

Municipal & Business Branch Library
Municipal Building

MEMBER OF THE A. B. C.
FORTY-NINTH YEAR

71-23

PAPER TRADE JOURNAL

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

ESTABLISHED IN 1872

Vol. LXXI. No. 23

NEW YORK AND CHICAGO, DECEMBER 2, 1920

Per Annum, \$4.00
Single Copy, 10 Cents

EXPORT will give you DEMAND

even when the domestic market slumps; if you prepare for it. It is worth talking over with

PARSONS TRADING COMPANY

17 BATTERY PLACE, NEW YORK, With Branches All Over The World
London, Stockholm, Sydney, Melbourne, Wellington, Bombay, Rio de Janeiro, Buenos Aires, Havana, Mexico, etc.



Paper for Every Need

Our manufacturing facilities are at your service in solving your paper problems. Paper and Cardboards. The best service consistent with conditions.

SEAMAN PAPER COMPANY
Chicago New York



AUER & TWITCHELL PAPER

Philadelphia

New York

F. BREDT & CO.

240 WATER STREET, NEW YORK CITY

ANILINE COLORS
and DYESTUFFS for
Paper Mills



Ultramarine Blue, Brown
and White Sugar of Lead,
Canvas Dyer Felts

SOLE AGENTS FOR

JOSEPH PORRITT & SONS

FELTS AND JACKETS

PAGE 19!



PROTECTIVE PAPERS

Glassine Parchmoid
Vegetable Parchment Greaseproof

Diamond Fibre Receptacles of all kinds

Diamond State Fibre Company

Dept. FT.
BRIDGEPORT, PENNSYLVANIA (near Philadelphia)

H. R. WOODWARD, Pres.

WALTER P. SIMONDS, Treas.

TRAIN SMITH COMPANY

IMPORTERS AND DEALERS IN

ALL GRADES OF FOREIGN AND
DOMESTIC PAPER STOCK

OLD SOUTH BLDG., BOSTON, MASS.

Telephones: Murray Hill { 4246
 { 4247

Hans Lagerloef, Pres't & Treas.
Orvar Hylén, Vice-Pres. & Sec'y.



Lagerloef Trading Co., Inc.

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

All **WOOD PULP** Every
Kinds Description

Correspondence Invited!

PULP STONES

of absolutely the finest quality

LOMBARD & CO.

Importers and Dealers

236-238 A. Street : BOSTON, MASS.

Branch at Montreal, Canada

GROUND WOOD

Wire
for
Quotation

FOR IMMEDIATE SHIPMENT

NEW YORK OVERSEA CO., Inc.

44 Beaver Street

New York, N. Y.

PRICE & PIERCE., Ltd

30 East 42d Street, New York

Sole Selling Agents for
Bathurst Lumber Co. Ltd.
BATHURST, N. B.

**Kraft Pulp and Easy
Bleaching Sulphite**

INTERNATIONAL PULP CO.

NEW YORK CITY

**ASBESTINE
PULP**

+

**FILLER
90% Retention**

REG. U. S. PATENT OFFICE

PAPER EXPORTERS

NEWSPRINT
PRINTING
WRITING
WRAPPING
SPECIALTIES

HUDSON TRADING COMPANY

18 East 41st Street

NEW YORK

ESTABLISHED 1888

CABLE ADDRESS: "HUDTRACO," NEW YORK

DANA T. McIVER

High Grade Printing Paper

116 So. Michigan Avenue
CHICAGO

BOOK AND COATED PAPER

Car Lot and Tonnage Contracts

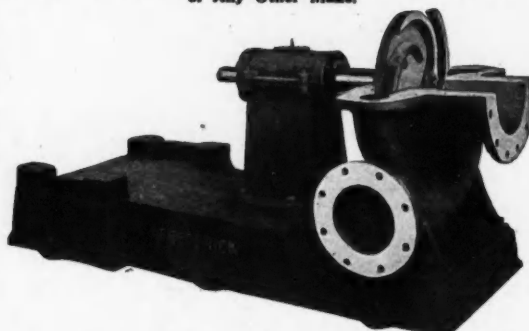
FREDERICK

Pulp and Paper Mill Pumps

We Specialize in the Design and Manufacture of

Heavy Duty Paper Mill Pumps

Frederick Pumps Are Giving Excellent Service in Some of the
Largest Paper Mills in the World.
Compare Our Detail Specifications, Guarantees, etc., with Those
of Any Other Make.



The Frederick Iron & Steel Co.
FREDERICK—MARYLAND—U. S. A.

Canadian Office—R. J. McLean, Southam Bldg., Montreal
Chicago Office, 1242 Menadnock Block
Detroit Office, 48 Garfield Building

Cutting Dies

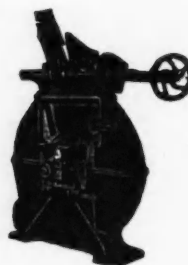


We have been in business since 1849 and are exceptionally well fitted by experience, with equipment and highest class of workmen, to furnish dies for cutting paper, etc., for all purposes.

For Dieing Out Envelopes, Labels, Lithographs and Advertising Novelties, Boxes, Wrappers, Gaskets, Toys, Paper Napkins, Drinking Cups, etc., etc.

The Hoggson & Pettis Mfg. Co.

New Haven, Conn., U. S. A.



The Lombard Barker Attachment

can be applied to any make of Disc Barker. No matter what Disc Barker you may be operating—the Lombard Barker attachment will add to its efficiency—saving in wood—easy operation.

WATERVILLE IRON WORKS


Waterville, Maine





STATE PULP & PAPER CO.
 INC.
 8 West 40th Street
 NEW YORK
 DEALERS IN
PULP & PAPER
 Agents for
RIVERTON PAPER CO., INC.
 RIVERTON, CONN.

Offices
 London, England
 Buenos Aires, Argentine
 Havana, Cuba
 Santiago, Chile
 Cape Town, South Africa
 Johannesburg, South Africa



Offices
 Bombay, India
 Sydney, Australia
 Melbourne, Australia
 Rio de Janeiro, Brazil
 Shanghai, China
 San Francisco, Cal.

Exporters and Importers of
PAPER and PULP
PARSONS & WHITTEMORE, Inc.
 299 Broadway
 New York

KNOX WOOLEN CO.
 MANUFACTURERS OF
"EXCELSIOR"
 FELTS AND JACKETS
 FOR EVERY GRADE OF PAPER
 CAMDEN, MAINE

Seamless Felts for fast running

Satin style Felts for fine finish

1863 1920

**COLORS FOR
 PAPERMAKERS**
KUTTROFF, PICKHARDT & CO.
 INCORPORATED
 128 Duane Street - - New York
 BOSTON - 86 Federal St. PHILA. - 111 Arch St.
 PROV. - 52 Exchange Pl. CHI. 305 W. Randolph St.

PERFORATED METAL SCREENS
 IN STEEL AND ALLOYED METALS
 For Pulp and Paper Mills



Elevator Buckets, Conveyor Flights
 and Troughs, General Sheet and
 Light Structural Work

HENDRICK MANUFACTURING CO.
 75 Dundaff Street, Carbondale, Pa.
 New York Office, 30 Church St.

Francis Hughes Company
 Packers and Graders of
Paper Mill Supplies
 Correspondence Solicited
 21st Street at Loomis, Chicago, Ill.
 Private Switch on C. B. & Q. Tracks

**WE ARE
MANUFACTURERS OF
SPECIAL COLORS FOR
THE PAPER INDUSTRY**

**METHYL VIOLET
FUCHSINE
SAFRANINE
BASIC BROWN
METHYLENE BLUE
SOLUBLE BLUE
ALKALI BLUE
BASIC BLUE
AURAMINE
FAST DIRECT COLORS
PAPER SCARLETS
" YELLOWS**

**D
D**
**DICKS, DAVID
CO., INC.**

Manufacturers and Sales Agents of
High Grade Aniline Dyes and Chemi-
cals

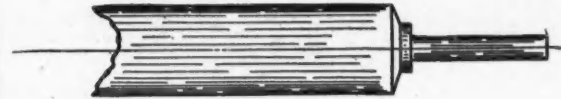
19-21 North Moore Street

Works:

Rosebank, S. I., N. Y. Chicago Heights, Ill.

Offices:

Boston, Mass.; Charlotte, N. C.; Paterson,
N. J.; San Francisco, Cal; Glens Falls,
N. Y., Shanghai, China



Rubber Covered Felt Rolls

The next time you need your brass covered felt rolls recovered, we suggest you connect with us before having this work done.

We cover felt rolls with rubber that give far better service than those covered with brass jackets. Our rubber rolls wear perfectly smooth and do not pit, crack or cut the felts same as brass rolls do. Reports from one of the largest paper mills in the United States which has a large number of these rolls in operation indicate that the rolls are very satisfactory, and after being in use over a year and a half show practically no signs of wear.

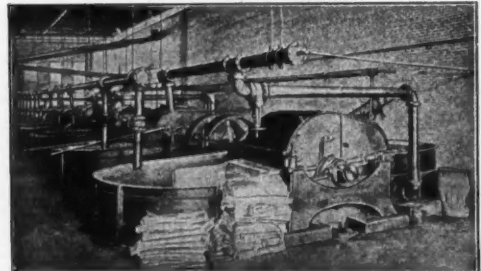
This is worth your consideration. Send us your inquiries. Quick return shipment is our specialty.

We also furnish the best rubber covers for all kinds and sizes of paper mill rolls

THE AMERICAN WRINGER CO.

Mechanical Roll Dept.,
Dept. P

WOONSOCKET, R. I.



The Illustration Shows a Typical Dilts Equipment in the Beater Room of One of the Largest Boxboard Mills in the United States

WE MAKE A SPECIALTY OF

Beating Engines ALSO
**Fly Bars, Bed Plates
and Machine Knives**

Owning and operating as a separate department of our business the Knife Works formerly Taylor Brothers & Co., makers of MACHINE KNIVES at Fulton, N. Y., for over fifty years.

Dilts Machine Works, Inc.
Fulton, N. Y., U. S. A.

"DRYDEN" KRAFT PULP

**Extra Strong, Long Pure
Sulphate Fibre**

Daily Capacity 120,000 Pounds

KRAFT WRAPPING SHEATHING PAPERS

Daily Capacity 45,000 Pounds

The Dryden Pulp & Paper Co., Ltd.
Dryden, Ontario, Canada

Craig-Becker Company

Incorporated

52 Vanderbilt Avenue
New York City

**Bleached Easy Bleaching
Unbleached Sulphites**

**Spruce and Poplar Ground
Wood Pulp**

DOMESTIC

EXPORT

*The Selective Buyer
Is Demanding LIBERTY TAPE*

HE has proven its superiority to the average tape in the severest kind of service. He knows its sure strength and dependability—its perfect fitness to meet his varying demands. *And he is buying Liberty Tape now as never before.*

The Liberty Tape line presents an interesting possibility to the jobber. Samples of the tape, plain and printed, on request. We furnish designs and have our own printing facilities.

LIBERTY PAPER COMPANY
52 Vanderbilt Ave. New York City
Mills: Bellows Falls, Vt.



*Both Plain
and Printed*

GORTON'S CODFISH
No Bones

GORTON'S COD
No Bones

FOURDRINIER WIRES WISCONSIN WIRE WORKS

all meshes of paper making

WIRE CLOTH

APPLETON

WISCONSIN

SALT CAKE

FOR SULPHATE OR KRAFT PULP

Paper Makers' Alum

Both Commercial and Free from Iron

D. A. HIMADI & CO., Inc.
51-53 Maiden Lane New York

Telephone John 3929



Bayless Manufacturing Corporation

SALES OFFICE: 527 FIFTH AVENUE, NEW YORK.
PULP AND PAPER MILLS AT AUSTIN, PA.



HIGHEST
QUALITY
SULPHITE
WRAPPING
PAPERS

FOURDRINIER WIRES

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

THOMAS E. GLEESON, Inc.

Manufacturers of Wire Cloth of All Descriptions

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

Specialty—The Finest Wires for Tissue and Fine
Grade Papers

J. ANDERSEN & CO.

FREDERICK BERTUCH, SPECIAL PARTNER

21 East 40th Street, New York City

Importers of Chemical Pulp BLEACHED AND UNBLEACHED

Agents for Kellner Partington Paper Pulp Co., Ltd.
Sarpsborg, Norway; Forsbaga, and Edsvalla, Sweden;
Bergvik and Ala Nya Aktiebolag, Soderhamn, Sweden
Scandinavian Export Agents

TEXAS GULF SULPHUR CO., TEXAS CITY, TEXAS

The Pulp and Paper Trading Co.

21 East 40th Street

New York City

DEALERS IN DOMESTIC CHEMICAL AND
MECHANICAL PULPS AND PAPER

AGENTS FOR

J. & J. Rogers Company, Ausable Forks, N. Y.

Procter & Gamble Distributing Co.

Mills at Augusta, Georgia and
Memphis, Tenn.

Canadian Kraft Limited, Three Rivers, Canada

Dealers in Wayagamack Kraft Pulp

EASTERN AGENTS of Sulphite Pulp. Made by
Port Huron Sulphite & Paper Co., Port Huron, Mich.

THE WATERBURY FELT CO.



FELTS and JACKETS

For Every Grade of Paper and Pulp

Correspondence and Orders
Solicited

Manufactured at
SKANEATELES FALLS
New York

The Only Shopping Bag That Stands the Test



"He Couldn't Pull the
Handles Out"

At last! Shopping bags with handles that cannot pull out. An entirely new method of manufacture. No rivets or staples to weaken the bag. A vulcanizing process. Order the same styles as before, but ask for the new kind of handles. Ask for the "G" numbers.

We are now making a new size bag. The largest on the market, 17" x 17".

A. M. SIMON & CO.

Manufacturers

350 West 38th Street, New York, N. Y.

Starch

Paper manufacturers generally recognize the value of starch in the manufacture and coating of paper.

To obtain definite results in any desired direction in the preparation of paper, not merely a difference of grade, but a difference of kind or variety of starch is required.

Our carefully controlled and thoroughly standardized processes enable us to produce exactly the various starches which the paper industry has found economical and efficient.

Corn Products Refining Company
17 Battery Place New York

Starch



ACID PROOF WOOD PIPE

Enduring as granite itself, immensely strong and, last but not least, with a carrying capacity 14% greater than cast iron, 20% more than steel pipe — WYCKOFF WOOD PIPE offers the most practical piping system for paper mills.

Let us tell you what other successful mills are doing with WYCKOFF.

A. WYCKOFF & SON CO.
ELMIRA, N. Y. U. S. A.

CASEIN

Especially prepared
for

PAPER COATING

“N. 3” & “N. 6”

PAPER SIZING

“S. 3” & “S. 6”

Uniformity of Quality
Guaranteed

Write for Samples and Quotations to

Aldgate Casein Works

Proprietors

Nieuwhof, Surie & Co., Ltd.

Head Office

5, Lloyds Avenue, London, E.C.3

Telegraphic Address Suricodon England



FROM COAL TO COLOR

This progression involves many intricate and carefully worked-out steps varying with each line of "National" Dyes made by the

National Aniline and Chemical Co., Inc.

The interlocking of these manufacturing steps so as to insure satisfactory results is one of the triumphs of American chemists. It has largely contributed to the establishment of an American Dyestuff Industry.

GENERAL OFFICES

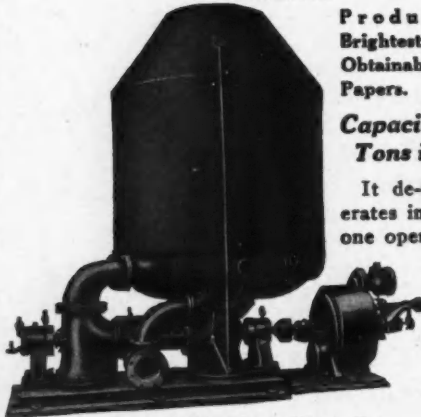
21 BURLING SLIP

NEW YORK

WINESTOCK

DE-FIBERING AND DE-INKING PROCESS

PATENTED



Height of Machine Over All, 12 Feet

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 fibres, instead of rubbing, grinding or kneading them in.

CASTLE, GOTTHEIL & OVERTON

SOLE SELLING AGENTS IN THE UNITED STATES

200 Fifth Ave. Building New York, N. Y.

E. D. Jones & Sons Co., Pittsfield, Mass.,
Builders in the United States

Waterous Engine Works, Co., Ltd., Builders and Selling
Agents for Canada, Brantford, Canada.

The Procter & Gamble Distributing Company

CINCINNATI, OHIO

Mills at Augusta, Georgia and Memphis, Tennessee

Makers of

Highest Grades Bleached Chemical
Pulp from Cottonseed Hull Fibre

Offered under the Following Brands:

"P & G"

BLEACHED PULP

BUCKEYE

BLEACHED PULP

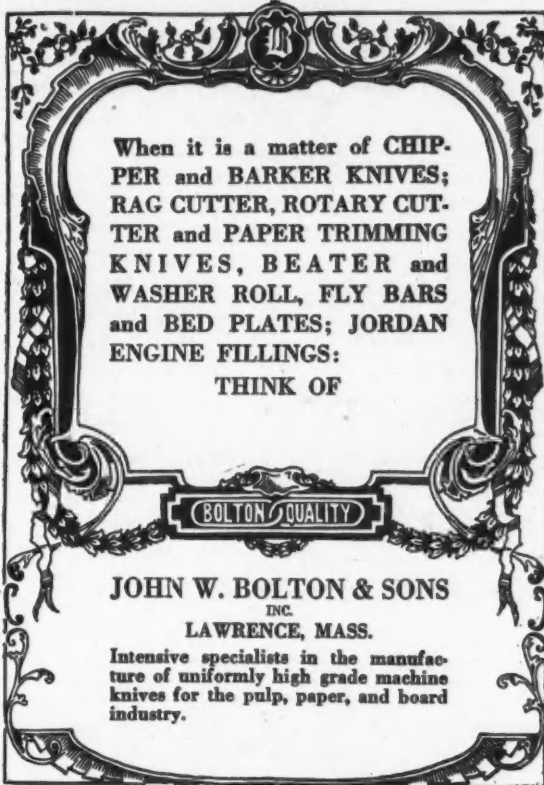


Especially Suitable for the Better Grades of Paper

SOLE AGENTS IN UNITED STATES AND CANADA

The Pulp & Paper Trading Co.

21 East 40th Street, New York City



When it is a matter of **CHIPPER** and **BARKER KNIVES**; **RAG CUTTER**, **ROTARY CUTTER** and **PAPER TRIMMING KNIVES**, **BEATER** and **WASHER ROLL**, **FLY BARS** and **BED PLATES**; **JORDAN ENGINE FILLINGS**:

THINK OF

BOLTON QUALITY

JOHN W. BOLTON & SONS
INC.
LAWRENCE, MASS.

Intensive specialists in the manufacture of uniformly high grade machine knives for the pulp, paper, and board industry.

The John W. Higman Co.
29 Broadway ————— New York City

QUALITY
CLAYS

FOR ALL PURPOSES
ENGLISH and AMERICAN

—————
CALE B. FORSYTHE,
Western Representative Kalamazoo, Mich.

FLOWER CITY TISSUE
MILLS CO.

ROCHESTER ————— **NEW YORK**

MANUFACTURERS OF
HIGH GRADE FOURDRINIER TISSUE,
SPECIAL WRAPPERS, FOLDER STOCK,
TAG BOARD, BRISTOLS, ETC.

Mills at
ROCHESTER, N. Y. ————— **SCOTTSVILLE, N. Y.**
Direct all correspondence to Rochester, N. Y.



