designed for a speed of 700 feet of paper per minute. At this speed the capacity would be 100 tons in every twenty-four hours. No. 6 is driven by 500 H.P., variable speed motor. No. 6 and 7 machines are equipped with three Voith screens instead of two, as is the case in the other five machines.

### Riordon Co. Affairs

Monday was the date upon which the payment by the Riordon Company to the Edwards interests of the sum of \$1,500,000 was due. This was the amount of the first payment on the Gatineau properties, and the alternative to payment was expected to be the liquidation of the company. However, it was stated today that the Edwards interests had granted an extension of time, but nobody seemed to be willing to give out any information as to whether the extension was for a few days or a long period. Meanwhile, another form letter has gone forward to shareholders of the Riordon Company, Limited, with the signature of R. Montagu Davy, Chairman of the Creditors' Committee. After giving the balance sheets of the Riordon and Gatineau Companies, he concludes:

"We are still of the opinion that should the company be forced into liquidation the unsecured creditors will not receive anything and the advantages of any scheme which will re-establish the company's credit must be obvious to all the creditors, and should compensate them for the delay necessary for its development.

"The possibility of raising sufficient money to start up the mills is also receiving careful consideration, and your committee is of the opinion that the property in which you are so deeply interested will be of greater value in every way if in operation than while lying idle.

"I hope we may count upon your support and co-operation during the delays which cannot but be discouraging, but are necessary for the working out of the situation in whatever manner may prove possible, and I trust you will not hesitate to write either to myself or any other member of the committee for any further information that you may desire."

### Effect of Fordney Bill

The fact that an effort is being made by certain interests in Washington to raise the question of the embargo on pulpwood cut on Crown lands in Canada has given rise to the belief that the clause affecting news print in the Fordney Bill is an attempt to force the Canadian Provinces to abandon their present position regarding the export of pulpwood. There was a similar clause in the Underwood resolution which failed to receive the assent of President Wilson. The Fordney Bill involves the imposition of an additional 10 per cent ad valorem duty on news print imported from any country, which imposes restrictions on the export of pulpwood to the United States. However, Canadian paper interests, judging from the published utterances of representative men, apparently feel that the Fordney Bill will have small effect on the volume of business done between Canada and the United States. One Montreal news print manufacturer is quoted as follows: "We shall continue to export to the United States as much news print as they need. The United States will have an opportunity to add the duty to its price and the consumer will pay the difference."

### Booth Mill Shuts Down

It was announced from Ottawa today that about 150 men were temporarily thrown out of work over the week-end following the suspension of operations at the big paper mill of the J. R. Booth Company at Chaudiere. Business depression and a consequent lack of orders were given by J. Fred Booth, manager of the concern, as the reason for a brief shut-down. He expected that work would be resumed about September 1.

Fifty men of the E. B. Eddy Company, who have been idle since Wednesday last, were back at work on Tuesday when that company's paper mill re-commenced operations after a five days' shut-down.

### Big Hydro Plant Completed

The largest hydro-electric plant in the Maritime Provinces has just been completed at the works of the Bathurst Lumber Company at the Nepisquit Falls in Restigouche County. Work was begun in May, 1919, and the plant has been completed at a cost of \$1,750,000. Provision has been made for three generators and two have been installed, but at present only one, with a capacity of 4,500 horse-power, will be used. The Bathurst Lumber Company will require about 2,500 horse-power for its own plants; another 1,000 horse-power will be used by the Newcastle and Dominion pulp mills, leaving a margin of 1,000 horse-power for other demands.

### Fraser Companies' Annual Report

The first annual report of the Fraser Companies, Limited, of New Brunswick, since the issue of \$2,000,000 of first mortgage, six per cent serial gold bonds this Spring, is ready for distribution, and shows a very substantial increase in profits over the previous year. After making allowances for depreciation in inventories, profits from operations for the year amounted to \$2,157,618. Deductions of \$441,356 for interest and charges on bonds and bank loans, and of \$439,960 for depreciation of plant and equipment, left net profits of \$1,276,301, or 12.7 per cent available for dividends on the common stock, amounting to \$10,000,000. What is

of more material interest to the investors in the recent bond issue is that about \$1,500,000 was available for the payment of 6 per cent interest on the outstanding bonds of slightly less than \$2,500,000, or over 60 per cent. For this comprises the whole funded indebtedness of the company.

Even after allowing for a charge of \$279,462 for Government taxes, covering the two years 1919 and 1920, there would remain some \$1,200,000 available for bond interest, or over eight times what was required. Of these taxes \$185,000 has been paid since the beginning of the present year. After deducting \$200,000 for the Fraser Memorial Hospital at Fredericton and \$100,000 for dividends there remained \$976,301 to be carried forward to profit and loss.

The balance sheet indicates a strong working capital position for the company, with a balance of current assets over current liabilities of \$2,431,000. This does not allow for the proceeds of the sale of the \$2,000,000 of bonds which would greatly increase the total at present.

#### President Fraser's Statement

Dealing in market conditions for pulp and lumber the president, Archibald Fraser, says: "The first few months of the current year witnessed a marked cessation in demand for pulp and lumber products. As a result your pulp mills, until recently, were not in continuous operation. Orders are now being received, however, in steadily increasing volume and your pulp mills at Edmundston and Chatham are now operating satisfactorily on current business." Reviewing the past year he says, further: "Your company in May, 1920, availed itself of the opportunity to purchase, on favorable terms, the pulp mill and timber limits of the Dominion Pulp Company at Chatham, N. B. This mill has a capacity of 18,000 tons of easy bleaching sulphite pulp per annum. The sale of this product readily combines with the sale of the pulp produced at Edmundston. This transaction secured for your company an additional 288 square miles of leasehold timber limits, mostly on the Miramichi River, bringing the total area of timber lands, which your company either owns or on which it has cutting rights, to a total of 2,932 square miles."

#### Developments in Newfoundland

Sir Richard Squires, Premier of Newfoundland, who has been on a visit to Montreal, said in an interview, great interest was being shown by capitalists in the forest wealth of Newfoundland. Some months ago the representatives of British and Norwegian capital visited the country with the object of inspecting what Sir Richard says are enormously valuable timber areas on the Humber River, combined with accessory water power of great potentiality. "I understand," said he, "that negotiations are pending between the owners of these lands and water power and certain English capitalists with a view to the development of this area."

As to the strike in the paper mills, which threw a large number of men temporarily out of employment, Sir Richard observed that arrangements have been come to between the Anglo-Newfoundland Development Company concerned and the paper makers, with the result that the mills have again started operations and are gradually developing into full capacity. These mills are situated at Grand Falls and are owned by a concern in which Lord Northcliffe is interested.

#### To Manufacture Paper Barrels

Speaking before the Rotary Club here, Art Harries, president and manager of the Canada Paper Box Company, intimated that his firm is about to embark in a new departure in the manufacture of paper barrels. An example of the barrel was exhibited which they proposed to make, suitable for the shipment of flour, lime, dyes, sugar, butter, lard and other goods. Preparations are under way for the installation of the necessary machinery for the manufacture of these barrels.

#### Siam to Have Experimental Paper Mill

WASHINGTON, D. C., August 31, 1921.—Siam will soon have an experimental paper mill made in America with equipment recommended by the Bureau of Standards of the Department of Commerce.

This paper-making plant which, although not primarily intended for commercial purposes, will furnish the writing and printing paper for the Siamese army, is now being carried across the ocean to this Asiatic country.

The mill is complete in every detail and spare parts and supplies are included in the shipment. It is patterned after the experimental paper mill of the Bureau of Standards that has been in operation since 1913, and was made by representative manufacturers of paper mill machinery in this country. The mill being sent to Siam is about 50 per cent larger than the one at the Bureau and is capable of producing 1,200 pounds of paper daily.

Siam is interested in paper making because of the possibilities of turning some of her grasses, weeds and other fibrous plant products into paper. The paper mill will be used in making researches which will aid in the development of a Siamese paper industry.

Bureau of Standards' tests have shown that rice straw, banana tree stems and lalang grass will make paper. These materials were sent to the Bureau from Siam and were made into paper in the paper mill there. Siamese experiments will be made to develop the best methods of using jawa weed and other plants of that country as well as waste paper.

America is also sending to Siam with the mill a trained paper maker and engineer who will superintend the erection and operation of the mill.

The interest of the former Siamese Minister, Probha Karavongse, in the experimental mill at the Bureau of Standards, led to the purchase of the paper-making machine which will be erected at Bangkok, Siam, under the supervision of the Royal Survey Department of the Siamese army. Siamese officials saw the possibilities of the paper industry in their country and their government asked the American government, through the State Department and the Department of Commerce, to supervise the design and purchase of the experimental machine.

The paper mill consists essentially of a 44-inch Fourdrinier paper machine; two 300-pound wood-tube beaters; a small Jordan engine; a 600-pound rotary boiler; a cylinder duster; screen; sheet cutter; suitable pumps, shafting, pulleys and motors; bleach paint; necessary electrical fittings and plumbing, belting and spare parts.

#### New England Salesmen to Meet

[FROM OUR REGULAR CORRESPONDENT.]

BOSTON, Mass., August 29, 1921.—Following out plans developed by H. H. Reynolds, of Housatonic, Mass., president of the Salesmen's Association of the Paper Industry, and Arthur E. Ford, of Springfield, Mass., vice-president for New England, elaborate plans are being made for a conference of the paper industry salesmen of the entire New England district, at Boston, on Wednesday, September 14. The meeting will be in conformity with a national plan of paper salesmen to have conferences to discuss business conditions, but the summer meetings are being chiefly social.

The salesmen will meet at the Hotel Copley Plaza, where machines will be taken to the Tedesco Country Club at Swampscott. A business meeting will be held immediately upon arrival, and after luncheon there will be golf or a drive to Gloucester, as the visitors prefer. At 6 o'clock the entire group will meet again at the Corinthian Yacht Club at Marblehead Neck for a shore dinner.

The Boston committee consists of John E. A. Hussey, chairman, and Thomas Compton Walsh, Clarence S. Anthony and George T. Standbridge.

## WOOD PULP DUMPING PROBE BY TREASURY DEPARTMENT

**In the Case of Two Cargoes of Pulp Brought in by New York Importers the New York Appraiser, Claiming to Act Under the Authority of Section 201 of the Emergency Act, Has Demanded That a Bond Be Given by the Two Firms to Cover Any Anti-Dumping Duty Which May Be Imposed by the Secretary of the Treasury After Investigation—Announcement from A. P. & P. A.**

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., August 26, 1921.—Under date of August 23 a circular letter of instructions was sent out by the Customs Division of the Treasury Department at Washington stating that it had "received information" that there were violations of the anti-dumping provisions of the new Fordney Emergency Tariff law of May 27 last in the shipment to the United States of wood pulp, including sulphite, from Scandinavian countries and Germany. The letter instructed the Federal customs appraising officers at New York and elsewhere to watch out for such shipments and verify prices, with a view to comparison of the prices at which products were sold in the country of exportation and the prices at which they were offered to American importers.

### Appraiser Demands Bonds

Two cargoes of pulp, one imported by Enders & Co. and the other by Sergeant & Co., were received in New York City recently and duly disposed of. The New York appraiser, claiming to act under authority of Section 201 of the Emergency Tariff Act, has now demanded that a bond be given by the two firms to cover any special anti-dumping duty which may be imposed by the Secretary of the Treasury after investigation.

Inquiry at the Treasury Department today elicited the statement that no report had been made to the department regarding the action taken by the New York appraiser but that a report was expected in the next few days. Treasury customs officials did state, however, that it was likely that on the strength of the circular letter of August 23 the appraising officer at New York might have demanded the giving of a bond pending determination whether the pulp shipments had entered at a price lower than the price at which it was sold abroad.

### To Conduct Investigation

Through its agents abroad and elsewhere the Customs Division, it was stated, would conduct an investigation in an effort to determine whether such shipments of pulp were being made to this country to break the paper market here, or for getting rid of German surplus stocks. The officials said that if they found that the provisions of the law were being violated, it would be their duty to impose the special anti-dumping duty, regardless of whether the goods admitted were dutiable or free. They stated that the anti-dumping law covered goods admitted free as well as those which were dutiable, and that if the law was found to have been violated the Treasury would be required by the anti-dumping act to levy a duty equal to the difference between the price at which the pulp was being sold for home consumption and the export price.

### Announcement From A. P. & P. A.

In this connection the American Paper and Pulp Association, which was influential in having the investigation begun, in an announcement to its members, says:

"During the past few months, and especially in the past six weeks, there appears to have been a great deal of paper of certain grades and various kinds of pulp shipped into this country at such

prices as to justify our conclusion that it is being dumped in this country under the meaning of that word as given in the Anti-Dumping Clause of the Emergency Tariff bill. Since rumors of dumping began, the difficulty has been to get definite information as to paper being offered or sold in this country at prices less than it is being sold in the country of origin. Finally, in July, what seemed to be definite information was secured and a protest was made immediately to the Secretary of the Treasury, with request that they investigate and make ruling if possible."

The association in its letter to members, further says regarding this subject:

"Our letter to the Secretary of the Treasury was acknowledged with statement that investigation would be made. A representative of the Treasury Department was put on to the investigation here in New York and his report has been filed within the past few days. It was impossible, of course, for us to know what was in the report until after it had been filed with the Treasury Department. Learning that the report had just gone in, a wire was sent to the Division of Customs in the Treasury Department, to which this matter had been referred, and we had reply immediately as follows:

"Results investigation in United States justify investigation abroad, which has been ordered."

"It would seem necessary now to await the results of the investigation abroad.

"Should any member of the association receive information as to the offer of paper of any grade in this country at prices which appear to be much below cost of production of the same grade of paper in this country, the association will be glad to have definite information. It desires especially copies of letters from abroad accompanied by samples of paper offered. It would doubtless be very helpful to keep the matter before the Treasury Department by continuing to file what appears to be evidence of dumping."

Officials of the Customs Service state that it may be some time before the investigation is completed, owing to the tremendous amount of work incumbent upon the foreign investigators of the Customs Service.

## HAMMERMILL AGENTS MEET

(Continued from page 19)

& Co., Inc., Philadelphia; W. H. Rourke, Rourke Eno Paper Company, Hartford.

G. R. Likins, Springfield Paper Company, Springfield, Mo.; W. B. Stevenson, W. F. McQuillen, A. Storrs & Bement Company, Boston; John D. Swigart, H. E. Petterson, C. H. Heinlein, Swigart Paper Company, Chicago; Alfred D. Tayloe, Tayloe Paper Company, Memphis; J. D. Keating, A. H. Phillips, Troy Paper Company, Troy, N. Y.; J. Nacht, Union Card & Paper Company, New York.

James Logan, J. B. Thayer, U. S. Envelope Company, Springfield, Mass.; Paul E. Vernon, A. C. Damon, Paul E. Vernon & Co., New York; Geo. W. Ward, Thomas S. Furlong, Louis S. Megargee, D. L. Ward Company, Philadelphia; Edw. C. Johnston and David W. Magown, New York; A. A. Sorenson and Geo. S. Johnston, Western Newspaper Union, Omaha; Homer W. Bush, Rochester; A. H. Sampson, Holyoke; Peter Peterson, Chicago; Geo. R. Burkhardt, Holyoke; J. R. Brundage, White & Wyckoff Manufacturing Company, New York; Mark D. Wilson, Geo. R. Criss, R. D. Wilson Sons & Co., Clarksburg, W. Va.; L. A. Colton, Zellerbach Paper Company, San Francisco.

M. D. McAlpine, Bradner-Smith & Co., Chicago; C. A. Young, Carter, Rice & Co., Boston, Mass.; S. M. C. Browne, Western Newspaper Union, Buffalo, N. Y.; A. R. Cobb, C. M. Rice Paper Company, Portland, Me.; I. Henry Reid, Diem & Wing Paper Company, Cincinnati, Ohio; F. Dillard, Caskie-Dillard Company, Lynchburg, Va.; J. R. Hauser, Geo. J. Kuebel, Durico Paper Company, Erie, Pa.; J. R. Hewitt, PAPER TRADE JOURNAL, New York.

**HIGH COLOR!**

**CLEAN!**

**STRONG!**

**MT. TOM**

**BLEACHED SULPHITE**

*— . . . —*  
*May we quote?*  
*— . . . —*

**A. J. PAGEL & CO., Inc.**

**347 Madison Avenue**

**New York**

## MORE INQUIRIES FOR PAPER IN PHILADELPHIA MARKET

**Prominent Distributors State That Business Is Becoming Markedly Better—Paper Stock Dealers Also Report Orders From Mills That Have Not Been Buying for Some Months Past—Reductions of Half a Cent on Manilas and Fibers Are Announced by Two Large Producers—Board Prices Are Advanced—Questionnaire on Co-operative Buying of Paper Direct From Mills.**

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, August 30, 1921.—August closed with increased inquiries. The Beck Company, the D. L. Ward Company, the Paper House of Pennsylvania and Simon Walter, Inc., were just a few of the houses which reported business decidedly increased during the week just over. Inquiry of other distributors, however, brought forth the statements that they also could honestly report markedly better business.

The gain was not confined to the distributors. In the paper stock trade both the dealers in old papers and in rags reported orders from mills where before there had been but desultory inquiries. The stock dealers' complaint, however, is that mill prices are too low to justify shipments save under the pressure of urgent need for ready funds or the exhaustion of storage capacity. It is the opinion of the stock dealers that the mills are now offering low prices hoping to take advantage of surplus stocks or of the financial stress of the dealers and that just as soon as these have been exhausted prices will advance. But even though quotations are still too low for profit the trade is pleased with the turn of the market. Said M. O. Raiguel, the veteran paper stock dealer, "I read the PAPER TRADE JOURNAL religiously. I always find it accurate. But I was especially impressed with last week's Philadelphia letter. It hit the nail on the head as to present conditions and the forecast made then was realized during the week."

### Low Government Bids Affect Business

Distributors of fine papers believe that were it not for the fact that the Government bids were so low, sales would have increased much more during the week that they did. The low prices quoted had the effect of causing large orders again to be held up awaiting further recessions. The drop in the price of bleached sulphite and the rather definite intimations which were received that the Whitaker and several other companies would revise prices downward in their lists to appear September 1, were deterrent influences. But withal, the business of the printers increased to such an extent for immediate requirements that the wholesalers enjoyed the improved demand noted. Fine paper prices generally were steady during the week but fractional cuts are anticipated this week.

### Coarse Paper Less Firm Than Fine

Coarse paper prices generally were not as firmly held as the fine. Reductions of a half cent on manilas and fibers were announced by two of the large producers and others are expected to follow.

Board prices which had been hovering between \$25 and \$28 were advanced to \$30 and \$35 during the week and it is believed will shortly be still further advanced. Even though mixed and commons are being bought at but \$7 a ton delivered at the mills, the trade does not believe that board can be made profitably at the low figures at which it recently has been selling.

### Social Side of the Business

The social side of the paper business engaged considerable attention during the week past. The big attraction of course was the Hammermill convention and to it there was quite an exodus

from the Philadelphia distributors, including the Thomas W. Price Company, the D. L. Ward Company and Riegel and Co. The Strathmore paper distributors, ever since the notable dinner at the Bellevue-Stratford Hotel a few months ago, have developed a social relationship of a most enjoyable character. On Thursday of last week they sat down at dinner at The Bourse and to talk over problems of distribution and wider consumption of the Strathmore line. The five Philadelphia distributors were all represented by the principal executive officers.

### Co-operative Buying by Printing Trade

Co-operative buying of paper by the printing trade direct from the mills has long been discussed in Typothetae circles but thus far no action has been taken. The same subject, however, was approached during the week by a paper distributor, Sylvester S. Garrett, who sent a questionnaire to the representative printing establishments of the city asking whether they would enter into such a plan. Mr. Garrett's letter follows:

"Do you believe that co-operative buying by printers from mill direct would assist you in solving the perplexing problems of today and the probable future?"

"I have been in the paper business since 1896. For eight years, while associated with my father, my principal sales were made to printers. In 1904 I undertook business for myself. At that time the coarse paper line seemed most promising to me, so I pushed in the hardest. Nevertheless, I have been repeatedly asked to take on lines of fine paper by many of the best mills in America and Europe.

"You know of the permanent success of the National Grocers' Association, the National Hardware Association and dozens of other co-operative buying organizations. I have suggested the thought to several local printers and some well-known mills and, in every case, the idea has met enthusiastic approval.

"I am prospering in my present business but would not object to expanding my field of usefulness and applying the knowledge gained by a quarter of a century of activity in a business which is a family institution. If, in your judgment, I am the man to undertake the formation of The Printers Buying Syndicate or Association, write or phone me at once and get in on the ground floor with an organization devoid of frills, but with plenty of credit."

### General News of the Trade

The Paper House of Pennsylvania has been so successful in the introduction of foreign-made paper, particularly to the printing trade, that President Norbert J. Considine proposes early next month sailing for the Scandinavian Peninsula on a trip of several weeks to establish new and closer connections. The firm recently received by steamer *Jackson* over 300 tons of news in sheet and roll and this readily was disposed of. It is not probable that high priced papers will be handled because of the fact that the duty on papers which sell for more than 8 cents abroad, is so heavy as to offset the difference in price here.

The Paper Trade Association has been invited by the Industrial Relations Committee of the Philadelphia Chamber of Commerce to participate in its campaign for business revival and the promotion of industrial relations essential thereto and an effort will be made to co-operate by a large attendance at the opening of the campaign at luncheon on Tuesday afternoon, September 13, in the Bellevue-Stratford Hotel. Governor Henry J. Allen of Kansas will be the speaker. His theme will be "Improvement of Industrial Conditions."

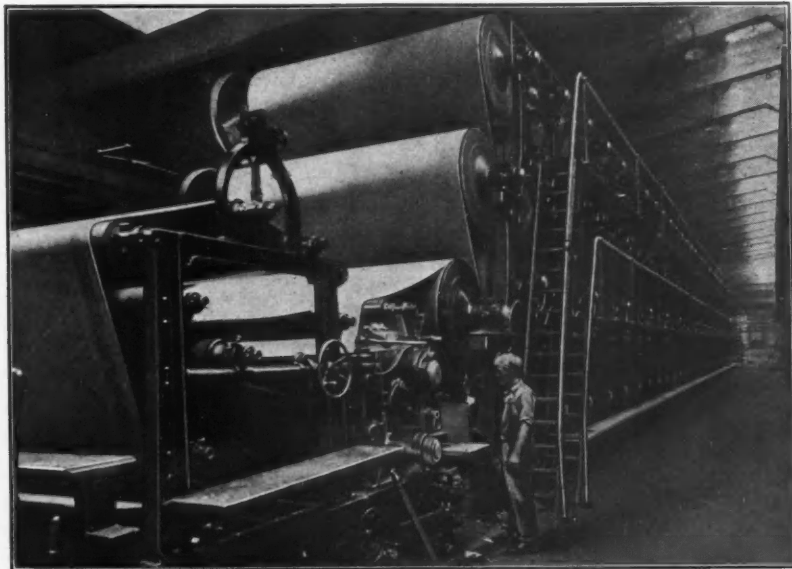
There made the trade rounds during the past week for the first time in a decade a dealer of the olden days, Peter Wigo, once one of the best known figures in paper stock circles. Mr. Wigo, who retired many years ago, was long in business for himself and also was associated for many years with Castle Gottheil & Overton. He had many interesting reminiscences to discuss.

The recently organized Welsh Paper Company, 701 Chestnut

(Continued on page 26)



# Another "BIG BABY"



*Four Deck Board Machine in Bogota, N. J.  
Continental Paper Co.*

This is the No. 2 machine and has 130 dryers, 48" diam. by 142" wide.

Every accessory to get economy and big production is used. It is equipped with

## "Vapor Absorption System of Course"

The air ducts are underground. The ends of the nozzles can just be seen.

The "Little" No. 1 machine alongside which has "only" 114 dryers is also equipped.

This mill also has our system in their beater room—storage building—finishing room.

## J. O. Ross Engineering Corp.

549 W. Washington Blvd.  
Chicago, Ill.

30 East 42nd St.  
New York City

79 Milk St.  
Boston, Mass.

## INTERNATIONAL PAPER CO. INCREASING ITS PRODUCTION

**Output Now 400 Tons a Day—President Dodge Emphatically Against Unions—Other Mills to Open—Inventories of Paper Small and Cash Position Easy—Four Hundred Working at Corinth—1921 Earnings Relatively Small on Basis of Eight Months' Operations—Can Sell News Print Production for Remainder of 1921—Officials Bringing Relations of Employees in Harmony.**

[FROM OUR REGULAR CORRESPONDENT.]

"The International Paper Company is now turning out 400 tons of paper a day with production increasing daily," said Philip T. Dodge, president of the company. "Last Friday 350 tons were produced. Much of this production is news print. In the not distant future we expect production to reach about the figure prior to the strike. Eight of our mills are now operating.

"I wish to say emphatically that we are through with unionism. Of course we do not object to organization within the circle of our own employees, but we insist on an open shop basis. It is true that the men have more money at the end of the year on the open shop plan than they have under the closed shop with strikes and delays. We are handling our wage settlement independent of the Board of Arbitration which recently announced reductions for both skilled and common labor. Hereafter all our mills will be non-union.

"As to the price of news print for the last quarter, I believe, if price goes to four cents a pound, many small mills will be forced to close."

### Earnings Outlook This Year

International Paper Company's mills now operating include Hudson River, Otis, Niagara Falls, Winnepesaukee, Montague, Piercefield, Wilder and Milton. Hudson River and Otis are the large news print mills, the former with capacity of 262 tons a day and the latter with 302 tons.

Inventories of paper are small at present. The company's cash position, at the present time is easy.

Present production of 400 tons of paper a day compares with output which normally runs about 1,200 tons all grades of paper, of which two-thirds is normally news print. Additional mills are expected to be re-opened shortly.

International Paper Company is having good success in obtaining all the skilled labor needed at its mills. It is not objecting to taking back its old employees on the open shop basis. Company was the only large company to oppose the unions in the recent wage controversy and its success in re-opening its mills is regarded as a distinct victory.

The largest and most modern mill at Corinth which is operating with strike breakers has just taken on a new lot of men and it is estimated that there are now 400 men at work at this mill. Three paper machines are being operated there.