Daily Capacity of 600 Air-Dry Tons

The extent
of our production of
High Grade
BLEACHED
Sulphite Fibre

insures uniform quality, prompt
shipments and market prices

Pulp Division
BROWN COMPANY
founded 1832
PORTLAND MAINE



NIBROC KRAFT
NIBROC BOND
BERMICO SHEATHING
PAPER
(Rosin Sized or Waxed)
WAXO KRAFT
NIBROC KRAFT TOWELS
LAMINATED SPIRAL
WOUND PAPER TUBES
(All Sizes, Lengths and Widths)

Paper Division
BROWN COMPANY
founded 1832
PORTLAND MAINE

SABIN ROBBINS PAPER CO.

ESTABLISHED 1884

National Distributors of Jobs in Paper
MIDDLETOWN, OHIO

WE BUY JOBS IN PAPER

Enameled Book and Card Board Seconds
Bonds, Ledgers, Etc.

SALES OFFICES

CHICAGO NEW YORK ST. LOUIS
CLEVELAND DETROIT



EVERYTHING IN

PULP & PAPER

J.F. PATTON CO., INC.

33 West 42nd St.
New York City

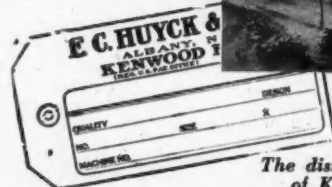
(Cable address - Pulp.N.Y.)



Joining by hand the two ends of woven fabric into felts.

Endless Felts and Joined Felts

As papermakers' felts are woven endless only to a length of sixty-five feet, those of greater length must necessarily be woven to the desired size and then joined. This joining, or splicing, of the two ends is done entirely by hand work. Kenwood Mills experts weave the two ends together, thread by thread, matching the loom weave so closely that in the finished felt it is difficult to find where the splice has been made. The fact that Kenwood felts are so uniformly satisfactory speaks highly for the skill and deftness of these busy workers.



The distinguishing mark
of Kenwood Felts.



F. C. HUYCK & SONS
Albany, N. Y.



Direct Sales Service to the Paper Merchant

We have the distinction of being the largest sales organization in the East operating exclusively with paper merchants. All sales made for the mill direct to the paper merchant.

WE SOLICIT YOUR BUSINESS ON THE BASIS OF BUILDING UP YOUR TRADE IN YOUR NAME AMONG THE LARGEST AND BEST PAPER MANUFACTURERS

Barton Hill Company
INCORPORATED

Paper Manufacturers' Selling Agents

ASTOR TRUST BUILDING
501 FIFTH AVENUE at 42d STREET

TELEPHONES 4784 & 5986 VANDERBILT
NEW YORK CITY

LET US SUPPLY YOU

NEWPORT SILICATE OF SODA

40° BAUME 42°
1 DRUM or 100 TANKS

PROMPT SHIPMENT FROM CARROLLVILLE, WIS.

NEWPORT CHEMICAL WORKS, Inc.

120 BROADWAY,
NEW YORK CITY

GENERAL OFFICES:
PASSAIC, N. J.



KRAFT - SULPHITE

 BLEACHED DOMESTIC

 UNBLEACHED FOREIGN

 — INQUIRIES SOLICITED —

 SCANDINAVIAN - AMERICAN TRADING CO., 50 E. 42nd St. New York City

Satisfactory

**Quality, Service,
Price**

A combination to your advantage in every product of

LABOITEAUX

It pays to line up with the leaders if you are particular about your requirements in

All Grades of
BOX BOARDS
and
PAPER SPECIALTIES

*Write, wire or phone any of
our branches for prompt service.*

THE C. L. LaBOITEAUX CO.
Cincinnati New York Chicago Cleveland

COLLINS MANUFACTURING COMPANY

SAMUEL R. WHITING, Pres. and Treas.

Manufacturers of

LOFT DRIED PAPERS
LEDGERS
BONDS
WRITING PAPERS

Mill: North Wilbraham, Mass.

Main Office:
208 Race Street
Holyoke, Mass.

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

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

Joseph O'Neill Wire Works

Port Chester, New York
Established 1906

Papier-Zeitung

Berlin SW 11 (Germany)

Founded by Carl Hofman, 1876

appears twice a week

Covers the whole paper trade (paper making, transforming, stationery). More than 12,000 bonafide subscribers all over the world.

Subscription: 4 Dollars



ROYAL CARD & PAPER CO.

Distributors of

FINE PAPERS COARSE PAPERS and BOARDS

Of Every Description

Three New York Warehouses
Fifteen Foreign Offices

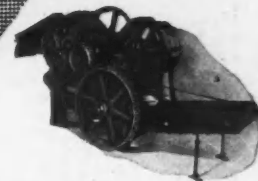
*Our World Wide Sales Organization
Is Ready to Sell Your Products*

MAIN OFFICES

100-102 Worth St., N. Y. City



**CUTS
THE
STOCK
BOTH
WAYS—
AND THE
PAYROLL
IN HALF**



Here's the machine that does the work of two of the ordinary machines—does it faster, more thoroughly, with less power costs, with less labor and practically no waste.

It splits the rag, chops it into uniform blocks and then delivers it to the bleach boilers. And one COBURN-TAYLOR will keep two bleach boilers busy all day. Write us for information.

B. F. Perkins & Son, Inc.
Holyoke, Mass.

HART TRADING CO., Inc., Tribune Building New York City

Exporters and Importers Paper and Pulp

Exclusive Sales Agencies

DOMESTIC

Westfield River Paper Company, Russell, Mass.—grease proof, parchment and glassine papers.

Hartje Paper Manufacturing Co., Pittsburgh, Pa., (Mills, Steubenville, Ohio)
News and Kraft Paper.

FOREIGN

A/S Papirfabriken Brager, Drammen, Norway—
M. G. sulphite papers.

A/S Phoenix Papirfabrik, Drammen, Norway—
Light weight grease proof parchment and glassine papers.

A/B Klippans Finpappersbruk, Klippan, Sweden—
India Bible.

Stromsnäs Bruks A/B, Stromsnäs Bruk, Sweden—
kraft, sealings and sulphite papers (light weight and heavy in all finishes).

A/S Lillestroms Cellulosefabrik, Kristiania, Norway—sulphite pulp, strong and easy bleaching.

A/S Fladeby Cellulosefabrik, Kristiania, Norway—
sulphate pulp, strong and easy bleaching.

Western Office
Conway Building,
Chicago, Ill.

Connections with the most important mills making all grades of paper pulp for domestic and foreign consumption. Foreign specialties in paper and pulp.

Canadian Representative—M. S. Kilby,
Reg'd, 248 St. James St.
Montreal, Canada



TRADE-MARK
REGISTERED

SOLE AGENTS in the UNITED STATES, CANADA, MEXICO and CUBA for
FINNISH CELLULOSE ASSOCIATION, HELSINGFORS, FINLAND
comprising all and every Sulphite, Sulphate and Kraft pulp mill in Finland. Manufacturers of superior grades of Bleached and Unbleached Sulphites, Easy Bleaching Sulphates and Kraft Pulps.

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!

WOOD  **PULP**

Lagerloef Trading Company, Inc.

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

Telephone: Murray Hill 4246-47
" " " 2170

INQUIRIES SOLICITED.

MEMBER OF THE A. B. C.

PAPER TRADE JOURNAL

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

FORTY-NINTH YEAR

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

LESLIE R. PALMER, President

J. W. VAN GORDON, Vice-President

Telephone { 2380
2381 }
2382 }

Vanderbilt

10 EAST 39TH ST., N. Y., U. S. A.

Cable Address Catchow, New York

Western Publication Office—431 S. Dearborn Street, Chicago
New England Office—Room 46, 127 Federal Street, Boston

Washington Office—L. M. Lamm, 63 Home Life Bldg.
Western New England News Office—A. W. Anders, Holyoke
London Office—Stonhill & Gillis, 58 Shoe Lane

The PAPER TRADE JOURNAL is the pioneer publication in its field, and has for many years been the recognized Organ of the Paper and Pulp Industry. Its circulation is greater than the combined circulations of all other publications in the field. Entered at New York Post Office as second-class mail matter.

Terms of Subscription

UNITED STATES AND MEXICO.....Per year, \$4; 6 months, \$2; 3 months, \$1
CANADA AND FOREIGN COUNTRIES IN POSTAL UNION.....Per year, \$6
SINGLE COPIES.....10 cents

Other Publications of Lockwood Trade Journal Company, Inc.

AMERICAN STATIONER AND OFFICE OUTFITTER (Weekly).....Per year, 98
LOCKWOOD'S DIRECTORY OF THE PAPER }
STATIONERY AND ALLIED TRADES (Annual) }.....Per copy, 67

Vol. LXXI. No. 23

NEW YORK AND CHICAGO

Thursday, December 2, 1920

Table of Contents

News of the Trade:

	PAGE.
Production and Shipments of Paper Mills for October..	16
Ratio of Stocks to Average Production.....	16
Changes at Arrowhead Co. Plant.....	17
Zellerbach Co. Buys A. S. Hopkins Co.....	17
Box Firm Reduces Wages.....	17
Cost Association Convenes at Kalamazoo.....	18
C. H. Hubbard to Head New Paper Firm.....	18
Forests Products Association to Meet.....	18
Printing Committee Wants Suggestions on Paper Bid.	20
Waste Paper Prices Decline.....	20
Duty on Lignum Extracts.....	20
Fairbanks-Morse Co. Expands	20
Interest in Paper Clothing.....	20
News Print Export Price to Be 6½ Cents from Canada.	22
Invitation for Pulp and Paper Plants.....	22
Mills Lower Prices of Spruce Lumber.....	22
Abitibi Putting in Pulpwood Supply.....	22
Freer Mill Deliveries Reported From Toronto.....	24
Cornwall Gets New Industry.....	24
Big Company Adopts New Name.....	24
Wisconsin Paper Business Not As Active As Recently.	26
Big Projects Being Completed.....	26
Acquires Newaygo Co.	26
Paper Men Look for No Price Decline.....	28
Essential Facts About Paper.....	28
Productions of Wood Pulp for October.....	30
Values Still Firm in Philadelphia Market.....	32
Coarse Paper Market Quiet.....	32
President Whiting on the Situation.....	32
Stock Dealers Have Playnight.....	32
Ward Co. Improvements	32
New York Trade Jottings.....	34
Rapid Work on Florida Pulp Mill.....	34

	PAGE.
Recent Incorporations	36
Paper Man on Interstate Tunnel Commission.....	36
C. C. Burns Seriously Ill.....	36
Bogalusa to Be Big Paper Center.....	36
New Paper Roll Handling Truck.....	38
Shartle Bros. Machine Co. Busy.....	38
Bids and Specifications for Government Paper.....	44
Fire Prevention in Pulpwood by Artificial Fog.....	48
News of the Fox River Valley.....	60
Imports of Paper and Paper Stock.....	72
Exports of Paper and Paper Stock.....	72
Packing Boxes From Pulp.....	72

Editorial:

Good Will in Foreign Trade.....	46
Canadian Exports Large	46

Practical and Technical:

Practical Questions and Answers.....	42
--------------------------------------	----

Obituary:

David Wolbrette	40
Thomas W. Holley	40
Munson L. Dady	40

Market Review:

New York Market Review.....	70
Market Quotations	71
Miscellaneous Markets	74

Want and For Sale Advertisements, Pages 76, 77, 78 and 79

PRODUCTIONS AND SHIPMENTS OF PAPER MILLS FOR OCTOBER

According to Tabulation Prepared by the Federal Trade Commission Paper Mill Stocks of News Print for the Month Equaled About Five Days' Average Output, of Book Slightly Less Than Seven Days' Average Output, Board About Seven days' Average Output and Wrapping About Nine Days' Average Output—Imports and Exports of All Grades for September.

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., December 1, 1920.—The attached tabulation is a summary of production, shipments and stocks of paper mills in the United States for the month of October, 1920, prepared by the Federal Trade Commission. This summary is compared with the month of October, 1919, and October, 1918, and the average production and stocks based upon the production and stocks for the years 1917, 1918 and 1919. The mills have been classified for convenience into ten 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 conditions 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 October, 1920, compared with October, 1919, and October, 1918, and with average production and stocks.

Grade	Number of mills	Stocks on hand 1st of month (Net tons)	Production (Net tons)	Shipments (Net tons)	Stocks on hand end of month (Net tons)
News Print (Standard and Special Grades of News):					
October, 1920	81	24,593	124,818	126,815	22,596
October, 1919	76	18,331	125,216	127,447	16,100
October, 1918	64	20,323	105,169	104,760	20,732
Average	..	..	112,736	..	24,031
Standard News:					
October, 1920	67	21,804	114,232	116,385	19,651
October, 1919	55	14,343	110,902	112,599	12,646
October, 1918	50	15,653	94,330	93,252	16,731
Average	..	..	101,400	..	20,502
Book (M. F., S. S. C. and Coated):					
October, 1920	93	21,124	93,849	94,147	20,826
October, 1919	91	28,275	89,400	90,877	26,838
October, 1918	89	29,449	70,519	70,215	29,753
Average	..	..	74,984	..	31,666
Paperboard (total) (Straw, Fibre, Leather, Chip, etc.):					
October, 1920	256	38,249	196,604	192,631	42,222
October, 1919	252	51,102	202,524	205,209	48,417
October, 1918	227	40,848	168,617	167,709	41,756
Average	..	..	160,394	..	50,146
Boxboard:					
October, 1920	152	17,460	133,829	132,536	18,753
Wrapping (Kraft, Manila, Fibre, etc.):					
October, 1920	148	19,570	73,100	71,970	20,700
October, 1919	161	44,212	67,110	71,726	39,596
October, 1918	151	33,888	66,827	66,120	34,595
Average	..	..	60,294	..	49,560
Bag (all kinds):					
October, 1920	40	2,015	17,005	16,658	2,362
October, 1919	47	4,016	18,073	19,324	2,765
October, 1918	41	3,491	17,005	16,558	3,938
Average	..	..	13,260	..	3,818
Fine (Writing, Bonds, Ledgers, etc.):					
October, 1920	113	28,400	34,526	33,958	28,968
October, 1919	114	35,347	34,808	37,138	33,017
October, 1918	95	29,264	34,854	33,693	30,425
Average	..	..	28,236	..	34,567
Tissue (Toilet, Crepe, Fruit, Wrappers, etc.):					
October, 1920	98	5,633	13,743	12,570	6,806
October, 1919	92	6,692	16,015	16,238	6,469
October, 1918	86	4,915	12,353	12,067	5,201
Average	..	..	11,986	..	6,895

Hanging (No. 2 Blank, Oatmeal, Tile, etc.):					
October, 1920	26	1,380	10,322	9,893	1,809
October, 1919	22	5,554	8,569	10,524	3,599
October, 1918	18	2,298	6,773	6,547	2,524
Average	..	..	6,838	..	4,410
Felts and Building (Roofing, Sheathing, etc.):					
October, 1920	53	10,755	28,807	26,101	13,461
October, 1919	51	7,991	31,103	33,138	5,956
October, 1918	51	8,348	24,358	24,192	8,514
Average	..	..	24,804	..	7,401
Other Grades (Specialties not otherwise classified):					
October, 1920	97	13,621	29,190	28,581	14,230
October, 1919	86	17,688	23,950	26,147	15,491
October, 1918	72	10,784	21,017	21,430	10,371
Average	..	..	19,162	..	12,098
Total—of all Grades:					
October, 1920	..	165,340	621,964	613,324	173,980
October, 1919	..	219,208	616,808	637,768	198,248
October, 1918	..	183,608	527,492	523,291	187,809
Average	..	..	512,694	..	224,592

Note—The average production and stocks are based upon the annual reports for 1917, 1918 and 1919.

The following stocks were reported on hand at terminal and delivery points on October 31, an addition to the mill stocks shown in the tabulation; news print, 452 tons; book paper, 2,180 tons; fine, 162 tons; wrapping, 3 tons; and "other grades," 174 tons.

Stocks of all grades except news print and book, increased during the month. Stocks of all grades reported by manufacturers at the end of October amounted to 176,951 tons, including the stocks at terminal and delivery points. In addition to these stocks, jobbers and publishers reported news print stocks and tonnage in transit aggregating 235,481 tons.

Ratio of Stocks to Average Production

Comparing the stocks on hand at the domestic mills on October 31, with their average daily production based upon the combined production for 1917, 1918 and 1919, the figures show that:

News print paper mill stocks equal about five days' average output.

Book paper mill stocks equal slightly more than 7 days' average output.

Paper board mill stocks equal about 7 days' average output.

Wrapping paper mill stocks equal about 9 days' average output.

Bag paper mill stocks equal slightly less than 5 days' average output.

Fine paper mill stocks equal about 26 days' average output.

Tissue paper mill stocks equal slightly less than 15 days' average output.

Hanging paper mill stocks equal slightly less than 7 days' average output.

Felts and building paper mill stocks equal about 14 days' average output.

Miscellaneous paper mill stocks equal slightly more than 19 days' average output.

Total paper mill stocks of all grades equal about 9 days' average output.

Imports and Exports

The imports and exports of all grades of paper for September, 1920, compared with September, 1919, as shown by the records of the Department of Commerce, were as follows:

	September, 1920		September, 1919	
	Pounds	Value	Pounds	Value
Imports:				
News print	130,822,161	\$6,703,303	93,147,032	\$3,308,723
Book paper	242,296	32,528	2,312	1,057
Wrapping	774,606	79,181	766,256	63,771
Hanging	..	20,757	..	9,901
All other grades*	..	244,262	..	138,006
Exports:				
News print	6,363,957	454,564	9,405,034	484,436
Book paper	6,112,494	981,451	7,696,741	799,229
Paper board	..	455,241	..	320,507
Wrapping	4,279,099	564,424	4,348,558	371,043
Fine	..	209,085	..	75,359
Tissue	..	588,023	..	658,011
Hanging	..	246,112	..	129,437
All other grades*	..	95,805	..	68,461
Total imports	..	1,049,324	..	519,614
Total exports	..	7,080,031	..	3,521,458
	..	4,440,029	..	3,426,097

* Includes some paper already converted into commercial articles.

News print is the only grade of which the United States is a heavy importer. The bulk of this tonnage, the value of which amounted to \$6,703,303 for September, 1920, is imported from Canada. The value of the exports of news print in September, 1920, amounted to \$454,564, which is slightly less than 7 per cent. of the news print imported.

Book paper, news print, wrapping paper, fine paper and paperboard were the principal grades exported, the combined value amounting to \$3,043,703, for September, 1920.

The value of the total imports of all grades was about 7 per cent. less than for August 1920, and 50 per cent. greater than for September, 1919. The value of the total exports for September, 1920, was \$1,013,932 more than the value of the exports for September, 1919, and \$2,640,002 less than the value of the imports for September, 1920.

Loss of Production

The idle machine time reported to the commission is shown by

Grade	Lack of Labor		Lack of Orders		Repairs		Other Reasons		Total	
	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919
News Print:										
Number of machines.....	...	...	3	...	11	30	11	2	25	32
Total hours idle.....	...	...	448	...	1,157	999	581	90	2,186	1,089
Book Paper:										
Number of machines.....	...	4	...	10	37	33	22	33	59	80
Total hours idle.....	...	480	...	867	5,161	1,084	1,718	2,750	6,879	5,181
Paperboard:										
Number of machines.....	5	10	66	30	69	93	192	47	242	180
Total hours idle.....	568	5,296	14,056	5,639	8,438	10,213	22,824*	4,305	45,886	25,453
Wrapping:										
Number of machines.....	...	3	7	5	31	30	34	35	72	73
Total hours idle.....	...	1,105	953	918	3,183	3,403	5,715	5,006	9,851	10,432
Bag:										
Number of machines.....	...	...	...	...	9	9	2	5	11	14
Total hours idle.....	...	...	...	...	286	1,066	159	264	445	1,330
Fine:										
Number of machines.....	...	7	15	34	26	20	38	22	79	83
Total hours idle.....	...	1,038	2,933	7,713	4,734	1,563	4,025	2,224	11,692	12,538
Tissue:										
Number of machines.....	2	...	25	9	24	28	15	22	66	59
Total hours idle.....	697	...	3,454	2,671	3,154	2,519	2,475	2,673	9,780	7,863
Hanging:										
Number of machines.....	...	...	...	...	7	10	6	5	13	15
Total hours idle.....	...	...	...	...	434	1,020	648	173	1,082	1,193
Felts and Building:										
Number of machines.....	...	2	10	7	6	18	19	14	35	41
Total hours idle.....	...	744	1,599	258	1,018	232	3,233	163	5,850	1,397
Other Grades:										
Number of machines.....	1	...	6	4	17	14	1	14	25	32
Total hours idle.....	54	...	1,166	1,060	1,938	1,030	23	475	3,181	2,565
Total number of machines.....	8	26	132	99	237	285	250	199	627	609
Total hours idle.....	1,319	8,663	24,609	19,126	29,503	23,129	41,401	18,123	96,832	69,041

* Includes 832 hours due to water conditions, and 654 hours due to lack of material.

grades in the tabulation attached. This lost time is compiled from the following operating reports: News print 48 companies operating 52 mills and 106 machines; book paper, 79 companies operating 100 mills and 238 machines; paperboard, 185 companies operating 213 mills and 278 machines; wrapping, 101 companies operating 114 mills and 200 machines; bag, 27 companies operating 27 mills and 34 machines; fine, 70 companies operating 102 mills and 178 machines; tissue, 75 companies operating 86 mills and 156 machines; hanging, 18 companies operating 19 mills and 22 machines; felts and building, 33 companies operating 41 mills and 59 machines; other grade, 63 companies operating 76 mills and 112 machines. This tabulation does not include the machines in 11 mills which were closed down completely. The reasons tabulated for lost time are lack of labor, lack of orders and repairs. "Other reasons" include lack of coal, lack of water power, etc. Lack of coal caused a loss of 192 hours. The time lost in October, 1919, is shown by grades and reasons for purposes of comparison.

Changes at Arrowhead Co. Plant

FULTON, N. Y., November 29, 1920.—W. D. Greagor, general superintendent of the Arrowhead Mill, has severed his connections with the Arrowhead company. He is succeeded by H. L. Sherrei, for the past two years paper mill superintendent of the same company. R. H. Wheeler, superintendent of the Granby Division, has also severed his connections with the same company, and is succeeded by R. Barney.

Zellerbach Paper Co. Buys A. S. Hopkins Co.

SAN FRANCISCO, Cal., November 19, 1920.—In order to augment its chain of wholesale paper houses on the Pacific Coast, the Zellerbach Paper Company recently purchased the A. S. Hopkins Company, of Sacramento. The transfer of ownership was reported in the Sacramento *Union*:

"The new brick building of the Zellerbach Paper Company is now a feature of the waterfront. Three stories high, it represents another of the larger of the Western companies to recognize Sacramento as one of the important industrial centers of the Pacific Coast.

"The A. S. Hopkins Company, pioneer paper firm of Sacramento and the west-of-the-Rockies territory, has now ceased to exist. News of the transfer of interests is now history.

"Yesterday workmen were busy moving the stock of the Hopkins Company into the new Zellerbach quarters.

"The Zellerbach Paper Company concluded that Sacramento

would be the logical depot from which to cover the Northern California and Nevada territories.

"The paper trade of Northern California and Nevada, which in the past had been handled from the company's plant in San Francisco, will from now on be handled from Sacramento.

"Forty people will be regularly employed. This central warehouse will fill orders from representatives working as far north as the Oregon line and as far east as Utah. A complete stock will be carried, enabling the company to make immediate deliveries.

"E. S. Carpenter, who for several years was connected with the Hopkins company, will act as president of the Zellerbach division there.

"James R. Davis, formerly sales manager of the San Francisco division, has been appointed divisional manager in Sacramento. The new store is the twelfth link in a chain of wholesale paper houses owned by the Zellerbach Paper Company."

It will be advisable for all mills to send samples and quotations to this new division of the Zellerbach Paper Company.

Box Firm Reduces Wages

[FROM OUR REGULAR CORRESPONDENT.]

LEOMINSTER, Mass., November 29, 1920.—A wage reduction of from 10 to 15 per cent. has been announced by Whitney & Company in most of its departments. The company manufactures paper boxes. A falling off in business is given as the reason for the decrease by Fred Whitney, president of the company.

COST ASSOCIATION HOLDS CONVENTION AT KALAMAZOO

Second Annual Convention of the Kalamazoo Valley Local Divisions of the Cost Association Is Largely Attended and Is a Complete Success in Every Respect—Organization Is Addressed by T. J. Burke, the New Secretary and Treasurer of the Cost Association, With Headquarters in New York—Other Men Prominently Connected With the Industry Make Addresses.

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., November 29, 1920.—The second Annual Convention of the Kalamazoo Valley Local Division of the Cost Association of the Paper Industry was held at the Park American Hotel, afternoon and evening of November 22. There were in attendance about sixty, composed of executives and accountants. Not only were all the mills in Kalamazoo Valley represented, but there were several from outside of the state.

The address of B. E. Hutchinson, treasurer of the American Writing Paper Company of Holyoke, Mass., was very educational and contained much valuable information and suggestions to the executives as well as the cost accountants.

The first after-dinner speaker was T. J. Burke, secretary and treasurer of the Cost Association of the Paper Industry, with headquarters at 18 East 41st Street, New York City. Mr. Burke's address proved to all present that he had years of experience in accounting work and that he is in position to help all the mills to improve their cost systems. The Cost Association was very fortunate in getting such a valuable man.

The next address was by Durward E. Burchell of Cambridge, Mass., professor of industrial accounting at Harvard University. He delivered a very instructive and educational address on "Accounting Control of Manufacturing." This is a very important subject as no cost system can be dependable unless it has some accounting control. Mr. Burchell explained an excellent system which could be very easily put in effect.

The next speaker was Earl G. Barr of E. G. Barr & Company, systematizers and cost accountants of Chicago. His subject was "Departmental Distribution of Power and General Overhead and Application of the Same by Graphic Chart Method." This was explained in a very influential way by giving every one present a chart and also using blackboard diagrams.

Cost accounting today is a most important branch of mill management, and the Kalamazoo Branch is becoming one of the most progressive business societies in the city. The men in charge of the local accounting are Geo. T. Jubb, Paul Brocsamle, Harry C. Bradford, G. T. Ingling, J. T. Bachelder and William Allen.

B. F. Soffe Speaks to Superintendents

Benjamin F. Soffe, of the Permutit Company, New York, was the speaker before the regular meeting of the Michigan Division of the American Pulp & Paper Mill Superintendents Association, the evening of November 24. The subject of his address was "Water and Water Softening." Mr. Soffe gave practical demonstrations with his demonstrating outfit.

T. J. Burke on Tour

T. J. Burke, of New York City, the newly elected national secretary of the paper mills cost association, visited the Kalamazoo Division the past week and was taken in charge by President George Jubb and Secretary Harry Bradford. Mr. Burke is on a personally conducted tour designed to promote the interests of the organization throughout the length and breadth of the land. "The Cost Association is destined to take its proper place in the future

conduct and development of the paper industry," said Mr. Burke. "Conditions are now arising that will tend to place this organization in a position where its activities will be more fully appreciated by mill executives. 'Costs' are daily becoming a more and more important factor in the successful management of all mills. Our active members are the men who study these conditions closely and should be able to disclose possible leaks in many departments.

"It is my desire to more closely bind the interests of the organization with the mill executives and to induce these executives to become affiliated with the association in an active way."

C. A. Hubbard to Head New Paper Firm

Carril A. Hubbard, for several years sales manager of the Bryant Paper Company, will, about January 1 next, resign his position and become head of a company now being organized to take over a special paper line now being manufactured by a Wisconsin concern. The mill in question runs one machine exclusively on onion skin paper and it is the plan of Mr. Hubbard and his associates to promote the sale of this commodity. Mr. Hubbard has made many friends during his residence in Kalamazoo and is actively identified with the social and business life of the community. He has been particularly interested in the growth and success of the Associated Charities Association of this city. He will not move his family from Kalamazoo, though his new duties will involve a large amount of traveling.

General Trade News

The Kalamazoo Vegetable Parchment Company employees have been instrumental in the organization of the Parchment Community Club. This association will meet twice monthly in the Parchment Welfare hall. The meetings will be both social and business in nature. One of the main objects will be to improve living conditions in "Parchment," already an attractive industrial suburb of this city.

The Bardeen Paper Company, MacSimbar Paper Company and the Wolverine Paper Company, all of Otsego, have organized a general welfare department for the three mills. It will have much to do with the employment of labor and its proper housing in the future. It will also promote social and educational work among the employees.

F. M. Hodge, president of the Kalamazoo Paper Company, retires this week as president of the Kalamazoo Kiwanis Club. Under his wise direction the club has made great strides the past year and is now recognized as one of the most progressive and valuable organizations in the city.

Forest Products Association Meets

The Empire State Forest Products Association held its fifteenth annual convention at the Hotel Utica, in Utica, on Thursday, December 2, beginning at 10 in the morning. The program was, in substance, a forest policy conference; for the association believes in self-determination when it comes to problems of handling New York State timberlands.

New York has led all other States in its policy of conservation, a position which the private timberland owners and operators and the forest industries of the State desire to see maintained. At the Utica meeting, the association, as the recognized spokesman of these interests, endeavored to formulate its views on a forest policy for New York State.

The program included addresses by such well-known leaders in forestry and conservation as Dean Moon of Syracuse, Professor Hosmer of Cornell, Secretary Carpenter of the Conservation Commission, and at the evening banquet, ex-Senator Sage, spoke on water storage and water power development.

The meeting was not confined to members of the association, but all interested persons were invited to attend and to participate in the discussions.

ARE YOU
INTERESTED

IN

SWEDISH GROUND WOOD?

Wire Us for Quotations

A. J. PAGEL & CO., Inc.

Wood Pulp Agents

347 MADISON AVE.

NEW YORK

PRINTING COMMITTEE WANTS SUGGESTIONS ON PAPER BIDS

Will Be Willing to Change Date of Making Annual Contracts for the Printing Office if This Meets With the Greater Convenience of the Paper Manufacturers—Major Besson, of the District Government, Announces That the Price of Waste Paper Has Declined Recently From \$1.70 Per Hundredweight to Offers by the Mills of 35 to 38 Cents for the Same Quantity.

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., December 1, 1920.—It is understood that the joint Congressional committee on printing, which purchases paper for the Government Printing Office, is open for suggestions as to the time of year for asking annual bids for the paper for the printing office.

A great many years ago the joint Congressional committee on printing decided that the paper contracts should commence on March 1, which means that the bids are opened in January with awards being announced in the week following. At the time this custom was started the paper manufacturers used to make their contracts for raw materials around that time of the year and the date was originally set as being most convenient for the paper manufacturers. However, word is now received from the committee that it would be willing to change this date if it would be more convenient for the paper manufacturers in bidding and correspondence with the committee has been invited.

Waste Paper Prices Decline

The business of salvaging waste paper has slumped, so far as the District government is concerned, according to Maj. F. S. Besson, assistant engineer commissioner, in charge of the trash plant.

Maj. Besson said that not so long ago the city was getting \$1.70 per hundredweight for the fragments of paper collected from backyards and streets. Today, he said, the mills are offering 35 and 38 cents for the same amount and are not eager to take it at those prices.

The assistant engineer commissioner attributes the change to the fact that for more than a year children and adults, spurred on by the high prices offered, have been saving paper and selling it to the "ragman." As a consequence, Maj. Besson pointed out, the warehouses of the pulp mills are filled with a reserve supply of waste paper.

Maj. Besson said some municipalities are seriously considering the installation of pulping machinery at their trash plants. The District has little space at the trash plant for the storage of the salvaged paper after it has been baled, and must let it go at whatever price is offered in order to prevent it from accumulating.

Inquiry Into Industrial Production

The International Labor Office has undertaken a world-wide inquiry into industrial production in the various countries of the world, in its relations to conditions of labor and cost of living. The purpose of this inquiry will be to secure all information necessary to an accurate statement as to the actual condition of affairs with regard to prices and production. The Office will not make any more original investigations on its own account than are absolutely necessary, but will make the utmost possible use of data collected by governments, scientific societies and economic organizations of all kinds. It will undertake only such research work as is necessary to complete existing collections of material. The inquiry will include an examination of (1) state of affairs in

regard to coal and raw materials, (2) transport conditions, (3) supplies of machinery and tools, (4) exchange, (5) credits, (6) factors connected with labor and (7) psychological and moral factors.

Rates on Paper

The Interstate Commerce Commission has issued an order in connection with the rates on printing paper in carloads from Denver, Colo., to Santa Fe, N. M. The commission has authorized the Atchison, Topeka & Santa Fe and the New Mexico Central Railway to establish rates on printing paper in carloads shipped in interstate commerce dependent upon value declared in writing by the shipper or agreed upon in writing as the released value of the property.

The commission has also authorized the Atchison, Topeka & Santa Fe to establish rates on printing paper not enamelled, book or flat writing paper not surface coated in straight or mixed carloads depended upon the same conditions as above stated. The commission has made the same provisions for the Atchison, Topeka & Santa Fe in connection with rates on printing paper not enamelled, roll paper for computing machines, printing paper, unprinted, printed paper consisting of book paper, cover paper, Bristol board, cardboard, document Manila and lithographing paper, news print paper, label paper, poster paper and tag board, rolled or unrolled; wrapping paper, unprinted; unprinted paper bags, and wall paper, in carloads between oints in New Mexico and Texas and various Texas and other eastern destinations.

Duty on Lignum Extracts

The United States Court of Customs Appeals in a decision just rendered has reversed the decision of the Board of General Appraisers which overruled a protest in connection with the importation into the United States of "Lignum Extract" in tank cars from Canada. This extract is a by-product from manufacture of sulphite wood pulp and the shipment in question was assessed with duty at the rate of 10 per cent ad valorem as "waste not specially provided for" under the tariff act of 1913.

The importers protested against the assessment, claiming among other things a right of free entry for the merchandise under the provision for "extracts of oak and chestnut and other barks and woods other than dyewoods such as are commonly used for tanning," contained in the same act. The Board of General Appraisers heard the protest of the importers and overruled it, from which decision the importers appealed to the court and the court has upheld the importers.

Fairbanks, Morse & Co. Expand

Fairbanks, Morse & Co., have purchased the entire business consisting of all stock on hand, good-will and liabilities of the Luster Machine Shop and Railway Equipment Company, 917 Arch street, Philadelphia. Fairbanks-Morse have opened a new branch at this address under the management of D. W. Dunn, and will sell their complete line of engines, motors, pumps, etc. The entire personnel of the Luster Machinery Company has been retained. E. J. Luster, former president, will be manager of the Machine Tool Division of the Fairbanks-Morse Philadelphia branch.

Interest in German Paper Clothing

Wisconsin papermill men have been interested in samples of German paper cloth which have been sent to them in an effort to create a market here. Elaborate tests have been undertaken by a few of the mills, showing the new fabric possesses considerable tensile strength and is able to withstand a considerable amount of moisture, but is highly inflammable. The fabric is coarsely woven and resembles burlap. It is made out of threads consisting of fine shreds of paper rolled together.



Carrying a Volcano For Six Months

There wasn't even a moment when the camera could catch this belt in clear detail—so heavy was the smoke and mist rising, from the sizzling cargo.

Bearing steaming sinter, enveloped constantly in clouds of hot gases—this Goodrich "LONGLIFE" ran six months under these conditions in the plant of the American Sintering Company at Youngstown, Ohio. But six months—what did that mean in service return?

Let's see. The maximum record before the installation of "LONGLIFE" was three weeks to three months—several belts quit in a few weeks—until "LONGLIFE" bent itself to the task. Six months—two to three times greater service than its nearest competitor.

THE B. F. GOODRICH RUBBER CO.
Akron, Ohio

This is the best photo we could get of the "LONGLIFE" Belt in the American Sintering Company.

**Goodrich
"Longlife"
Conveyor Belts**

FOUNDED 1869



NEWS PRINT EXPORT PRICE TO BE 6½ CENTS FROM CANADA

Spanish River Pulp and Paper Mills Will Raise Their Price to This Level for the First Quarter of 1921, Which Will Make This the General Export Price from Canada for the First Three Months of the New Year—W. I. Bishop Construction Co., of Montreal, Gets Contract to Build Big Pulp Mill for Three Rivers Pulp and Paper Co.—Other News of the Canadian Trade.

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., November 29, 1920.—A great deal of prominence has been given in the papers here to a despatch from New York, stating that the International Paper Company had announced new contract prices for news print for the first quarter of 1921, at the rate of 6½ cents per pound or \$130 per ton. This is the price which the Canadian Export Paper Company is charging during the last three months of the present year. Some of the American papers have been getting paper from the Spanish River Pulp and Paper Mills at a lower price under old contracts. Your correspondent is informed that contrary to expectations in some quarters there will be no further increase in the contract price for paper supplied by the Canadian Export Paper Company for the first quarter of 1921, but there will be an increase for those mills who have been getting their supply from the Spanish River Pulp and Paper Mills. This Company's price will be raised to 6½ cents per pound or \$130 per ton, and this will be a general export price from Canada for the first quarter of the new year.

New Pulp Mill at Three Rivers

The Three Rivers Pulp and Paper Company has awarded to the W. I. Bishop Construction Company, of Montreal, a contract for the construction of a ground-wood mill at Three Rivers, Que. This Company was incorporated recently with an authorized capital of \$4,400,000. The principal promoters are Noah Timmins, a well-known mining capitalist, and John Breakey, one of the best known lumber men in Eastern Canada. The company's limits are on the Etchemin River and along the Gulf of St. Lawrence.

The Clarke Company's New Mill

A. J. MacIntyre, manager of the Clarke Company's Pulp mills at Bear River, N. S., which are now approaching completion and will likely be ready for operation during the present winter, states that the company is seriously considering the erection of a paper mill near St. John, N. B. The original intention of the company had been to establish this paper mill at Bear River, where it was promised hydro-electric development by the provincial government. This hydro-development has been delayed and if it is not soon proceeded with the company will erect its mill in New Brunswick. The proposed mill will be the first of its kind in the Maritime Provinces.

Invitation for Pulp and Paper Plants

A despatch from St. John states that considerable attention has been attracted both in the British Isles and in the United States by a recent address of Premier Foster of New Brunswick in which he offered reasonable terms and lengthy franchises to any pulp and paper concerns establishing in New Brunswick. The Government has now supplemented the information by the announcement that it has undertaken to develop water powers at strategic points and has all surveys and plans completed preparatory to an immediate commencement on construction. These developments, which will be under the control of the Water Power Commission, are to be at the service of any companies wishing to establish pulp and paper making plants. Moreover, the Government is prepared to offer substantial assistance to any company desiring to

develop a water power project in connection with a pulp or paper making enterprise.

Up to the present, according to available information, only three companies are proceeding with new development work on an extensive scale. These are the Fraser Brothers of Edmundston, who have a large new plant under way, the Bathurst Company, also extending its works, and the Nashwaak Pulp and Paper Company, a Maine concern, which is erecting a new dam and will establish another mill near Fredericton.

It is the desire of the Government to promote the erection of pulp and paper plants drawing their supply of pulpwood from Crown lands. At present the cut on these lands is small. Of the province's total production of pulpwood, more than 75 per cent is cut on private lands. A provincial embargo is in force prohibiting the export of pulpwood in an unmanufactured state when cut on the crown lands; this, of course, does not apply to the cut product of privately owned lands.

New Brunswick's crying need is for capital to develop her extensive pulp and paper making possibilities on a large scale. There are within the province approximately 12,500,000 acres of lands more or less covered with forest and containing approximately 36,000,000 cords of spruce and balsam. Licensed Crown lands amount to 6,332,000 acres, privately owned lands, 4,500,000 acres and 2,500,000 settlement lands. This gives some idea of the tremendous expansion possible for the industry in the province, and the attractions offered to outside capital.