### Eight Mills Now Operating

On the basis of operations during the eight months of this year, 1921 will be a relatively poor one from the viewpoint of earnings. Last year when it showed earnings of \$52 a share on the common stock, International Paper Company produced slightly in excess of 500,000 tons of paper, of which 300,000 tons was news print. Prior to the closing of the mills May 1, due to the strike, company was operating about 50 per cent of normal. The strike lasted two months, during which time no paper was produced. The present rate of production, 250 tons daily, would mean an annual output of 75,000 tons.

While it is true that demand for papers other than news print

has reached negligible proportions, International Paper can sell all the news print it can produce for the balance of the year. Last year the company contracted with publishers for the sale of practically a year's normal output of news print for 1921 delivery. The company has been hard put to meet its contract obligations and has only done so by borrowing paper and by making adjustments with publishers. For this reason it will doubtless concentrate on print paper for the balance of this year.

Officials are directing their energies to bringing relations of employees in closer harmony. It is intended to have the men organize shop committees. One of the vice-presidents has been devoting a great deal of his time to the subject and as soon as conditions become normal company will put into effect housing and insurance benefits, which officials declare will give its employees better working conditions than now demanded by union regulations.

## PHILADELPHIA DEMAND BETTER

(Continued from page 24)

street, is now carrying in its stock room a complete line of the Collins Manufacturing Company products which are available in single ream or case lots. The bond line includes the Preference, Convertible, Service and Equipment and the Arkwright, Yeoman, Collins Linen and Newport ledgers.

Simon Walter spent last week on a trip to the New England Mills.

Installation of a new steel water wheel to replace the half century old wooden one at the Dorland Mill of Shryock Brothers is completed and the mill has resumed operations.

Homer C. Price, formerly engaged in the automobile business, has joined the sales force of the Whiting-Patterson Company.

Asher S. Humes, hitherto with the D. L. Ward Company, is now connected with the Paper House of Pennsylvania.

Suits were brought during the week by the D. L. Ward Company against the Central Press Company, 1315 Cherry street to recover \$4,748 for paper and on notes and against the United Auto Stores, 33rd and Chestnut streets, to recover \$620 for merchandise.

H. J. Miller has been added to the sales force of the Charles Beck Company.

Trade visitors of the week included Representatives Dole of the Champion International Company, Lucas of Linton & Scott and Advertising Manager Sutton of the Standard Paper Manufacturing Company, Richmond, Va.

## K. V. P. Co. to Erect Community Building

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., August 30, 1921.—Ground has been broken at Parchment, seat of the plant of the Kalamazoo Vegetable Parchment Company, for the new community building and club. When completed it will be one of the homeiest and most comfortable structures of its kind in the state of Michigan and a model to be followed by other great industrial concerns and communities intending to erect similar structures.

Designed to be the center of "Parchment" social and community activities, it will fill the bill to perfection. It is admirably located, being immediately adjacent to the playgrounds and directly across the river road from the big paper mill and parchment plant.

Plans and specifications were prepared by Billingham & Cobb, who have made a very careful study of community houses in order to erect a building that will adequately meet all future needs. The structure is dignified colonial in type of architecture, with a frontage of 84 feet on the River road and running back a depth of 122 feet. It is really three stories high, the basement being more than a full story, light and airy and designed for use throughout its length and breadth.

# Why Buy Foreign Make of Micrometer

When You Can Buy a Better One Made in U. S. A.



WILL SEND ON APPROVAL. If you are not certain whether this kind of instrument is what you want, you can send us your order and whether you have paid for the instrument or not you can return it anytime within ten days after you have had it by prepaying the express charges, and packing it so that it will reach us in as good a condition as it was when you received it.

Each Instrument Is Correctly Adjusted Before Being Shipped. Securely Packed, \$40.00, F. O. B. Chicago.

## E. J. Cady & Company

326 WEST MADISON STREET

CHICAGO, ILL.

*These goods are carried in stock by our Eastern representatives:  
C. B. Hewitt & Bros., 16 Ferry St., New York*

## PAPER DEMAND IN TORONTO IS SOMEWHAT MORE ACTIVE

**While Orders Are Not Large, They Are Numerous and Seem to Indicate That Paper Is Needed Immediately—Mills Are Getting Busier and Are Constantly Increasing the Number of Running Days Per Week—Paper Concerns Make Excellent Displays at the Canadian National Exhibition—Fire Destroys Huge Pile of Pulpwood Belonging to Kaministiquia Pulp & Paper Co.**

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ontario, August 29, 1921.—The reports from nearly every wholesaler in the paper line during the past week are to the effect that business is now picking up quite a bit and that the improvement, which set in some ten days ago, continues. It looks as if September is going to be a very good month in nearly every line of paper. The orders are not large but they are numerous and all customers who place business want deliveries immediately, showing how low stocks have become and that the urge for buying is that the goods are needed right away.

Mills are also getting busier and are increasing the number of days on which they run each week. Some plants, which have been operating only two or three days each week for the past month or two will go full time this week. The kraft paper market shows considerable activity and one large distributing concern states that August has been the best month it has had so far this year. The demand for glazed kraft is growing all the time. The price at which the product sells to jobbers in car lots is  $8\frac{3}{4}$  cents, and it is declared there will be no further lowering in the value. The present quotation will rule, at least, until the end of the year. The demand for fiber and fiber kraft is also very good, but manilas are still moving slowly. The book paper market has also shown some upward movement in demand.

The only price change during the past few days has been a reduction of half a cent in bleached white and colored sulphite papers. The former is now being disposed of at 11 cents a pound and the latter at  $9\frac{1}{2}$  cents. Toilet and tissue mills are well employed, and have orders ahead for some weeks. The pulp market is still inactive but it is hoped that this too will show a change in the near future, as the mills get busier and confidence re-asserts itself.

There has been an abnormal demand for fruit wrap tissues from the West which the mills are unable to supply and many orders have been cancelled in consequence. Waxed papers are in fair requisition and more bakers are now sealing their product.

On the whole, the outlook is strengthening and the closing months of 1921 may help to round out a very fair year after all in the paper trade, although the volume will not be as large as last year by perhaps 30 per cent. Paper box firms are doing a fair trade; coated paper plants report that the call for their product would be much larger if the printers' strike was settled in the cities.

### Splendid Exhibits Made in Paper Line

The Canadian National Exhibition is now in progress in Toronto and attracts annually over a million visitors from all parts of the Dominion. Several paper firms are making excellent displays, among them being W. J. Gage & Co., Toronto, who operate the Kinleith Paper Mills at St. Catharines. They are featuring their Holland linen and other lines in social and wedding stationery and papeteries. The Interlake Tissue Mills, Merritton, have a gaily decorated booth. The walls are adorned with mauve decorative crepe tissue panelled in white rope tissue. At one end is an alcove on which rests a basket of flowers—astors—all made of colored tissue paper. In display cases are shown a full range of specialties in luncheon sets, outing sets, tissue paper towels, nap-

kins, white and colored sulphite tissues, drug wraps, fruit wraps, etc.

### What the Provincial Forestry Station Is Doing

The Department of Lands and Forests of Ontario has a striking display in the Government building. There is a log cabin built entirely of bark and nearby are piles of balsam, spruce and poplar pulpwood from which news print is made. There is also an exhibit by the Forestry Department showing stages in growth of forest plants at the provincial forestry station. Millions of seedlings are now being grown for transplanting in Ontario. Miniature trees raised from the seed taken from the cones reveal the development in one, two and four years, etc., in the work of transplanting white pine, Scotch pine, jack pine, white spruce and white cedar.

### Action in Timber Returns Is Withdrawn

The action against the Shevlin-Clarke Company, of Fort Frances, Ontario, in so far as it relates to or arises from the alleged invalidity of the licenses for timber berths 45 and 49 in the Quitico Forest Reserve issued to the company, has been withdrawn. The action was entered by the Attorney-General of Ontario to set aside certain patents granted the defendant company and for damages for alleged improper cutting of timber and failure to make correct returns as to the timber cut. Some time ago Justice Orde directed the Attorney-General to give particulars of several clauses of the statement of claim.

### Fire Wipes Out Large Pile of Pulpwood

In a recent fire at Black Bay over thirteen hundred cords of pulpwood belonging to the Kaministiquia Pulp and Paper Company, of Port Arthur, Ont., were destroyed, together with several buildings comprising a camp. The wood was covered by insurance.

### Woods Wages Are Very Much Reduced

The first call for men to go into the lumber and pulpwood camps was made recently at North Bay when a North Shore contractor asked for several men. The wages offered were \$26 to \$32 a month, with board, which is about one-third of the figure prevailing a year ago. The number of men desiring to enter the camps is very large owing to the unemployment situation. It is reported that help has been hired for certain camps at as low as \$18 per month and board. The general wage, however, it is felt, will run about one dollar a day.

### Notes and General Jottings

Hon. T. W. McGarry, of Toronto, president of the Whalen Pulp and Paper Company, is now on a visit to the Pacific Coast. The plant at Wood Fiber, B. C., which has been closed for some time, has been re-opened, turning out one hundred tons daily. The plant at Port Alice has been running steadily, shipping the output of pulp to the Orient. If an improvement in the pulp market takes place it is hoped to operate the Swanson Bay mill at an early date.

William Innes, of Montreal, Eastern representative of the Interlake Tissue Mills, is spending a few days in Toronto on business.

Mr. Wright, of Smith, Davidson & Wright, wholesale paper dealers, Vancouver, B. C., was a caller on the trade in Toronto during the past week, returning from a visit to the leading mills in eastern portion of the Dominion.

William Robertson, of the forest branch, Department of Lands, Victoria, B. C., and former British Columbia Lumber Commissioner for the east, is in Toronto on a visit. He states that the pulp and paper making industry is making great strides in the Pacific Coast Province.

A. L. Dawe, of Montreal, secretary of the Canadian Pulp and Paper Association, was in Toronto last week calling upon the members of the trade.

Albert Huntley, of the Hodge-Sherriff Paper Company, Toronto, has returned after spending an enjoyable holiday at Lake Simcoe.

N. R. Wessels, of the Allen Paper Company, Toronto, and E. W. Bristow, of the Buntin, Reid Company, Toronto, got back last week after a most successful fishing expedition in the Haliburton district.

# J. Andersen & Co.

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

## A-1 Bleached Sulphite

Agents for

**KELLNER-PARTINGTON PAPER PULP CO. LTD.**  
Borregaard, Norway

# WAYAGAMACK

## KRAFT PULP

*Uniform in Quality*

*Essential for Strength Requirement*

**The Pulp and Paper Trading Company**

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

Sole Agents for United States for

**CANADIAN KRAFT, Ltd.**

Three Rivers, Canada

## Obituary

### Eugene Francis Crowe

Eugene Francis Crowe, president of the Perkins-Goodwin Company, died suddenly of heart disease last Saturday. Mr. Crowe was at the time seated in the saloon of the yacht *Aimejean*, the guest, with his wife, of Edgar P. Lawson, when he died. They had started on a cruise and had just anchored for the night at Port Washington when Mr. Crowe collapsed and died before Doctor Herman Baruch, whose yacht was at anchor nearby, could come to his aid.

Mr. Crowe was a well known figure in the pulp and paper trade. Born January 11, 1868, at Spring Valley, N. Y., he came to New York city as a youth and entered business as a paper salesman. About thirty years ago he was employed by Perkins-Goodwin Company as a paper salesman and subsequently held the positions of sales manager, secretary, vice-president and, at the time of his death, president of that company, succeeding John H. Duffy, who retired.

More than a year ago Mr. Crowe was warned by his physicians that he must conserve his energies and from that time he ceased his active participation in the management of the business of Perkins-Goodwin Company and by travel in this country and abroad sought to regain his health.

He is survived by his widow, Mrs. Grace M. Crowe. He was an enthusiastic golfer and a member of many golf clubs, among which were: Blind Brook, Baltusrol, Seaview, Knollwood, Fox Hills and the Englewood Country Club. He resided at 404 Riverside Drive.

### Frank Wiley Farrell

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, August 29, 1921.—Frank Wiley Farrell, among the best known paper brokers of Philadelphia by reason of long service in the ranks, and genial disposition, died on Tuesday of last week at his home, 129 Walnut avenue, Wayne, Pa. The immediate cause of death was heart failure, although Mr. Farrell for a long time has been in failing health. He was able, however, to attend quite regularly to his business from his offices in the Real Estate Trust Company building. His only son, F. Gilbert Farrell, is associated in the business and it will be conducted along the same lines as in the past.

Mr. Farrell was a native Philadelphian. In 1875 as a young man he entered the business of his late brother, William E. Farrell, who established the Nescochague Manufacturing Company at that time located at Sixth and Minor streets. The firm was one of the most prominent in the city at the time and was the training school for many members of the trade now at the head of their own concerns or prominent in others.

Mr. Farrell grew up in the paper jobbing business and about 1888 when his brother decided to devote his entire attention to the Pleasant Mills Paper Company, which had been established at Pleasant Mills, N. J., and which produced jute manilas of high quality, Mr. Farrell in association with Herman Hoopes, took over the Nescochague business. He continued in it for almost a decade. Upon its liquidation he established in August, 1897, the Frank W. Farrell Company opening offices in the Drexel building. In recent years, however, the offices were removed to the Real Estate Trust Company building.

Mr. Farrell is survived by his widow, his son Gilbert, a sister, Miss Mary R. Farrell and a brother, Austin Farrell living in Marquette, Michigan. Funeral services and interment were private.

### John S. Koster

Major John S. Koster, pioneer wood pulp and paper manufacturer, a hero of the Civil War and one of the best-known men in

New York State, died on August 18 in his 81st year at the Dr. A. F. Christian Sanatorium in Boston, Mass., where he had been a patient for some time.

He was born at Lee, Mass., June 21, 1841, and was educated at Palmer, Mass., in the high school, graduating in 1857. He learned the printer's trade on the *Springfield Daily American*. His father was one of the leading men in the paper-making industry.

Mr. Koster left the newspaper business and entered the paper mill at Palmer managed by his father. His father died, but the young man continued the business until the breaking out of the Civil War.

He enlisted in the Twenty-first Massachusetts Volunteers organized at Worcester and served for three years, making a brilliant military record.

For five or six years after the war Major Koster was employed in the Boston postoffice. He rose to a responsible position in the office, but decided to return to paper making. In 1872 he became superintendent of a paper mill at Lancaster, N. H. Next he went to Nova Scotia as manager for an English company about to manufacture wood pulp under a German patent. His success attracted attention and he was induced to take the position of superintendent of the Herkimer Paper Company. He went to Lyon Falls in 1876 and took charge of the pulp mills there, of which Warner Miller was president. With new mills and improved machinery he increased the output of the plant many fold. He was a stockholder and one of the directors in the company. He was also interested in a Kansas cattle ranch and in Denver real estate. April 16, 1865, Major Koster married Mary L. Kinzey, of New York. She survives, with the children: Mrs. Minnie E. Wyeth, S. E. Koster, J. E. Koster of Ilion, Grace B. Richardson, and Irene S. Higgins. There are four grandchildren and two great grandchildren.

A man of sterling qualities of head and heart, sound in judgment, upright in character, and prominent in the affairs of his county and this state, Major Koster had won the esteem and respect of all who had the pleasure of his acquaintance.

### Operations Being Resumed in High Grade Mills

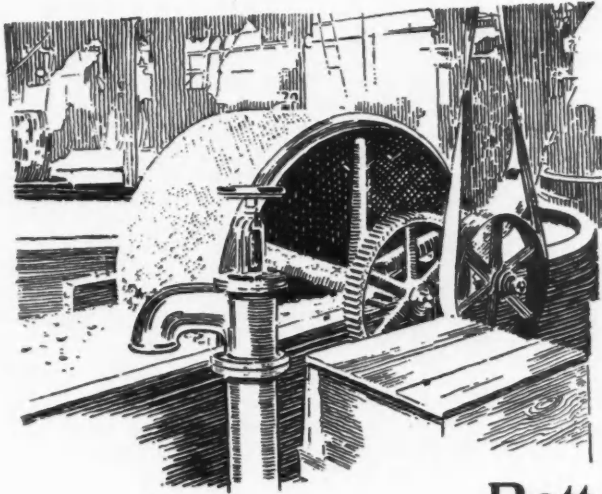
Resumption of operations by some of the high grade paper mills on a broad scale is reported to the American Paper and Pulp Association, these reports coming from various sections of the country. Among the notable examples are the Strathmore Paper Company at Mittineague, Mass., which will restore its machines to production on September 1, and the American Writing Paper Company, which is steadily increasing its output now that the low point has been reached.

Following the recent and various individual downward revisions in the price of high grade paper, liquidation is apparently complete in the writing, book and cover paper markets and as a result buying is increasing.

While these prices may not have returned to their pre-war level, they are down to bed rock so far as costs are concerned. With contract bleached sulphite selling at 4½ cents and other pulps down in relative values, with rags only 30 per cent higher than 1913 prices, with wages reduced to the lowest possible minimum and with coal still high, the mills are faced with fixed costs for a number of months and have gone the limit in the reduction of their prices.

Furthermore, these prices contemplate increased production, because at the present low rate of operation they represent in many lines a distinct loss.

In comparison with costs, high grade papers have liquidated more in their prices than shoes, finished cotton goods and textiles, the factories of which are in operation with good demand since the public feels these prices to be on a satisfactory level. High grade papers, having gone to, and below, this level, are now also increasing in use with the return of confidence on the part of the merchants, printers and public.



## Better Board And More Of It

Better board and more of it from the same equipment; without increase in floor space, with one-half the power, and at a trifling cost.

All this and more from the BIRD CONTINUOUS BEATER ATTACHMENT.

ASK us for information.

**BIRD MACHINE COMPANY**  
SOUTH WALPOLE MASS.

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

*Canadian Builders of Bird Machinery*  
Canadian Ingersoll-Rand Co., Ltd.,  
Montreal, Canada.

# BIRD CONTINUOUS BEATER ATTACHMENT

## QUESTIONNAIRE ON COST STANDARDIZING

Thomas J. Burke, secretary-treasurer of the cost association of the Paper Industry, following out a plan outlined in the PAPER TRADE JOURNAL recently is sending the following questionnaire to all pulp and paper manufacturers and converters:

With your co-operation, this association can make a real step forward in its work of standardizing cost accounting procedure if you will see that the accompanying questionnaire is given to the manager of your Cost Department and carefully answered by him. All information thus obtained will be treated as strictly confidential and will be used only for tabulation purposes, so that we may have a definite basis on which to work in our efforts to promote the adoption of more uniform cost finding principles and methods, to the end that intelligent competition may result from the knowledge on the part of all paper manufacturers of the exact relation between their costs and their quotations.

I urge you most sincerely to see that this questionnaire is answered and returned to this office at an early date, so that a report thereon may be prepared by October sixth and seventh, the dates of our next convention in Chicago.

### General

1. Name of Concern.
2. Post office address.
3. Trade associations to which you belong, if any.
4. Principal active officers with titles.
5. Name of officer in charge of general accounting department.
6. Name of officer in charge of cost accounting department.
7. Number of employees in cost department, including operating statistics.
8. List of mills operated by concern. Name of mill. Location. General classification of products. Number of employees.
9. State name and address of accounting firm responsible for your present cost system.
10. Mention the principal difficulties you have had to contend with in operating this system.
11. How often do you prepare a statement of profit and loss? Monthly, semi-annually, or annually?
12. Are your costs compiled by a cost department in each mill, or are reports forwarded to a general cost department in the head office?
13. Are your costs compiled by processes, if so, name departmental divisions.
14. Do you include "interest on investment" in your manufacturing costs and selling price estimates?
15. If you own your mill and have a mortgage thereon, how do you absorb the interest on that mortgage?
16. In the case of "idle time" do you distinguish between "idle time" due to shut-downs for mechanical purposes and "idle time" due to lack of orders?
17. Do your superintendent, sales manager, cost manager and chief executive officer hold regular meetings, thereby providing an opportunity for the last named to settle promptly any questions raised by the others?
18. State whether costs are made up for each unit of production differentiating grades, sizes, weights and colors.
19. Are all material quantities and all cost values checked and controlled through double entry accounts forming an integral part of the general accounting system? If not are they periodically reconciled with the general accounts?
20. Have you classified your different departments under the headings "Productive" and "Auxiliary," the departments under the former heading being those in which the raw materials are prepared, converted and finished, and whose expenses therefore are charged direct to the products, and the latter or "Auxiliary" departments being those rendering "service" to the productive departments, whose expenses are charged to the productive departments on the basis of the service rendered.

### Raw Materials and Supplies

21. Are all raw materials purchased weighed as received?
22. Are all raw materials on hand kept in a locked storeroom in charge of a competent storekeeper?
23. Are your supplies on hand kept in a locked storeroom?
24. Are requisitions made out for all raw materials and supplies used?
25. Do you start a fresh woodpile annually?
26. If not, how do you ascertain the value thereof at the end of your financial period?
27. Do you charge raw materials and supplies into manufacturing costs at "average" or "actual" prices?

### Preparation and Conversion

28. Do you charge into your costs a regular amount monthly for felts and wires, and thereby set up a reserve against which the cost of felts and wires actually used may be charged as used, or do you absorb into your costs monthly the value of the felts and wires actually put onto the machine during that month?
29. How do you absorb the cost of relining your digesters?
30. In the case of rags do you see that each batch is put into a separate drainer or drainers and that the number of cars of "half-stock" taken from that drainer or drainers is carefully counted so that the cost of each car may be known?
31. Have car loaders been properly instructed regarding the loading of those cars uniformly?
32. Is any independent check kept of the materials which actually go into your beaters, if so by whom and by what method?
33. Do you rely entirely on reports received from beater engineer? State methods adopted for measuring quantities used.

### Repairs and Replacement, etc.

34. Are you satisfied that a careful analysis is made of all work done by your repair department, so that charges therefor are properly allocated either to manufacturing costs or capital account?

### Purchasing Department

35. Does your system provide for a proper check on all invoices paid so that your purchasing department cannot pass for payment any invoice until the respective goods have been actually received and checked by your storekeeper?

### Sales Department

36. Have you any arrangement whereby your sales department is notified regularly of your losses due to lack of orders?

### Light, Heat and Power

37. What arrangements have you made to properly allocate the costs of the light, heat and power supplied to the different departments in your mill? Please explain fully.

### Rates, etc.

38. In order to get a machine hour rate for your paper machines, it is necessary to divide the estimated total annual cost of running the machine by the estimated annual total of working hours. What is your estimated annual total of work hours? State clearly how you arrive at this figure.

39. A so called "normal" cost is obtained by dividing the "normal" operating time of a department into the predetermined annual expenditure for that department, thereby obtaining a departmental hourly rate. (a) Do you determine departmental rates in

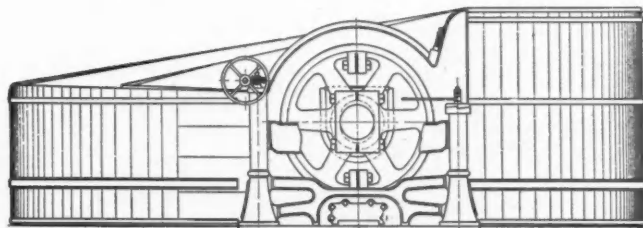
(Continued on page 34)





## Judgment

Judge the other fellow by yourself is a saying with a lot of merit in it. For instance, if you were a buyer of paper instead of a manufacturer, and you were offered better paper at a lower price you would naturally purchase that product. With Niagara Beaters as part of your equipment you can appeal to your prospective customers on this basis with the result that the business will be yours.



*Ask the Mill That Owns One*

**Valley Iron Works Co.**

Appleton  
Wis.

## IMPROVED PROCESS OF COOKING SULPHATE

By HERMANN GEVERS, KAUKAUNA, WIS.

Hermann Gevers, of Kaukauna, Wis., has been granted a patent on an improved process of cooking sulphate and soda pulp, the essential points of which are as follows:

### Pumps to Circulate Liquor

Heretofore, in manufacturing cellulose by the soda or sulphate process, the charge of fibrous material and liquor in the digester has usually been heated either by directly injecting steam or by the so-called "indirect" method, in which the liquor is circulated through a steam heater and in which the steam does not come in contact with the digestion liquor. In the "indirect" method, an injector or centrifugal pump is usually employed to circulate the liquor from the bottom to the top of the digester through the heater. Similar means are at times provided for circulating the liquor in the "direct" cooking method. The direct injection of steam in the soda or sulphate process is objectionable, since the condensed steam dilutes the liquor. This objection is avoided by the indirect method referred to but in this case the heat of the steam is not as efficiently utilized.

In carrying out the present process, digestion liquor is heated in a boiler which, in accordance with the preferred embodiment of the invention, is direct fired so that the use of a boiler for generating steam from water is dispensed with. The liquor is pumped or otherwise forced under pressure into the boiler, is heated therein to generate steam and is brought to a suitable high temperature and pressure, which may be varied in accordance with the different materials to be treated and the size of the apparatus employed.

### Wood Chips Placed in Digester

In carrying out a digesting operation, a charge of fresh wood chips or other fibrous material and part of the liquor required for the digesting or cooking operation is placed in the cooking vessel or digester and the latter is then closed. The rest of the liquor required for the operation, which has been preheated in the boiler, is then introduced into the digester and, most conveniently, is forced from the boiler by the steam generated therein through a suitable pipe line extending from the boiler at a point below its water level and connected to the digester. Preferably, the pipe line is provided with connections and valves whereby the preheated liquor from the boiler can be admitted either to the top or bottom of the digester, or part into the top and part into the bottom as may be required. When the digester is thus charged, the steam generated from the digestion liquor in the boiler is introduced into the digester and preferably—as is customary with the direct cooking method referred to—means are provided whereby the steam can be introduced either into the upper or the lower end of the digester as conditions may require. During the cooking and digestion operation, fresh liquor is pumped into the boiler preferably as soon as the digester charge has, by the introduction of preheated liquor and steam, been brought to the temperature and pressure required for the completion of the cooking operation. The cooking of the digester charge is then continued and completed by aid of steam generated in the boiler and at the same time the boiler is utilized to preheat the liquor for the subsequent operation or operations.