The provincial government has, for some years, been carrying on a forest survey said to be the most comprehensive of its kind in America. A large portion of the forest lands has been extensively examined and mapped out by forest experts, so that definite data as to timber on large areas can be given to applicants for licenses to cut on Crown lands. This is an important consideration for companies anxious to determine authoritatively the possibilities of timber leases, and their relation to river and rail transportation.

Deal for Timber Limits Postponed

The large timber deal by which the Fraser Companies Limited, were to acquire the New Brunswick Railway Company's timber lands, at a cost of approximately \$11,000,000, has not yet been closed. Archibald Fraser makes the statement that the consummation of the deal has been postponed and added that no big deals are being put through at the present time. For continuing the option which they have on the New Brunswick Railway Company's land, the Fraser interests have been paying \$25,000 a month for some time now.

Mills Lower Price of Spruce Lumber

A drop of five dollars per thousand feet in the sale price of spruce lumber has been made in the Ottawa lumber market. The reason for the drop, it is stated, is due largely to the inactive dealing which has been going on in the spruce market for the past several weeks. The prices of all grades of pine are reported to be holding absolutely firm, though there is at the present time very little trading going on in any of the lumber stocks. Dealers on the whole described the market as being "dead," and attributed its cause chiefly to the aftermath of the presidential elections in the United States, and the slackening of the demand from public buyers. Uncertainty as to the building program next spring has also a considerable bearing upon the market. It was also announced that lumber cut in the woods of the Ottawa Valley this year would be one of the lowest on record.

Abitibi Putting in Pulpwood Supply

The Abitibi Company of Iroquois Falls, Ont., is making good

(Continued on page 72)

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

FREER MILL DELIVERIES REPORTED FROM TORONTO

Smaller Purchases, However, Are Also Reported on the Part of the Consumer—General Opinion of the Paper Trade Is That Prices Will Come Down Some After the First of the Year, Although the Movement Is Likely to Be Gradual—Cornwall Pulp and Paper Co. Is Incorporated for \$200,000 by Capitalists Who Are Principally From Buffalo—Scale of Discounts Arranged.

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ontario, November 29, 1920.—Freer deliveries of stock from the mills and smaller purchases on the part of customers from jobbers characterize the paper market at the present time, with prices in all lines holding firm. In wrapping papers, consumers are holding aloof, but this is causing the wholesaler no anxiety as they feel that customers will have to come into the market again early in the new year. No large stocks are being held by jobbers. The general opinion of the paper trade is that paper prices will come down some after the first of the year. The movement is likely to be gradual. It is believed that present values are now artificial, and while cotton, leather, wool and other commodities are dropping, paper cannot escape. Some mills take an opposite view, and declare that as long as consumption keeps ahead of production and raw materials, such as pulp, etc., are excessive in price, there is not much prospect of an early decline in quotations.

Jobbers say that if mill prices go down theirs will go down with them, and they are endeavoring to keep their stock to a fair level, where good service can be rendered, but there is no disposition to load up. The printing trade has improved considerably of late in Toronto and other cities. This has caused a little more buying. While orders during the past two or three weeks have been small they have been plentiful.

Speaking of the outlook, a leading member of the wholesale interests said this week that he thought now was the time for the manufacturer, when making up his mill run schedules, to consult with his customers to find out what was needed most, and if it is possible to meet their views to do so. There was no use in a mill sending a customer a lot of S. C. book when he was waiting for M. F. The result was that the customer's warehouse was filled with unsalable stock and the mill was not getting its product into the hands of the ultimate consumer.

It is the prevailing view in the paper ranks that if sane business methods are adopted and all come down the ladder one round at a time, a normal condition in the industry will be reached with perfect safety. Some Old Country book papers have begun to arrive on the Canadian market, and travelers for English houses are calling on the Canadian trade for the first time in some years. Prices for imported lines are so high when laid down in Canada that manufacturers in the Dominion do not fear any serious competition from British firms.

In toilet and tissues, there have been no changes in prices for weeks, and mills report the cost of raw stock still high. They are buying only what is absolutely required. Orders are being caught up with and some new cheap lines will be put on the market in the near future to meet American competition. The rag and paper stock market is very quiet, and buying is limited. It is not expected there will be any revival until well into the new year.

Cornwall Gets New Industry

A charter has been granted to the Cornwall Pulp and Paper Company, with a capital stock of \$200,000. The members of the company are principally Buffalo capitalists. The company has leased a building in Cornwall, with the option of purchase, and will turn out ground wood pulp and later branch out into the production of wall board, etc. The initial capacity will be forty tons

daily and five grinders will be running by the first of the year. Two rossing machines are also being installed for handling the rough wood. E. E. Emigh, of Richmond, Va., is in charge of the mill. J. B. O'Brien, who is president of the Niagara Wall Board Company, is the president and manager of the new company, and the treasurer is C. C. Hullinger, who is also connected with the Niagara Wall Board Company and the Maine Pulp and Paper Company. P. C. Deevle, president of the L. R. Steel Service Corporation; L. H. Manley, a director of the Davenport Coal Company, Buffalo, and Fred Dobmeier, of Buffalo, are the other directors.

Scale of Discounts Arranged

The Mills Relations Committee of the Canadian Paper Trade Association, Toronto, have arranged with the various mills manufacturing book papers, manila writings, covers, posters, tag manila and bristols for a scale of discounts as follows: (1) A base price to jobbers and car load buyers; (2) a one-ton price, being 15 per cent. advance on the base price; (3) a 500-pound price, being 20 per cent. on the base price; (4) less than 500-pound lots, being 25 per cent. on the base price. All of these lots are to be sold on the basis of f.o.b. mills. A further conference of the Mills Relations Committee was held this week in Montreal with the manufacturers.

Pulpwood Keeps Growing in Value

Spruce is growing more valuable all the time, and the highest figure that the Ontario government has received in recent bids is \$6.10 per cord, which was from J. T. Horne, of Fort William, Ont., for fifty square miles of timber and pulp wood limits. A few days previous the highest figure was \$6.05, which was for seventy square miles in the township of West Hele township. It is estimated the limit contains about 75,000 cords of pulp wood. The successful tenderer was the Port Arthur division of the Provincial Paper Mills Company.

Big Company Adopts New Name

The name of the Canada Box Board Company has been changed to the Canada Paper Board Company. The headquarters of the company are in Montreal, and the general manager is David F. Robertson. The company has plants at Montreal, Frankford and Campbellford, Ont., and is the largest producers of board in the Dominion. A new ground wood pulp plant is about completed at Frankford, where the capacity of the board mill has also been increased. All the mills of the company are busy.

General Jottings and Personals

William Wallace, of Toronto, has been appointed manager of the Canadian Daily Newspaper Association. Recently he was in charge of the arrangements for the Imperial Press Conference in Canada, and before that looked after the *Canadian Daily Record* during the war, supplying home news to the Canadians in France. He also served overseas and won the Military Cross.

E. A. Crippen, Sapdina avenue, Toronto, has been appointed Canadian representative of the Grammen Paper Mills Company of Grammen, Norway, manufacturers of greaseproof and copying tissue papers.

Col. Thomas Gibson, Toronto, vice-president of the Fort William Paper Company, paid a visit to Fort William this week, and delivered an interesting and timely address on the pulp and paper industry in Canada before the Canadian Club.

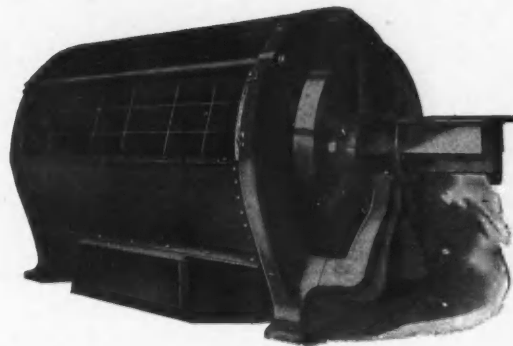
I. H. Weldon, Toronto, president of the Provincial Paper Mills Company, and N. L. Martin, Toronto, secretary of the Canadian Paper Trade Association, who are members of the Hartley Bay Hunt Club, have returned home after a successful expedition in the deer-hunting line.

Among the callers on the trade in Toronto during the past week were R. O. Hughes, of Hughes & Eason, wholesale paper merchants, Auckland, New Zealand; Ralph H. Booth, president of the Booth Paper Company, Detroit, and John G. Sutherland, of Dayton, Ohio president of the Fort William Paper Company.

“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

The Sandy Hill Iron & Brass Works

Hudson Falls, N. Y.

Manufacturers of **Paper and Pulp
Mill Machinery**

WISCONSIN PAPER BUSINESS NOT AS ACTIVE AS RECENTLY

Employment Department of Paper Mills and the Employment Bureau of the State Report More Applicants Than Jobs, Which Condition Has Not Existed for More Than Three Years—Another Effect of the Slackened Demand Is the Almost Complete Halt of New Building Operations—Plenty of Labor, It Is Stated, Will Be Available During the Winter Months.

[FROM OUR REGULAR CORRESPONDENT.]

APPLETON, Wis., November 29, 1920.—While the paper business in Wisconsin is still good, it is not as active as a few months ago, manufacturers say. There have been rumors of mills closing down temporarily because of lack of orders, but only a few of those rumors were founded on fact. One or two mills in Green Bay did curtail operations for a few weeks, when their warehouses were filled, but they are operating again. Low water, which forced several mills to slacken up a bit during the later summer and early fall months, enabled orders to catch up with production, and those mills are now operating at capacity.

For more than two years a majority of the mills could not accept new business, a condition particularly true in the Fox River valley, but of late the sales departments of many mills are seeking new customers, it was said. Less difficulty is being experienced in obtaining materials, and there is no shortage of labor. Employment departments of paper mills and the employment bureau of the State report more applicants than jobs, a condition which has not existed for more than three years.

Another noticeable effect of the slackened up demand is the almost complete halt of new building projects. Construction work now under way, of course, will be completed, but no new projects have been started for some time.

Big Projects Being Completed

For two or three years hardly a month passed without announcement of some new project of major importance. Among the big projects now in process of completion in Wisconsin and the Northern Peninsula of Michigan may be mentioned the Pride Pulp and Paper Company at Tomahawk; Hoskin-Morainville Company at Menominee, Mich.; Octonagon Pulp Company, at Octonagon, Mich.; Peshtigo Fibre Company at Peshtigo; Consolidated Water Power and Paper Company at Wisconsin Rapids and Biron; Gilbert Paper Company at Menasha; Neenah Paper Company at Neenah; Fox River Paper Company at Appleton; Eau Claire Paper Manufacturing Company at Eau Claire. In addition to these there are several minor improvement projects which are being finished.

Practically all of the big construction work will be finished early in the spring, it was said. Paper production will be increased by about 25 per cent in Wisconsin when the new mills and new machines begin operation.

Plenty of Labor in Winter Months

An indication that there will be plenty of labor during the winter months is contained in almost daily announcements of suspension of large Wisconsin industrial institutions. One of the latest to close down is the Menasha Woodenware Company at Menasha, the largest concern of its kind in the world, throwing approximately 2,500 men out of employment. There was a rush to the paper mills when that big plant closed, but only a few men could be given jobs.

Acquires Newaygo Co.

Announcement was made by the Consolidated Water Power and Paper Company at its office in Wisconsin Rapids that it has

acquired complete ownership of the Newaygo Company of Port Arthur, Canada, a timber land holding and operating company. The Newaygo company also operates a tug line on the Great Lakes, landing pulpwood at Ashland, Wis., from where it is shipped by rail to paper mills in Wisconsin.

The Newaygo company was formerly a subsidiary of the Interlake Pulp and Paper Company, which was recently merged with the Consolidated property, which acquired the timber holdings a short time after.

Goes With Northern Paper Mills

W. A. Kelly, formerly connected with the Marathon Paper Mills Company at Rothschild, Wis., has been appointed general superintendent of the Northern Paper Mills at Green Bay. Mr. Kelly started his paper-making career with the Falls Manufacturing Company at Oconto Falls, Wis., when 11 years old. He remained with that company for ten years, after which he became identified with paper mills in Petoskey, Mich.; Au Sable Forks, N. Y.; Richmond, W. Va., and Roanoke Rapids, N. C. He returned to Wisconsin ten years ago to join the administrative force of the Marathon company.

George W. Mead, president of the Consolidated Water Power and Paper Company, has announced the purchase of a large tract of land on the outskirts of the village of Biron, where one of its mills is located, which is to be improved for park purposes for use of Biron people. It is planned to make the property as attractive as any in the Wisconsin River valley. The big paper mill is Biron's sole means of support, and it is able to operate all its affairs on the taxes paid by the company.

General News of the Trade

The Elm Paper and Box Company of Neenah is installing machinery in its new plant in Neenah, and will soon begin the manufacture of paper boxes and specialties. A half dozen paper specialty companies have been established in Neenah and Oshkosh within the last eighteen months.

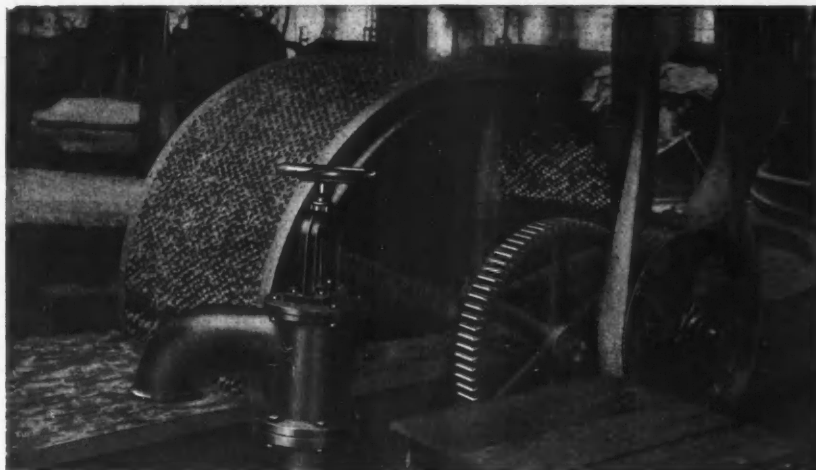
First classes in the papermaking course to be established by the Forest Products laboratory and the University of Wisconsin extension division, Madison, at Neenah, will be held the week beginning December 1. For the first few weeks classes will be conducted one evening a week, but later the course of study is to be extended to two or three evenings.

Lectures and discussions on the identification of wood and the use of wood will take up the first few weeks, after which the processes of pulp and papermaking will be considered. The courses of study are rather technical and are intended to supplement actual work in the mills.

Paper mill owners and the American Legion were instrumental in establishing the classes. Members of the Legion will receive instruction free of charge, while others will be required to pay a small tuition fee. If the plan works out well it is intended to establish a day school in pulp and papermaking in the Fox River valley, probably in Neenah. There is no similar school in Wisconsin, with the exception of the Forest Product laboratory.

Officials of the Kimberly-Clark Company are pleased with the success of the new State Bank of Kimberly, the home of the company's largest mill. The bank was opened a few days ago, and is doing a splendid business. Several officers of the paper company are directors of the bank.

The Technical classes in connection with the Abitibi Power and Paper Company at Iroquois Falls, Ont., have started for the season. The company has now its full force in woods operation for the winter. On the limits of the Abitibi organization there are eight company camps with nineteen jobbers and sub-jobbers, each taking cut anywhere from 2,500 to 55,000 cords of pulp wood. In all, over three thousand men are employed in the bush.



Doubles Capacity of Beater Tubs

By keeping your beater tubs continually on the job—eliminating the costly and wasteful stops for filling and discharging—the BIRD CONTINUOUS BEATER ATTACHMENT actually doubles their capacity. In other words, one Bird attachment plus one beater actually accomplishes as much as two beaters. Then—the savings due to the greatly reduced power consumption is sufficient to pay the cost of the Bird Attachment many times over every year.

Write us for Bulletin.

BIRD MACHINE COMPANY
South Walpole, Massachusetts

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

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

**BIRD CONTINUOUS
BEATER ATTACHMENT**

PAPER MEN IN NEW ENGLAND LOOK FOR NO PRICE DECLINE

Anticipate No Virtual Change in Paper Prices for Some Months at Least—W. F. McQuillen, of A. Storrs & Bement Co., States That When Change Does Come It Will Be Gradual and Without Any Noise or Panic—John Carter & Co. Conduct Interesting Advertising Campaign on "Halftones on Certificate Bond"—Other New England Trade News.

[FROM OUR REGULAR CORRESPONDENT.]

BOSTON, Mass., November 30, 1920.—Paper men of New England look for no virtual change in paper prices for months. Many who have just returned from the national convention in Chicago are of the belief prices will hold firm and that there can be nothing in the nature of a reduction from present figures.

One of the Boston jobbers holding this view of the outlook is W. F. McQuillen, of the A. Storrs & Bement Company, 140 Federal street. Mr. McQuillen made this prediction, when asked upon his return from Chicago for his views on the situation:

"I do not look to see much change in paper prices for another six months at least and maybe not for a year. When the change does come, it will come gradually, I think, without any noise or panic."

In an interview on the subject, recently, Mr. McQuillen was quoted as saying that there can be no change until there is a corresponding decrease in the price of coal and other manufacturing cost.

"There seems to be an impression among some of these men who are leading in the movement to buy the smallest possible minimum of stock, that the paper manufacturer is responsible for the present condition; that he is and has been curtailing his production for the sake of keeping prices up and reaping a profiteer's gain thereby.

"My observations of the past few days confirm what I already knew to be a fact in a general way. Paper manufacturers throughout the country are running their plants to the limit of their capacity, ninety per cent of them night and day. They cannot make any more paper than they are doing and because of the continuing increased cost of raw materials, they are not making as much money as they were in 1914 when prices were fifty per cent or more lower.

"The falling prices of other commodities, pointed out by unreasoning paper consumers as cause for a reduction in the price of paper, do not hold water when it comes to analysis. Take, for instance, the item of coal and grant that the price has decreased materially within the past few weeks. That fact furnishes not the slightest reason for a reduction of paper prices at this time. Why? Because the coal that is being used in the manufacture of paper and pulp today, and that will be used until late next spring, was bought months ago and paid for at the price that existed then. It would be a poor substitute of a business concern that would depend upon a from day to day coal supply under present conditions. No, the paper manufacturer, in common with the one who makes any other product of general consumption, has to make his plans and secure his material months ahead or else he meets with disaster, and the paper manufacturer is just as much entitled to get his money out of his business, with a fair and reasonable profit, as is any other producer.

"The pulp wood that the manufacturers of New England are paying a high price for now will not be available for manufacture into paper for a full year and it is hardly reasonable to suppose that it must be sold when so manufactured at a price in keeping with what pulpwood will cost a year from now.

"It is undeniably true that there are pirates in the paper manufacturing business, just the same as may be found in all other lines of business production, but they are the exception and not the rule. These men who have had everything to gain and nothing to lose, and have imposed upon the consumers' necessity by charging an exorbitant price for paper during the present crisis, have made some money, no doubt, but when matters become adjusted, as they must eventually, these same men will find that they have made all the money they ever will in the paper business."

Trade Quiet in New England

Trade during the past week in the New England markets was marked by the usual holiday quietness. While there has been a falling off of a dollar a ton in the price of mechanical pulp within the past two weeks, buyers do not appear particularly concerned.

Conducting Advertising Campaign

John Carter & Co., 100 Federal street, is conducting an advertising campaign on "Halftones on Certificate Bond," through distribution of advertising matter put out by the Crocker-McElwain Company of Holyoke, Mass.

One circular used in the campaign carries the largest half-tone ever printed on bond paper, a reprint of an actual commercial job. It is 133-line screen, printed on certificate bond by the certificate press, with doublestone ink on a cylinder press. The halftone, of the plant of the Electric Storage Battery Company of Philadelphia, is mounted on an upright-grain (wood) base supplied by the courtesy of J. W. Pitt, Inc., manufacturers, Bath, N. Y., and East 26th street, New York City. John Carter & Company is a member of the "Certificate Bond Club," the purpose of which is to carry forward direct by mail advertising to its legitimate goal.

"Essential Facts About Paper"

Customers of Stone & Andrew, Inc., are perusing a booklet entitled "Essential Facts About Paper," written and copyrighted by William Bond Wheelwright, author of "From Paper Mill to Press Room," etc., and privately printed for this Boston firm. The book contains 38 pages, in six chapters, as follows: "Principal Raw Materials," "Paper Making—The Heater Room"; "Paper Making—The Machine Room"; "Paper Making—Finishing"; "The Physics of Paper" and "Quality and Testing." The book contains illustrations of the rag room of Crane & Co.; rag boiler, same firm; beater room, mechanism of a Jordan engine, wet end of fourdrinier machine, calender end of fourdrinier machine, of the Hammermill Paper Company; super calenders, Appleton Coated Paper Company, and coating paper.

The foreword says: "The United States is the largest producer of paper in the world, making annually a tonnage larger than that of any other five nations combined.

"Over seven hundred mills are engaged in the production of this commodity in our country, and the uses for paper have become so extensive as almost to baffle enumeration, and to require a high degree of specialization in its purchase and distribution.

"Long training and efficient organizations are requisite to maintain familiarity with both the sources and the market. The large variety and quantity of stock sufficient to satisfy the diversity demanded in the trade has made the paper merchant a permanent and necessary economic factor.

"In the conduct of this business we recognize intelligence and service as prime factors for winning and holding a satisfied clientele. Many of the old school merchants operated on the basis that the less their customers knew about paper the better it was for themselves, as that would make them more dependent upon them. We feel that the reverse is the case, and that the more helpful information we can give, the better we are serving. It is with this thought and wish that we have had this book of 'Essential Facts About Paper' prepared, and present it to our friends with the hope that they may find its contents useful."

*Direct from Producer
to Consumer*

**ENGLISH CHINA CLAYS
SALES CORPORATION**

33 WEST 42nd STREET, NEW YORK

Exclusive Representatives of
ENGLISH CHINA CLAYS, Ltd.
ST AUSTELL, ENGLAND

*Largest China Clay Producers
in the World*

500,000 TONS ANNUALLY



PRODUCTIONS OF WOOD PULP FOR THE MONTH OF OCTOBER

According to Figures Issued by the Federal Trade Commission, Mill Stocks at the End of the Month of Ground Wood Equalled Slightly Less Than Twenty-one Days' Average Output; of Bleached Sulphite Slightly Less Than Three Days' Average Output; Sulphate Slightly More Than Ten Days' Average Output, and of Soda Pulp Slightly Less Than Five Days' Average Output.

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., December 1, 1920.—In connection with the Commission's current statistics of the paper industry a summary of the monthly reports from manufacturers of wood pulp and other kinds of pulp used in paper making is submitted herewith for the month of October, 1920. The table shows the kind of pulp, the stocks, production, pulp used and shipments for the month. The pulp shipped during each month represents only pulp shipped to a concern different from the one producing it. Loss of production is shown by giving the idle machine time reported by each company for each kind of pulp.

Pulp Production

The following is a tabulation of the production, pulp used by the company producing it, shipments to outside concerns, and stocks of finished pulp, in tons of 2,000 pounds on an air-dry basis, for October, 1920, compared with October, 1919, for the operating mills. The average production is based upon the reports covering the years 1917, 1918, and 1919, and the average stocks are based upon the stocks carried for the 18 months' period ended May 31, 1920:

	Number of Mills.	On Hand First of Month.	Production For Month.	Used During Month.	Shipped During Month.	On Hand End of Month.
Ground wood pulp:						
October, 1920	160	92,823	125,518	113,056	11,135	94,150
October, 1919	150	130,880	119,073	117,930	9,796	122,227
October, 1918	160	118,823	100,369	105,637	*	113,555
Average			118,586			143,889
Sulphite, news grade:						
October, 1920	62	13,151	72,412	58,717	9,707	17,139
October, 1919	62	19,493	71,000	59,507	11,228	19,758
October, 1918	54	13,412	57,397	57,739	*	13,070
Average			62,478			21,510

Sulphite, bleached:						
October, 1920	30	4,826	49,504	26,493	23,389	4,448
October, 1919	30	10,383	51,915	27,425	25,790	9,083
October, 1918	25	1,916	23,885	23,441	*	2,360
Average			42,276			9,928
Sulphite, easy bleaching:						
October, 1920	8	1,386	6,069	4,173	2,521	761
October, 1919	8	1,895	6,089	3,525	2,728	1,731
October, 1918	9	1,179	8,951	8,523	*	1,507
Average			6,552			1,800
Sulphite, Mitscherlich:						
October, 1920	7	915	7,433	4,438	2,768	1,142
October, 1919	7	1,672	7,232	4,694	2,851	1,359
October, 1918	7	2,805	4,731	6,388	*	1,148
Average			6,578			1,730
Sulphate pulp:						
October, 1920	21	3,537	20,099	14,066	4,812	4,758
October, 1919	20	6,641	17,499	10,209	6,249	7,682
October, 1918	19	1,208	12,720	12,898	*	1,030
Average			12,350			6,248
Soda pulp:						
October, 1920	27	4,655	38,237	19,703	17,363	5,826
October, 1919	27	6,876	35,037	18,218	16,355	7,340
October, 1918	24	3,669	28,649	28,804	*	3,514
Average			31,616			6,054
Other than wood pulp:						
October, 1920	3	45	605	325	87	238
October, 1919	6	182	865	785	134	128
October, 1918	5	221	922	913	*	230
Average			988			175
Total—for all grades:						
October, 1920		121,338	319,877	240,971	71,782	128,462
October, 1919		178,022	308,710	242,293	75,131	169,308
October, 1918		143,233	237,624	244,443	*	136,414
Average			281,424			191,335

*Included in pulp used.

Total stocks of all grades of pulp in the mills on October 31, amounted to 128,462 tons. Mill stocks of bleached sulphite and easy bleaching sulphite decreased during the month. All other grades increased.

Ratio of Stocks to Average Production

Comparing the stocks on hand at the domestic pulp mills at the end of the month with their average daily production based on the reports covering the years 1917, 1918, and 1919, the figures show that:

Ground wood mill stocks equal slightly less than 21 days' average output.

News grade sulphite mill stocks equal slightly more than 7 days' average output.

Bleached sulphite mill stocks equal slightly less than 3 days' average output.

Easy bleaching sulphite mill stocks equal slightly more than 3 days' average output.

(Continued on page 70)

Loss of Production

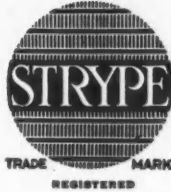
Grade.	Lack of Labor.		Repairs.		Other Reasons.		Total.	
	1920.	1919.*	1920.	1919.	1920.	1919.	1920.	1919.
Ground wood pulp:								
Number of grinders	0	.....	105	347	496	646	601	993
Total hours idle	0	.....	18,731	55,206	125,135	132,049†	143,866‡	187,255
Sulphite, news grade:								
Number of digesters	0	.....	33	58	29	55	62	109
Total hours idle	0	.....	1,878	5,986	3,878	4,556	5,756	10,542
Sulphite, bleached:								
Number of digesters	0	.....	9	39	21	16	30	55
Total hours idle	0	.....	1,056	1,457	1,369	1,445	2,425	2,902
Sulphite, easy bleaching:								
Number of digesters	0	.....	4	0	5	3	9	3
Total hours idle	0	.....	587	0	1,116	205	1,703	205
Sulphite Mitscherlich:								
Number of digesters	0	.....	13	18	0	2	13	20
Total hours idle	0	.....	546	595	0	420	546	1,005
Sulphate pulp:								
Number of digesters	9	.....	9	14	10	16	19	30
Total hours idle	1,464	.....	1,085	2,220	1,711	4,250	2,796	6,570
Soda pulp:								
Number of digesters	0	.....	2	22	21	37	23	95
Total hours idle	0	.....	76	610	304	4,258	380	4,868
Other grades:								
Number of digesters	0	.....	0	0	4	2	4	2
Total hours idle	0	.....	0	0	631	600	631	600
Total number of grinders and digesters	9	.....	175	498	586	773	761	1,271
Total hours idle	1,464	.....	23,959	66,164	134,144	147,783	158,103	213,947

*Included in "Other Reasons."

†Includes 118,513 hours, due to water conditions and lack of power.

‡Includes 110,460 hours due to water conditions and lack of power.

The World Our Market



Our planning of two years ago has brought fruit in abundance and has served to enlarge our future scope.

We thank those mills who have cooperated with us and invite printing and wrapping paper mills wishing to enter new fields of endeavor, in a constructive way, to visit us when in New York and discuss the future with us.

FRED C. STRYPE
QUALITY PAPERS NEW YORK

Arthur R. Rapp Company

PAPER
CONWAY BUILDING
Chicago

We endeavor to establish a closer relationship between mill and jobber or converter on the basis of *permanent connections* rather than transient sales.

**Selling to Jobbers and
Converters Only**

L. H. BOGART,
Secretary

H. BARGER,
Treasurer

Manufacturers' Exporters

of

PAPER

to the Wholesale Jobbing Trade
Exclusively

W. M. Pringle Co., Inc.
Howard and Crosby Sts., New York, N. Y.
Cable Code—Pringle Co., New York. All Codes

Established 1868



Paper Pie Plates
Picnic Plates
Ice Cream Plates, square
and round
Cake Circles
Glassine Lined Plates (Patented)
Corrugated Cake Circles

Flat and Square White Bags
Glassine Bags
Sandwich Bags
Chocolate Dividers
Chocolate Layers
White Laid Confectionery Bags

Manufactured by
ALFRED BLEYER & CO.
229-230 West Street
New York City

INQUIRIES SOLICITED

VALUES STILL FIRMLY HELD IN PHILADELPHIA MARKET

Some Varieties of Paper Are Off in Price But This Is Regarded by the Trade as a Modification to Meet Present Conditions Rather Than as a General Recession in Paper Prices—Demand for Practically All Lines of Paper, However, Is Quiet—President Whiting of the Paper Trade Association Expresses Confidence in the Future of the Market—Paper Stock Market Quiet.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, November 30, 1920.—November closed in the Philadelphia paper trade with a feeling on the part of the distributors of real thanksgiving that price recessions, even if demoralization which has afflicted other industries has not affected paper. Values are still firmly held all along the line; this statement is true despite the fact that the past week saw a horizontal reduction by the Dill & Collins Company for almost its entire line of fine papers. Its prices went off from $\frac{3}{4}$ to $1\frac{1}{4}$ cents per pound, it is true; but, after all, that is a reduction of but 5 to 6 per cent., and is regarded by the trade as a modification to meet present conditions rather than as a decline and forerunner of general paper recessions.

The view is general that neither the Dill & Collins Company cut nor some other easing off of prices that took place during the week in any sense conflict with the forecasts made at the meeting of the Fine Paper Division recently. Its opinion, as reported in these columns in brief, were that unquestionably the near future would bring with it modifications in prices in isolated cases where advances had been too great, or where the speculative influence had entered into the situation or where some unusual circumstance, as overproduction or the need for converting stock into cash, compelled individual lowering of prices, but that anything like a general cut was most highly improbable, and that as a matter of fact stiffening of present price was probably more likely than a slump. The Dill & Collins Company made no announcement of the reasons which prompted it to reduce prices. Printers, however, regard its move as the forerunner of other downward revisions, but the distributors say that there are no indications that the Dill & Collins Company's example will be followed generally.

Evidence of Fundamental Strength

The present fundamental strength of prices in the better grades of paper was emphasized by maintenance of values in the face of the continued weakness of demand for nearly all lines. While none of the distributors report business as absolutely stagnant, all agree that the situation is controlled by the buyer; that he no longer seeks out the distributor clamorous to have his needs filled, but that good salesmanship is required these days to effect sales. The attitude of the converter and consumer is one of waiting for price recessions, of not buying save for absolutely necessary and immediate demands.

Those demands certainly have not been very heavy. But fortunately they are increasing rather than declining. Inquiries numerously made by printers a week ago, were followed during the interim by order placing although these were restricted. Still the trade notes that this business came on behalf of consumers who were preparing office forms for next year or for catalogues and thereby gave indication of their confidence in the future.

Coarse Paper Market Quiet

The coarse paper market is about as quiet as is the fine paper market. Manila and other wrappings and Krafts, are in quite free supply, but buying for the special holiday requirements is still far behind what it was a year ago. Prices, however, are steady. Save

for the reduction on a line of cheap manilas announced a week ago there have been no shading down of prices by the mills. Tissues are now quite plentiful and mill purchases at \$1.75 f.o.b., a reduction of 25 cents are reported. Some of the jobbers have passed on this reduction to the buyer lowering prices from 20 cents to $17\frac{1}{2}$ cents per pound. One sale of considerable value at \$1.79 was reported, but generally the ruling price is considerably higher. Cheap bags have come down about 20 per cent, but the better grades are holding steadily.

President Whiting on the Situation

Canary writings once virtually out of the market, are again in free supply and with prices steadily declining. Import news of inferior grade has been offered the trade as low as 7 cents per pound, but buying has not been on a very large scale. Summing up the situation, President Whiting of the Paper Trade Association said, "I am making no particular reference to any one manufacturer who for individual reasons may have revised his prices. But I have experienced during the week nothing to change my opinion from that of the others who participated in the symposium of last week. Fine paper prices will not slump. There will be slight reduction where prices had been unduly advanced or where speculation rather than market conditions was the factor. Some few lines of book, bonds and other fine papers will ease off; so will news, canary writings and a few other grades. But paper prices as a whole will remain at substantially present levels because in the main they were justified by conditions of production, and of supply and of demand. I feel absolutely confident that there will be no slump comparable with that in silk, cotton, leather and other articles."

Paper Stock Market Quieter

The paper stock market is quieter than for years past. There is hardly any movement either into the jobbers' warehouses or from them into the mills. Prices are so low that small collectors have gone out of the business entirely; the wholesalers are refusing to take stock save from customers whom they feel obligated to favor. Some of these actually are paying to regular customers more than they can get from the mills; one of the larger houses which proposes to continue its policy of standing by its patrons in this disturbed period is actually paying 50 cents for mixed and commons and when the accumulation is too great for accommodation in its warehouses, is reselling the grade to mills at 40 cents. Virtually all the local and nearby mills have closed their doors to any stock at this time.

Rag stock dealers report that all movement of stock has ceased; that mills will not place orders at any price. Their warehouses are filling up but congestion is still quite a little time off.

Stock Dealers to Have Playnight

The stockholders found during the week the means of relieving the congestion of funds in the treasury of the Association, and having the money and the time—also the inclination—a playnight has been decided upon. Under date of November 26, Robert A. Evans and Lisle Q. Owens as a committee advised the membership that arrangements had been made for a dinner at the Bellevue-Stratford at six o'clock to be followed by a theatre party at the Garrick to see Otis Skinner in "At the Villa Rose." Each member of the Association will be supplied two tickets; but the privilege exists of securing more at \$7 per.

Ward Co. Improvements

Good eats in good company is also the goal of improvements which the D. L. Ward Company is making in the basement of its 6th and Ranstead streets headquarters. The finishing touches were placed during the week on a cafe and luncheon installed there for the benefit of the employees and executives. It is proposed to furnish wholesome meals on a self-sustaining, but not profit-making basis. A mammoth gas range and a capacious ice box have been installed and early in December the restaurant will be in operation.

(Continued on page 34)



**CREPE
ABSORBO
NAPKIN**

During present deflation period price economy is the controlling factor.

This napkin is priced the most economically because it is made and creped in one operation; no finished product used in its manufacture, and our mills are running on it, alone, continuously.

We sell to the jobbing trade only. Have you some on hand?

M. M. ELISH & CO., Inc.

29 Beekman St. New York City

SEE ELISH ABOUT NAPKINS

**INTERSTATE
Pulp & Paper Co.**
(INCORPORATED)
1050 GRAND CENTRAL TERMINAL,
NEW YORK, N. Y.

**P U L P
AND
P A P E R**

Domestic and Export

Newsprint	Book	Writing
Bond	Wrapping	
	Ledger	



Manufacturers of

Coated Cardboard, Boxboard and Lithograph Paper, including Lithograph Blanks, Postal Card Stock, Tough Check, Railroad, Thick China, Transluents and Menu Board.

Our Boards and Papers lie flat, hang straight, and register because they are made right.

Orders for regular or special sizes are given prompt attention. Quality guaranteed.

TRY US AND SEE

EASTERN SALES OFFICE, 501 Fifth Avenue, NEW YORK CITY

**PAPER MAKERS'
ALUM**

(Both Commercial and Free from Iron)

Casein, Satin White, English China Clay,
Crystal Boro Phosphate
(A solvent for Casein)

**THE KALBFLEISCH
CORPORATION**

31 UNION SQ. WEST, NEW YORK, N. Y.

New York Trade Jottings

Word has been received in this city that J. L. Davis has recently been appointed as the new manager of the Columbus Division of the Diem and Wing Paper Company, Cincinnati, Ohio.

* * *

W. J. Garrity, formerly of the statistical department of the Eastern Manufacturing Company, has succeeded J. S. Mouat, and is now in charge of the advertising for the well-known systems bond and other products of that company. THE PAPER TRADE JOURNAL unites with his many friends in wishing him the best of luck at his new post.

* * *

J. S. Mouat, who has been in charge of advertising for the Eastern Manufacturing Company, at 501 Fifth avenue, in this city, since the inauguration of the national advertising campaign of that company on Systems Bond, has resigned to become general manager of the Ohmlæ Paint and Refining Company, Chicago. Mr. Mouat has proved himself a progressive advertising man, and every one who has come in contact with him in his work will miss his genial personality and will wish him continued success in his new position, even though it means that the paper trade will lose him.

* * *

Judge Charles F. Moore, recently connected with the Parsons Trading Company, has joined the force of the Seaman Paper Company, at 200 Fifth avenue. On account of the growth of the latter company and the expansion of its many important business connections, Judge Moore has been engaged as special representative to assist the executive department in the many ways that his wide experience so well qualifies him to do. There is no one, perhaps, better known to the paper industry in all its branches than Judge Moore, and his new position should prove beneficial to the Seaman Paper Company and to himself.

* * *

Last August, in announcing its price for the present calendar quarter, the International Paper Company expressed its purpose to keep costs down to a minimum in the hope that a further advance in price on news print would not be necessary. In spite of its endeavor, certain items have increased somewhat, but the company has decided to absorb any increase in cost that may occur in the first quarter of next year. Accordingly the price it has fixed covering the period from January 1 to March 31, 1921, inclusive, is the same as that of the last quarter, namely, \$6.50 per cwt., f.o.b. mill, for rolls in carload lots.

IN THE PHILADELPHIA MARKET

(Continued from page 32)

Col. Fred A. Galbraith, treasurer of the Western Paper Goods Company and active in the American Legion, recently was guest of honor at a banquet in this city of the Pennsylvania Division.

The sales force of E. Latimer, Jr., 126 N. Fourth street, who recently installed a fine paper division, was supplemented recently by the addition of George K. Hooper, George H. Ott, and A. R. Clements. They will visit the city and nearby trade.

As a forrunner of the Hammermill Night of the Wardco Club, to be held at the Manufacturers Club, December 2, the D. L. Ward Company is making a special display of all the Hammermill products, bonds, ledgers, and safety papers.

The Victor Paper Company opened offices during the week on the sixth floor of 929 Chestnut street.

John McGuigan, formerly of the D. L. Ward Company, has joined the sales force of the Enterprise Paper Company, Third and Callowhill streets.