The improved process and apparatus avoid the necessity of employing a water-fed boiler to supply steam for heating the digestion liquor. As the preheated liquor is forced from

the boiler into the lower portion of the digester and also during the continued cooking operation, gas and vapor are relieved. This venting of the digester concentrates the liquor. Furthermore, the generation of steam from the liquor in the boiler also concentrates the liquor so that undue dilution and waste of heat are avoided.

### Liquor Concentrated in Boiler

Again, because of the fact that the liquor is concentrated in the boiler, the liquor when first prepared can be weaker than would otherwise be the case. The preparation of a weaker cooking liquor is, of course, easier and more economical. A comparatively small amount of lime will furnish the desired causticity. Furthermore, the liquor in the digester can be kept at such a concentration that expensive steam evaporators and extra fuel are not required for the recovery of the alkali from the resulting black liquor. The introduction of highly preheated liquor into the freshly charged digester reduces the cooking time; the boiler is fully utilized not only to supply steam for the cooking operation, but also to preheat the liquor for the succeeding operation; no pump is required for circulating the liquor, which can be forced into different portions of the digester as required by pressure developed in the boiler; and good boiling and circulation during the cooking operation can be readily attained by venting the digester and by admitting steam to different portions thereof. Again, no heater other than the direct-fire boiler is required.

## STANDARDIZING QUESTIONNAIRE

(Continued from page 32)

this manner? (b) If so on what basis do you arrive at the "normal" operating time?

### Overhead

40. Rent—Is this allocated to the various departments on the basis of the floor space occupied?

41. Taxes (excluding Federal taxes)—Are these allocated on the basis of investment values in each department?

42. Depreciation—State whether you figure depreciation as part of your manufacturing costs.

### Shrinkage and Waste

43. What do you figure is the average percentage of "broke" made on your machines?

44. How do you take care of the shrinkage in weight between dry rags and half-stuff?

45. Do you not believe that a strong effort should be made to standardize "pulp" units, particularly in reference to weights whether in rolls, bundles, dry laps, wet laps, skids, etc?

### Final

46. Are you willing to assist us in educating manufacturers to a proper knowledge of their manufacturing costs and in persuading them not to sell below these costs?

47. Do you not believe that a Standard Cost Finding system for each branch of the pulp and paper industry would be very beneficial? Note that this does not mean a Standard Cost, but a Standard Method of Finding Costs.

48. If so, state whether you are willing to be represented if a meeting be called for the purpose of discussing the best method of drawing up such a system for your particular branch of the industry. Name the branch or branches in which you are most interested.



Would you like to put on a wire without danger of crimping it, or buckling the rolls?

You *can* do it on a BELOIT Fourdrinier and not remove a roll, suction box or save-all.

*Ask Beloit!*



Beloit, Wis., U. S. A.



## New York Trade Jottings

M. S. Schmidt, of the News Print Service Bureau, is away on his vacation, but is expected back by Tuesday.

\* \* \*

O. M. Porter, secretary of the Woodlands Section, is away on his vacation and is not to return until after Labor day.

\* \* \*

Plans are under way, according to reports from headquarters in this city, for a salesmen's meeting in Chicago sometime during the month of October.

\* \* \*

The American Forestry Association met in this city last Tuesday and discussed current business. Among the paper men who are members is W. R. Brown, of the Brown Company, with offices in the Woolworth Building.

\* \* \*

R. S. Kellogg, secretary of the News Print Service Bureau, is on a trip to New Hampshire visiting the mills in that section and attending the forestry conference at North Woodstock. He will be back in this city on Friday.

\* \* \*

Reports have been circulated in this city that the International Paper Company was again to confer with representatives of organized labor. This was emphatically denied by Production Manager Curtis at the offices of the company last Tuesday.

\* \* \*

R. S. Kellogg, secretary of the News Print Service Bureau, learned on a recent trip to Washington that pressure on the tariff legislation will defer a hearing on the Snell Bill until sometime in October instead of early in September as was originally planned.

\* \* \*

The Freeport Sulphur Company, of which Parsons & Petit are the selling agents, has gotten out a chart which should prove of considerable interest to paper men. It shows many interesting facts and statistics concerning sulphur, pyrites and sulphuric acid.

\* \* \*

Dr. Hugh P. Baker, Executive Secretary of the American Paper and Pulp Association, attended a conference last Tuesday at the Bureau of Standards in Washington. There was general discussion of paper standards for the government, the producer, the jobber and the consumer.

\* \* \*

The Texas Gulf Sulphur Company announces removal of its offices to larger and more commodious quarters in the Liggett Building, at 41 East 42nd street. This company will occupy the entire 22nd floor in this new modern building located on the corner of Madison avenue and 42nd street.

## News of the Chicago Trade

[FROM OUR REGULAR CORRESPONDENT.]

CHICAGO, August 29, 1921.—Three hearings are scheduled in September and one in October, before the Consolidated Classifications Committee in reference to the fibre box specifications and changes as set forth in Special Docket 6, issued August 6.

The hearings will be held at San Francisco, September 7; Chicago, September 20; New York, September 26, and Atlanta, Ga., October 26.

Docket 6 carries numerous proposed changes for shippers using corrugated and fibre board containers, and says that these have been suggested by box manufacturers and users. However, it is said that the two associations representing these manufacturers did not make the proposals of revisions of the general rates outlined in Rule 41.

Both the Container Club and the National Association of Cor-

rugated and Fibre Box Manufacturers have prepared counter proposals which will be ratified by the membership before being placed before the Consolidated Classifications Committee at the hearings.

J. A. Carpenter, of the Kansas City Paper House, Kansas City, Mo., stopped over in Chicago for a day while on his way east to Erie, Pa., last week.

Logan Thompson, of the Champion Coated Paper Company, was a visitor to the city last week. He stopped here on a return trip from Charlevieux.

R. C. Schatsnider, identified with the Whittaker Paper Company, of St. Paul, Minn., was in Chicago last week.

S. J. Hodgins, of the Central Topeka Paper Company, Topeka, Kan., stopped in Chicago last week while passing through on his way to Erie, Pa.

"Bob" Butterworth, Chicago manager of the Champion Coated Paper Company, spent two days at the mills last week.

Frank Sanborn, of the Ideal Coated Paper Company, with offices in the Transportation Building here, reports that business has been rather good during the past month. He said that the stay paper business was particularly good and that August was the best month of the year so far. Mr. Sanborn's statement of better stay paper business is an indication of improved conditions among the local box makers.

The American Lace Paper Company, of Milwaukee, is sending out samples of its new gold laces. These are made up in various pretty designs. The new laces are made from Ideal Coated Paper Company's gold paper.

## Gem City Boiler Co. Making Small Heaters

[FROM OUR REGULAR CORRESPONDENT.]

DAYTON, Ohio, August 29, 1921.—The Gem City Boiler Company is developing considerable of a business in the manufacture of small heaters suitable for paper mills. Among the firms in which these heaters have been installed are the American Coating Company, at Elkhart, Ind.; the Lockport, N. Y., paper mills; the Monroe Paper Company, at Monroe, Mich.; the Hartje plant at Steubenville and the strawboard plant at Rockford, Ill.

The Gem City Boiler Company is officered by experienced boiler men, Thomas E. Tucker being president and Albert H. Kemper, vice-president and general manager. The latter was president of the Brownell Company, for many years, while Mr. Tucker at one time also was identified with the Brownell organization in an important capacity. The Gem City's mills are located in North Dayton. While paying special attention to the small heater and small boiler manufacturing line, the company is discovering that a greater demand is developing, also, for the standard makes of boilers and mill equipment and is anticipating a busy fall season.

Unlike many firms in this line of business the Dayton company has not been compelled to close down at any time this year. The working hours were slightly reduced and there were times when the force was curtailed, but the plant has been operated continuously.

## Short Cuts to Power Transmission

Short Cuts to Power Transmission is the title of a valuable little book just issued by the Flexible Steel Lacing Company, 4661 Lexington Avenue, Chicago, giving a large fund of valuable belting and transmission data. The information is complete and concise and covers the subject in an entirely practical way.

It contains clear, candid discussions of all types of belting and lacing, "Short Cut" rules which all users of belting should know, as well as accurate formulas for calculations and handy tables of measurements, etc.

Engineers, practical mechanics, shop superintendents can obtain information of permanent value from this book, which will be sent free on request.

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The man who thinks by the gallon, buys cheap oil and says, “See the pennies I save.”

The man who thinks by the year, uses Gargoyle Lubricating Oils and points to lower oil consumption, reduced friction, increased power, increased production, lower costs for repairs and replacements.

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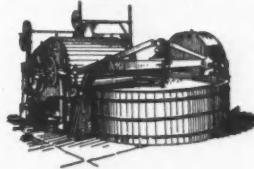


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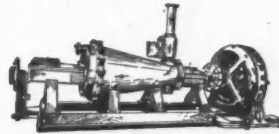
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Because of the high speeds and heavy pressures which are always present, and the side pull on bearings when belt driven, it is necessary to use a heavy bodied oil. For this purpose we recommend **Gargoyle Etna Oil Heavy Medium**.

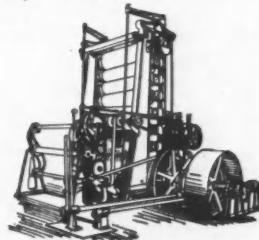
**Paper Machines**



For bearings of the paper machine, subjected to induced heat from steam used for drying, an extra heavy bodied oil is required such as **Gargoyle**

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The rolls at the wet end subjected to moisture and heavy pressure demand a compounded oil which will resist the washing tendency and maintain a perfect oil film. We recommend **Gargoyle D. T. E. Oil Heavy X** for these specially trying conditions.



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Paper machine production is directly dependent upon uniform speed. Calender bearings are subjected to heavy pressures and high frictional heat. The regular application of **Gargoyle D. T. E. Oil Extra Heavy** insures uniform speed, and consequently minimizes “broke”

# Editorial

Vol. LXXIII New York, September 1, 1921 No. 9

FIFTIETH YEAR

## The Anti-Dumping Law

The developments in the investigation of alleged violations of the anti-dumping act as outlined in the Emergency Tariff, particularly in relation to pulp, has caused a great deal of discussion not only among paper men but throughout the entire business world. Domestic manufacturers claim that this probe on the part of the Treasury Department is entirely justified by the losses they have sustained during the year through the unfair competition of foreign producers. Importers on the other hand say that to restrict pulp from coming into the United States will not only work a great injustice on a host of small converting mills which do not control their source of raw material, but they further state that the agitation is simply to permit the large manufacturers to keep prices up. Out of all the controversy arises the question of whether Germany, the chief offender, really can produce pulp and paper at a figure so low that it is possible for her to sell it in this country below the cost of the domestic manufacturers' raw materials alone.

Some interesting figures have been given out by the Information Service of the American Paper and Pulp Association and are the result of an investigation by Mr. E. H. Naylor. These statistics compare the rate per hour of wages received by labor in a German paper mill as compared with the rate per hour received at Kalamazoo. The latter was chosen for the comparison because the recent cut in wages there has caused conditions to become fairly stable and because they are as low through that district as they are anywhere in the industry. The German wage rates are figured on the exchange rate of 1.40 cents to the mark.

A machine tender in a German paper mill receives 7 cents an hour, as against 72 cents an hour received by a machine tender in a Kalamazoo mill; German backtenders get 6.4 cents, as against 54 cents for Kalamazoo backtenders; German third hands get 6.12 cents, as compared with Kalamazoo third hands at 47 cents an hour; beater engineers get 6.25 cents in Germany, and in Kalamazoo 65 cents an hour; German roustabouts get 5.8 cents an hour, as against 35 cents an hour in Kalamazoo; rag sorters in Germany receive only 4.2 cents an hour, as compared with the same workers getting 30 cents an hour in Kalamazoo; counters—bench girls—in German mills get 6.1 cents an hour, as against the same position drawing 65 cents an hour in Kalamazoo. A glance at these figures should prove that Germany can produce at much lower cost than our mills, whether they have sold below the cost of American production or not.

Many of the paper men in this country do not understand just what constitutes a violation of the anti-dumping law. Briefly the act provides that when the Secretary of the Treasury finds that an industry in this country is being or is likely to be injured because of the importation of merchandise which is being sold, or is likely to be sold, at less than its fair value, then he shall make his finding public to the extent that he deems necessary, together with such details as may be necessary for the guidance of the appraising

officers. In such a case, whether the merchandise is dutiable or free of duty, if it is found that the purchase price or the exporters' sales price is less than the foreign market value—or, in the absence of such value, than the cost of production—then a special dumping duty shall be levied in an amount equal to such difference. Note, however, that this applies to the foreign market value and cost of production. The law further provides that if it is established that the amount of this difference is wholly or partly due to the fact that wholesale quantities in which this merchandise is sold for exportation to the United States are greater than wholesale quantities in which it is sold or offered for sale in the country of exportation in the ordinary course of trade, then due allowance shall be made in determining the foreign market value. The law is thus quite clear on the subject, and it is evident that enforcing it at this time will give only temporary relief to manufacturers of pulp in the United States, providing they are able to prove their case.

## Canadian Paper Exports Decrease

July returns on exports from Canada of pulp and paper, according to the Canadian Pulp and Paper Association, continue to reflect the universal depression existing in the market for these commodities although there are indications that the bottom has been reached, so far as demand if not so far as values is concerned, and that the near future will witness improvement.

The July exports of paper, pulp and pulpwood reached a total value of \$9,661,595 as compared with \$8,687,504 the preceding month and with \$17,560,653 for July, 1920. Exports of news print paper amounted to 1,146,362 cwts. valued at \$5,539,623 compared with 847,604 cwts. valued at \$4,295,181 the preceding month and with 1,219,439 cwts. valued at \$5,727,193 in July last year.

The chief discrepancy is shown in wood pulp. Exports for July this year amounted to 845,150 cwts., valued at \$2,870,401, compared with 648,885 cwts., valued at \$2,225,425, the preceding month and with 1,893,641 cwts. valued at \$9,137,733 in July, 1920. The details are as follows:

The exports of news print for July amounted to \$5,539,623 as compared with \$5,727,193 for July of last year, book paper for July amounted to \$14,986 as compared with \$110,596 for July of last year and other grades of paper for July amounted to \$241,546 as compared with \$1,039,225 for July of last year.

The exports of sulphate pulp for July amounted to \$390,068 as compared with \$1,383,104 for July of last year, bleached sulphite pulp for July amounted to \$515,280 as compared with \$1,402,957 for July of last year, unbleached sulphite pulp for July amounted to \$990,807 as compared with \$3,822,679 for July of last year and groundwood for July amounted to \$974,246 as compared with \$2,528,993 for July of last year.

Pulpwood to the extent of 80,835 cords, valued at \$995,039, was exported to the United States during the month, compared with 144,741 cords, valued at \$1,545,906 in July, 1920.

Paper to the value of \$81,670 was exported to the United Kingdom, \$5,243,134 to the United States and \$471,351 to other countries. Wood pulp to the value of \$1,179,392 was exported to the United Kingdom, \$1,507,146 to the United States and \$183,863 to other countries.



The returns for the four months ending July 31 show that paper to the value of \$21,354,564 was exported as against \$26,423,454 for the same period in 1920 and \$17,532,409 in 1919. Pulp was exported to the value of \$8,976,685 as against \$26,070,593 for the same period in 1920 and \$9,534,827 in 1919. Wood was exported to the value of \$3,704,327 as against \$4,061,376 for the same period in 1920 and \$3,260,241 in 1919.

It will be noticed that despite the subnormal conditions at present prevailing the returns for the first four months of the current year are well in advance of those for the same period in 1919 although very much less than last year.

### Watertown Paper Men Interested in Tariff

[FROM OUR REGULAR CORRESPONDENT.]

WATERTOWN, N. Y., August 29, 1921.—Paper manufacturers in this district have just received notice that the Finance Committee of the United States Senate will soon hold a hearing at Washington on the subject of tariff on paper. They are all urged to be ready to appear before the committee when the date of the hearing is definitely fixed. It is expected that practically all the heads of local companies will accept the invitation to go there to present their views. It is hoped that a protective tariff worth while may be obtained.

Germany is now recognized as the country that is spreading a quieting influence upon the industry in this country and is supplying the demand to an extent that local plants are idle and prices are low. It was said here today that thousands of paper makers are idle here because of the production of German mills being sold in this country. The industry demands a tariff that will protect American labor and industry against the competition at hand.

The head of a local paper manufacturing concern today explained the true situation. He said that the German machine tender receives but 85 cents a day and that paper is made there at \$30 a ton. The machine tender in America is one of the highest paid men in the mill and he gets about \$8 a day and a ton of paper costs from \$80 to \$90 a ton.

After getting the paper into the American market the Germans are then able to make another large profit from the difference in exchange. It is against the labor figures of Germany and the difference in the exchange rate of money that local manufacturers will ask Congress to provide a tariff wall for self-protection. It is expected that when that is done the industry will promptly feel the beneficial effects and to that degree prosperity will begin to return to the people effected.

The new wage scale promulgated by the arbitration board went into operation in the St. Regis, Sherman, Hanna and DeGrass Paper Company mills last Monday, a general average reduction of 15 per cent in wages being established. Under the decision of the arbitration board it is expected that another reduction will be made January 1.

### Orr Felt & Blanket Improvements

[FROM OUR REGULAR CORRESPONDENT.]

DAYTON, Ohio, August 22, 1921.—Improvements being installed in the plant of the Orr Felt & Blanket Company in Piqua are being pushed as speedily as possible though the plans are so elaborate that it probably will be the first of next year before they are completed.

This week the new 200 foot smoke stack was completed. Many persons were afforded an opportunity to ride up an elevator inside the stack and take a view of the surrounding country. The trip proved such a novelty for Piquans that the elevator was kept going almost constantly for several days. The stack is a "work of art" and consequently is ornamental as well as useful.

A. M. Fry, a Piqua contractor, has been awarded the contract for the construction of a new engine room, new loom department, and for other improvements of an extensive nature.

Plans have been drawn by Dayton architects for the buildings to be erected by the company. The office building has been moved 108 feet to make room for improvements. It is expected that the changes will result in an addition of 85,000 square feet.

### Rex's Paper Co.'s Good Record

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., August 29, 1921.—Not a day's shutdown is the record of the Rex Paper Company since January 1. In addition there are at present orders on the company's books for a month's steady business.

The business depression that has been felt by every paper mill in the Kalamazoo valley district has missed the Rex plant during its existence.

"Business is good with us and has been very satisfactory the entire year" remarked John F. King, president of the company. "We have orders ahead for a month and when those have been filled there will be more to take care of and keep us running.

"I am satisfied that conditions are better generally. Manufacturers have helped readjustment by taking their losses; now if the middleman will cut his prices as he should, there will be little delay in a general business revival."

### To Finance Maine Paper Mills

AUGUSTA, Me., August 30, 1921.—A committee of creditors, consisting of Blaine S. Viles and Walter S. Wyman, of this city, and Douglass T. Johnston, a New York banker, it was learned today, will conduct the affairs of the Cushnoc Paper Company and the Kennebec Paper Company, provided creditors representing 90 per cent of the indebtedness of the company sign agreements before September 15.

Officers for both of the companies, as well as creditors representing more than \$500,000 of claims, already have signed.

Balance sheets of the two companies are said to show a surplus of nearly \$1,000,000, but the business depression prevents the owners from properly financing operations, it was explained by the committee.

The committee said the proposed arrangement would protect the interests of creditors and permit continued operation of the mills. Under its terms the creditors would extend the time of payment of claims and accept promissory notes, payable in six months, at 7 per cent interest.

### Hold Standardization Conference

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., August 31, 1921.—A paper standardization conference was held at the Bureau of Standards, Department of Commerce, yesterday when representatives of several paper mills and government officials were present.

For some unknown reason the conference was kept "quiet." The only possible reason for this is the fact that the Joint Congressional Committee on Printing is supposed to attend to the standardization of government paper specifications and there is a feeling among some at least that the calling of the conference was ill advised.

Yesterday's conference was merely preliminary and it is understood that further conferences will be called. Representatives were present from several paper mills, from the General Supply Committee, from the National Paper Trade Association, the American Paper and Pulp Association and from several government departments. There was a full discussion of standards for both government and commercial work.

## UTILIZATION OF CELLULOSE WASTE LIQUORS

BY LOUIS EDGAR ANDES IN "KUNSTSTOFFE," TRANSLATED BY CLARENCE J. WEST

Two methods are in general use for the preparation of paper pulp or cellulose from wood, namely, the sulphite and the soda processes. In both cases the purpose is to free the wood fiber or cellulose from the incrusting substances, rosin, etc., and to obtain the fibers, whether for paper making or for spinning material, in the most suitable form. In the sulphite process, which is the more extensively used, the incrusting materials are dissolved by means of sulphurous acid or its salts, sulphites (bisulphites). The sulphite liquors are prepared by the action of sulphur dioxide gas upon calcium or magnesium carbonate in the presence of sulphurous acid, use being made of suitable towers or chambers. The digesters used in this process are very large, since the time required for the digestion is considerable. The wood is chipped, placed in the digesters, first slowly heated with steam, the liquor then added and the whole heated at a gradually increasing temperature until the pressure is about 3 atmospheres. The time of the steaming operation is from 12 to 15 hours, the actual cooking time is from 30 to 40 hours; if one takes into consideration the time necessary for the preliminary heating, the total time of the process is from 90 to 100 hours. At the close of the cook the resulting cellulose is washed with water and the waste liquor (the sulphite waste liquor, or cellulose waste liquor) is blown from the digester.

In the so-called soda process—soda pulp—one heats the chipped wood with 12° Bé sodium hydroxide to 6 or 8 atmospheres pressure for several hours. The product obtained in this way is washed and partly dried, bleached and alternately treated with steam and alkali or by some other method. The waste liquor—that is the liquid remaining after the cook—is either discarded or the constituents recovered. Blowing the waste liquor into open water is not permissible, and the disposal of the liquor is always an unavoidable expense to the pulp mill.

The waste liquors of the two processes, but principally that of the sulphite process, are found on the market, both in the crude and the refined form. The crude liquors contain strongly colored humus material, of which there is only a slight amount in the purified liquor; it is removed in part by settling and decantation, by blowing heated air through the liquor for the purpose of oxidizing the sulphite to sulphate, or, in other cases, chemically, as by the use of sodium hydroxide. The purified liquor differs from the crude products in appearance, in that it is nearly free from flocculent material and consists of a dark brown but not smeary product. The concentrated product is also sold in the crude and the purified states. The consistency is expressed in terms of degrees Beaumé; the half-concentrated liquor contains about 20 per cent of solids, the concentrated liquor about 50 per cent.

### Great Concentration Necessary

It is necessary to concentrate the waste liquor to the greatest possible consistency, both from the standpoint of cost of transportation as well as the cost and number of the containers necessary. This evaporation, since it involves the removal of large volumes of water, is costly, and a few years ago there was a question as to whether this concentration was profitable. Since then, however, there has been a change in this matter, for the high price which the waste liquor commands makes the cost of concentration of less importance. The cellulose waste liquor has a ready-market, the price varying between 30 and 150 marks per 100 kilos. While it was a question, only a short time ago, to find uses for the material, today this liquor serves a manifold and heterogeneous variety of uses; it has become a sort of universal agent, and if there appears to be no other raw material for a given purpose, one thinks at once of these waste liquors. All these uses, however, are make-

shifts of the poorest kind. For example, the liquor is in general unsuitable as a "varnish" substitute, in spite of the recommendation of experts; it does not have the necessary binding power for the solid pulverized materials (body color) nor has it the slightest resistance to moisture or water. The splendid varnish substitute, when dried, may be easily removed with water and therefore it has no value in resisting the atmospheric conditions.

In order to avoid evaporation, it is the practice in Sweden to expose the liquor to very low temperatures, by which treatment the principal part of the water is removed while the adhesive resinous material separates.

Experiments have been carried out on a small scale to test the removal of the water by means of freezing mixtures in which the vessel containing the cellulose waste liquor was placed in the mixture; since the thawing of the water follows only after several hours, if one works at 20 to 25° below zero, it should not be difficult to test the practicability of this freezing method on a large scale. The process has been employed on a commercial scale in several industries, as for example, in purifying linseed oil (the removal of the slimy products which produce turbidity).

### Principal Properties of Cellulose Waste

The principal properties of the cellulose waste liquors are, according to Marcusson (*Z. angew. Chem.*, 1917), as follows:

Upon the addition of an excess of hydrochloric acid, sulphite liquor gives a light colored precipitate of lignosulphonic acid; this is not soluble in ether or benzene as are the fatty or resin acids. When the precipitate is warmed with acids, it becomes dark in color and suffers a deep-seated decomposition, with a marked odor of sulphurous acid. Concentrated hydrochloric acid produces this decomposition without any noticeable increase in temperature. Considerable amounts of calcium may be detected in the acid solution by means of ammonia and ammonium carbonate or oxalate.

Alcohol precipitates calcium lignosulphonate, which may be filtered and characterized as such; it is soluble in water, is insoluble in ether, benzene, chloroform, decomposes upon warming with hydrochloric acid with the evolution of sulphurous acid and also splits off sulphurous acid when warmed with sodium hydroxide.

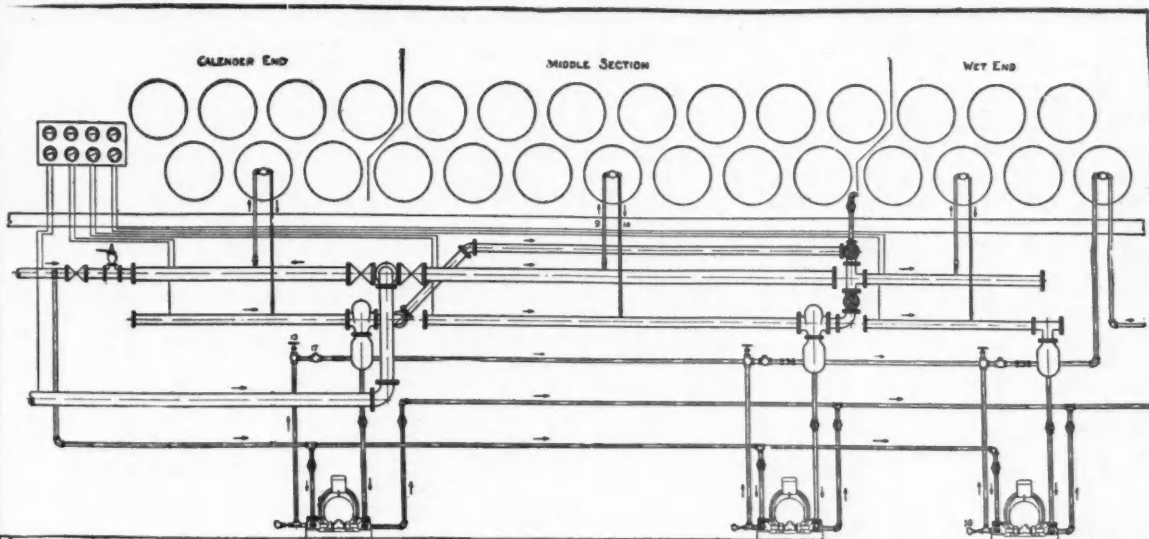
Fehling's solution is strongly reduced by the sulphite liquor, as are also dyestuffs, such as methylene blue and indigo, and chromium salts. The liquors also give a noticeable naphtha-sulphuric acid reaction for carbohydrates.

Upon concentrating the sulphite liquors, one obtains on an average about 10 per cent solids of a brown to black color, containing 10-15 per cent ash, 6-10 per cent sulphur and only about 0.1 per cent nitrogen. The ash consists principally of calcium, though a little magnesium may be present. It should be borne in mind that the sulphite liquor may be used without further treatment than the preliminary concentration after addition of alkali (protection against the oxidation of iron). The brown flakes which result in the use of strongly alkaline sulphite liquor are not iron oxide, as might be supposed, but are, according to F. Löffl, more likely the tannin substances of the liquor. According to Marcusson the sulphite liquor develops a characteristic odor of roasted or burnt flesh upon concentration.

### Content of Lignin in Wood

It is important, as may be readily understood, to determine the content of the liquor of the incrusting substances of the wood, that is the lignin, which is dependent upon the kind of wood used. König and Becker (*Z. angew. Chem.*, 1919, 40, 155) have determined the content of lignin in wood by four different methods:

(Continued on page 44)



## THE CRANE SYSTEM OF CIRCULATION AND DRAINAGE CONTROL

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### Saves Coal in Paper Mills and Increases Production

Numerous tests have shown that no machine should use more than three pounds of steam to produce one pound of paper. It is essential that the steam consumption of paper machines be closely checked against their actual production.

**One of the main features of the Crane System of Circulation and Drainage Control is the high degree of economy effected by its use.**

Maintaining all the dryers at their maximum efficiency permits the use

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Furthermore, the use of Cranetilt Metering Traps to handle the condensation gives a positive check at all times in the amount of steam used to dry the paper.

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## UTILIZATION OF CELLULOSE WASTE LIQUORS

(Continued from page 42)

1. Heating the finely ground wood for 6 to 7 hours with 1 per cent hydrochloric acid under a pressure of 6 atmospheres.

2. Treating the wood at room temperature with 72 per cent sulfuric acid according to Ost and Wilkening.

3. Treating the wood with concentrated hydrochloric acid (sp. gr. 1.21) according to the method of Willstätter and Zechmeister.

4. Treating with gaseous hydrochloric acid.

The amount of lignin found by these methods varied from 19.59 to 29.94 per cent.

The conifers showed a somewhat higher lignin content than did the deciduous trees. The carbon content of the lignin varied between 67.31 and 71.35 per cent, the hydrogen content between 5.07 and 7.80 per cent. Furfural yielding substances or pentosans could not be detected in the pure lignins, but on the other hand they did give more or less methyl ( $\text{CH}_3$ ) groups when heated with hydriodic acid and phosphorus, while pure cellulose was free of methyl groups. Cellulose therefore will yield methyl groups only if it contains lignin. The above investigators also attempted to determine, in addition to the lignin, the hemicelluloses, that is, that part of the cellulose which, by boiling with dilute acid or by steaming under slight pressure, are hydrolyzed and changed into sugar.

In order to separate the hemicelluloses from the more difficultly hydrolyzable orthocelluloses, 0.4 per cent sulphuric acid was used. By this method it was found that individual woods contained about the same amount of hemicelluloses (hexosans and pentosans). Relatively the content of pentosans in the conifers is small (10 to 12 per cent calculated on the dry substance) as compared with 22 to 26 per cent in the deciduous woods. On the other hand these contained a lower lignin content, about 20 to 26 per cent as against 20 to 29 in the conifers. The hemicelluloses of the conifers, corresponding to the lower pentosan content, contained only 8 to 9 per cent of the dry substance as pentosans and about 13 per cent of hexosans (which yield fermentable sugars) while the hemicelluloses of the deciduous woods contained from 15 to 20 per cent of pentosans and only 3 to 6 per cent of hexosans. The pure cellulose content of all woods varied from 39 to 45 per cent. Only the poplar gave a somewhat higher content of cellulose, namely 47 to 49 per cent.

Sulfite waste liquors contain from 1 to 1.5 per cent of fermentable sugar. Since one obtains from 3 to 4 cubic meters of waste liquor per 1,000 kilos of wood, this amount of wood will yield from 40 to 50 kilos of fermentable sugars. Evaporation with 0.3 to 0.4 per cent sulfuric acid will increase this amount 2 to 3 times, that is to 120 or 140 kilos.

### Numerous Proposed Uses

Investigations bearing on the practical utilization of waste sulphite liquors have extended over a number of years, but it is only within the last five years that, because of the ever increasing lack of different raw materials its use has been introduced with more or less success, into various industries. Although the proposals to prepare really valuable articles from this waste liquor have been very numerous, the principal uses are still confined to the field of adhesives, for which the method of preparation is extremely simple. Of the numerous proposed uses, the following may be named: Alkaline sizing material, varnish for wood, dressing material, acetone, dyeing cheap cotton goods, binding agent for molding sand or for Thomas slag meal, binding agent for printers' colors, briquetting agent, boring oil and boring oil substitute, fuel (coal), dextrin substitute, packing material, lubricating oil, printers' ink, fertilizer, packing material for eggs (in place of water glass), emulsifying agent for rosins, tar, pitch, oils, etc., filtering material in place of bone charcoal, substitute for varnish dyestuff

for fibers, food for fish and domestic animals, tanning material, substitute for priming oil, rosin oil substitute, impregnating wood in conjunction with sodium hydroxide, potassium hydroxide and metallic salts, insulating material in connection with fillers, adhesives, substitute for colophony, artificial manure, artificial lakes, sizing of paper, lubricants in connection with easily volatile oils, furniture polish, paper impregnating agent, plastic masses, polishing material, purification of used cork, lubricant, soft soap, sulphur, sulphur dyes, soap especially for washing with hard water, spirits, binder for road blocks, washing agent, wool dye and finally sugar.

### As a Binding Agent

Mitscherlich proposed several years ago a method in which, after diffusion of the liquor, the part not diffused was concentrated, treated with lime and thus gave rise to a thickening material. In place of this a simpler method was proposed, which did not involve osmosis, but which gave a much less pure product. The need of neutralization and the extensive use of the liquor led to the idea that it might be useful as an adhesive, and probably as a binding agent for fine coal. This experiment was a failure because the product resulting after drying absorbed water so rapidly from a moist atmosphere that it lost its adhesive properties.

The adhesive and thickening agent prepared by the following process did not possess this undesirable property. To be sure, it has practically no adhesive properties after drying if used in thick layers; for example, in gluing wood because the thick layers in drying, shrunk and developed many cracks, but if used in very thin layers, where the tendency to shrink was absent, as for example with powders, it was a satisfactory adhesive. In this connection the term "adhesive" is scarcely correct, for the product is really a binding agent for solid, more or less finely pulverized materials. Since this is almost always accompanied by the use of pressure, the binding agent may have no adhesive properties of importance.

### The Method Followed

The method itself is as follows: Sulphite liquor is treated with finely powdered calcium carbonate or milk of lime, in the latter case until a yellow precipitate begins to form. The calcium sulphite thus formed may be used for the preparation of the bisulphite. The liquid or the original material is then concentrated in a graduation apparatus or in open pans or similar apparatus to a specific gravity of about 1.2, which concentration may be recognized by the formation of a thin film on the surface. The hot liquid is then treated with a hot suspension of lime paste of specific gravity of about 1.2, which concentration may be recognized by the formation of a thick, pasty, transparent mass and the lime has disappeared. If the liquids are too thick before mixing, they form a mass that is difficult to knead. If they are not sufficiently concentrated, a yellow precipitate results, which has practically no adhesive properties unless larger amounts of the liquor are added. In place of the thin lime paste, one may use burnt lime with very little water and with this the dilute sulphite liquors, and in place of lime, one may use compounds which result in other processes from the action of lime upon sulphite or soda liquors. This characteristic, pasty, wax-like, strongly adhesive mass consists of a compound of organic material of the sulphite or soda liquor with lime which is changed by the addition of water to a powdery mass. This product does not absorb any considerable amount of water from the moist atmosphere and therefore products bound by it are permanent. Besides being used in the manufacture of coal briquettes, it is useful as a binding agent for other pulverized materials.

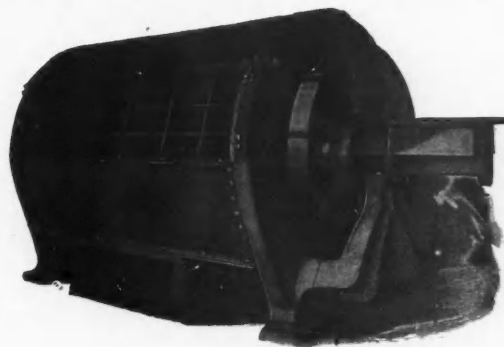
Saxl and Oberländer report the following regarding their ad-

(Continued on page 46)

# "IMPCO" TAILING SCREENER

## FOR SCREENING GROUND WOOD TAILINGS

Very Low  
Power  
and  
Upkeep Expense



Delivers  
Rejections Free  
from Good  
Stock

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

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

# BOOK PULP

"SOMETHING NEW IN PAPER-MAKING"

Our clean, bleached white Book Pulp possesses all the paper-making elements and advantages of bleached sulphite and soda pulp, at a cost slightly higher than that of ground wood pulp. It enables the practical paper-maker to cut costs and create new grades.

**New York and Maryland Pulp and Paper Co.**  
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New York  
**MILL—METUCHEN, N. J.**

## CURRENT PAPER TRADE LITERATURE

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

**Theory of Atmospheric Evaporation.**—W. H. Carrier, *J. Ind. & Eng. Chem.*, xii, 432-8 (May, 1921).—A mathematical development of the subject, proving the following points: The rate of evaporation at any instant per unit of surface is proportional to the difference in vapor pressure between the liquid and the vapor of that liquid in the immediate vicinity. Other conditions being constant, the rate of evaporation increases in direct proportion to the velocity. (Cf. W. H. Carrier, *Proc. Am. Soc. Heat. Vent. Eng.*, xxiv (1918); Thomas Box, *A Treatise on Heat*, 1870.) The rate of evaporation is substantially proportional to the wet bulb depression, when the material is not heated, and 95° depression is approximately equivalent to 1 in. difference in vapor pressure in the evaporation formula. The drop in temperature of the air in the drier is proportional to the rise in vapor pressure of the air. The weight of evaporation is substantially the same at any temperature per degree depression. The capacity of air for producing evaporation is directly proportional to its wet bulb depression. For a given exposed surface and air quantity, the ratio of the final depression to the initial depression is constant regardless of changes in dry bulb temperature or moisture content of the air.—A. P.—C.

**Tunnel Driers.**—Grahame B. Ridley, *J. Ind. & Eng. Chem.*, xiii, 453-60 (May, 1921).—Tunnel driers may be built suitable for drying any material which can be handled economically on trays. Materials that will stand a higher temperature when wet than when dry can generally be dried most rapidly when they enter the tunnel at the hot end, as the temperature of the cold end then becomes the limiting temperature, and a higher average temperature may be maintained. The highest thermal efficiencies are obtained when the air is discharged at the highest relative humidity that the condition of the product will permit. It is usually more economical to use a large quantity of air at high velocity with recirculation, than to use a small quantity of air with low velocity and no recirculation.—A. P.—C.

**Compartment Driers.**—W. H. Carrier and A. E. Stacey, Jr., *J. Ind. & Eng. Chem.*, xiii, 438-47 (May, 1921).—An outline of the field of the compartment drier, its advantages and limitation, of the methods of heating and of moisture removal, of the classification of compartment driers, and of the various types of compartment driers.—A. P.—C.

**Spray Process of Drying.**—R. S. Fleming, *J. Ind. & Eng. Chem.*, xiii, 447-9 (May, 1921).—Outline of the apparatus required, nature of the process, advantages of preconcentration, recovery of product, temperature of drying, and application of the process.—A. P.—C.

**Direct Heat Rotary Drying Apparatus.**—Robert G. Merz, *J. Ind. & Eng. Chem.*, xiii, 449-52 (May, 1921).—Description of the various types of direct heat rotary driers, of their general mechanism, applications, advantages and disadvantages, with a brief discussion of their efficiency and of the advisability of utilizing waste heat from other processes to heat them.—A. P.—C.

**How to Increase the Efficiency of Waterpower Plants.**—Charles M. Allen, *PAPER TRADE JOURNAL*, lxxii, 16; *Paper*, xxviii, 7 (April 20, 1921); *Paper Mill*, xlv, 16.—Description of the Alden dynamometer (See *Transactions, A. S. M. E.*, xxxii, P. 275), and the method of using it, followed by a discussion of the following points on the efficiency of waterpower plants: gate

opening, wheel settings, inspection and cleaning of wheels, keeping trash racks free, obstructions in the draft tube and tail race, proper speed for maximum efficiency.—A. P.—C.

### UTILIZATION OF WASTE LIQUORS

(Continued from page 44)

hesive: The sulphite liquor contains, in addition to gypsum and other mineral constituents, a considerable amount of water soluble plant glues, vegetable albumins and gums; upon evaporation to 30° Bé, the resulting liquid possesses a noticeable adhesive and binding power, which, however, is not water-resistant but, on the other hand, is very hygroscopic.

A water-resistant adhesive may be prepared from the waste liquor in the following way: The liquor (dilute or concentrated) is treated by mixing with as much protein substance (chondrin, gluten, glue, blood, albumin, casein, fibrin) as the liquor itself contains adhesive matter and the whole well stirred. Upon adding to this mixture a very dilute acid, such as sulphuric acid, or a solution of an acid-reacting salt, such as alum or ferric sulphate, a sticky mass separates, the adhesive, which is water-insoluble; the water-soluble adhesive of the waste liquor has combined with the water soluble protein substance to form the water-insoluble adhesive.

The following may serve as examples: 10 g. dilute waste liquor were mixed with 5 g. of a 10 per cent solution of fish glue solution and to this mixture 10 g. of a 10 volume-per cent sulphuric acid added, which caused the separation of the adhesive. (2). 10 g. of a concentrated waste liquor (35° Bé) were mixed with 10 g. of 15 per cent joiner's glue and the adhesive precipitated by adding 10 g. concentrated alum solution. The dilute acid or alum solution may be first added to the sulphite liquor and then the protein solution added, or the acid or alum solution may be mixed with the protein solution and this added to the sulphite liquor. The adhesive or binding material is washed with water after separating from the waste liquor. In order to use this with greasy, sandy or dusty materials, these are first moistened with the acid or alum solution and then the liquor containing the protein solution added. The product is thoroughly mixed and pressed. The reverse order may also be used, the acid or alum being added after the protein solution.

#### Hüttenes' Attempt at Gelatinization

Karl Hüttenes (German patent 316,234) attempted to gelatinize the liquor by the addition of chemicals. This procedure greatly decreases the adhesive properties. For example, 1,000 kilo of crude sulphite liquor (3 to 8° Bé) were mixed with 10 kg. lead acetate and then concentrated. This gives a pale colored adhesive which may be used without question.

German patents 307,667 and 307,668 (Papier- und Zellstoffwerke Feldmühle A. G., Berlin) prepare an insoluble lignin product suitable for sizing paper from lignosulphonic acid of the sulphite waste liquor by adding the pure or crude, dilute or concentrated liquor in a thin stream to a hot solution of alkali and heating until the end of the decomposition.

(To be continued)

#### Change in H. Plaut Trading Co.

Notice has recently been received of the withdrawal of Tomaso Bellettati from the H. Plaut Trading Company at Buenos Aires. Mr. Bellettati will live in Europe after retiring from active business and the firm will continue, under the same name, with Henry Plaut and Leon Arcave as the only partners.

## Steam Economy in Paper Mill



One of the most vital factors in paper mill operation is that of steam supply for drying the paper, heating the mill and driving the machinery. With a steam horse power year running \$175 and upward, the saving of even a few pounds of steam an hour means a material saving per ton of product.

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150 Nassau St., New York City

## Recent Incorporations

ARGO PAPER MILLS CORPORATION, Delaware. Capital \$3,000,000. Attorney, Corporation Trust Company of America, Wilmington.

ITKIN & MINTZ PAPER BOX CORPORATION, Manhattan, New York. Capital \$8,000. Incorporators, N. and B. Mintz, S. Itkin; attorneys, Kleiner, Britwitz & Nadel, 299 Broadway.

SIMPLEX PAPER ACCESSORIES COMPANY, Brooklyn, N. Y., machinery. Capital \$25,000. Incorporators, P. H. Horwitz, L. La-veck; attorney, D. E. Latham, 280 Broadway.

OLYMPIAC PAPER AND POWER COMPANY. Capital \$5,000,000. Incorporators, Edward D. M. Mills, Seattle, Wash.; I. Sellerbach, M. R. Higgins, San Francisco; attorney, Corporation Service Company.

### New Factory of the Liberty Paper Co.

BELLOWS FALLS, Vt., August 29, 1921.—The Liberty Paper Company, whose New York offices are at 203 Lafayette street, is occupying its large new factory, a picture of which is presented here-



NEW PLANT OF THE LIBERTY PAPER COMPANY

with. It is a concrete structure 240 feet long and contains approximately 50,000 square feet. It was built for the company by the Guarantee Construction Company of New York and is considered a particularly fine piece of work. The floors are constructed heavily, carrying a floor load of 250 pounds per square foot, and the entire factory is as near fireproof as possible. All the usual modern conveniences of locker rooms, shower baths, etc., are included. The company has its sidings extending the entire length of the factory and a coal pocket where it can conveniently dump its coal.

The factory was planned with the idea of manufacturing their other specialties besides gummed tape, but in view of present business conditions the company has not started on any of them yet.

The company takes a special pride in its printing department in which it prints all of its own tape and also handles quite a little roll printing for other concerns. This department is equipped with both flat-bed and rotary presses.

### Black-Clawson Co.'s Business Expanding

[FROM OUR REGULAR CORRESPONDENT.]

DAYTON, Ohio, August 29, 1921.—The Black-Clawson Company, manufacturers of paper machines, Hamilton, O., is reported to be doing a fairly good business, having several contracts of substantial size.

The company has managed to keep in operation the greater part of the season and by arranging hours, the largest part of the working force has been given employment.

The company is understood to be working on a 132 inch Four-drier for the Waterway Products Company of Chicago, which will be installed on the first unit of this concern. The company is building a two machine mill now, with the intention of adding to the plant as rapidly as possible until a series of five mills are completed. It would seem altogether probable that other contracts would be sent to the Miami Valley as the company's plans are reported to embrace a probable expenditure of \$5,000,000.

The Black-Clawson Company also is reported to have secured a contract for a standard sized paper machine for the Lawrence Bag Company of Miamisburg which is making enlargements.

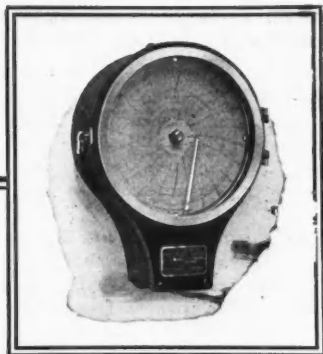
The Lawrence company is a new organization composed of men who are thoroughly experienced in the "paper business," and in the manufacture of grocers' bags of known quality. James Lawrence is at the head of the company; W. F. Lawrence is secretary, George Brown treasurer, and A. M. Walburg and Thomas G. Means vice-presidents.

It is understood that they will make every effort to place the new concern in the forefront of Miami Valley industries.

### Cuts Price of News Print

MINNEAPOLIS, Minn., August 27, 1921.—The Minnesota and Ontario Paper Company announced today a price of \$88 per ton for news print paper for the months of October, November and December. This is a further voluntary reduction of \$10 per ton from the contract price, and is in addition to a reduction already given of \$5.





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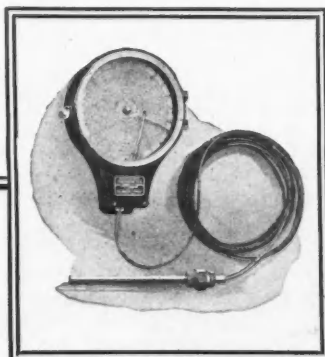
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have earned the confidence which could not be gained otherwise. They have proved beyond any doubt that the performance in service is all and more than we claim.

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### Recent Contracts

Riordan Company, Limited—Temiskaming, Canada.

Toronto Paper Mfg. Company, Limited—Cornwall, Ont.

Diesen Wood Company—Wiborg, Finland.  
Iggesund Cellulose Fabriker—Iggesund, Sweden.

The Kellner Partington Paper Pulp Co.—Sarpsborg, Norway.

Titagur Paper Mills Co., Ltd.—Bengal, India.

Eaton, Crane & Pike Co.—Pittsfield, Mass.

Falulah Paper Co.—Fitchburg, Mass.

Hampshire Paper Co.—South Hadley Falls, Mass.

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## BIDS FOR PAPER FOR U. S. GOVERNMENT

WASHINGTON, D. C., August 31, 1921.—The purchasing officer of the Government Printing Office has received the following paper bids:

50,000 pounds 26 x 38, No. 50, Chip Board: Dobler & Mudge, at \$30 per ton; C. L. La Boiteaux Company, \$27.40; LaFayette Box Board and Paper Company, \$31.60; United Paperboard Company, \$31.40; Geo. W. Millar & Co., Inc., \$34.00; Philip Rudolph & Son, Inc., \$32.50; Mathers-Lamm Paper Company, \$27.40; Knickerbocker Supply Company, \$38.40; Republic Bag and Paper Company, \$34.00; R. P. Andrews Paper Company, \$39.70; Old Dominion Paper Company, \$37.80 and Coy, Hunt & Co., \$31.48.

4,000 pounds 26 x 38—No. 50, Strawboard: C. L. La Boiteaux Company, \$.0327 per pound; Old Dominion Paper Co., \$.0374; Philip Rudolph & Son, Inc., \$.0457; La Layette Box Board and Paper Company, \$.031; Geo. W. Millar & Co., Inc., \$.04175.

500 pounds 24 x 36—40 pounds Tablet Stripping Machine Paper in 24 in. rolls: Paper Manufacturers Company, \$.085 per pound; R. P. Andrews Paper Company, \$.0795; Mathers-Lamm Paper Company, \$.06375; Whitaker Paper Company, \$.0669; Old Dominion Paper Co., \$.069; Geo. W. Millar & Co., Inc., \$.0775.

50,000 pounds 25 x 30—No. 20, Binder's Board No. 2: C. L. La Boiteaux Company, \$.0249 per pound; R. P. Andrews Paper Company, \$.0204; Mathers-Lamm Paper Company, \$.0226; Whitaker Paper Company, \$.0226; Geo. W. Millar & Co., Inc., \$.0275; Dobler & Mudge, \$.022; Philip Rudolph & Son, Inc., \$.02922; Louis Schulman Company, \$.034875; Coy, Hunt & Co., \$.0369; Knickerbocker Supply Company, \$.0303.

9,800 pounds 22 x 28—196. White China Board: Holyoke Card and Paper Company, \$36.00 per M sheets; Geo. W. Millar & Co., Inc., \$53.50; R. P. Andrews Paper Company, \$35.90; Dobler & Mudge, \$27.80; Carter, Rice & Co., Corp., \$30.50; B. F. Bond Paper Company, \$31.30; Old Dominion Paper Company, \$28.48; T. Barrett & Son, \$34.50; Whitaker Paper Company, \$34.93.

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

10,000 pounds 34 x 44 No. 10, Trunk Board; Old Dominion Paper Company, at \$.04199 per pound; R. P. Andrews Paper Company, \$.051; Mathers-Lamm Paper Company, \$.042; Whitaker Paper Company, \$.0323; Philip Rudolph & Son, Inc., \$.034; Coy, Hunt & Co., \$.038; Louis Schulman Company, \$.039; C. L. La-boiteaux Company, \$.03285.

1,150 pounds 17 x 28—11½ pounds No. 9, Yellow Writing Paper: Whitaker Paper Company, at \$.1793 per pound; Mathers-Lamm Paper Company, \$.2058; Rainbow Paper Corporation of New York, \$.1934, and Coy, Hunt & Co., \$.20.

4,000 pounds 26½ x 41—100, India Tint Coated Cover Paper: Dobler & Mudge, \$.0975 per pound; R. P. Andrews Paper Company, \$.109; Whitaker Paper Company, \$.0925; Mathers-Lamm Paper Company, \$.111; Geo. W. Millar & Co., \$.1237, and Coy, Hunt & Co., \$.10.

### What It Costs to Plant Artificial Forests

NEW YORK, August 30, 1921.—The first survey of the actual cost of commercial planting of forests now being made by the Woodlands Section of the American Paper and Pulp Association is showing some surprising results, indicating that the costs are much lower than has customarily been estimated. The paper mills of the country are beginning on an extensive scale to grow from the seed up their trees from which their future paper will be made, and the chief handicap to success is now found in taxation methods, which prove a constant drain on the owner during the period of growing the crop.

The cost figures have been classified by districts. The New York

cost is figured at less than \$15 an acre in most cases. One extensive plantation cost \$13 per acre, including cost of stock. Another figured the cost of seedlings at \$4 per thousand, while still another found that by planting tree seeds in an ordinary truck garden as an auxiliary crop, it cost only \$40 to \$50 to produce 200,000 transplants.