Daniel L. Murphy, Simon Weil and William J. McGarrity, are preparing to travel together to the convention of the National Association of Waste Material Dealers at the Hotel Sherman, Chicago, early in December.

Mrs. Edna Hancock Beck, wife of Leon Beck of the Charles Beck Company, died suddenly last week. She was prominent in many civic organizations and was active in philanthropic and community movements. Two young children, Richard and Carl survive.

W. Allan Lindsay, manager and part owner of the Keystone Paper Mills at Upper Darby, just beyond the city, is at his home suffering from serious, though it is not believed fatal injuries, received on Saturday night when his automobile skidded and rolled down a twenty-foot embankment. The accident occurred just off Merion avenue near Sixty-ninth street at a point where that thoroughfare crosses over the Philadelphia and Western Company trolley tracks. Mrs. Lindsay was following her husband in another machine when the small coupe in which he was riding ran over the side of the road, turned over several times, and smashed to pieces at the foot of the embankment just beside the tracks. Her cries brought assistance and the injured man was taken to his home nearby.

Curtis Brothers have under way extensive alterations to their mills at Newark, Del. The washer and beater rooms are being reconstructed, a warehouse is being constructed and a tank to give additional fire protection is being built. The improvements will aggregate in cost about \$20,000. The firm is specializing on its line of Curbro papers for the highest grade of offset work.

The plant of the Paper Products Company, 223 N. 23rd street, is being increased for the production of waxed paper specialties.

The Alling & Cory Company is sending out from the Philadelphia branch in the Bourse, a new catalogue. Announcement is made that while advances on twenty-five numbers were justified, the firm will itself absorb the increased cost of production.

Henry Copeland representing the Berkshire Hills Paper Mills, was a visitor to the trade during the week.

Construction of an enlarged stock house at the Dorlan mill of Shryock Brothers, was completed during the week.

Thomas J. Trotter, of the Scott Paper Company, has been appointed as chairman in charge of the banquet of the Association of Manufacturers' Representatives to be held here December 9.

Shipment was made during the week from the plant of the Russell Products Company, Camden, N. J., through the Franklin Paper Company, this city, of its first production of leatherette, imitation cloth and other paper specialties.

Rapid Work on Florida Pulp Mill

JACKSONVILLE, Fla., November 25, 1920.—Rapid progress is being made in Leesburg in the erection of the pulp mill of the Grass Fiber and Paper Company recently formed, and the plant will be ready for operation within a comparatively short time, according to E. R. Lacy, vice-president and general manager.

This company will utilize saw grass for the manufacture of paper pulp, and, according to Mr. O'Neal, there is an unlimited supply of this material available. The company has a large acreage of State lands under lease and, in addition, holds leases on much private property. The supply is declared to be sufficient to keep a number of mills in operation without interruption. The supply of pulp material in Florida, according to Mr. O'Neal, is sufficient for the entire country.

At the outset this company plans to reduce the native grass to the pulp state, shipping the pulp to paper mills where it will be converted into the finished product. Later, it is the plan of the company, to erect a paper mill in Florida.

The plant now in the process of erection will have a daily capacity of turning out twenty-five tons of paper pulp.

Established 1886

Understanding

Integrity

Service

SINCE the inception of this organization 34 years ago, we have consistently and persistently endeavored to conduct our business on one essential principle: That in every transaction in which this company should be involved, the very name of this organization should carry with it an assurance of thorough understanding, absolute integrity and the utmost in service.

WE believe that the measure of success which we have achieved is a measure of the success of the policy.

WOOD PULP

AND

CHEMICALS

OF EVERY DESCRIPTION

M. GOTTESMAN & COMPANY

INCORPORATED

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

Recent Incorporations

FULTON PAPER COMPANY, Manhattan, New York.—Printing and advertising. Capital \$10,000. Incorporators: A. R. McDermott, S. F. Frank, F. Covino, 15 Frankfort street.

ARMOUR PAPER BOX COMPANY, Manhattan, New York.—Capital \$5,000. Incorporators: S. Kaufman, I. Levine, W. Rapp, 603 Prospect avenue, The Bronx.

FRONTIER PAPER CORPORATION, Riverside Drive, St. Lawrence County.—Capital \$300,000. Incorporators: I. V. H. Gill, H. C. Gray, J. A. Dix, Albany.

ADVANCED ARTS COMPANY.—Capital \$16,000. Printing and stationery. Incorporators: Lawrence F. Gould, Everett H. Parsley, Carl F. Crousey, Washington, D. C.

YARNALL PAPER PRODUCTS COMPANY, Manhattan, New York.—Active capital \$5,000; 200 shares common stock, no par value. Incorporators: F. H. Thompson, J. J. Cunningham, J. M. Yarnall, Yonkers.

MAR-KAY PAPER COMPANY, Manhattan, New York.—Capital \$5,000. Paper and twine. Incorporators: G. Bell, D. Patterson, A. P. Castelano, 714 Second avenue.

EDGAR PRINTING AND STATIONERY COMPANY, Manhattan, New York.—Capital, \$75,000. Incorporators: C. and P. Edgar, Flushing, New York.

MAR-KAY PAPER COMPANY, Manhattan, New York.—Paper and twine. Capital, \$5,000. Incorporators: G. Bell, D. Patterson, A. P. Castelano, 714 Second avenue.

CAPITAL INCREASES.

THE WATERPROOF PAPER AND BOARD COMPANY, Cincinnati, Ohio.—From \$390,000 to \$250,000.

STECHEE LITHOGRAPHIC COMPANY, Manhattan.—\$1,000,000 to \$2,500,000.

MEURICE CORN, Manhattan, New York.—\$10,000 to \$100,000.

PEERLESS BLUE PRINT COMPANY, Manhattan, New York.—Capital \$5,000 to \$50,000.

DESIGNATIONS.

ALBEMARLE PAPER MANUFACTURING COMPANY, Virginia.—\$10,000; rep., W. L. Saunders, 41 Park Row, New York.

WYOMING VALLEY PAPER MILL, Pennsylvania—\$50,000; rep., J. S. Wemyss, 5 Beekman street, New York.

Paper Man on Interstate Tunnel Commission

JERSEY CITY, N. J., November 29, 1920.—John F. Boyle, president of the John F. Boyle Company, Jersey City, N. J., has been appointed on the commission to build the new vehicular tunnel connecting New York and New Jersey. The magnitude of this work was referred to by Governor Edward, ex-Governor Edge of New Jersey and Lieutenant-Governor Walker of New York, at the recent tunnel opening exercises, as perhaps the biggest work ever attempted in the United States, and of tremendous importance to the States of New York and New Jersey.

New York will have a new gateway for her foodstuffs, so that she will never have to fear famine through railroad strike or boat strike, as the new tunnel's capacity will take care in an emergency of all necessary interstate traffic by motors.

New Jersey is congratulating herself on having a man of such sterling qualities appointed on the commission. Mr. Boyle has given unselfishly much of his time to the development of his State—to war work. Incidentally, many successful box manufacturers in New York today lay their success to the fact that John F. quietly and unostentatiously helped them through the stormy times that all business men go through in starting in business at first.

Mr. Boyle is one of the most successful box board men in the East. Besides, being president of the John F. Boyle Company, he

is a director in the Commercial Trust Company of New Jersey, also the Mutual Benefit Light, Heat and Power Company. Much of his time is given to public matters. His son, John, Jr., a chip of the old block, is vice-president of the mill.

A New Jersey publication, recently commenting on Mr. Boyle's appointment, refers to him as a man of the people, a man easy



JOHN F. BOYLE

of approach, a man of stern character, and a man of kindly feeling. His appointment is looked upon as a particularly good one, for his grasp of big business affairs and his willingness to give generously of his time for any or all things for the benefit of public institutions, fits in well in a commission that has such a gigantic task ahead of it.

C. C. Burns Seriously Ill

[FROM OUR REGULAR CORRESPONDENT.]

WATERTOWN, N. Y., November 29, 1920.—Celestine C. Burns, general manager of the St. Regis Paper Company, who for the past week has been confined to St. Joachims Hospital here, in a very critical condition, is reported as gradually improving. It was said today that while he is not out of danger, there are prospects that he will recover. For some time Mr. Burns had been afflicted with stomach trouble.

Mr. Burns is recognized as one of the most able paper manufacturers in this section and his serious illness is a source of regretful concern by all paper manufacturers who knew him. His early recovery is earnestly hoped for.

When this city adopted the commission form of government, Mr. Burns was chosen by the people as one of the first commissioners. The entire community grieves over his illness and is anxious for his early return to health.

Bogalusa to Be Big Paper Center

NEW ORLEANS, La., November 27, 1920.—William H. Sullivan, general manager of the Great Southern Lumber Company, at Bogalusa, after a conference with the heads of the company, and an inspection tour of cutover pine lands in La Salle Parish, announced that the Great Southern would spend \$8,000,000 within the next five years in adding four units to its paper mills, consuming pulp manufactured from tops of pine trees.

"We're going to make Bogalusa the biggest paper manufacturing city in the world," said Mr. Sullivan.



OUR WAR SURPLUS FOR YOUR SERVICE

Two-Digester Pulp Purification Unit

At less than 25% of its real value

Operations having just been completed, there is released for sale and *immediate shipment* from our Carney's Point, N. J., plant, one two-digester Pulp Purification Unit, consisting of steel frame and plate building containing complete equipment for the purification of 25,000 pounds a day of linter pulp or similar stock.

This equipment consists of two welded steel digesters, 8' diameter x 25', Sargent dryer, Downingtown wet machine, 16' wide, tanks, motors, blowers, pipe lines, etc.

This is one opportunity that you sometimes hear about but seldom meet face to face. Coming at this late part of our gigantic sale when we are nearing the end, we cannot afford to wait for rising prices. We have cut all our prices to the bone, and on this Purification Unit we have gone further and cut through the bone.

Wire this office for quotation

Du Pont Chemical Company

Incorporated

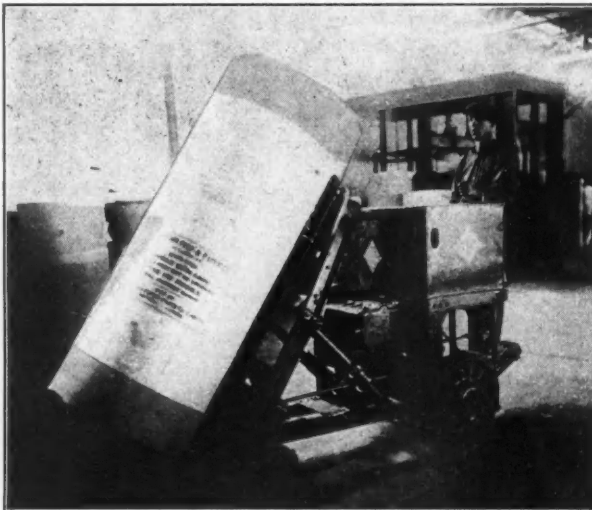
Wilmington, Delaware

NEW PAPER ROLL HANDLING TRUCK

Over and over spins the heavy 72-inch roll of news print followed by the tender who finds difficulty in directing its travel along the row of steel floor plates. In onto the wrapping floor behind a half a dozen more rolls ready to be covered. The wrapper is busy with brush and paste he applies liberally at either end of heavier paper covering which lays flat on the floor.

Several progressive Canadian mill operating managers with their engineers began a study of this delivery end of the mill and decided that something more efficient, safe and dependable must be substituted for hand labor.

These men were more or less familiar with electric industrial storage battery trucks which had demonstrated their usefulness in handling flat stock and sulphite. As a consequence they presented their problem to one of the builders of this equipment. As a result—and that after much study and experimentation—a design was completed in which 90 per cent of the parts were already standard in a line of sixteen types which have been manufactured for years.



NEW PAPER ROLL TRUCK

The design was approved, the first machine built and put into operation. The only change made in the equipment was the substitution of a telescoping steel roll retaining bar for a leather strap and this is only used 10 per cent of the time. Ten more of the equipments were completed and all are reported as have speeded up product and lightened the work. The equipment consists of the power and of an electric freight car type battery truck, hundreds of which have been used by various railroads for the past ten years.

The power end of the truck consists of heavy steel hot riveted frame carried on springs over a steel full floating type drive axle with worm gear driven by a direct connected motor receiving current from a storage battery located immediately above motor and carried on the truck. The capacity of this battery will be found sufficient for the usual day's work, the size cells or plates being determined by the mill requirements. The $21\frac{1}{2} \times 3\frac{1}{2}$ drive wheels steer as well as move the outfit. The power controller is of the self-returning to neutral type with an interlocked battery switch or circuit breaker which makes it impossible to operate truck from floor and only operable when driver is in position to control it. If in operating he steps off or for some reason must release controls, the truck will stop within its own length when travelling at full speed—automatically.

There are no fuses on the truck to blow out should truck be overloaded. On the other hand, the motor will take all the power the battery will deliver without signs of distress. If truck is overloaded it will stop. Truck may be driven in either direction. It is equipped with a tiller type steering handle and an electric horn.

For incline work it may be stopped when ascending by applying the brake. To pick up speed full power is applied and brake released gradually. The brake and circuit breaker and controller operating independent, the control handle may be removed by operator when he leaves truck standing. All these features guarantee safety when traveling. The roll carrying mechanism consists of a heavy perfectly balanced steel apron with chisel into which news print is rolled. A telescoping quadrant bar is furnished to slip around roll in apron if small size. This apron is attached to a heavy steel casting revolving on large ball bearing, and which is supported by a rocking structural steel "A" frame pivoted on special axle fitted with two $10\frac{1}{2} \times 5$ inch rubber tired steerable wheels.

A standard motor driven mechanism such as used in industrial revolving crane trucks is used to handle the single line which performs a marvelous function of handling the roll in three places. The single line cable from drum runs over a swivel pulley or sheave at top of a structural "A" frame and attached to the apron near the outer end of the latter.

With the apron on the floor the news print is rolled into it, either one 72-inch, two 34-inch, or three 24-inch. The operator standing at the rear of truck closes switch manually. The apron with the horizontal roll is lifted up six or eight inches as the cable rocks the "A" frame, which supports it, back toward the truck. As the "A" frame is pulled back it rests on a pair of special coil springs. The reaction in these springs is such as the cable continues to wind in it revolves the apron and news print into an end position with the load back over the truck wheel base. When it reaches this position it trips a switch, and hoist motor stops. A special designed lip keeps roll in apron when in vertical position. The rolls may now be safely transferred to any part of the mill, drying or shipping floor, or straight into freight car if desired.

To set roll on end it is only necessary to start hoist motor and pay out the cable. The distribution of weight is so finely worked out that the roll moves into a vertical position and is set on the floor in front of the truck. The special end chisel on the apron is of such a design it can be inserted with small assistance without tearing the end wrapper. A single cable does all this perfect operation. Simplicity, flexibility and ruggedness are the dominant characteristics.

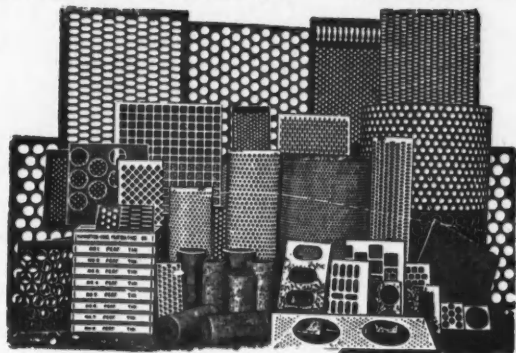
Dependability for continuous operation is guaranteed, so that when once in service the whole mill force will not be called to help in the pasting and shipping room if the equipment should later not prove equal to the task.

Shartle Bros. Machine Co. Busy

[FROM OUR REGULAR CORRESPONDENT.]

MIDDLETOWN, Ohio, November 27, 1920.—C. W. Shartle, president of the Shartle Machine Company, reports business to be in good shape. The Shartle plant, which deals with paper manufacturers and pulp makers, is working on orders booked sufficiently ahead to keep the establishment in operation for many months. Though there had been a slight let-up in the receipt of orders for a few weeks, inquiries continued to be numerous and there is every indication that additional orders will be forthcoming, Mr. Shartle states.

PERFORATED METALS



Paper and Pulp Mill Screens. Steel, Iron, Copper, Brass, Bronze FOR

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

All sizes and shapes of holes in many thicknesses and dimensions of sheets.

Accuracy in all details and excellence of quality at lowest consistent prices.

THE HARRINGTON & KING PERFORATING CO.

618 North Union Ave., Chicago, Ill.
114 Liberty St., New York, N. Y.



Standardize

your requirements for Grease-proof paper on tested quality.

The well-known brands Purity and Berkshire will meet all requirements a high grade Grease-proof paper is subject to.

Many of the largest paper distributors of the country have standardized on Mountain Mill products.

Why don't you?

We will be glad to mail you a full line of samples.



LEE, MASSACHUSETTS

Chicago Sales Office: 1148 First National Bank Building

"AMERICAN"

PAPER MAKERS TWINE TUBE ROPE
WALL PAPER TWINE HAY ROPE
FINE AND COARSE POLISHED TWINES
"AMERICAN" BRAND MANILA ROPE
"AMERICAN" BRAND TRANSMISSION ROPE

The name "AMERICAN" as applied to cordage means "more value in every way." Send for copy of our General Catalogue, Prices and samples. Address Department M.

Largest Makers of Commercial Twines and Rope in the World

AMERICAN MANUFACTURING CO.

NOBLE AND WEST STREETS, BROOKLYN, NEW YORK CITY

CORDAGE

Obituary

Munson L. Dady

[FROM OUR REGULAR CORRESPONDENT.]

DAYTON, Ohio, November 29, 1920.—Munson L. Dady, for thirty years identified with the Ohio Paper Company, Miamisburg, in a managerial or other important capacity, died Sunday afternoon at St. Elizabeth's hospital, this city, to which place he had been removed on Thanksgiving Day for an emergency operation. Mr. Dady was 84 years of age and retained unusually good health for one so advanced in years until the final summons came.

Mr. Dady was known as a pioneer insurance man, having been engaged in that business until he entered the paper trade. Several years ago he decided it was best to surrender business cares and he has not been actively at work since that time. Mr. Dady is survived by his widow, Mrs. Emily Dady and two daughters, Miss Edith Dady, who has been living with her parents in Miamisburg, and Mrs. Vincent G. Apple, wife of a manufacturer in this city.

David Wolbrette

NEW ORLEANS, La., November 27, 1920.—David Wolbrette, president of the Southern Paper Company, Ltd., died at Colorado Springs, Col. as a result of complications following an operation. Mr. Wolbrette had been spending his summer vacation in California and Colorado and took sick just two days before he was due to leave for home. After one month's illness, he died on November 13. His remains were brought here for burial. His sons will continue the business, and the oldest one, Samuel Wolbrette, will succeed him at the head of the house.

Thomas W. Holley

HOLYOKE, Mass., November 29, 1920.—Thomas W. Holley, formerly treasurer of the American Pad and Paper Company of this city, died at Winnipeg, Manitoba. He left Holyoke in 1903 for Winnipeg, and had been most successful in the real estate business. He had been ill a number of months with Bright's disease.

Pulpwood Prices Lower in Maine

The Boston *Transcript* published the following special dispatch from its Bangor, Me., correspondent, November 26:

"At last the peak of pulpwood prices has been passed and the decline begun. Cheaper print paper may be expected. For years the cost of wood to the pulp mills has been advancing, the rate of increase greatly accelerated by the war, until this past summer and early fall the price of rough wood reached the astonishing figure of \$18.50 to \$21 a cord, and of peeled wood \$28.50 to \$30. Contracts at these prices were made in October, but today the rough wood is obtainable at \$12 to \$13 and the peeled at \$20 to \$21 a cord. Further considerable reductions are predicted, although it is not likely, on account of the diminishing supply and the high value of long lumber, that the pulp mills will ever again be able to get their supplies at the old-time rates.