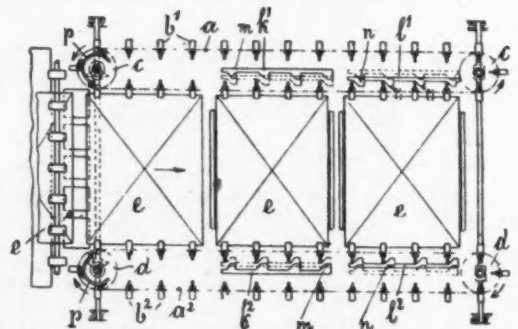
One big Canadian company found its cost, planting much closer than is the custom in the United States, to be \$15.12 an acre. Ohio, planting cottonwoods, fixed the cost at \$13.93 per acre.

New Jersey plantings, with a wide variance in species and locations, found a cost varying from \$5 to \$15 per acre. Vermont's costs ran to no higher than \$12, with an average of \$9 per acre, and the New England success in general ran high, ranging from 80 to 95 per cent of survivals.

This low cost figure for establishing new forests, indicates that there will be a wide expansion of reforestation activity by paper mills in the East which must grow trees for their future supply or depend on imported raw material.

### Carrying Paper and Board Sheets

George Spiess of Leipzig obtained German patent No. 336,750, class 55e, group 5, on carrying and moving sheets of paper or board, marked e, by endless chains, marked a1 and a2, holding the sheets by clasps, marked b1 and b2, in a horizontal position or



approximately so. The endless chains can be shifted parallel to one another. The endless chains revolve around c and d. A contrivance opening the clasps is marked p. Moldings marked k1 and k2, l1 and l2, with their incline marked m and n cause the clasps to drop the sheet, the number of clasps holding one sheet opening simultaneously.

### To Represent Reeves Pulley Co. in New York

The Reeves Pulley Company, Columbus, Ind., has perfected arrangements with Manning, Maxwell & Moore, Inc., of 119 W. 40th street, New York, whereby the latter assumes the exclusive agency for "The Reeves" Variable Speed Transmission in the New York territory.

Manning, Maxwell & Moore will carry a very complete assortment of repair parts for these Transmissions so immediate delivery can be made on these.

Manning, Maxwell & Moore will carry a carload of complete Variable Speed Transmissions of various sizes and classes in stock so prompt deliveries can be made when the customer is in a hurry for machines.

They will have a completely organized Variable Speed Transmission Department, in charge of expert engineers in this line who will look after the interests of their clients.

Manning, Maxwell & Moore will also handle "The Reeves" Wood Split Pulley along with their complete line of power transmission goods and now have a stock in their warehouses.

# HEINE <sup>LARGE UNIT</sup> BOILERS

Longitudinal Drum Water Tube Boilers.

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## SELLING AND MANUFACTURING METHODICALLY

BY T. J. BURKE, C. A. SEC.-TREAS., COST ASSOCIATION OF THE PAPER INDUSTRY

"The right goods at the right price" is a sign I have noted frequently of late as appearing in the windows of many stores. It is a notice that strikes at the very root of things. The jobbers and retailers advertise as having the right goods at the right price, but what about the manufacturers? What steps do they take to make sure that they have the right goods at the right price? Taking your own case, for example, are you satisfied that your products can be considered to be within this category? Not only are you satisfied that they may be so considered, but are you absolutely sure that this is the case? In order to be quite sure you must have reliable figures, and now, to come to the climax of the matter, have you these reliable figures? What is your policy regarding your products? How have you formulated this policy?

In these days when business has to be stalked as carefully as one would stalk a deer, it is absolutely essential that every scientific aid possible shall be used. Up-to-date cost systems are essentially scientific aids to business, their usefulness lying in the fact that they help manufacturers to sell scientifically and to manufacture methodically, by enabling him to push, through his Sales Department, those goods on which he makes the most profit and to control, through his Production Department, his output, so that it will keep pace with the sales made.

### Paper a Fundamental Commodity

Paper must certainly be considered one of the so-called fundamental commodities today, and the only trouble with these commodities has been very largely one of price. Certainly, the demand for paper has fallen off, but as stated above, it is a fundamental commodity and there must always be what might be called a basic demand which must be supplied. This basic demand has undoubtedly been kept at its lowest possible ebb, mainly on account of the general distrust of prices.

It is absolutely necessary that prospective purchasers be made to feel that prices will not go lower and that therefore their competitors will not gain any advantage over them by waiting a little longer. In other words, confidence must be inspired in prospective buyers. The dictionary definition of "confidence" is given as "trust" or "reliance." I ask the question, how can prospective purchasers be expected to put reliance in the prices quoted when there are such big variations and so many changes. Undoubtedly some of these changes are due to what may be called fundamental reasons, but many of them are due to a desire to get business at any price and therein lies the danger. To build up "confidence" is one thing, to play the "confidence-game" is another. To go back to the dictionary, the definition given of "confidence-game" is a swindling scheme to get money. That's rather a strong expression to use in connection with the manufacturers who sell their products below cost, but if we give the matter serious attention and consideration, it would appear that the term "confidence-game" approaches very closely what they are doing. They are attempting to build up confidence by resorting to unfair methods of business, for manufacturers who sell their products at less than cost price are resorting to unfair methods of business, inasmuch as they know quite well that there must come a time when they will no longer be able to sell on the same basis. What they hope to do is to secure business at the lower basis, and then, after having lulled the purchaser into a feeling of security, to gradually work on to a high price basis.

### When Products May Be Sold Below Cost

That manufacturers may sell their products at slightly below cost with the hope of keeping their organization together and taking care of their overhead thereby eliminating the heavy cost

of shutting down is, of course, perfectly legitimate, but what might be termed illegitimate competition is competition from manufacturers who cut prices below this mark. There are not many manufacturers who are frankly willing to do this, but there are many manufacturers who do it nevertheless, simply because they do not know what they are doing. How can they know, since they have to wait until perhaps the end of a six months' period before they can state definitely whether they have made a profit or a loss? In the meantime, by means of rule of thumb methods, they endeavor to ascertain how things are going. Naturally such a method breeds fear, and a man who is afraid of what may be in store is not in a position to use his best business judgment. He generally decides that whatever else he does, he must keep the mill running. He feels that as long as there is something to do that he must be better off than he would be if he were shut down altogether, because then his equipment would be idle and earning him nothing, while as long as his machines are running, even only part time, he feels they are earning something for him. What he overlooks is the fact that while he would be losing his fixed charges and could not expect any interest from his investment while his mill was shut down, yet the goods that he manufactures and sells may mean a much bigger loss to him at the prices he quotes, inasmuch as the cost of the raw material and labor which he has to put into those goods may not all come back to him but only a part thereof and his loss will thus be increased.

### Many Benefits from Modern Cost System

These are all very simple facts known to a great many and yet there are still manufacturers who are not convinced of the benefits which they would derive from an up-to-date cost system. They much prefer to take these big risks, because forsooth they might have to add the expense of two or three extra clerks and one good cost manager. Knowledge is power, and a proper knowledge of your production costs must and will mean a better ability to do business. Right here I would like to urge the necessity for a really up-to-date cost system. Such methods, for instance, as "distributing overhead expenses in accordance with the percentage of direct labor" cannot be called scientific nor reliable. I therefore urge all manufacturers of paper when taking up this cost question to make a good job of it and to get the best possible advice. Do not employ a cost man because a friend told you he was a good bookkeeper. Very big strides have been made by cost accountants in recent years and the leaders amongst them are very far-seeing, clever accountants.

Strongly enough, manufacturers have never had to be persuaded very strongly of the necessity for getting the best salesmen available and they have always been willing to pay the salesmen big salaries. Undoubtedly the best ones are worth the salaries they receive because they will supply the manufacturer with a lot of useful information regarding the possibilities for selling his various products in different territories. Now if any manufacturer has a scientific cost system he is in a position to work out, on a scientific basis, just what price he can quote in those various territories for the products likely to sell best there and how those prices compare with the prices quoted by his competitors. In this way he can pick and choose the most profitable business, and this is the business, which it is all the more desirable and necessary to have, at a time when the mill is running below normal.

### Large Paper Concerns Convinced

There never was a time when the profits to be derived from a properly constructed and well-thought-out cost system were greater, nor could be used to better advantage. Such large com-

(Continued on page 56)

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**CORDAGE**

## PLANT FOR REDEMPTION OF PULP FROM PINE STUMPS

With reckless extravagance the lumberman and the naval stores operator have for years been destroying the virgin pines of the South. Only about one-third of the tree ever reaches the market in the form of lumber, lath, or shingles, while a few years of the wasteful American method of tapping turpentine from the living tree are sufficient to cause its death. In place of the forests of yellow pine which a generation ago covered more than one-quarter billion acres of land in the South, there exists today an expanse of desolate barren studded with stumps blackened by the fires which from time to time sweep over them.

The yellow pine stumps do not send up a second growth like the northern deciduous trees, and because of their resinous nature, do not decay in a lifetime. They remain an obstacle to agriculture and to the development of the land.

Because of the expense of removing them, not more than one-tenth of this cut-over land has ever been reclaimed for agriculture or grazing, in spite of the fact that there remains locked up within these stumps a potential wealth far greater than was obtained from the trunks that have given their substance to naval stores and lumber industries.

For three-quarters of a century engineers, chemists, and business men have endeavored to devise means to unlock this underground storehouse of wealth. The efforts of the inventive genius have been directed mainly along three distinct lines. The first to be suggested was the destructive distillation of the stump and trash wood. This produced tar, pitch and charcoal having sufficient value to offset a portion of the cost of clearing the land. These processes have recently developed and have become moderately profitable, particularly on account of the value of flotation oils for use in the mining industry.

The second scheme of reclaiming this underground wealth was to cut the wood into fine chips and then steam in a closed vessel under sufficient pressure to distil off the turpentine, the steamed wood then being dried and used for fuel. This became profitable when it was found that after steaming, the wood could be used as a source of supply of rosin by extraction with a solvent. This modified plan known as the steam and solvent process is now operated successfully, and with a profit in many locations.

The third proposal was to utilize the fiber of the wood for making pulp and paper. This could be done only with difficulty by the acid pulp methods most common to the industry, because of the extremely resinous nature of the wood.

### Value of Waste Wood for Paper Making

The enormous waste of the yellow pine wood in the South Atlantic and Gulf States attracted the attention of Joseph H. Wallace & Co. in 1906. They found that the pulp mills of Sweden were employing what was known as the "Sulphate" process, and were successful in making pulp from wood containing considerable resin. They began experiments with a view of utilizing this waste as raw material for the manufacture of chemical fiber and paper, and after a demonstration in the laboratory made an actual commercial run in a Swedish mill on a load of resinous pine waste material from the southern states. This test was successful, and as a result they designed and erected (1912-1913) the mill of the Southern Paper Company at Moss Point, Mississippi. This mill was operated for three years under their supervision, and during that period produced chemical pulp and kraft wrapping paper at a lower cost of production than has ever been obtained by any other plant in the world. This plant thoroughly demonstrated the value of the waste wood as raw material for pulp and paper, and several plants of similar character are now operating profitably along similar lines.

There exist then, three distinct methods, each of which is successful, but none of which recovers any great percentage of the

potential wealth of the stump and logging waste. Both the destructive distillation and the steam and solvent methods result in the destruction of the fiber on which the pulp and paper manufacture depends, notwithstanding that the market value of the fiber in the form of pulp is ordinarily as great as that of all the other products.

In 1916 they outlined a program of research with an ultimate object of combining.

1. The manufacture of chemical fiber suitable for kraft wrapping or book paper and test board.
2. The by-product manufacture of naval stores (turpentine, pine oil and rosin).
3. The destructive distillation of "trash" (material unsuitable for fiber).
4. Improvement of lands.

Superficially it would appear an easy matter to make paper from the residue remaining by the steam and solvent process. It has not been accomplished, however, in the past, because the efficiency of the extraction methods in vogue have depended largely upon reducing the wood to such a finely comminuted state that it is no longer serviceable for pulp making.

### Utilizes Every Part of Stump

As a result of about fifteen years' study of the yellow pine waste material, they are able to announce that by experiments in their laboratory based largely upon the experience of others, as shown by a careful study of the Patent Office records including examination of over 800 patents, the problem has been solved. All three methods above mentioned for utilization of this material have been combined in one, well balanced combination of processes, which utilizes every part of the stump and logging refuse in a most efficient and economical manner. This process has one enormous advantage over previous methods in that the treatment of the material can now be divided into two distinct parts, which parts can be separated from each other as widely as may be necessary.

The preliminary treatment will take place in a small semi-portable field plant of a very simple design, operating at a central point in the land clearing scheme. These field plants will produce turpentine, pine oil, rosin, pyroligneous acid, and tar—as well as a main product—pulp chip—of a uniform moisture and resin content. These crude products are transportable more cheaply than the original wood itself to centrally located plants and existing mills where the manufacture of pulp and paper and refining operations are carried out. Pulp and paper plant may now be located where manufacturing and labor conditions are most favorable, and where conditions justify large outlay of capital investment at fixed locations.

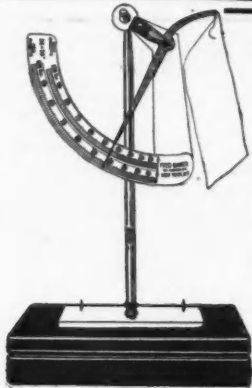
At the field plant the chips are sorted into (a) material suitable for pulp making, (b) material physically unsuitable for pulp making, either because of partial decay or containing too much knot or imperfect material, and including bark, sawdust, etc.

The material unsuitable for pulp manufacture (termed "trash") will be used as raw material for destructive distillation, producing, in addition to the usual acid, flotation oils, etc., a fuel supply sufficient for all of the requirements of the field plant.

### Field Plant Simple as a Saw Mill

They require no more complicated apparatus than is found in the average saw mill, and no labor more skilled. The method involves only the performance of work. They extract turpentine, pine oil and rosin of high grade from the pulp chip before it is delivered to the pulp mill, and in doing so they modify the character of the main product, the chip, as to make it a new article,

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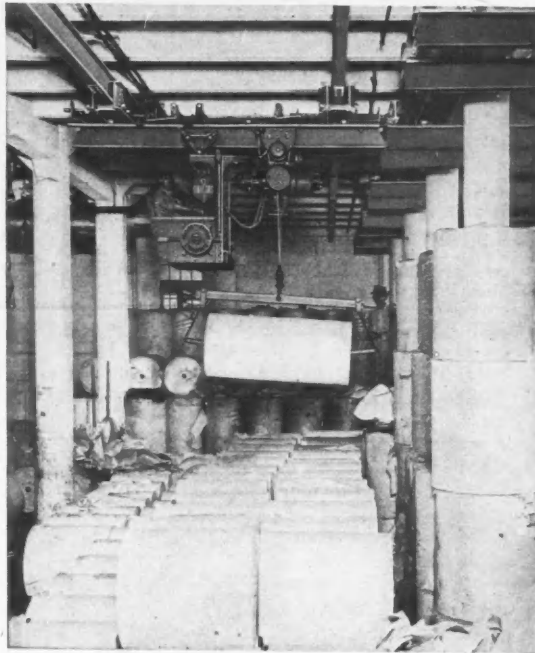


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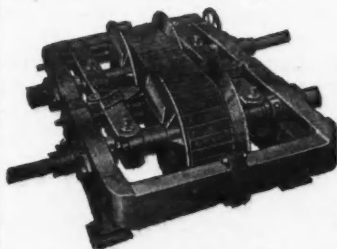
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The following are a few improvements and refinements incorporated in the manufacture of "THE REEVES" Transmission:

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**REEVES PULLEY COMPANY**  
 COLUMBUS, INDIANA

## PLANT FOR REDEMPTION OF PULP FROM PINE STUMPS

(Continued from page 54)

—a Standardized Chip. A chip that is uniform in resin content, acid content, and moisture content is now available for the first time in the history of chemical pulp manufacture. The use of a standardized material for pulp making will result in increased yield from digesters, superior quality and uniformity of product.

Their solvent is selective, and they obtain superior products in naval stores. The value of low grade resinous material left in the chip does not warrant its removal prior to the pulping treatment, where it is dissolved in the black liquor. Moreover its fuel value is utilized in the recovery of chemicals used in the pulp plant.

This process has been thoroughly demonstrated in their semi-commercial plant at Stamford, Connecticut, using waste material from cut-over pine lands owned by the Southwestern Settlement & Development Co. of Texas, selected by their forester, Mr. W. S. Uhler. The material was divided by him into classes that could be differentiated by woodsmen in clearing the lands.

The yield of products was sufficient in each case to justify commercial exploitation of the class of material selected. The variation in yields between the several classes is not pronounced enough to establish any great difference in value. It would probably be best to throw them all into one class. The yields would then become those shown in the following table, in the calculation of which the yields from each class have been "weighed," according to the proportion that class formed of the total shipment of wood to their laboratory.

	Per Cord
Pulp (air dry).....	825 lbs.
Turpentine .....	8.2 gals.
Pine oil .....	6.8 gals.
Rosin (280 lbs. per bbl.).....	1.65 bbls.

also the solvent, to the extent of the manufacturing requirements, and a heavy oil having medicinal properties, .33 gallons.

The results in value of product from an average cord are given in the table below, based on Average Market Values:

Product	Yield Per Cord	Average Market Values					
		First Half 1916		First Half 1919		First Half 1921	
		Unit Price	Value	Unit Price	Value	Unit Price	Value
Pulp (air dry)	825 lbs.	\$0.18	\$14.85	\$0.05	\$41.25	\$0.03	\$24.75
90% .....	825 lbs.	.481	3.94	.709	5.81	.60	4.92
Turpentine .....	8.2 gals.	.55	3.74	.81	5.51	1.48	10.06
Pine oil .....	5.8 gals.	5.41	8.93	13.03	21.50	5.83	9.61
Rosin (280 bbl.)	1.65 bbl.						
			\$31.46		\$74.07		\$49.34

The above table includes only those products which are the result of the prior treatment in the field plants of that portion of the wood waste which are physically adapted to pulp manufacture. These are dependent on the methods developed in their own laboratory and are protected by applications for patents that are believed to be comprehensive and sound.

They do not include the products that will be obtained by a destructive distillation of the "trash" material, and which will be dependent to some extent on character of distillation plant that may be selected.

There are several available kinds of destructive distillation plants and this selection is a matter of further consideration.

It is apparent, however, from an actual test on a ton of trash material that the destructive distillation plant will add 25% to 30% to the values of products shown in this table, besides furnishing sufficient fuel to operate the entire field plant. This fuel can be in the form of charcoal and pitch in combination (briquettes) or producer gas.

The field plant will be assured of sufficient fuel as the final by-

product of the operations in the woods, so that no refinement of power plant and no water supply for condensing is required.

The temperature required in the extraction and drying are less than that of boiling water, so that exhaust steam from a power unit of the ordinary non-condensing type will be sufficient for this purpose.

## SELLING SCIENTIFICALLY

(Continued from page 52)

panies as the International Paper Company, American Writing Paper Company and others have been thoroughly convinced on this point and have spent many thousands of dollars in perfecting their cost organizations. They fully realize the benefits that would accrue to the pulp and paper industry as a whole, if all the manufacturers in the industry could be brought to a realization of these benefits, and that is why they are supporters of this association. I have sometimes had it said to me by a small manufacturer, "Well, I can understand a large company like that wanting a cost system, because it is not possible for them to give the personal supervision to their different departments that I can give." This is the kind of man who is very difficult to convince. He points to the fact that he has always made money, or until recently, and further states that he expects to do so in the future. He seems to overlook entirely the possibility that he might have made a good deal more money than he has if he had manufactured on a methodical basis, so that he produced just those products which his salesmen could sell at the largest profit.

### A Matter of Common Sense

After all, it is merely a matter of common sense, and when manufacturers generally recognize this, there will be less hesitation about realizing the importance of the Cost Department. Unfortunately, there have been failures amongst the cost men, just as there have been failures in every other line of business. Nevertheless, the bulk of the systems installed have been very successful and I can give quotations today from a large number of presidents of well-to-do companies clearly setting forth their belief in cost systems and their reasons for this belief. I know that all these manufacturers will be represented at the Convention which this Association will hold at the Drake Hotel in Chicago on October 6 and 7 next. They are doing fine work by spending their time and money in an endeavor to place the pulp and paper industry on a sound economic basis by impressing upon the manufacturers within that industry the importance of the cost question and the necessity for installing up-to-date cost systems in their mills. Instead of playing the "confidence game" they are striving to restore "confidence" in general.

### Confidence Shaken by Price Slashing

This confidence has been somewhat rudely shaken by the slashing of prices which has taken place within recent months. This cut-throat competition could be eliminated by the adoption of uniform cost accounting systems such as are in use in many associations today. I seriously urge groups of manufacturers making the same products to get together and tackle this problem seriously. Like a good many other problems, it looks much larger than it really is. No one questions now the very large benefits that have accrued to the printers through the excellent uniform cost accounting system which has been adopted throughout that industry. While talking to a gentleman who was connected with the United Typothetæ of America for many years recently, I learned that they were expending over \$2,000,000 a year in giving service to their members. Surely the pulp and paper industry is as big a one as the printing industry, since the latter could not exist without the former.



Howard Bond

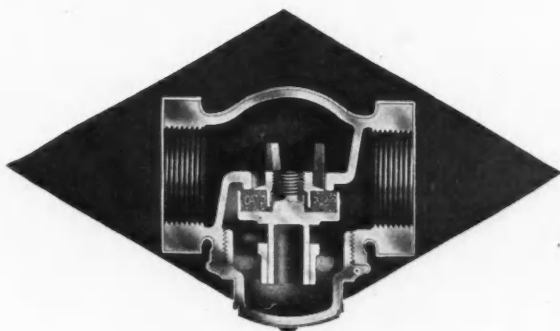


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**Figure 117**

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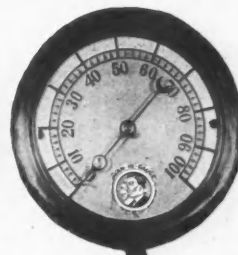


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## New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,  
WEDNESDAY, AUGUST 31, 1921.

The anti-dumping investigation by the United States Treasury Department, some of the results of which have been made public during the week, seems to be occupying most of the attention of the trade this week. It is too early as yet to say just what the effect of the investigation will be on the market, but that it will have some influence is evident. In all probability it will help to stabilize prices which have grown a good deal firmer, anyway. The importers do not seem to be at all worried over the matter and say that they expect to continue to do business at the old prices in spite of it. Some of the importers have already been asked to furnish bonds on a small quantity of their shipments and it is thought that a test case will be made of these.

Although at the present writing most of the largest producers of news print paper have not announced their prices for contract news for the last quarter of the year, they are momentarily expected to do so. It is pretty well established in the minds of members of the trade that the minimum price will be 4 cents a pound and the maximum will not run higher than 4.50 cents. Rumor has it that one company is going to come out with a 3.75-cent quotation, but there is nothing to substantiate this and it seems hardly likely. During the past week news has been in fair demand considering general market conditions and manufacturers say they are looking forward to a good business in the fall. The lower price will undoubtedly do something toward stimulation of the demand.

Cuts have been reported in book paper during the week, but only from one or two of the smaller companies. It is doubtful whether this will influence the big producers who are holding fast to the present quotations which appear to be rock bottom. The demand has improved a little during the past week, although book paper is not hurrying back to normal. Doubtless the opening of the fall trade will uncover some good-sized orders and book manufacturers and jobbers say they are preparing for a good demand at that time.

A good and increasing demand is reported for tissues this week. The explanation lies in the clothing industry, which uses large quantities of this material for wrapping. The general reduction in the price of garments has started the public buying once more and clothing manufacturers have a good sized crop of orders for the autumn and Christmas trade. This creates a demand for tissue and the dealers in this city, together with the manufacturers, say that the lean period is now over.

Wrapping and other coarse papers are still in the doldrums. The demand is stagnant and buyers are not showing very much interest as yet. With the clothing industry picking up, however, the outlook is more hopeful than it has been for some time and it looks as though there would be a better demand soon.

Board is a great deal steadier this week and no price changes have been recorded. The demand appears to be greatly improved and the mills are almost all running once more. Those that are not are said to be making all preparations to get back to normal once more.

### Mechanical Pulp

It is said that mechanical pulp is still pretty scarce, but the demand is not normal yet, although it is considerably better than that which exists for other grades of pulp. Importations are about the same and owing to the sub-normal supply prices have held fairly steady.

### Chemical Pulp

Chemical pulp has gone down no further than it did last week when the Brown Company cut prices and the general situation is about the same. The demand is still poor and general conditions are rather unfavorable. Dealers say that when the anticipated im-

provement comes in the demand for paper there will undoubtedly be a corresponding pick up in pulp which will come a little later.

### Old Rope and Bagging

The demand for old rope is still stagnant, with prices mostly nominal and importations falling off. The same is true of bagging. This is due to the fact that jute and other papers made from these materials are also very slow and no real improvement can be looked for until these grades of paper get considerably better.

### Rags

Rags are also in poor demand, particularly in the imported grades, where the prices are all nominal. They are largely nominal in domestic rags, too, although dealers say the supply is under what it should be, and manufacturers are likely to find themselves short when they come into the market once more.

### Waste Paper

Waste paper is reported to be a great deal better this week, although the demand is spotty and is not showing a marked preference for one group. The price of mixed papers has gone up a little as has the price of news and soft white shavings. There is much more firmness in the other grades.

### Twine

Twine is still rather slow, although the demand is steadily getting a little better week by week. It is not expected that conditions will improve much before the middle of next month, when the paper men will begin buying again.

## Sutherland Paper Co. Doing Grand Business

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., August 29, 1921.—“People who think this country is going to smash had better take another look at conditions” remarked L. W. Sutherland, president of the Sutherland Paper Company, when asked how he found business these days.

The big Sutherland mill has been operating steadily all summer, is doing a fine business turning out dry cartons. Orders are now booked to insure a steady run for weeks ahead.

“I can say honestly that business conditions look better with us than for months” added Mr. Sutherland. “We have had little to complain of the past two or three months and the future outlook is even brighter. I contend we are in a position to know of general conditions, as we supply cartons for so many different lines of manufacture. I predict everybody will be busy next winter and very busy next year.”

Sam Graff, of D. Graff & Sons, paper stock dealers, added “there is business to be had if one just goes out after it. While things are not rushing, by any means, we are not discouraged at the showing made this year. The future also looks brighter.”

## Springfield Paper Firms Incorporate

SPRINGFIELD, Mass., August 31, 1921.—The Becker Paper Corporation has incorporated with capital consisting of \$50,000 preferred stock and 500 shares of common stock, having no par value. This corporation is to have offices in Springfield and New York, and its officers are: President, Karl Becker, of New York City; treasurer, Edward M. Miller, of Woodhaven, N. Y.; clerk, Franklin King, of Brookline; directors, the above, with Lester E. Flint, of Belmont, and Ernest R. Collins, of New York City.

Another concern in the paper field to incorporate is the Springfield Paper Stock Company, with an authorized capital of \$10,000. This corporation consists of Louis Kaplan, of 119 Massasoit street, president; Morris Lavin, of 117 Massasoit street, treasurer, and Charles V. D. Siegel, of 310 Main street, clerk.

# Market Quotations

## Paper Company Securities

New York Stock Exchange closing quotations August 23, 1921:

Stocks	BID.	ASKED.
American Writing Paper Company, pref.	23	25
International Paper Company, com.	44 3/4	45
International Paper Company, pref., stamped.	67	68
Union Bag & Paper Corporation	58	60

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

### Paper

F. o. b. MILL		
Ledgers	12	@ 30
Bonds	9.00	@ 55.00
Writings—		
Extra Superfine	13	@ 25
Superfine	13	@ 20
Tub Sized	13	@ 16
Engine Sized	9.00	@ 15.00
News—f. o. b. Mill—		
Rolls, contract	4.00	@ 5.15
Rolls, transit	4.75	@ 5.75
Sheets	6.00	@ 6.50
Side Runs	3.90	@ 4.80
Book, Cased—f. o. b. N. Y.—		
S. & S. C.	6.70	@ 8.50
M. F.	6.50	@ 8.25
Coated and		
Enamel	8.25	@ 11.00
Lithograph	9.00	@ 11.25
Tissues—f. o. b. N. Y.—		
White, No. 1	.75	@ 1.00
Colored	1.10	@ 2.15
Anti-Tarnish	1.50	@ 2.70
Manila	70.00	@ 90.00
Kraft—f. o. b. Mill—		
No. 1 Domestic	6.00	@ 6.50
No. 2 Domestic	5.00	@ 5.50
Imported	6.00	@ 6.50
Sulphite Screenings	2.00	@ 3.00
Manila—		
No. 1 Jute	8.00	@ 9.00
No. 2 Jute	7.75	@ 8.50
No. 1 Wood	5.00	@ 6.00
No. 2 Wood	4.50	@ 5.00
Butchers	4.90	@ 5.70
Fibre Papers—		
No. 1 Fibre	6.00	@ 7.00
No. 2 Fibre	5.00	@ 6.00
Common Bogus	1.80	@ 2.10
Card Middies	5.00	@ 5.75
Boards—per ton—		
News	35.00	@ 40.00
Straw	35.00	@ 40.00
Chip	30.00	@ 32.50
Binders' Board	65.00	@ 75.00
Sgl. Mld. Ld. Chip	55.00	@ 60.00
Wood Pulp	80.00	@ 90.00
Container	55.00	@ 60.00

### Mechanical Pulp

(F. o. b. Pulp Mills)		
No. 1 Domestic	25.00	@ 30.00
No. 1 Imported	25.00	@ 30.00

### Chemical Pulp

(Ex-Dock, Atlantic Ports.)		
Sulphite (Imported)—		
Bleached	3.75	@ 4.50
Easy Bleaching	3.00	@ 3.50
No. 1 Strong unbleached	2.50	@ 2.75
No. 1 Kraft	2.25	@ 2.75
Sulphite—		
Bleached	nominal	@ 3.75
(F. o. b. Pulp Mill.)		
Sulphite (Domestic)—		
Bleached	3.75	@ 4.25
Strong unbleached	2.50	@ 2.75
Easy Bleaching		
Sulphite	3.00	@ 3.25
News Sulphite	2.75	@ 3.00
Mitscherlich	3.25	@ 3.75
Kraft (Domestic)	2.25	@ 2.75
Soda bleached	nominal	@ 4.00

### Domestic Rags

Prices to Mill, f. o. b. N. Y.		
Shirt Cuttings—		
New White, No. 1	8.25	@ 8.50
New White, No. 2	5.50	@ 6.00
Silesias, No. 1	5.50	@ 5.75
New unbleached	7.50	@ 8.00
Washables	4.00	@ 4.25
Fancy	5.50	@ 5.75
Cottons—according to grades—		
Blue Overall	5.50	@ 6.00

New Blue	5.20	@ 5.50
New Black Soft	2.75	@ 3.00
New Light Sec.		
onds	2.25	@ 2.50
Khaki Cuttings	3.00	@ 3.25
Corduroy	3.00	@ 3.25
New Canvas	6.25	@ 6.75
New Black Mixed	2.50	@ 2.75

### Old

White, No. 1—		
Repacked	5.25	@ 5.50
Miscellaneous	4.00	@ 4.25
White, No. 2—		
Repacked	3.00	@ 3.25
Miscellaneous	2.50	@ 2.75
St. Soiled White	1.15	@ 1.35
Thirds and Blues—		
Repacked	1.75	@ 2.00
Miscellaneous	1.00	@ 1.25
Black stockings	1.60	@ 1.80
Cloth Strippings	1.00	@ 1.10
No. 1	1.00	@ 1.10
No. 2	.85	@ .90
No. 3	.70	@ .80
No. 4	.60	@ .70
No. 5A	.70	@ .80

### Foreign Rags

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

### Bagging

Prices to Mill F. o. b. N. Y.		
Gunny No. 1—		
Foreign	.90	@ 1.00
Domestic	.85	@ .95
Wool, Tares, light	1.00	@ 1.10
Wool, Tares, heavy	1.00	@ 1.10
Bright Bagging	.90	@ 1.00
No. 1 Scrap	.90	@ 1.00
Sound Bagging	.75	@ .85
Manila Rope—		
Foreign	3.75	@ 4.00
Domestic	4.15	@ 4.35
New Bu Cut	2.00	@ 2.25
Hessian Jute Threads—		
Foreign	4.25	@ 4.50
Domestic	4.00	@ 4.25
Mixed Strings	.80	@ 1.00

### Twines

Cotton—(F. o. b. Mill)		
No. 1	22	@ 23
No. 2	19	@ 20
No. 3	18	@ 19
India, No. 6 basis—		
Light	18	@ 19
Dark	17	@ 18
B. C., 18 Basis	39	@ 40
A. B., Italian, 18 Basis		
Finished Jute—		
Light, 18 basis	56	@ 27
Dark, 18 basis	24	@ 25

### Jute Wrapping, 2-6 Ply—

No. 1	25	@ 26
No. 2	23	@ 24
Tube Rope—		
5-ply and larger	17	@ 18
Fine Tube Yarn—		
5-ply and larger	30	@ 32
4-ply	31	@ 33
3-ply	32	@ 34
Unfinished India—		
3-ply and larger	16	@ 17
Paper Makers Twine		
Balls	10 1/2	@ 12 1/2
Box Twine, 2-4 ply	14	@ 16
Jute Rope	20	@ 24
Amer. Hemp, 6	32	@ 34
Sisal Hay Rope—		
No. 1 Basis	19	@ 22
No. 2 Basis	18	@ 20
Sisal Lath Yarn—		
No. 1	18	@ 19
No. 2	17	@ 18
Manila Rope	26	@ 28

### Old Waste Papers

(F. o. b. New York)		
Shavings—		
Hard White, No. 1	3.00	@ 3.50

Hard White No. 2	2.75	@ 3.30
Soft White No. 1	2.25	@ 2.40

Flat Stock—		
Stitchless	1.10	@ 1.20
Over Issue Mag.	1.10	@ 1.20
Solid Flat Book	.90	@ 1.00
Crumpled No. 1	.80	@ .85
Solid Book Ledger	1.60	@ 1.75
Ledger Stock	1.25	@ 1.50
No. 1 White, New	1.50	@ 1.60
New B. B. Chips	.45	@ .50

Manilas		
New Env. Cut	2.95	@ 3.15
New Cut, No. 1	1.75	@ 2.00
Extra No. 1, Old	1.05	@ 1.15
Print	.80	@ .90
Container Board	.65	@ .75
Bogus Wrappers	.50	@ .60
Old Krafts, machine compressed		
Bales	1.65	@ 1.75

News—		
Strictly Overissue	.60	@ .65
Strictly Folded	.40	@ .45
No. 1 Mixed Paper	.35	@ .45
Common Paper	.20	@ .25

### CHICAGO

[FROM OUR REGULAR CORRESPONDENT.]

Paper	F. o. b. Mill		
All Rag Bond	40	@	—
No. 1 Rag Bond	30	@	40
No. 2 Rag Bond	18	@	20
Water Marked Sulphite			
White	11	@	15
Sulphite Bond	9	@	12
Sulphite Ledger	14	@	15
Superfine Writing	23	@	30
No. 1 Fine Writing	20	@	27
No. 2 Fine Writing	18	@	25
No. 3 Fine Writing	11	@	14
No. 1 M. F. Book	5 1/2	@	7
No. 1 S. & S. C. Book	6 1/2	@	7 1/2
Coated Book	8 1/2	@	10 1/2
Coated Label	8 1/2	@	10 1/2
News—Rolls, mill	4 1/2	@	5 1/2
News—Sheets, mill	5 1/2	@	5 1/2
No. 1 Manila	5 1/2	@	—
No. 1 Fibre	5 1/2	@	—
No. 2 Manila	5	@	—
Butchers' Manila	4 1/2	@	—
No. 1 Kraft	6	@	—
No. 2 Kraft	5 1/2	@	—
Wood Tag Boards	5	@	—
Screenings	3	@	—
Boards, per ton—			
Plain Chip	30.00	@	35.00
Solid News	35.00	@	40.00
Manila Lined			
Chip	55.00	@	60.00
Container line			
85 Test	55.00	@	—
100 Test	60.00	@	—

Solid Wood Pulp	—	@	—
Straw Board	35.00	@	40.00
Filled Pulp Board	—	@	—

### Old Papers

Shavings—			
No. 1 Hard White	2.25	@ 2.50	
No. 1 Soft Shav.	1.75	@ 2.00	
No. 1 Mixed	.55	@ .65	
No. 2 Mixed	.55	@ .65	
White Envel. Cuttings	2.25	@ 2.50	
Ledgers and Writings	1.25	@ 1.40	
Solid Books	1.10	@ 1.20	
No. 1 Books, light	.75	@ .85	
Blanks	1.15	@ 1.25	
Ex. No. 1 Manila	1.60	@ 1.75	
Manila Envelope			
Cuttings	1.65	@ 1.75	
No. 1 Manilas	.75	@ .85	
Folders News (over issue)	.60	@ .65	
Old Newspaper	.30	@ .35	
Mixed Papers	.20	@ .25	
Straw Clippings	.20	@ .25	
Binders' Clippings	.20	@ .25	
Kraft	1.65	@ 1.75	
New Craft Cuts	1.75	@ 1.85	
Roofing Stock, L. o. b. Chicago, Net Cash—			
No. 1	18.00	@	—
No. 2	16.00	@	—
No. 3	14.00	@	—
No. 4	14.00	@	—

### PHILADELPHIA

[FROM OUR REGULAR CORRESPONDENT.]

Bonds	.10	@	.60
Ledgers	.15	@	.40
Writings—			
Superfine	.15	@	.20
Extra fine	.12	@	.22
Fine	.20	@	.30
Fine, No. 2	.20	@	.25
Fine, No. 3	.15	@	.20
Book, M. F.	.06	@	.09
Book, S. S. & C.	.08	@	.15
Book, Coated	.08	@	.15
Coated Lithograph	.10	@	.15
Label	.08	@	.15
News	.05	@	.07
No. 1 Jute Manila	.18	@	.18 1/2
Manila Sul, No. 1	.09 1/2	@	.10
Manila No. 2	.08 1/2	@	.09
No. 1 Kraft	—	@	.07
No. 1 Kraft	—	@	.08
Common Bogus	.02	@	.03 1/2
Straw Board	35.00	@	45.00
News Board	30.00	@	35.00

# Imports and Exports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

## NEW YORK IMPORTS

WEEK ENDING AUGUST 27, 1921

### SUMMARY

News print	1,574 rolls
Printing paper	1,681 rolls
Wrapping paper	560 bbls., 1,431 pcls., 527 reels
Packing paper	.884 rolls, 29 cs.
Cigarette paper	.425 cs.
Hangings	.26 bbls.
Wall paper	.15 cs.
Fiber paper	.47 cs.
Drawing	.4 cs.
Miscellaneous paper	.18 cs., 86 bbls.

### CIGARETTE PAPER

American Tobacco Co., Strathlorne, Bordeaux, 400 cs. cigarette paper; France, Havre, 25 cs. cigarette paper.

### PAPERHANGINGS

A. C. Dodman, Jr., Baltic, Liverpool, 26 bbls. paperhangings.

### WALL PAPER

A. Murphy & Co., Baltic, Liverpool, 15 cs. wall paper.

### WRITING PAPER

Goodman & Levy, France, Havre, 11 cs. writing paper; Lafayette, Havre, 3 cs. writing paper.

### FILTER PAPER

E. Fougere & Co., Strathlorne, Bordeaux, 47 cs. filter paper.  
H. Reene Angel & Co., George Washington, Bremen, 10 cs. filter paper.

### DRAWING PAPER

H. Reene Angel & Co., George Washington, Bremen, 4 cs. drawing paper.

### NEWS PRINT

National Park Bank, Toledo Bridge, Helsingfors, 1,266 rolls, news print.  
Mail Express Co., Hellig Olav, Copenhagen, 275 rolls news print.  
Sun-Herald Corp., Drottningholm, Gothenburg, 1,033 rolls news print.

### PRINTING PAPER

Equitable Trust Co., Ipswich, Hamburg, 924 rolls printing paper.  
Agar-Bernson Corp., Bannack, Hamburg, 657 rolls printing paper.

### WRAPPING PAPER

M. O'Meara Co., Toledo Bridge, Helsingfors, 420 bales wrapping paper; Hellig Olav, Copenhagen, 1,431 pcls. wrapping paper.  
Poland Paper Co., Drottningholm, Gothenburg, 140 bales, wrapping paper; same, 527 reels wrapping paper.

## PACKING PAPER

Republic Bag & Paper Co., Bannack, Hamburg, 750 rolls packing paper.  
Ladenling, Thalman & Co., Bannack, Hamburg, 134 rolls packing paper.  
Japan Paper Co., Bannack, Hamburg, 29 cs. packing paper.  
C. A. Johnson, Baltic, Liverpool, 86 bbls. paper.  
Mansell, Hunt, Catty & Co., Mesaba, London, 1 cs. paper.  
E. Daiber, West Inskip, Antwerp, 3 cs. paper.  
P. H. Petry & Co., Ipswich, Hamburg, 10 cs. paper.  
R. F. Downing & Co., Ipswich, Hamburg, 4 cs. paper.  
E. H. Sergeant & Co., Drottningholm, Gothenburg, 10 cs. filter paper.  
W. J. Byrnes, Lafayette, Havre, 5 cs. writing paper.

## RAGS, BAGGINGS, ETC.

Royal Mfg. Co., Olympe, Genoa, 89 bbls. cotton waste.  
Castle, Gottheil & Overton, Strathlorne, Brest, 400 bbls. rags.  
Irving National Bank, Bannack, Hamburg, 27 cs. paper stock.  
Mechanics' & Metals National Bank, Valacia, London, 22 bbls. paper stock.  
Mechanics' & Metals, National Bank, Belvedere, Alger, 97 bbls. rags.  
American Woodpulp Corp., Ipswich, Hamburg, 249 bbls. baggings.  
American Woodpulp Corp., George Washington, Bremen, 138 bbls. rags.  
Castle Gottheil & Overton, West Inskip, Antwerp, 35 bbls. rags.  
E. J. Keller Co., West Raritan, Hamburg, 61 bbls. rags.  
E. J. Keller Co., Walter Luckenbach, Rotterdam, 297 bbls. rags.  
E. J. Keller Co., Schiedyk, Rotterdam, 378 bbls. rags.  
E. J. Keller Co., Strathlorne, Brest, 841 bbls. rags.  
Castle, Gottheil & Overton, Strathearne, Brest, 400 bbls. rags.  
Castle, Gottheil & Overton, Valacia, London, 22 bbls. thread waste.  
Castle, Gottheil & Overton, West Inskip, Rotterdam, 35 bbls. rags.

## OLD ROPE

W. Schall & Co., Madonna, Marseilles, 177 coils.  
Berkshire Products, Inc., Strathlorne, Bordeaux, 840 rolls cordage.

## WOOD PULP

Scandinavian-American Trading Co., Songvand, Trondhjem, 1,900 bbls. moist chemical pulp, 380 tons.  
Scandinavian-American Trading Co., Toledo Bridge, Helsingfors, 7,200 bbls. wood pulp, 2,437 tons.  
American Wood Pulp Corp., Toledo Bridge, Helsingfors, 3,600 bbls. wood pulp, 1,206 tons.

National City Bank, Toledo Bridge, Helsingfors, 1,800 bbls. wood pulp, 600 tons.  
National Bank of Commerce, Drottningholm, Gothenburg, 670 bbls. wood pulp.  
A. J. Pagel & Co., Inc., Drottningholm, Gothenburg, 3,000 bbls. kraft pulp.  
National Bank of Commerce, Drottningholm, Gothenburg, 268 bbls. dry chemical pulp.  
Castle, Gottheil & Overton, F. J. Luckenbach, Rotterdam, 1,125 bbls. wood pulp.  
Castle, Gottheil & Overton, West Inskip, Rotterdam, 800 bbls. wood pulp, 160 tons.  
A. J. Pagel & Co., Inc., Ipswich, Hamburg, 875 bbls. dry sulphite, 176 tons.  
M. Gottesman & Co., Moravia Bridge, New York, 200 bbls. bleached sulphite; Songvand, Brooklyn, N. Y., 200 bbls. unbleached sulphite; Drottningholm, Brooklyn, N. Y., 670 bbls. bleached sulphite.

## PHILADELPHIA IMPORTS

WEEK ENDING AUGUST 27, 1921

A. Klipstein & Co., F. J. Luckenbach, Rotterdam, 600 bales woodpulp.  
Koons, Wilson & Co., Baltic, Liverpool, 1 cs. photo paper.  
Castle, Gottheil & Overton, Southwestern Miller, London, 77 bbls. rags; 297 coils old rope.

## BOSTON IMPORTS

WEEK ENDING AUGUST 27, 1921

I. B. Moors & Co., Belgian, Liverpool, 150 bags hidcuttings.  
Baring Bros. & Co., Belgian, Manchester, 83 bbls. old pickers.  
Brown Bros. & Co., Belgian, Liverpool, 183 coils old rope.

## GALVESTON IMPORTS

WEEK ENDING AUGUST 27, 1921

Hudson Trading Co., Cuttyhunk, 682 rolls news print.

## NEW ORLEANS IMPORTS

WEEK ENDING AUGUST 27, 1921.

Castle, Gottheil & Overton, City of Wetherford, London, 350 bbls. rags.

## Patent on Water Proof Board

The firm of Max Rogler, Duesseldorf, has obtained German Patent No. 337,769, class 55f, group II. The principle of the patented process is in the saturation of fiber matter which is the component part of the board. This saturation exceeds by far the quantity used in ordinary sizing. The saturating fluid is precipitated upon the fibers and next fixed upon them, whereupon the stock is conducted into the ordinary board making machine. The saturating fluid may be applied in the form of a colloid solution. In that case 1,000 weight parts of linseed oil, oleine or any other fat or resin good for saponification are saponified with a lye of a 50 per cent Bé solution of caustic soda or caustic potash. The resulting soap is diluted in 2,000 weight parts of water. To this soap water are added 200 weight parts of stearine pitch and 500 weight parts of fluid paraffin. By stirring the solving process will be accelerated. One may add alcohol to still more accelerate the solving. The solution is added to 2,000 weight parts of cotton, pulp or any other material desired, already prepared in the pulping cylinder. In order to obtain a stock of fine fibers it is advisable to add at this stage

50 kilograms of salt. Then to the whole stock a solution of acetate of lead is added, while the pulping continues, until the water is bright and clear, whereupon the stock is conducted into the board making machine. If a watery emulsion as a saturator is preferred, 2,000 weight parts of petrol pitch, made fluid by heating, and 500 weight parts of a ten per cent solution of dextrin of sulphite lye are mixed by constant stirring. The resulting emulsion is added to 1,500 weight parts of board fiber matter. In this case, too, 50 kilograms of salt are added. Another process is when you grind 2,000 kilograms of coal tar pitch, to which 1,000 kilograms of water containing 5 or 10 per cent of salt are added. The water should be cooled down to 5 degrees C. This paste is added to 1,500 kilograms of board fiber matter already prepared in the pulper.

The Export Association of Finland at Helsingfors has recently issued an export register containing the names and addresses of various companies which trade with other countries. All of the principal commodities manufactured in Finland are listed and among them woodpulp, pulpboards, cellulose and paper.

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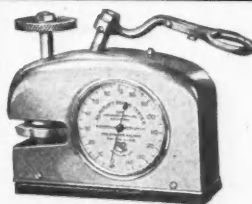
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To work by the Sun  
Means twice the work done. **Indispensable**

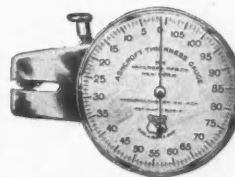


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## BLEACHED SULPHITE

FOR

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**PARSONS**

**Pulp and Lumber Co.**

EDWIN J. DEWEY, Manager Pulp Sales

Offices, 1807-1810 Finance Bldg., PHILADELPHIA, PA.

Mills at PARSONS, WEST VA.

## Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,  
WEDNESDAY, AUGUST 31, 1921.

August is always a very slow month as far as most commodities are concerned, and this is especially true of chemicals which are in poor demand anyway. Then, too, the difficulty of keeping some kinds of chemicals during the warm weather which are especially sensitive to atmospheric conditions prevents large stocks from being accumulated on the open market. If one may judge by the comments heard throughout the trade the chemical market is in a much healthier condition than it has been for some time, despite the midsummer dullness. Liquidation is complete and prices have gotten on a reasonable basis both for buyers and producers. The whole market is rapidly stabilizing and by the middle of the fall months things should be going along at a good rate of speed once more.

**ALUM.**—Scattered buying has marked the ammonia alum business during the past week, but dealers report that things are looking a little better and that buyers are showing more interest than they have for a long time. The price remains nominally the same, 3.50 to 3.75 cents a pound for the lump grade, 3.75 to 4.00 cents a pound for the ground and 4.00 to 4.25 cents a pound for the powdered.

**BLEACHING POWDER.**—A much firmer tone has been developing in the bleach market during the past week. The demand has been fair during that time and spot stock are reported as low on account of the warm weather which causes rapid deterioration of this product and thus dealers will not risk keeping much on hand. The price is reported to have advanced slightly and is now 2.25 to 3.00 cents a pound.

**BLANC FIXE.**—Blanc fixe is just about the same as it was last week with no startling developments either for the good or the bad side. The price is nominally the same, \$40 to \$50 a ton on the pulp and 4.50 cents a pound on the powdered.

**BRIMSTONE.**—Spot quotations of brimstone are reported as considerably firmer while the number of inquiries both at the mines and in this city is said to be increasing. The price per long ton at the mines is nominally around \$15 or \$16 a ton.

**CAUSTIC SODA.**—The distressed lots of caustic soda which were in much evidence throughout the market not so long ago have been just about absorbed, improving the whole caustic market to a considerable extent. There is a much stronger undertone and dealers report an increase in inquiries. The price is nominally the same at about 3.25 cents a pound on a 60 per cent basis.

**CHINA CLAY.**—The demand for imported clay is reported as considerably improved outside the paper industry and the domestic, too, is showing a little more life. The prices are nominally the same with the domestic unwashed at about \$7 or \$8 a ton, the domestic washed at \$8 to \$9 and the imported around \$14 to \$24, depending upon the grade required.

**ROSIN.**—Buyers in the rosin market are still evincing interest for immediate use only. The price on grade E is \$5.05, on F it is \$5.10 and on G \$5.15.

**SODA ASH.**—Spot stocks of soda ash are running low and the demand is said to be fairly good. The price has advanced a little and is pretty steady at 2.10 to 2.15 cents a pound on a 58 per cent basis.

**STARCH.**—There has been a further falling off in the price of paper makers' starch which is now quoted at 2.08 to 2.36 cents a pound.

**SULPHATE OF ALUMINA.**—The inquiries for the iron free grade are said to be increasing but not much real business is developing. Commercial is quoted at from 1.60 to 2.00 cents a pound and on the iron free it is 2.50 to 3.00 cents a pound.

**TALC.**—There is rather a better demand for domestic talc which is still quoted at \$18 a ton.

## Market Quotations

(Continued from page 59)

Solid Ledger Stock	1.75 @ 2.00	New Black Soft	.04% @ .04%
Writing Paper	1.50 @ 1.75	New Light Sec-	onda .03 @ .03%
No. 1 Books, heavy	1.25 @ 1.50	Khaki Cuttings	.04 @ .04%
No. 2 Books, light	.90 @ 1.00	Corduroy	.02% @ .03
No. 1 New Manila	2.75 @ 3.00	New Canvas	.08 @ .08%
No. 1 Old Manila	1.25 @ 1.50	New Black Mixed	4.15 @ 4.25
Container Manila	.75 @ .80	Old	
Old Kraft	2.00 @ 2.25	White, No. 1—	
Overissue News	.90 @ 1.00	Repacked	.06 @ .07%
Old Newspaper	.40 @ .50	Miscellaneous	.06% @ .07%
No. 1 Mixed Paper	.40 @ .50	White, No. 2—	
Common Paper	.25 @ .30	Repacked	.04% @ .04%
Straw Board, Chip	.25 @ .30	Miscellaneous	.03% @ .04
Binders' Bd. Chip	.25 @ .30	Thirds and Blues—	
Domestic Rags—New		Repacked	.02% @ .02%
Price to Mill, f. o. b. Phila.		Miscellaneous	.01% @ .01%
Shirt Cuttings—		Black stockings	2.50 @ 2.75
New White, No. 1	.10 @ .11	Roofing Stock—	
New White, No. 2	.08 @ .08%	No. 1	.90 @ 1.00
Silesias, No. 1	.07% @ .07%	No. 2	.80 @ .90
New unbleached	.08% @ .09%	No. 3	.70 @ .80
Washables	.04% @ .05	No. 4	.75 @ .85
Fancy	.07% @ .07%	No. 5A	Nominal
Cottons—according to grades		B	Nominal
Blue Overall	.06% @ .07	C	Nominal
New Blue	.03% @ .03%		

### BOSTON

[FROM OUR REGULAR CORRESPONDENT.]