"The slump in prices seems to have been brought about by the force of the adjustment of values in commodities generally. There is a market for all the pulp and paper that can be produced by Maine's thirty-three mills, but the big concerns have shown reluctance lately to make contracts at the high prices that prevailed up to a month ago. Pulp wood is cut almost the year around and large quantities of it are piled up in the woods or along the railroad lines all over the State. The operators must have money to meet their obligations, hence the sharp cut in prices.

"The decline in wood values was immediately followed by a cut in wages and it looks as if the flush days of the pulpwood cutter are gone. For several years the cutters, or sawyers, have been getting wages that would have seemed fabulous to the old-timers—\$65 to

\$90 a month and board, or, working by the cord and putting in a few extra hours, many of them have been earning \$100 to \$150 a month. Experts have earned even more. It has been nothing unusual for the Bangor police to pick up a drunken pulpwood cutter who carried from \$300 to \$500 in his pockets. Only the other day a man complained that his summer's earnings of \$920 had been stolen from him at a poker party in Hancock street.

"When, about thirty-five years ago, the first cargo of pulpwood ever shipped from Bangor was loaded into the schooner *Post Boy* for Pawtucket, R. I., the price was around \$3.75 a cord. When, a few years later, the pulp-making industry became established on the Penobscot, the price went to \$4.40 and \$5 a cord. Ten or a dozen years ago, when the industry had expanded, the basis became \$6 and \$7. Within recent years good spruce wood has been in plentiful supply at \$7 and \$8 a cord, but the war sent values soaring until, in 1919 and this year up to a month ago, the mills were eager to contract for wood at \$18.50 to \$30.

"The thirty-three pulp mills of Maine use about 1,250,000 cords of wood yearly, or about 625,000,000 feet, board measure, cut in the State, beside a considerable quantity imported from the Maritime Provinces. At this rate, experts in forestry estimate that the standing softwood timber cannot last longer than thirty-five years, for the total supply is only about 35,000,000,000 feet. The yearly consumption, for pulp and lumber, approximates 1,000,000,000 feet. The annual growth, it is said, is at least offset by the ravages of insects and fire."

News of the Chicago Trade

[FROM OUR REGULAR CORRESPONDENT.]

CHICAGO, Ill., November 29, 1920.—The National Paper Trade Association will hold a sectional meeting in Chicago, Monday, December 13. The meeting will be held for the purpose of explaining to members of the organization the new cost system adopted at the recent convention of the American Pulp and Paper Association held here. To this meeting will be invited auditors and bookkeepers of member firms as well as the executives.

Due to an inadvertent error of omission, the name and number of the Seaman Paper Company, 208 South La Salle street, did not appear in the recent issue of the Chicago Telephone Directory. The Seaman Company has sent postal cards broadcast through the city advising prospective callers what their phone number is.

J. F. Fearing, western sales agent, for the International Paper company, with offices in Chicago, has returned from an extended business trip to the east. He arrived in Chicago, November 29.

B. Pheland, identified with the Eddy Paper Company, of Three Rivers, Michigan, spent a few days in the city calling on the jobbing trade last week.

John Welch, vice-president and general manager of the Green Bay Paper and Fibre Company, Green Bay, Wis., spent a few days among the trade of Chicago during the past week.

Restrained From Using "Valley"

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., November 29, 1920.—A decree has been handed down in the Superior Court, Springfield, enjoining the defendants in the case of the Valley Paper Company of this city against David H., Joseph H., Max and Jacob Barowsky of this city, doing business as the Connecticut Valley Paper Company, from using the name "Valley" in the combination of words, "Valley Paper Company" or in any other combination as a part of the defendants' trade name. The decree was made by agreement of counsel in the case.

Riegel & Co., Philadelphia, are installing a line of envelopes representing the products of leading manufacturers and of their own brands, the President, Premier and Sterling. The department will be in charge of E. J. Irwin, for several years connected with the firm, and assigned to the fine paper department.

DEMAND THIS BRAND

HOWARD BOND

WATERMARKED

World's Greatest Bond Paper

Renowned Where Quality Rules

Produced by

THE HOWARD MILLS, Urbana, Ohio

We offer a full line of

COLORS

and furnish precise directions on application for

Beater Dyeing, Staining and Coating.

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

THE HELLER & MERZ CO.

BOSTON

CHICAGO

NEW YORK

PHILADELPHIA

SPRINGFIELD, MASS.

PRACTICAL QUESTIONS AND ANSWERS FOR MILL MEN

A Department for the Solution of the Troubles, Large and Small, That Are Encountered by the Workers in the Mills in the Course of Their Duties in Making Paper and Pulp—All Mill Men Are Invited to Send in Both Questions and Answers—A Free Exchange of Ideas Is Desired—By Active Co-operation This Department Can Be Made a General Clearing House for Information in Regard to Practical Paper Making.

Mitscherlich Pulp

Question No. 2528. Will you please let me know through your practical answers column what there is about Mitscherlich fibre that is different from other fibre?

Answer No. 2528. The so-called Mitscherlich pulp differs from ordinary sulphite pulp in that it is of greater strength, due to method of cooking, and the fibre itself is longer than those of sulphite pulps. Quoting from a recent paper by John E. Daley, read at the Buffalo convention of the American Pulp and Paper Mill Superintendents' Association: "The chips are cut from 1 to 1½ inch in length for Mitscherlich pulp, whereas in quick-cook pulps the chips are cut ¾ to ¾ inch in length. This means that fewer fibres are cut and less sawdust and fine chips are made. After the wood is put in the digester in the Mitscherlich process it is steamed for an hour to drive all the air out of the digester and the cells and pores of the wood. The cold liquor is then allowed to enter the digester, when the steam condenses and forms a vacuum, which aids the liquor in thoroughly permeating the wood; thus, it is cooked very uniformly. The liquor is heated to 124° Centigrade and allowed to stand for 20 hours until the wood is thoroughly cooked. The rising gas pressure will raise the temperature to about 130° Centigrade at the finishing point. The essential differences between Mitscherlich process and quick-cook process is that in the former it is cooked by the same liquor that is put in the digester and is not weakened by the addition of water or condensed steam, as the heat or steam is confined within a lead pipe and does not come in direct contact with the liquor. In the quick-cook process the steam is blown directly into the digester. This dilutes the acid, necessitating the use of much stronger acid at the start, much higher temperature, and finishes the cook much more rapidly. In emptying the digesters, in the Mitscherlich process the gas is all blown off, the digesters filled with cold water two or three times to cool it enough to allow men to shovel pulp out. This treatment aids in producing a stronger fibre. With quick-cook process the fibres are blown out of the digester by pressure; this tends to weaken or rupture the individual fibres. This is the reason for the greater length of the Mitscherlich fibre over the quick-cook process. The length of Mitscherlich fibre averages 3 mm. against an average of 2mm. for the quick-cook process.

Electric Pump Removes Hot Ashes by Suction

A few of the large German paper mills have installed an electric pump, a new German machine, which cleans the boilers and flues by suction. The advantages of this machine, according to *Papierfabrikant*, are improved heat production, a 50 per cent. saving on the cost of cleaning, lessening of fire peril and the possibility of cleaning without interrupting the running of the plant.

The pump is cooled by water and, therefore, not affected by the heat of the ashes and the air sucked in. It readily absorbs matter heated to 150 degrees C., and has even withstood a heat of 300 degrees C.

The machine may also be employed in cleaning filter cloth, ventilators, air and gas filter appliances, generators, electric motors, etc. It facilitates the burning of wood, garbage and other fuel which discharges a large amount of ashes by way of flue channels.

Possibilities of the machine are still undefined. It is already being used in chemical plants for the transportation of hot materials. The machine is movable, mounted on wheels and springs. The motor may be attached to any electric current. The hot ashes are collected in tanks remote from the pump proper, thus avoiding any danger of the heat affecting the pump and motor. The tanks are covered with a screen or sieve, separating large cinders, mortar, etc., from the fine ashes. The tanks are constructed in a manner permitting their handy discharge. To run the machine one man is sufficient.

Advocates of the new machine say it keeps heat production continuously at top notch. Superintendents of plants naturally dislike to stop running, and generally postpone cleaning of the flues until it is impossible to postpone it any longer. The new machine does not in the least interfere with the running of the plant. Cleaning, therefore, is a regular routine matter attended to at prescribed intervals to be fixed according to the nature of the fuel used.

The machine is equipped with a metal hose, generally about 30 to 40 feet long. At the end of the hose there is a specially constructed suction nozzle, which is inserted into the channels of the boiler and the flues. Where the flues are very long they should be provided with small openings at appropriate intervals, closing hermetically and permitting the insertion of the suction hose. The metal hose, of course, is pliable. Between the nozzle and the pump proper there are two or three collecting tanks, also on wheels. The screens of the tanks will have to be emptied frequently, but this cleaning must be done when the pump motor is stopped. The several links of the metal hose are connected without screwing, and may be detached easily.

The pump makes about 1,280 revolutions per minute, sucking in about 4,300 litres of air and matter, while consuming about 7½ horsepower. The machine cart has a tin roof and canvas side walls, which are removable.


When the pump is to be used it is first filled with water, the cooling tank is also filled. Before this is done the hose link between the pump and the first collecting tank is to be detached, in order to prevent an unnecessary vacuum. Just before starting the pump the detached link is inserted. Then the motor is started.

It is claimed the machine will pay in any plant that has a heating surface of 600 square metres. As to smaller plants, two or more could jointly employ the machine.

The pump has no valves, which is claimed as a special advantage. Running water effectually keeps it cool and neutralizes the heat of the hot air sucked in. The machine, it is claimed, is pre-eminently effective in cleaning the heating surface in boilers, by removing encrustment and thereby increasing the effect of heat.

Daniels Manufacturing Co.

Manufacturers of


PAPER PRODUCTS

A COMPLETE LINE OF WAXED PAPERS

Rhineland, Wisconsin

Nov. 16, 1920.

CREPE NAPKINS
FOLDED NAPKINS
CREPE TOILET
SANITARY TOWELS

A. D. DANIELS, PRESIDENT
H. JOSEPHS, VICE PRESIDENT
J. S. DANIELS, SECY.-TREAS.
PAUL R. PHILLO, MANAGER

TO THE TRADE.

It is not our policy in an announcement to the trade to make predictions. We deem it highly important, however, to submit a few facts, upon which to base future action.

It is an established fact that contract pulp for the next year is at advanced prices and production now is less than the demand. Together with this is a low water situation confronted by the various Wisconsin Mills as well as a similar situation in the East. This, we believe, is more important and affects directly the price of paper for the next year.

The reservoirs of the water systems of Wisconsin are now below normal and there is nothing short of a miracle that can increase the head of the various water powers. The mills are already experiencing a low water stage and are not operating up to normal production. Therefore, to those who are able to anticipate their requirements, we merely suggest the advisability of prompt consideration.

We do not want to go through the experience of the past year by being compelled to refuse tonnage to those who have been dependent upon us. We are desirous of distributing our tonnage to as many localities as possible, in the quantities that may be required and thus avoid the necessity of cutting down orders as well as pro-rating tonnage.

This letter is not designed as a request for business, but is a sincere attempt to indicate our ideas of the present and future conditions confronting the trade and whether or not it is advisable to postpone action.

It is our policy to co-operate thoroughly, avoid argument and work amicably with all who desire our product. With us, quality precedes price and no one distributing our product, need make any concession for quality. We agree to refund the purchase price or replace the goods.

Yours very truly,

DANIELS MANUFACTURING CO.
Paul R. Phillo
Manager

PRP/R

All quotations for ten days acceptance. Orders subject to changes in freight rates, strikes, fires, accidents and all contingencies beyond our control. If goods are defective, the measure of damage is the price of the defective pieces. Buyer pays war tax on transportation charges, unless specifically agreed otherwise. All orders accepted subject to railroad conditions, priority orders, and governmental regulations. Terms and dates of payment are not affected by delays in transit.

BIDS AND SPECIFICATIONS FOR GOVERNMENT PAPER

Purchasing Officer of the Government Printing Office Receives Numerous Bids on Various Lots of Paper at Interesting Prices—Purchasing Officer of the Government Printing Office Announces Awards on Lots of Paper for Which Bids Were Opened Recently—Purchasing Officer of the Navy Department Will Open Important Bids for Paper—Other Bids and Awards.

[FROM OUR REGULAR CORRESPONDENT.]

The purchasing officer of the Government Printing Office has received the following bids for 12,000 pounds (400 reams) of 21 x 32—30 pounds wood Manila paper: Charles Walsey Company at \$.115; Old Dominion Paper Company, \$.1268; Graham Paper Company, \$.1225; Whitaker Paper Company, \$.1125 and \$.12; Mathers-Lamm Paper Company, \$.1045; R. P. Andrews Paper Company, \$.1125; Maurice O'Meara Company, \$.1005; George W. Millar Company, \$.1005; Wilkinson Bros. Company, \$.09975; Dobler & Mudge, \$.12375 and \$.1165; Nichol & Wood, \$.1014 and D. S. Walton, \$.11245.

Bids will be opened on December 6 at the Government Printing Office for 36,500 pounds (500 reams) of 32x48—73 pounds white S. and S. printing paper.

The purchasing officer of the Government Printing Office has received the following bids for 7,800 pounds (300 reams) of 22 x 34—No. 13, high machine finish yellow writing paper: Old Dominion Paper Company, at \$.2249 per pound; Mathers-Lamm Paper Company, \$.2327; Virginia Paper Company, \$.2585; American Writing Paper Company, \$.2275, and Whitaker Paper Company, at 27 cents.

Bids will be opened at the bureau on November 26 for 12,000 pounds (400 reams) of 21 x 32—30 pounds, wood Manila paper.

Government Printing Office Awards

The Worthy Paper Company has been awarded the contract by the purchasing officer of the Government Printing Office for furnishing 24,300 pounds (350 reams) of white commercial ledger paper.

The Southworth Company will furnish 14,300 pounds (250 reams) of various sizes white ledger paper at 42 cents, and the Carew Manufacturing Company will furnish 2,190 pounds of 21 x 32½ No. 60 blue ledger paper at 46 cents.

The Whitaker Paper Company will furnish 1,000 pounds of lining paper for headbands at 14 cents per pound and the same firm will also furnish 500 pounds of 24 x 36—40 pounds double stripping machine paper at 13 cents per pound.

The Mathers-Lamm Paper Company, will furnish 80,000 pounds (44,000 sheets) of No. 2 quality 25 x 30 binders' board at \$94.75 per ton, and the Box Board and Lining Company, will furnish 2,000 pounds (3,600 sheets) of best quality 22 x 26 No. 90, binders' board at \$111.76 per ton. Bids for these paper items were opened on November 15.

The United Paper Board Company will furnish 10,000 pounds of 22½ x 28½—200 pounds orange cardboard at .24225 cent per pound, bids for which were opened on November 15.

The Champion Coated Paper Company will furnish 1,000,000 pounds of 22 x 28—100 pounds, cream bristol board in 4¼ in. rolls, at .145 cent per pound, bids for which were opened on November 19. The other bids received for this paper were: American Writing Paper Company, at .165 cent; Dill & Collins Company, at .1515 cent and R. D. Andrews Paper Company, at .155 cent. The Purchasing Officer of the Government Printing Office has received the following paper bids:

7,650 pounds of 21 x 31—102 pounds, yellow bristol board:

Old Dominion Paper Company, at .1598 cent per pound; and Carter, Rice & Co., at .145 cent.

181,100 pounds of various sizes pink, melon, buff, Quaker drab, green, grey and yellow bristol board: Carter, Rice & Co., at .145 cent per pound; R. P. Andrews Paper Company, .1898 cent; R. P. Andrews Paper Company, .10 cent, and Mathers, Lamm Paper Company, .1395 cent.

3,600 pounds (300 reams) of 16 x 21—No. 20 fine white glazed bond paper: Carew Manufacturing Company, at .47 cent per pound; American Writing Paper Company, .38 cent; Old Dominion Paper Company, .5586 cent; Southworth Company, .46 cent; Whitaker Paper Company, .4646 cent; R. P. Andrews Paper Company, .45 cent; Strathmore Paper Company, .47 cent.

10,000 pounds (200 reams) of 25 x 38—50 pounds, white antique printing paper: Henry Lindenmeyr & Sons, .1629; Old Dominion Paper Company, .2398; George W. Millar & Co., .1575; D. L. Ward Company, .1775; American Writing Paper Company, .165 cent; Dill & Collins Company, .1695 cent; R. P. Andrews Paper Company, .165 cent; Mathers, Lamm Paper Company, .1745 cent; Wilkinson Brothers Company, .1774 cent; and Whitaker Paper Company, .1493 cent, .1596 cent, and .1685 cent.

39,550 pounds (1,300 reams) of various sizes white and yellow writing paper: American Writing Paper Company, .343 cent, .2787 cent and .353 cent; R. P. Andrews Paper Company, at 29 cent and 30 cent; Aetna Paper Company, .3173, .2883 and .3273 cent; Mathers, Lamm Paper Company, .23 cent, .1870 cent and .225 cent; Dobler & Mudge, .335 cent, .297 cent, .255 cent and .245 cent; Maurice O'Meara Paper Company, .23 cent; Strathmore Paper Company, .38 cent, 31 cent, and 34 cent; Whitaker Paper Company, .3441 cent and .3641 cent, and Old Dominion Paper Company, .35149, .2694, .3052, .248, .2674 and .3184 cent.

The Southworth Company has been awarded the contract by the Purchasing Officer of the Government Printing Office for furnishing 5,050 pounds (100 reams) of 21 x 32 — No. 28 white ledger paper at \$.43 per pound, bids for which were opened on November 10.

Wilkinson Brothers Company will furnish 1,500 sheets of 36 x 48 gray pressboard at \$.146 per pound, bids for which were opened on November 15.

The Purchasing Officer of the Panama Canal will receive bids on December 7 for the following items:

30 reams (15,000 sheets) of 17 x 28 — No. 13 blue bond paper.
40 reams (19,200 sheets) of 40 x 48 — 134, heavy wrapping paper.

3,500 pounds of blue bond paper in 17-inch rolls.

600 reams (300,000 sheets) of 17 x 22 — No. 13 white bond paper.

2,000,000 plain white crepe paper napkins.

6,000,000 hygienic paper drinking cups.

150 boxes of 14 x 17 inch, 4 pound, black typewriter carbon paper.

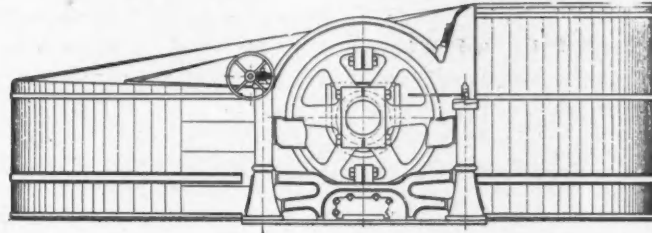
100 reams (50,000 sheets) of 22 x 34 inch, No. 16, canary laid writing paper.

Navy Department Bids

Bids will be opened at the Bureau of Supplies and Accounts, Navy Department, on December 21, for 440 reams of 17 x 28 white ledger paper. Bids will also be opened on the same date for 75 reams of 17 x 28 blue bond paper, 50 reams of 17 x 28 pink bond paper, 50 reams 17 x 28 yellow bond paper, 50 reams of 17 x 28 white glazed onion skin paper and 2,820 pounds of 22½ x 28½ white, blue, buff, yellow, salmon and red cardboard.

What T. A. P. P. I. Is Doing

Justus C. Sanburn, chemist, Strathmore Paper Company, Mitineague, Mass., has been appointed by President Hatch chairman of a committee on beater furnish, which will cooperate with a committee of the Cost Association in determining methods of estimating the quantities of materials added to the beater in the production of certain papers. Mr. Sanburn has accepted the appointment and is now studying the situation.