<b>Paper</b>		Wood, vat lined	40.00 @
Bonds	.07% @	Filled News Board	35.00 @
Ledgers	.08% @	Solid News Board	35.00 @
Writings—		S. Manila Chip	55.00 @
Superfine	.11 @	Pat. Coated	70.00 @
Fine	.09 @		
Books, S. & S. C.	.06% @	<b>Old Papers</b>	
Books, M. F.	.06 @	Shavings—	
Books, coated	.09% @	No. 1 Hard White	2.50 @ 2.75
News, sheets	\$4.50 @	No. 1 Soft White	2.10 @ 2.25
News, rolls	.04% @	No. 1 mixed	.85 @ \$1.00
Manilas—		Ledgers & Writings	.01% @
No. 1 Manila	\$7.00 @	Solid Books	.90 @
No. 1 Fibre	8.00 @	Blanks	.01% @
No. 1 Jute	8.00 @	No. 2 Books Light	.80 @
Kraft Wrapping	6.00 @	No. 1 Manila	.01 @
Common Bogus	3.00 @	Folded News, over	
		issues	\$12.00 @
<b>Boards</b>		Mixed paper	5.00 @
(Per ton f. o. b. mill)		Gunny Bagging	.50 @ .50
Chip	\$30.00 @	Manila Rope	.03% @ .04
News, vat lined	35.00 @	Common Paper	5.00 @
		Old News	6.00 @
		Old Kraft	1.55 @

### TORONTO

[FROM OUR REGULAR CORRESPONDENT.]

<b>Paper</b>		Sulphite bleached	95.00 @ 100.00
(Mill Prices to Jobbers f. o. b. Mill)		Sulphate	60.00 @ 65.00
Bond—		<b>Old Waste Papers</b>	
Sulphite	13 @ 15	(In carload lots, f. o. b. Toronto)	
Light tinted	14% @ 16%	Shavings—	
Dark tinted	16 @ 17%	White Env. Cut.	2.25 @ —
Ledgers	15 @ —	Soft White Book	
Writing	12% @ 16	Shavings	2.35 @ —
News, f. o. b. Mills—		White Bl'k News	1.60 @ —
Rolls (carloads)	4.75 @ —	Book and Ledger—	
Sheets (2 tons or over)	5.60 @ —	Flat Magazine and	
Book—		Book Stock	
No. 1 M. F. (car-	11.00 @ —	(old)	1.15 @ —
loads)		Light and Crum-	
No. 2 M. F. (car-	10.00 @ —	pled Book Stock	.90 @ —
loads)		Ledgers and	
No. 3 M. F. (car-	9.00 @ —	Writings	1.60 @ —
loads)		Solid Ledgers	1.60 @ —
No. 1 S. C. (car-	11.50 @ —	Manilas—	
loads)		New Manila Cut	1.85 @ —
No. 2 S. C. (car-	10.50 @ —	Printed Manilas	.70 @ —
loads)		Kraft	2.25 @ —
No. 1 Coated and	15.00 @ —	News and Scrap—	
litho.	15.00 @ —	Strictly Overissue	.85 @ —
No. 2 Coated and	14.00 @ —	Folded News	.75 @ —
litho.	13.25 @ —	No. 1 Mixed Pa-	.50 @ —
No. 3 Coated and	13.25 @ —	pers	
litho.	15.25 @ —	Domestic Rags—	
colored	15.25 @ —	Price to mills, f. o. b. Toronto.	
Wrapping—		Per lb.	
Grey	4.75 @ —	No. 1 White shirt	
White Wrap	5.25 @ —	cuttings	.08% @ .08%
"B" Manila	5.75 @ —	No. 2 White shirt	
No. 1 Manila	7.50 @ —	cuttings	.05% @ .05%
Fibre	7.25 @ —	Fancy shirt cut-	
Kraft, M. F. or	8.75 @ —	tings	.05% @ .05%
M. G.		No. 1 Old whites	.03% @ .04
		Thirds and blues	.02 @ .02%
<b>Pulp</b>		Per cwt.	
(F. o. b. Mill)		Black stockings	2.00 @ —
Ground Wood	\$25.00 @ \$35.00	Roofing stock	
Sulphite, easy bleach-	65.00 @ 70.00	No. 1	1.00 @ —
ing		No. 2	1.00 @ —
Sulphite, news grade	55.00 @ 60.00	Roofing stock	
		Manila rope	.04 @ —
		No. 2	.01% @ —
		Gunny bagging	.02% @ —

*The Home of Quality*



FACTORY  
132<sup>ND</sup> TO 133<sup>RD</sup> ST & BROOK AVE

# PAPER BAGS

Sacks and Specialties

ESTABLISHED 1901

## SCHORSCH & CO.

Manufacturers

500 East 133d Street : New York

This Registered Trade  
Mark Octagon



on a Paper  
Bag Vouches for  
Its Good Quality

# Buchanan & Bolt Wire Company

ESTABLISHED 1878 AT HOLYOKE, MASS.

Makers of Highest Grade Fourdrinier Wires, Dandy Rolls, Cylinder Covers, Brass Wire Cloth  
of all Meshes for Paper, Pulp and Coating Mills—Quality Guaranteed

We make a specialty of Fine Wires for Magazine and Book Papers

## Felt Test—Lowest Cost per Ton

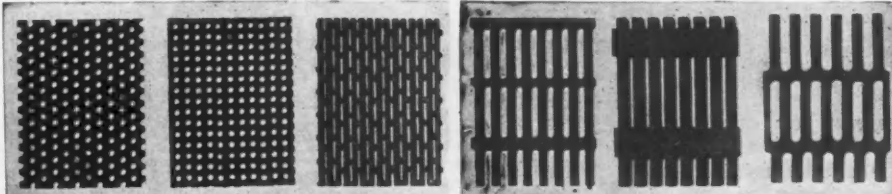
If you judge felt values, not by what you put into the equipment, but what you get out of it—then you will specify ORR 3 stripe Endless Felts, for ORR felts will produce the lowest cost per ton. They "stand up" under severe usage. Orr durability is acknowledged everywhere. Their strength and long life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

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

**THE ORR FELT & BLANKET COMPANY, Piqua, Ohio**

## PERFORATED METALS

All sizes  
and  
shapes  
of Holes



All kinds  
and  
thicknesses  
of Metal

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

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# WANT AND FOR SALE ADVERTISEMENTS

## CLASSIFIED RATES

Minimum rate for advertisements of 25 words or less, first insertion, \$1.00.

**SITUATION WANTED**, 4 cents a word for first insertion and 2 cents a word for each subsequent insertion of same ad. No ad of less than 25 words accepted.

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

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

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

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

## HELP WANTED

**WANTED**—Cylinder machine tender for two machine mill. Must be A-No. 1 man experienced on Tissues. Good living conditions and steady work for the right man. Address, Box 4375, care Paper Trade Journal. S-1

**WANTED**—Supercalender Men on Book Paper. Address, Box 4409, care Paper Trade Journal. S-1

**WANTED**—Superintendent for a one Machine Boxboard mill in Middle West. One who understands thoroughly the manufacture of container and boxboards, knows how to handle help and get results. Give age, references and salary expected. Address, Box 4395, care Paper Trade Journal. S-3

**WANTED**—Cylinder Machine Tender, capable of making high grade Bristol. Address, Box 4396, care Paper Trade Journal. S-3

**WANTED**—Chief Engineer who can handle both the Electric and Steam Power Plants of a Pulp and Paper Mill. First Class Men only who can command a good salary. Address, Box 4397, care Paper Trade Journal. S-1

**WANTED**—Young man to take charge of Samples and Price Records in Export and Import Department, also to handle inquiries. Must know fine papers and be good correspondent, writing his own letters on typewriter. Exceptional opportunity for man with initiative. Knowledge of languages essential. Write fully, stating age, religion, experience and salary expected. Address, Box 4410, care Paper Trade Journal. S-1

**WANTED**—Salesman, coarse papers and boards. Excellent opportunity with growing New York concern. Give age, reference and salary expected. Address, Box 4411, care Paper Trade Journal. S-3

## WANTED

**MASTER MECHANIC FOR LARGE PULP AND PAPER MILL. APPLY GIVING FULL PARTICULARS. ADDRESS, BOX 4357, CARE PAPER TRADE JOURNAL.** tf

## HELP WANTED

**PAPER AND TWINE SALESMAN** for New York City. Can turn over large business to right man. All communications strictly confidential. L. Hyman & Sons, 121 Spring street, New York.

**SALESMAN**—A real opportunity is offered young man of ability and integrity with a Paper Sack Manufacturer of old established reputation, for New England and New York territory. Give full particulars which will be held confidential. Miller, Tompkins & Company, 485 Washington street, New York City. S-1

**REPRESENTATIVE** for paper of all kinds, particularly fine and packing paper, well-connected, is wanted by first-class German firm for North and South America. Full particulars requested. Address, Box 4412, care Paper Trade Journal. S-1

## SITUATIONS WANTED

**EXPERT PAPER MILL MAINTENANCE ENGINEER.** Can design, build and operate paper mills, roofing plants and machinery with guaranteed efficiency. High priced man, but worth it. Now employed but desire change. If you want your plant put on efficiency basis, let me handle it for you. Address, Box 4090, care Paper Trade Journal. tf

**BOOKKEEPER**—Bright, energetic young man, 23, desires position. Have had eight years' experience in large mill office. Capable of handling payroll and general office work. Address, Box 4313, care Paper Trade Journal. tf

**GROUND WOOD SUPERINTENDENT** desires position. Experience in constructing, operation and maintaining. Capable of organizing and handling men; able to take full charge. Reliable. Best references. Address, Box 4292, care Paper Trade Journal. 8-ts. Sept.-1

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

**MASTER MECHANIC** with a splendid experience desires to make a change. Now has full control of construction and maintenance in a large plant. Address, Box 4339, care Paper Trade Journal. tf

**BOSS FINISHER WANTS POSITION**—Thoroughly experienced all grades Bond Writing, Cover, Board and Specialties. Competent and reliable. Best references. Address, Box 4362, care Paper Trade Journal. Sep-3

**WET MACHINE TENDER**—First class on Press Board, Insulation and Counter Board, desires position as Machine Tender or Foreman. Address, Box 4364, care Paper Trade Journal. Sep-1

**SUCCESSFUL PAPER MILL MANAGER** open for engagement, Practical, Standard Grades and Specialties. Manager or Superintendent, well known in the trade. Address, Box 4378, care Paper Trade Journal. S-8

**WANTED**—Position by machine tender. 20 years' experience on News, Book, Bond, all grades made on Fourdrinier Machine. Best of references. Address, Box 4381, care Paper Trade Journal. S-1

**WANTED**—Position by Superintendent of 20 years' experience on Book, News, Sulphite and Sulphate Test Papers. Specialist on over Tissue and Waste Paper Stock. Best of references furnished. Address, Box 4382, care Paper Trade Journal. S-1

## SITUATIONS WANTED

**PAPER BAG MANUFACTURERS**—Superintendent, Mechanical, Engineer, open for engagement, envelopes, specialties and printing, grocery and self-opening bags and sacks. Taking full charge of building new plants. Designing of machines and labor-saving devices, up to date, energetic, resourceful and good organizer. Address, Box 4383, care Paper Trade Journal. S-1

**SITUATION WANTED**—Energetic, capable, and practical Paper Mill Superintendent, 36 years' old, seeks connection with live wire concern. Well up on manufacturing of News, Hanging, Manillas and Sulphite specialties, handle help to best advantage, can get production and quality at lowest cost. Good on maintenance and repair. No white collared man. Address, Box 4384, care Paper Trade Journal. S-1

**EXECUTIVE**—Harvard Graduate, training in Mechanical and Electrical Engineering, six years in Central Station Industry, five years' experience in Board Mill, now employed as Manager, desires executive position in progressive Mill. Address, Box 4385, care Paper Trade Journal. S-1

**EXPERIENCED FINANCIAL AND CREDIT MAN** would like to make new connection. Am at present treasurer of one of the largest paper houses with headquarters in the East. Have been in the paper business more than 25 years—as treasurer of this same concern more than 15 years, supervising its financial and credit policy. If essential to make satisfactory connection, will invest. Can furnish highest grade of references. Address, Box 4398, care Paper Trade Journal.

**BOSS FINISHER** desires position. Here is an opportunity to secure the services of a steady, reliable man. Thoroughly experienced and can furnish best of references. Address, Box 4399, care Paper Trade Journal. S-1

**SIXTEEN YEARS PAPER SALESMAN AND EXECUTIVE** seeks connection in New York as mill representative, or with reliable paper firm as salesman or executive. Now employed; 35 years of age, married, good record. Best references. Address, Box 4400, care Paper Trade Journal. S-15

**PAPER SALESMAN**—New York City, with office, wishes to represent paper mill. Can produce large amount of business, with the right kind of co-operation. Drawing account on commission basis. Replies treated confidentially. Address, Box 4401, care Paper Trade Journal. tf

**PAPER MILL SUPERINTENDENT**, with wide experience on fine grade and colored specialties, wishes new connection. Address, Box 4402, care Paper Trade Journal. S-22

**WANTED**—Position as machine tender on Harper or Edwards machines. Have had wide experience on tissue; all grades. Can furnish best of references. Address, Box 4403, care Paper Trade Journal. S-3

**COATED PAPER SALESMAN**—Experienced in manufacture and sale of coated, lithograph and enamel papers. Acquainted with consuming and jobbing trade in New York City and all points East of Buffalo and Pittsburgh, desires mill connection. Commission or salary basis. Address, Box 4404, care Paper Trade Journal. S-1

**BOX BOARD SUPERINTENDENT OR MANAGER**—With record of better than 30% increased production in last two mills, wishes to make change. Best of reasons and references from present Corporation. Have had 15 years' practical experience in the manufacture of the different grades of Box Board and High Test Container. Familiar with construction, remodeling, repairs, power and office routine. Can put mill on present competitive basis. Forty-five years of age, married and have family. Would consider a salary and bonus proposition with mill not up to production. Address, Box 4372, care Paper Trade Journal. S-1



**SITUATIONS WANTED**

**WANTED**—Position by Machine Tender on Fourdrinier or Cylinder Machine. Have had a wide experience on Tissue and High Grade Papers, also on Board. Address, Box 4391, care Paper Trade Journal. S-1

**LIVE** energetic man with eight years' paper sales experience, wants mill connection, selling wrappings, toilet and bags to jobbers in Greater New York. Address, Box 4413, care Paper Trade Journal.

**SUPERINTENDENT**, now running a small board mill, wishes to make a change. Am up on all cylinder mills. Now running high test board. Address, Box 4414, care Paper Trade Journal. S-1

**SALES CORRESPONDENT**, of long experience in sales direction, will withdraw from present connection this Fall. Wants to associate with progressive concern. Address, Box 4415, care Paper Trade Journal. S-1

**Do You Want Help?**

Or have you some machinery you would like to dispose of?

**Try the Want Pages**

of the

**Paper Trade Journal****FOR SALE**

**FOURDRINIER PART**—One 90" P & J Fourdrinier part with Millsbaugh suction couch roll and pump, 40 ft. wire.

**JORDANS**—Several Horne and Emerson on way to our works. One Noble & Wood; two No. 1 Claffins.

**KOLLERGANGS**—One kollergang; size of stone 56" x 15" face.

**FULLEYS**—One 97" dia. x 34", double arm, modern pulley. Large cone pulleys. Large stock of iron pulleys, including some cone pulleys with Marshall drives. New wood pulleys with friction clutches. Also steel pulleys.

**PUMPS**—One dry suction, single vacuum, 12 x 22 x 18 Knowles; one 1,000-gallon Blake Tank Pump; several 7" and 8" Lawrence Machine Company, Class A, High Duty Pumps; Fan Pumps; new stock pumps, single and double.

**PRESS ROLLS**—Large number of different sizes on hand. Some suitable for rubber covering. Six rolls about 15" x 98" just received. Some brass and some rubber covered.

**ROTARIES**—Two 84" x 22" horizontal.

**REELS**—One two-bowl 58" face. Several new ones going through works. State which you desire.

**RAG CUTTERS**—One Daniels No. 2; one Taylor & Stiles.

**SLITTERS**—Two Dietz Slitters.

**SCREENS**—One 10-plate open side Packer with plates; one 12-plate open side Packer with practically new plates. Three Ruth centrifugal.

**WINDERS**—One 80" single drum P & J make; one 100" double drum, P. & J. make.

Advise us of your wants.

**MILLS MACHINE COMPANY**  
LAWRENCE, MASS.

**FOR SALE**

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

**For Sale**  
**Wax Paper Plant**  
**Fully Equipped**

Includes Slitter and Rewinder, Cutter and Trimmer and Wax Machine. Is equipped for waxing paper from the roll. Will wax a 9 lb. tissue to 10 lb. and up to 12½ lb. Also waxes bread wrapper stock and heavier weights. Address Box 4331, care Paper Trade Journal. T.F.

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

**FOR SALE**—Five dryers, 120" faced, 48" diameter, complete with frames and gears. These are as good as new and can be purchased reasonably. Marley Paper Mfg. Co., Childs, Md. S-15

**FOR SALE**—Rough or peeled pulpwood for immediate shipment from Canada. Address, Box 4406, care Paper Trade Journal. A-25

**FOR SALE**—100 tons Ledgers, grade 1 A. 200 tons Heavy Letters, best quality. 100 tons Pamphlets. 100 tons Cream Shavings. 50 tons Jute light Bagging. 50 tons Colored Shavings. 200 tons Crushed News. Offered by Josef Schimek, Muhlenstr. 11, Berlin O. 17, Germany.

**MISCELLANEOUS**

**WANTED**—Drum Winder to handle rolls 72" wide, Tissue and Light Weights. State make and condition and lowest cash price; also where can be seen. Address, Box 4329, care Paper Trade Journal. Aug-18

**A RESPONSIBLE DISTRIBUTING ORGANIZATION** with Branches in three or four prominent eastern cities and a number of Salesmen, would like to get exclusive sales of some good Wrapping Paper Mill. We discount our bills and can furnish unquestionable references. Address, Box 4369, care Paper Trade Journal. Sep-8

**KRAFT PAPER MILL LOCATION**—Abundant supply of tributary raw material available by both rail and water, cheap electric power, pure Lake Superior water, good labor conditions. The very best unoccupied Kraft Paper Mill location in America. Address, Commercial Association, Sault Ste. Marie, Michigan. S-15

**WANTED TO BUY**—A Paper or Card Board business. Would consider a partnership. Address, Box 4387, care Paper Trade Journal. A-18

**WANTED**—Five or six dryers, 28" to 36" diameter; 52" to 62" wide; also 62" Hamblet, or similar type, Sheeter and Slitter. Address, Box 4416, care Paper Trade Journal. S-1

The Want Columns  
of the  
Paper Trade Journal  
are  
Result Getters

TRY THEM

**Paper Mill Machinery For Sale**

**FOURDRINIER PAPER MACHINE**: one 112"; one 96"; one 80"; one 72".  
**CYLINDER PAPER MACHINES**: One 68" two cylinder; one 54" two cylinder.  
**FOURDRINIER PARTS**: Takes a wire 110" x 48"; one taking a wire 75" x 50".  
**PRESS PARTS FOR PAPER MACHINE**: Pusey & Jones bell crank housings, two sets 18" x 114"; three sets 18" x 110"; two sets 18" x 96".  
**DRYERS**: Four 48" x 111"; sixteen 48" x 106"; one 36" x 80"; ten 48" x 68"; one 84" x 67".  
**MACHINE CALENDER STACKS**: one 124" seven roll; one 120" eight roll; two 96" nine rolls; one 84" five rolls; one 66" five rolls; one 41" five rolls.  
**REAM CUTTERS**: One 68" Oswego, new; one 64" Holyoke Seybold; one 56" Acme.  
**REVOLVING SHEET CUTTERS**: One 122" Moore & White Duplex; one 104" Horne; one 100" Dillon; one 84" Clark; one 74" Hamblet; one 62" Horne; one 50" Hamblet Diagonal; two 42" Finlay.  
**SLITTERS AND WINDERS**: One 124" Moore & White four drum heavy type; one 120" Warren patent; one 110" Moore & White four drum; one 96" Kidder; one 44" Kidder; one 36" Kidder.  
**BEATERS**: Six 72" x 42" Noble & Wood; five 66" x 42" Noble & Wood; equipped with three cylinder washers; two 65" x 61" Dayton iron tub; four 61" x 60" Dayton iron tub; one Dilts 62" x 50"; one Jones 62" x 52"; eight Horne 36" x 36"; four Claffins.  
**JORDANS**: One Wagg Majestic; two Dillon No. 2 Improved; one large Horne; five Monarchs; two Pony Monarchs; two Pope Brushing Engines.  
**VARIABLE SPEED STEAM ENGINES**: One Chandler & Taylor Twin 12" x 12"; one Brownell Twin 14" x 16".

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



# BLEACHED SULPHITE

## WOOD FLOUR

Various degrees of fineness and either fibrous or granular. Made from first growth Spruce and Pine, by approved processes.

**UNION WOOD FLOUR CO., INC.**  
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## SULPHATE of ALUMINA

250 Tons Daily Capacity

Direct from Manufacturer to Consumer

**ALUMINUM CHEMICAL CO.**

Transportation Building, Chicago. Works: Chicago Heights, Ill.

## F. L. Smithe Machine Co. Inc.

MANUFACTURERS OF

### ENVELOPE MACHINERY

for making any style envelope, regular or special. Printed, stamp embossed and tissue lined envelopes.

Also die presses, tension machines, and metal clasp machines, and all other machinery used in manufacturing envelopes.

Designing, pattern making and machine work.

150 Eleventh Avenue, New York City, New York,  
U. S. A.

## Missisquoi Pulp and Paper Company

SHELDON SPRINGS

VERMONT

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

ESTABLISHED 1842

## FOURDRINIER WIRES

DANDY ROLLS  
CYLINDER  
MOLDS

**CHENEY BIGELOW WIRE WORKS**  
SPRINGFIELD, MASS.

MANUFACTURERS

Paper Mill Wire Cloth, Bank and Office Railings and Grill Work

**Architects and Engineers**

**CAREY, JAMES L.**, Paper Mill Architect and Engineer, 208 North Laramie avenue, Chicago, Ill.

**CHAPMAN, C. A., Inc.**, Paper Mill Architects and Engineers, 23 Jackson Boulevard E., Chicago, Ill.

**SNOW, S. M.**, Mill Architect, Engineer, Paper and Pulp Mills. Steam and Water Power Plants. 55 Kilby street, Boston, Mass.

**Rags, Paper Stock, Etc.**

**DERLOWITZ, PAUL**, 132 Nassau street, New York. Importer of Rags, Bagging, New Cuttings.

**FLYNN, MICHAEL**, 54 Columbia street, Brooklyn, N. Y.

**GOLDSTEIN, R., & SON**, 1162 Scott Street, Baltimore, Md. Cotton Rags and Paper Stock

**HILLS, GEO. F.**, 236 South Street. Branch House, 276 W. 25th street, N. Y.

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

**SIMMONS, JOHN, SONS**, Paper and Paper Stock, 29 and 30 South Marshall street Philadelphia, Pa.

**MISCELLANEOUS**

**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.

**Special Machinery**

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

**BOOKS ON PAPER MANUFACTURE**

Subscriptions are being taken for the new Textbooks on the Manufacture of Pulp and Paper of the Joint Committee on Vocational Education of the Pulp and Paper Industry, a complete set of which should be owned by every firm or individual connected with the industry.

The set will be complete in five volumes. Volumes I and II deal with arithmetical operations, elementary mathematics, drawings, etc. Volumes III, IV and V, to be issued shortly, will deal with pulpwoods and their preparation; manufacture of pulp; analytical methods; and paper manufacture in all its aspects.

Volumes I and II are now on sale at \$5.00 a volume. In the selection of classroom problems bearing on the principles and practice of pulp and paper manufacture they represent the highest standard in textbook publishing.

Orders, with remittances, will be filled by Thomas J. Keenan, secretary of T.A.P.P.I., 542 Fifth Avenue, New York.

**PAPER and BOARDS  
ALL GRADES**

**Direct Mill Service to the Paper Merchant**

*Boston Hill Company*

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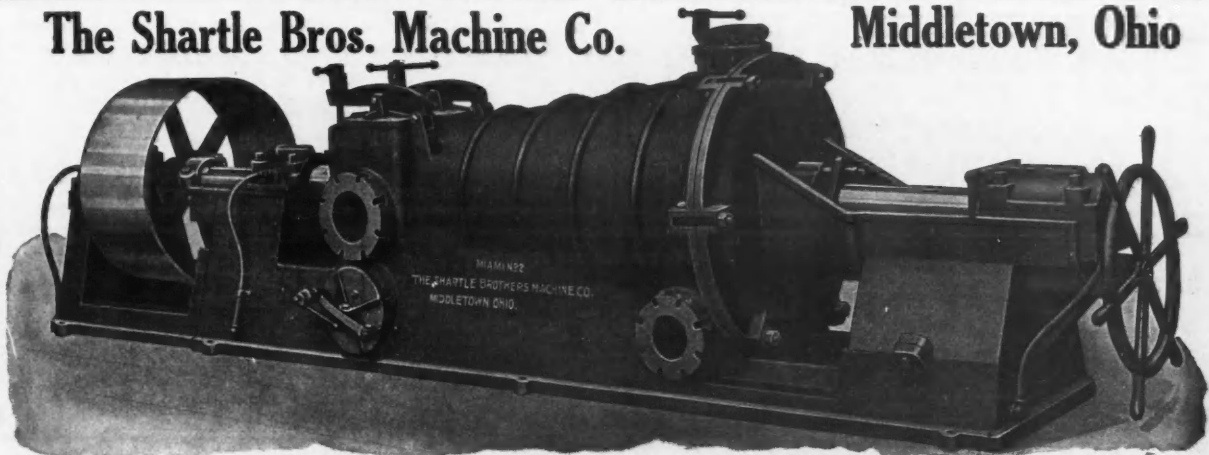
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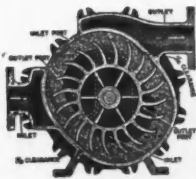
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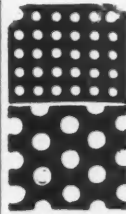
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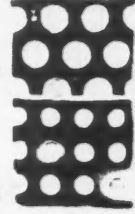
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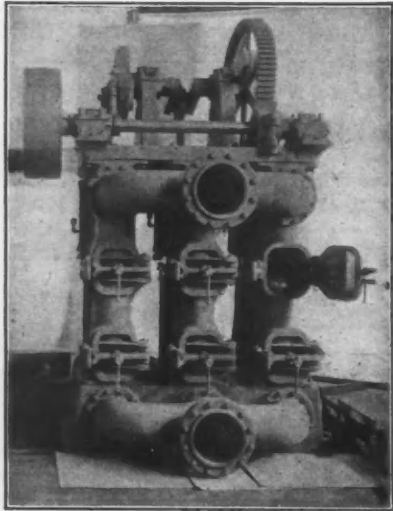
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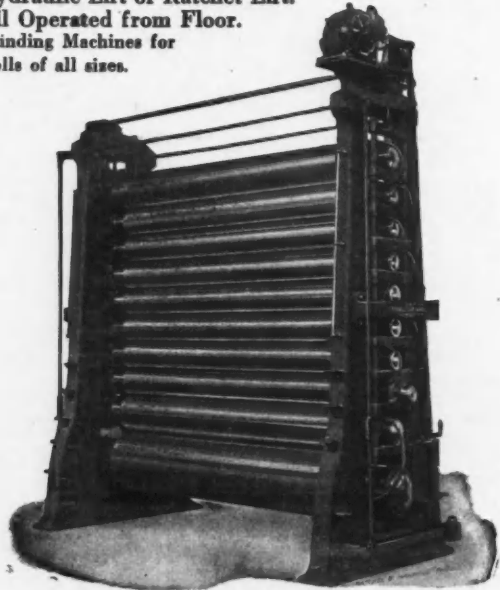


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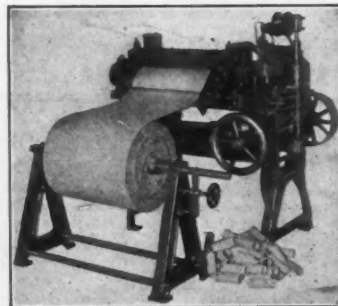
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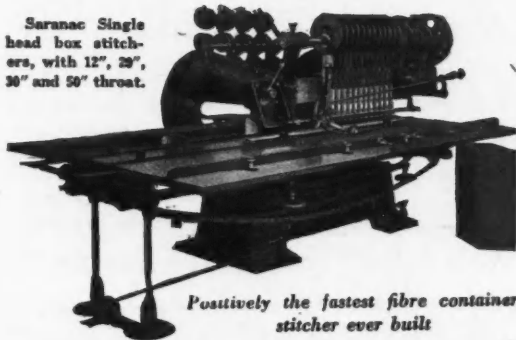
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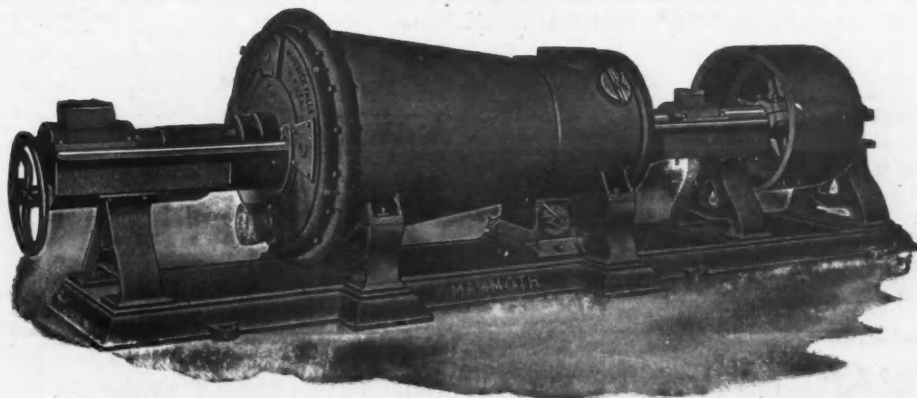
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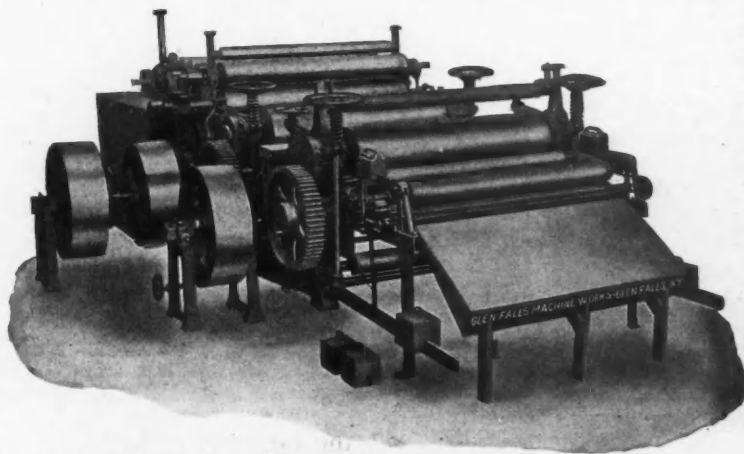


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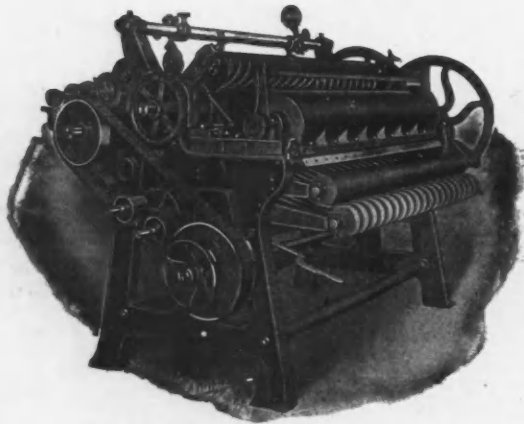
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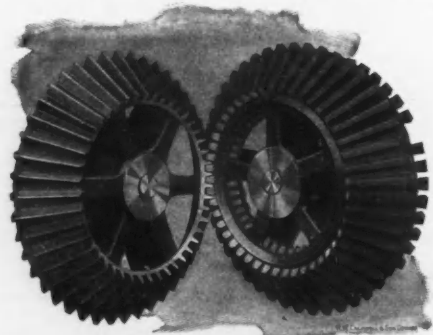
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**CLASSIFIED INDEX TO ADVERTISEMENTS**

<b>ADDING MACHINE ROLLS.</b>	Page	<b>CHEMICALS, COLORS, ETC.</b>	Page	<b>FILTERING SYSTEMS.</b>	Page
Paper Manufacturers Co.....	79	Arnold, Hoffman & Co., Inc.....	69	Norwood Engineering Co.....	67
<b>AGALITE.</b>		Heller & Merz Co.....	12	<b>FLOOR COVERINGS.</b>	
Union Talc Co.....	79	Du Pont de Nemours & Co.....	—	L. Sonneborn & Sons.....	—
U. S. Talc Co.....	79	Kuttroff Pickhardt & Co.....	Front Cover	<b>FOURDRINIER WIRES.</b>	
<b>ALUM.</b>		Newport Chemical Works.....	7	Appleton Wire Works.....	80
The Kalbfleisch Corp.....	—	Santocz Chemical Works, Inc.....	8	Buchanan Bolt & Wire Co.....	63
Pennsylvania Salt Mfg. Co.....	80	C. K. Williams & Co.....	80	Cable Excelsior Wire Mfg. Co.....	80
Superior Chemical Co.....	72	<b>CLAY.</b>		Cheney, Bigelow Wire Works.....	66
Winkler Bros., Inc.....	72	Atterbury Bros.....	72	Eastwood Wire Mfg. Co.....	80
<b>ALUMINUM SULPHATE.</b>		John W. Higman Co.....	—	Thomas E. Gleeson.....	75
Aluminum Chemical Co.....	66	Star Clay Company.....	80	Lindsay Wire Works.....	74
<b>ARCHITECTS AND ENGINEERS.</b>		<b>COAL MINING.</b>		Jcs. O'Neill Wire Works.....	73
John F. Carrigan.....	68	Empire Coal Mining Co.....	—	The W. S. Tyler Company.....	79
George F. Drew.....	68	<b>COGS.</b>		<b>FURNACES (Automatic).</b>	
Hardy S. Ferguson.....	68	N. P. Bowsher Co.....	79	Murphy Iron Works.....	68
William T. Field.....	68	<b>COMPRESSORS (Air).</b>		<b>GAUGES (Pressure, Indicating and Record-</b>	
George F. Hardy.....	68	The Nash Engineering Co.....	69	ing).	
Herbert S. Kimball.....	68	<b>CORDAGE.</b>		Bristol Co., The.....	49
Management Engineering and Development	69	Columbian Rope Co.....	—	Manning Gauge Co.....	57
Co.....	69	<b>CUTTING MACHINERY.</b>		The Foxboro Co., Inc.....	47
H. B. Frather.....	68	M. D. Knowlton Co.....	72	<b>HEATERS.</b>	
V. D. Simons.....	68	<b>DIE CUTTERS.</b>		Gordon Co., Inc., Robert.....	—
F. L. Smith.....	68	Hogson & Pettis Mfg. Co.....	—	<b>IRON AND STEEL PRODUCTS.</b>	
Stebbins Engineering Co.....	69	Independent Die Co., Inc.....	6	Brown-Wales Co.....	5
Thomas L. Tomlines & Son.....	68	<b>DIGESTERS.</b>		<b>KNIVES, ETC.</b>	
Vitale & Rothery.....	68	American Welding Co.....	—	Bolton & Sons, J. W.....	9
Joseph H. Wallace & Co.....	68	M. W. Kellogg Co.....	—	Dowd Knife Works.....	—
<b>ASBESTINE PULP.</b>		<b>DRIVES, SILENT CHAIN.</b>		Machinery Co., of America.....	10
International Pulp Co.....	Front Cover	Morse Chain Co.....	79	<b>LUBRICANTS.</b>	
<b>BALL BEARINGS.</b>		<b>DRYER EXHAUSTS.</b>		Vacuum Oil Co.....	38 and 39
S. K. F. Industries, Inc.....	—	The Nash Engineering Co.....	69	<b>MICROMETERS.</b>	
<b>BEATING ENGINES.</b>		<b>DRYING SYSTEMS.</b>		E. J. Cady & Co.....	27
Beloit Iron Works.....	35	Farnsworth Co.....	—	Foreign Paper Mills, Inc.....	3
Clafin Engineering Co.....	—	W. F. Pickles.....	12	<b>MILL COGS.</b>	
Dayton Beater & Hoist Co.....	74	<b>DYES, ANILINE.</b>		N. P. Bowsher & Co.....	79
Dillon Machine Co.....	78	Calco Chemical Co.....	—	<b>MOTORS.</b>	
Dilts Machine Works, Inc.....	4	Heller & Merz.....	12	B. F. Perkins & Son, Inc.....	—
Downingtown Mfg. Co.....	78	National Aniline & Chemical Co.....	—	Fairbanks-Morse & Co.....	7
Emerson Mfg. Co.....	77	The White Tar Aniline Corporation.....	—	<b>OILS AND GREASE.</b>	
Mills Machine Co.....	65	<b>DYESTUFFS.</b>		Vacuum Oil Co.....	38 and 39
Noble & Wood Machine Co.....	71	F. I. du Pont de Nemours & Co.....	—	<b>PACKING.</b>	
Valley Iron Works Co.....	33	<b>ELECTRIC EQUIPMENT.</b>		Jenkins Bros.....	57
<b>BELT LACING (Steel).</b>		General Electric Co.....	—	<b>PAINTS AND VARNISHES.</b>	
Flexible Steel Lacing Co.....	10	<b>ELECTRIC HOISTS.</b>		Du Pont de Nemours Co., E. I.....	—
<b>BELTING.</b>		Shepard Electric Crane & Hoist Co.....	55	<b>PAPER BAG MACHINERY.</b>	
Cincinnati Rubber Mfg. Co.....	—	<b>ENGINEERS.</b>		Fischer Machine Co.....	6
Goodyear Tire & Rubber Co.....	—	Samuel M. Green Co.....	49	Potdevin Machine Co.....	75
The Rossendale-Reddaway Co.....	8	J. O. Ross Engineering Corp.....	25	<b>PAPER BAG MANUFACTURERS.</b>	
R. D. Skinner & Co., Inc.....	47	<b>ENVELOPE MACHINES.</b>		Consolidated Paper Bag Co.....	61
<b>BOILERS</b>		F. L. Smith Machine Co.....	66	Lawrence Bag Co.....	5
Heine Boiler Co.....	51	<b>FELTS AND JACKETS.</b>		Schorsch & Co.....	63
<b>BRONZE ROLL JACKETS.</b>		Albany Felt Co.....	10	<b>PAPER BOX BOARDS.</b>	
Sandusky Foundry & Machine Co.....	74	Appleton Woolen Mills.....	5	C. L. La Boiteaux Co.....	37
<b>BUCKETS (Elevator).</b>		F. Brett & Co.....	Front Cover	<b>PAPER CUTTERS.</b>	
Hendrick Mfg. Co.....	9	Draper Bros. Co.....	75	Famblet Machine Co.....	74
<b>CALENDER ROLLS.</b>		Fitchburg Duck Mills.....	—	McLauthlin & Co., G. T.....	—
Farrel Foundry & Machine Co.....	70	F. C. Huyck & Sons.....	13		
Lohdell Car Wheel Co.....	70	Knox Woolen Co.....	3		
Norwood Engineering Co.....	67	Lockport Felt Co.....	63		
Perkins & Son, Inc., B. F.....	—	Orr Felt & Blanket Co.....	4		
Textile Finishing Machinery Co.....	69	Waterbury Felt Co.....	4		
<b>CARBON TOOLS.</b>		Waterbury & Sons Co.....	75		
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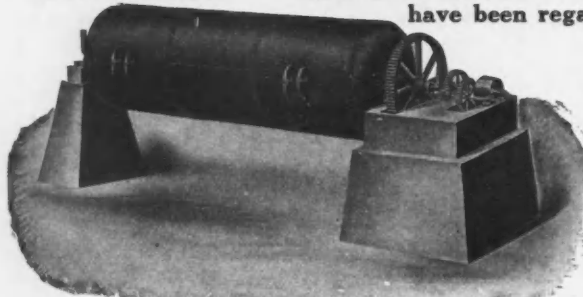
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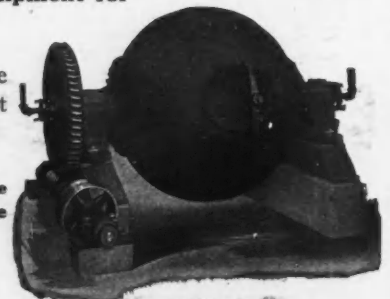
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**CLASSIFIED INDEX TO ADVERTISEMENTS (Continued)**

<b>PAPER DEALERS.</b>		<b>PAPER STOCK (Cont'd.).</b>		<b>SPLICING TISSUE.</b>	
M. M. Elish & Co.....	—	Mendelson Bros. Paper Stock Co.....	76	Sergeant Co., E. M.....	—
R. F. Hammond.....	Front Cover	Penn Paper & Stock Co.....	72	<b>STEAM SPECIALTIES.</b>	
Midwest Paper Co.....	75	Salomon Bros. & Co.....	75	Crane Co.....	43
<b>PAPER EXPORTERS.</b>		Train-Smith Co.....	Front Cover	<b>STITCHING MACHINERY.</b>	
A. M. Capen's Sons, Inc.....	80	<b>PAPER TESTERS.</b>		Saranac Machine Co.....	71
Hudson Trading Co.....	2	Ashcroft Mfg. Co.....	61	<b>SULPHITE PULP ("Kraft" Soda).</b>	
Interstate Pulp & Paper Co.....	11	Foreign Paper Mills, Inc.....	3	Dryden Pulp & Paper Co., Ltd.....	—
Parsons Trading Co.....	Front Cover	B. F. Perkins & Son, Inc.....	—	<b>SULPHITE BLEACHED AND UNBLEACHED.</b>	
Parsons & Whittemore.....	51	<b>PAPER TUBE MACHINERY.</b>		J. Andersen & Co.....	4 and 29
W. M. Pringle Co., Inc.....	4	Dietz Machine Works.....	70	The Borregaard Co., Inc.....	51
Storm & Bull.....	79	Grissinger Machine Works.....	72	Brown Company.....	5
<b>PAPER MANUFACTURERS.</b>		<b>PERFORATING MACHINES.</b>		Canadian Robert Dollar Co.....	37
American Coating Mills.....	11	Dietz Machine Works.....	70	Craig-Becker Co., Inc.....	3
Bayless Mfg. Co.....	3	<b>PERFORATED METAL.</b>		Dryden Pulp & Paper Co.....	—
Brown Company.....	5	Harrington & King Perforating Co.....	63	Parsons Pulp & Lumber Co.....	61
Collins Mfg. Co.....	13	Hendrick Mfg. Co.....	9	Price & Pierce, Ltd.....	Front Cover
Diamond State Fibre Co.....	Front Cover	Charles Mundt & Sons.....	2	Pulp and Paper Trading Co.....	61
Eastern Mfg. Co.....	66	Manhattan Perforated Metal Co.....	69	<b>SULPHUR.</b>	
Eaton-Dikeman Co.....	—	<b>PLUGS (Wood).</b>		Texas Gulf Sulphur Co.....	13
Fort Howard Paper Co.....	11	O. L. Bartlett.....	11	Union Sulphur Co.....	2
Franklin Paper Co.....	72	<b>PULP PROCESS.</b>		<b>TANKS.</b>	
Hammermill Paper Co.....	53	Castle, Gotthel & Overton.....	6	W. E. Caldwell Co.....	—
Howard Paper Co.....	57	<b>PULP STONES.</b>		New England Tank & Tower Co.....	79
Missisquoi Pulp & Paper Co.....	5	International Pulp Stone Co.....	Front Cover	Stearns Lumber Co.....	79
Mountain Mill Paper Co.....	4	Lombard & Co.....	79	<b>TAPE MOISTENERS.</b>	
Nuera Paper Company.....	9	<b>PUMPS.</b>		Liberty Paper Co.....	—
New York and Maryland Pulp & Paper Co.....	45	Fairbanks, Morse & Co.....	7	<b>TEMPERATURE CONTROL.</b>	
Poland Paper Co.....	51	Frederick Iron & Steel Co.....	—	Open Cril & Heater Co.....	—
Sherman Paper Co.....	69	Havton Pump & Blower Co.....	—	<b>TIMBER ESTIMATES.</b>	
Stratford Paper Co.....	77	<b>PUMPS (Vacuum).</b>		R. R. Bradley.....	68
Wausau Sulphate Fibre Co.....	—	The Nash Engineering Company.....	69	James W. Sewall.....	68
<b>PAPER AND PULP MACHINERY.</b>		<b>RAG CUTTERS.</b>		<b>TRANSMISSION MACHINERY.</b>	
Bagley & Sewall Co.....	—	B. F. Perkins & Son, Inc.....	—	H. W. Caldwell & Sons Co.....	74
Baker Mfg. Corp.....	71	Taylor-Stiles & Co.....	—	Reeves Pulley Co.....	55
Beloit Iron Works.....	35	<b>REAM CUTTERS.</b>		<b>TURBINES.</b>	
Rird Machine Co.....	31	Geo. T. Lauthlin Co.....	—	S. Morgan Smith Co.....	—
Black-Clawson Co.....	70	<b>RECORDING INSTRUMENTS.</b>		<b>TWINES.</b>	
Clark-Aiken Co.....	8	Bristol Company.....	49	American Manufacturing Co.....	53
Frank H. Davis.....	65	Foxboro Co., Inc.....	47	<b>VALVES.</b>	
Downingtown Mfg. Co.....	78	<b>ROBIN SIZE.</b>		Crane Co.....	43
Glen Falls Machine Works.....	73	Arabol Mfg. Co.....	79	Jenkins Bros.....	57
Improved Paper Machinery Co.....	45	<b>ROTARY BLEACHING BOILERS.</b>		<b>VENTILATING FANS.</b>	
M. W. Kellogg Co.....	—	Biggs Boiler Works Co.....	76	B. F. Perkins & Sons, Inc.....	—
Mills Machine Co.....	65	<b>RUBBER ROLLS.</b>		<b>VEGETABLE PARCHMENT PAPERS.</b>	
Sandusky Foundry & Machinery Co.....	74	American Wringer Co.....	—	Kalamazoo Vegetable Parchment Co.....	37
Sandy Hill Iron & Brass Co.....	—	<b>SCALES.</b>		<b>WAREHOUSE SERVICE.</b>	
Shartle Bros. Machine Co.....	67	Fairbanks, Morse & Co.....	7	Brown-Wales Co.....	5
Smith & Winchester Mfg. Co.....	78	<b>SCALES (Paper).</b>		<b>WAXED PAPERS.</b>	
Valley Iron Works Co.....	33	Fred Baker.....	55	Dragon Paper Mfg. Co.....	—
Waterville Iron Works.....	2	E. J. Cady & Co.....	27	<b>WOOD FLOUR.</b>	
<b>PAPER MILL AGENTS.</b>		Foreign Paper Mills, Inc.....	3	Union Wood Flour Co.....	66
Dillon & Barnes.....	72	<b>SCREENS.</b>		<b>WOOD PULP IMPORTERS.</b>	
Hill Company, Berton C.....	67	Central Mfg. Co.....	—	American Wood Pulp Corp.....	61
McIver, Dana T.....	2	Wm. A. Hardy & Sons Co.....	57	J. Andersen & Co.....	4 and 29
Melby, E. C.....	—	Union Screen Plate Co.....	73	Ira L. Beebe & Co.....	75
R. I. Stevens, Jr.....	69	<b>SKYLIGHTS.</b>		M. Gottesman & Co.....	—
<b>PAPER AND PULP MILL BROKERS.</b>		E. Van Noorden & Co.....	61	Hammond, R. F.....	Front Cover
Gibbs-Brower Co.....	—	<b>SLASHERS.</b>		E. J. Keller Co.....	55
<b>PAPER STOCK.</b>		Ryther & Pringle Co.....	—	Lagerloef Trading Co.....	14 and Front Cover
Atterbury Bros.....	72	<b>SLITTERS AND REWINDERS.</b>		A. T. Pagel & Co., Inc.....	23
Castle, Gotthel & Overton.....	75	C. Benninghofen & Sons.....	69	J. F. Patton & Co., Inc.....	51
Gumbinsky Brothers.....	80	Cameron Machine Works.....	75	Scandinavian-American Trading Co.....	12
Hicks, Daniel M.....	72	Dietz Machine Works.....	70		
Francis, Hughes Co.....	73	Samuel M. Langston Co.....	75		

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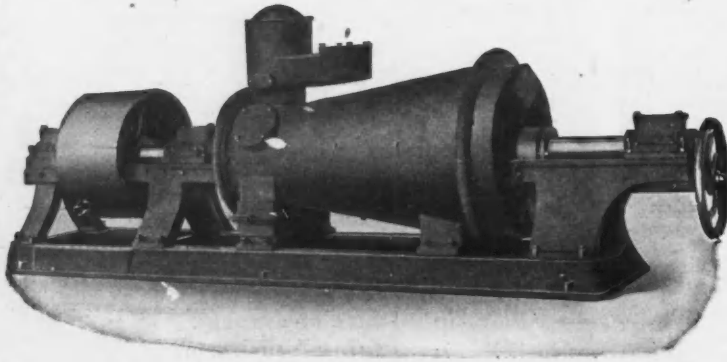
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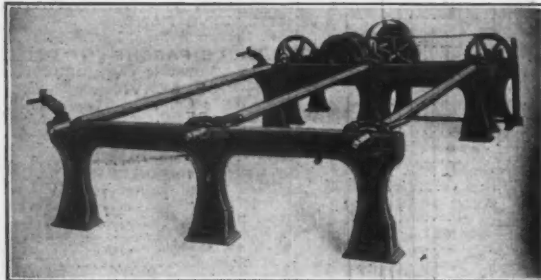
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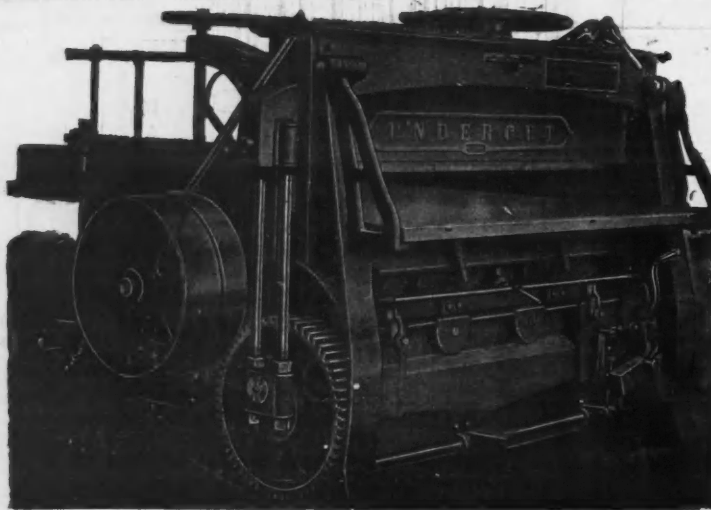
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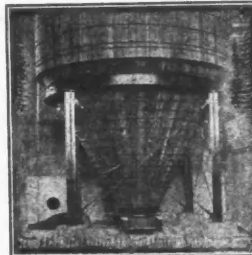
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