The Niagara Beater and Kraft Stock

In beating No. 1 Kraft in one installation, one Niagara is now doing the work of 5 1000-pound Holland engines. It has

Reduced the beating time from 6 to 1½ hours!

Reduced the power required 36%!

Reduced the floor space required 75%!

We Will Be Pleased to Submit Complete Data on Request

Write Us Today

Valley Iron Works Co.

Appleton, Wis.

Editorial

Vol. LXXI New York, December 2, 1920 No. 23
FORTY-NINTH YEAR

Canadian Paper Exports Larger

Canadian pulp and paper exports during October continued to show about as surprising increases as they have during recent months. The exports during the month reached a total value of \$16,706,005, compared with \$11,863,578 for the corresponding month last year, a gain of \$4,842,427.

The exports of paper for the month amounted to \$8,128,254 as compared with \$5,954,916 for October, 1919, showing a gain of \$2,173,338. The exports of chemical pulp for the month reached a total of \$6,590,944, as compared with \$3,965,946 for October a year ago, showing a gain of \$2,624,998. The exports of mechanical pulp for October amounted to \$1,986,807, as compared with \$1,942,716 for October a year ago, showing a gain of \$44.09.

The paper exports included 4,411 cwts. of book paper, valued at \$43,802; 1,288,089 cwts. of news print, valued at \$6,915,294, and other paper valued at \$1,169,158.

Pulp exports included 279,000 cwts. of sulphate, valued at \$1,963,401; 402,565 cwts. of unbleached sulphite, valued at \$2,800,095, and 536,329 cwts. of ground wood, valued at \$1,986,807.

The countries of destination were: Paper—United Kingdom, \$408,482; United States, \$6,167,488; other countries, \$1,552,284. Pulp—United Kingdom, \$583,343; United States, \$7,447,528; other countries \$546,880.

There were 124,390 cords of pulpwood, valued at \$1,752,923, exported during the month, compared with 56,399 cords, valued at \$596,486, during October a year ago, all of which went to the United States.

For the first seven months of the fiscal year, April to October, inclusive, pulp and paper exports amounted in value to \$103,349,481, compared with \$55,609,550 in 1919, and \$46,799,134 in 1918, a gain of \$48,339,931 over 1919, and of \$57,150,347 over 1918. They were only \$685,857 less than the total exports for the fiscal year ending March 31 last.

For the first seven months of the first year, ending with October, 1920, the exports of paper amounted to \$51,154,018, as compared with \$33,074,162 for the same period in 1919, and \$25,073,415 in 1918.

The exports of chemical pulp for the first seven months of the fiscal year ending with October, 1920, amounted to \$40,170,498, as compared with \$17,970,334 for the same period in 1919, and \$18,817,444 in 1918.

The exports of mechanical pulp for the first seven months of the fiscal year ending with October amounted to \$12,624,965, as compared with \$4,561,054 for the same period in 1919, and \$2,708,275 in 1918.

The exports of pulpwood for the seven months amounted to 778,246 cords, valued at \$9,556,255, compared with 571,843 cords, valued at \$5,686,179 in the corresponding period in 1919, and 1,047,748 cords, valued at \$9,980,535, in 1918.

Good Will in Foreign Trade

The war has been over for some time now and the sooner our importers grasp the significance of this fact the better it will be. Many of them seem to fail in the realization that we now have a desperate lot of competitors in the central nations of Europe, who are willing to go any lengths to get on their feet economically. When this country is flooded with cheap foreign made goods, the business prosperity of the whole nation will be absolutely dependent on trans-shipment of much of this stuff to South American and Asiatic ports in order to protect our own industries. Thus it is absolutely essential that the good will of these countries be kept.

The recent decline in prices in the United States has caused a good many of our importers to cancel orders and to attempt to get out of contracts by protesting letters of credit on technical grounds. While this policy may have the immediate effect of saving them from bearing losses, still, taking a long view of the situation, they had much better bear these losses now than lose the good will of their foreign business. The whole matter is admirably set forth in a recent report which was issued by the Guarantee Trust Company of New York, which is possibly one of the greatest authorities in America on foreign trade.

"The following letter from a prominent Far Eastern bank is a typical expression of the general dissatisfaction in foreign fields over the situation:

"To our extreme regret we must inform you that lately both banks and merchants here feel some uneasiness concerning the possibilities of continuing the close business relations which were established with your country during the war and which until recently have developed to the satisfaction of all concerned.

"This uneasiness, which we are sorry to observe almost everywhere, is due to unfortunate experiences of late regarding the attitude of American buyers toward their business contracts.

"Refusals by American banks to honor drafts drawn under their letters of credit because of quite insignificant deviations from the usual wording of letters of credit have recently occurred again and again, notwithstanding that the bankers here immediately offered guarantees of redress for such small inaccuracies. Obviously, these refusals were instigated by American buyers, and one cannot help feeling inclined to attribute the attitude of American banks to the changed attitude of American merchants.

"Although it may be that such methods are practiced only by merchants who have already acquired reputation in your country for unsympathetic commercial principles, you will readily understand that the victims here naturally generalize in their conclusions, and thus great harm is being done to the development of our trade with America.

"The exchange banks in Java, under the circumstances, are reluctant to take American bills. Hence, the extent of our business relations may be seriously affected, which we are trying our best to prevent.

"We deem it our duty to draw attention to these facts, and trust that they will bring home to American importers the fact that such acts as those mentioned in the foregoing ultimately will prove seriously detrimental to American business relations abroad, the growing extent and intimacy of which we have been watching all these years with the utmost pleasure and satisfaction."

"In justice to American business men, however, it should be stated that most of them are living up to not only the letter but also to the spirit of their contracts here and abroad. And, although we have no desire, of course, to excuse any American business man or bank from the responsibility of carrying out a contract in an honorable way, it must be admitted, in fairness, that there are extenuating, if not wholly justifiable, grounds for some of the repudiations of contracts complained about.

"It is alleged by American importers that, more frequently than occasionally, merchandise purchased abroad has not actually been on board ship within the time specified and that bills of lading have been issued dated back within the life of the credit. Consequently, American merchants feel that they are entitled to reject the goods on a legal technicality, in order to protect themselves against what they regard as commercial bad faith on the part of the shippers.

"American importers complain likewise that contracts have been cancelled abroad oftener than here, citing large numbers of such repudiations in South America and in Europe, including Great Britain. They point out that even legislation has been invoked to make the entrance of their goods into port illegal (referring specifically to the rice situation in Cuba).

"But in this critical readjustment period, it is even more essential than in normal times to preserve the highest business ethics in foreign trade, as well as domestic commerce. Our whole commercial structure rests upon a contractual basis, which, in turn, is founded upon solemn moral obligations. We cannot ever afford to impair the stability of that structure, and certainly not at this time, of all times, by permitting any weakening or deterioration of its very cornerstone."

Houses for Workmen

One of the many housing developments designed to relieve the shortage of workmen's houses is being projected in the East by a large manufacturing company which employs several thousand men. The housing shortage compelled many men to live long distances from the plant; and it was to provide for these as well as to improve living conditions that the company decided to build.

The development is an ideal one. A complete settlement has been laid out, consisting of single and duplex houses, boarding houses, a club house, restaurant and the necessary streets and sidewalks, sewer, water and electrical distribution systems. Concrete construction is being used for all the houses, some of the roads and even the sewer tile.

The construction of this complete development is being done by Dwight P. Robinson & Co., Inc., a large engineering and construction firm with headquarters in New York. The president of the company, Mr. Dwight P. Robinson, has for many years been a leading figure in the engineering and construction field. He was for a long period president of the Stone & Webster Engineering Corporation, which he left in 1918 to form his own company; and in June of this year he acquired the well-known organization of Westinghouse, Church, Kerr & Co. by effecting a consolidation of the two companies under his leadership.

The company is one of the largest of its kind in the country and does a nation-wide business in the design and construction of power developments, railroad work, housing developments and industrial plants of every character.

When recently interviewed, Mr. Robinson said: "Now that the election is behind us and the general uncertainty from that quarter

removed, it is my feeling and that of my associates that a strong revival of general business activity will soon be evidenced in all parts of the country. The demand for living accommodations and office space must be met; to take care of their rolling equipment the railroads must build new terminals and shops deferred by the war; public utilities generally are being granted sufficient rate increases to permit operation at a profit, and the money will therefore be available for the vitally necessary extensions to power, lighting and traction properties; many manufacturing plants must further increase their production by building plant extensions.

"With these facts in mind, the belief must be general that an almost unprecedented volume of construction must be executed in the coming year."

Central Topeka Paper Co. to Build

TOPEKA, Kan., November 27, 1920.—The business of the Central Topeka Paper Company has compelled the expansion of the plant in Topeka, and the firm has purchased the lots at 215, 217 and 219 Kansas avenue from Tinkhame Veale and J. W. Maxwell. A four-story, reinforced concrete building is to be erected on the lots in the near future. The company is already owner of the three lots to the south of the recent purchase, and has a three-story brick building on them. The new building is to be 75 by 150 feet, and construction on it will start at once, according to S. J. Hodgins, president of the company.

With the additional frontage and the new building the holdings of the company on Kansas avenue alone will represent an investment of \$500,000.

The trade territory of the company, which does a wholesale paper business covers four states and the business clearings exceed \$1,000,000 yearly.

To Be Known as American Tissue Mills

HOLYOKE, Mass., November, 29, 1920.—The Japanese Tissue Mills, will, in the future, be known as the American Tissue Mills. The present company formerly had two divisions, the Mt. Holyoke Tissue Mills and the Japanese Tissue Mills. Later, these were consolidated under the name of the Japanese Tissue Mills, Incorporated. The Amherst Waxed Paper Company, purchased some years ago by J. Louis Perkins, and located at Cushman, is to have a large plant in Holyoke and will occupy the building built some time ago by Mr. Perkins. It is understood that the plant at Cushman will be kept in operation. The latest machinery for the manufacture of waxed paper is now being installed in the Holyoke plant. The new mill will probably afford employment for about 100 hands.

EDWIN BUTTERWORTH & CO.

MANCHESTER, ENGLAND

Packers of all kinds of



PAPER STOCK, COTTON WASTE AND GUNNY BAGGING, BUFFALO SIZING, Etc.

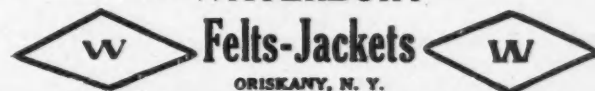
Sole Agents HAFSLUND

BLEACHED SULPHITE PULP—BEAR BRAND

Boston Office, 136 Federal St.
CHARLES H. WOOD, Sr., U. S. Mgr.

New York Office, 1123 Broadway, Chelsea 254
LEWIS JENNINGS, Manager

"WATERBURY"



ORISKANY, N. Y.

OUR TIGHT FITTING, DIAMOND "W" JACKETS

WILL NOT LICK UP AT ANY SPEED

1869 {MADE ONLY BY} 1920

{GUARANTEED BY}

H. WATERBURY AND SONS COMPANY, ORISKANY, N. Y.

FIRE PREVENTION IN PULP WOOD BY MEANS OF ARTIFICIAL FOG

A large log pile fire presents an exceptionally difficult problem in fire protection engineering, in that many times as much quick-burning fuel is present in a concentrated mass as is found in any form of building in which fires are commonly fought. The absence of walls and the exposed position and height of the log pile

to the amount of heat set free by the enormous velocity of combustion; therefore, such a fire makes a formidable exposure to buildings or other nearby log piles, much more formidable from the fact that a fire in a log pile of from five to ten thousand cords



FIGURE 1. CONVEYOR OPENINGS CAN SERVE AS DRAFT HOLES UNDER A LARGE LOG PILE. THIS PILE IS BEING CONTINUOUSLY WET BY MEANS OF SPRAY NOZZLES LOCATED ON OVERHEAD CONVEYOR AND COVERING THE MOST HAZARDOUS PART OF THE PILE. WATER FROM THIS SOURCE WHICH PERMEATES DOWN THROUGH THE PILE IS CONSTANTLY DRIPPING INSIDE OF THESE OPENINGS.

cause ideal draft conditions, so that the rate of combustion is ultimately limited only by the velocity at which air for combustion can be supplied to the fire and the products of combustion can be carried away. This velocity increases with the decrease in



FIGURE 2. HOSE STREAMS BEING CARRIED BY THE STRONG UP DRAFT OF THE FIRE DIRECTLY OVER THE TOP OF THE BURNING LOGS.

gas density, caused by the rising temperature of the fire, and is commonly called "draft."

Very few of the large log pile fires have been extinguished by hose streams until the fuel has been practically exhausted, owing

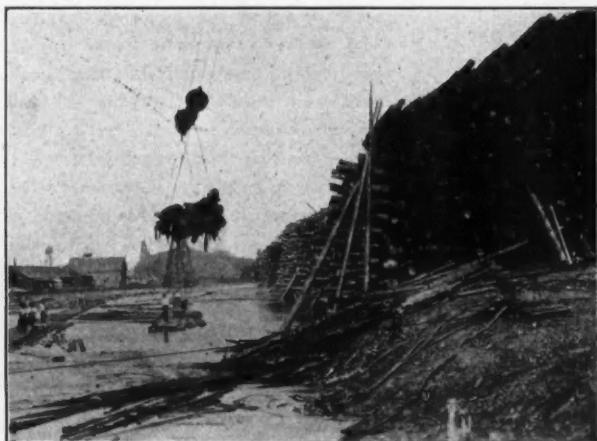


FIGURE 3. CABLE CONVEYOR STACKING LONG LOW PILES OF LONG LOGS ON THE SLOPING HILLSIDE BESIDE THE RIVER.

has in nearly every case continued two days or more, whatever the water supply available. To fight such a fire with any chance of success not only must there be available an exceptionally large amount of water per minute, but the supply must have such a capacity that it can be maintained at maximum draft for several days. In case of several large piles in which a fire in one exposes the others, a continuous supply of from 3,000 to 5,000 gallons per minute for a week may be required to take care of sparks as well as the drying action of the heat in order to prevent the fire from spreading from pile to pile. For this purpose, pumps supplied from a river or other large body of water with an auxiliary gravity supply or a gravity supply through ample mains from a



FIGURE 4. DARK LINES ALONG THE TOPS OF THESE LOG PILES SHOW THE PROGRESS OF ROTTING AT THE TOP OF THE PILE WHERE THE FUNGUS HAS BEEN INTRODUCED BY SEASON CRACKS.

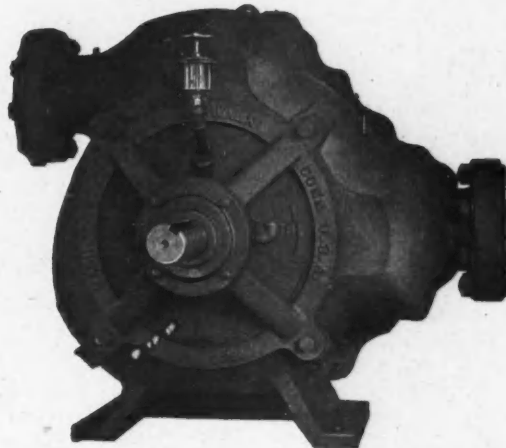
large reservoir, is about the only practicable arrangement. An auxiliary gravity supply of one or two hundred thousand gallons
(Continued on page 50)

THE HYTOR VACUUM PUMP FOR FLAT BOX SERVICE

Vacuum
Produced
Absolutely
Without
Pulsation

—
No Vibration

—
Saves Wires



Only One
Moving Part

—
No Rods, Pistons,
Crank Shafts,
Loose Moving Parts,
and No Gears

—
No Expert Attendance

Western Representative
T. H. SAVERY, JR.
1718 Republic Bldg.,
Chicago, Ill.

NASH ENGINEERING CO.
WILSON POINT ROAD
SOUTH NORWALK, CONN.

*New England
Representative*
G. H. GLEASON
141 Milk St.
Boston, Mass.

N.O.C.

NEW YORK OVERSEA CO. INC.

IMPORTERS
EXPORTERS

**WOOD PULP
and PAPER**

NEW YORK—CHRISTIANIA

Stockholm	Sao Paulo
Copenhagen	Buenos Aires
London	Batavia
Paris	Shanghai
Marseilles	Valparaiso
Genoa	Hong Kong
San Francisco	Samarang
Seattle	Soerabia
Las Palmas	Tientsin
Teneriffe	Calcutta
Meranham	Cape Town
Rio de Janeiro	Durban
	Johannesburg

NEW YORK 44 BEAVER ST. U.S.A.

N.O.C.

IMPORTERS OF

**SCANDINAVIAN
PULP**

AND

EXPORTERS OF

**AMERICAN-MADE
PAPER**

New York Oversea Company
44 Beaver St. New York City

FIRE PREVENTION IN PULP WOOD

(Continued from page 48)

for maintaining pressure constantly for quick service and supplying spray nozzles, can be used as a primary supply in conjunction with pumps, but a practically inexhaustible supply is unquestionably necessary for effective service.

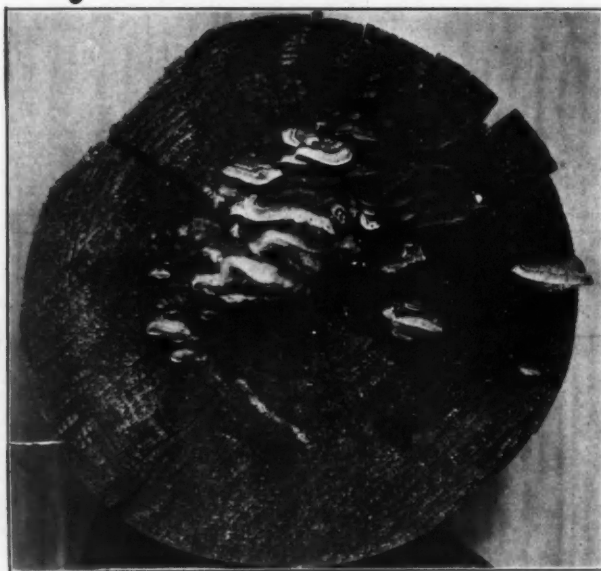


FIGURE 5. SHOWING FUNGUS PLANTS ENCOURAGED BY SEASON CRACKS AT THE TOP OF A LOG.

Calculations based on the constant and high velocity of heat generation in the large log pile fire which are confirmed by the lack of success in extinguishing such fires indicate that at least twenty to thirty thousand gallons of water per minute would be required to extinguish a large log pile when well under way. Such supplies are nowhere available at present; therefore, when subdivision is

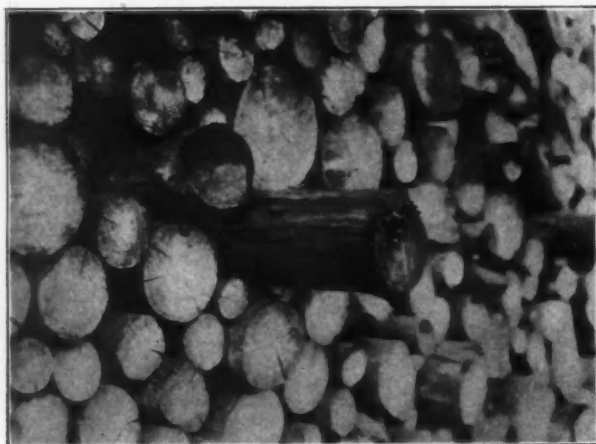


FIGURE 6. SHOWING FUNGUS PLANTS FROM SEASON CRACKS AT THE TOP OF A LOG EXTENDING FROM THE CENTER OF AN EVENLY PILED LOG PILE. NOTE THE DARK TOP OF THE NEARBY LOG WHICH EXTENDS ONLY A SHORT DISTANCE BEYOND THE SURFACE OF THE PILE. THE DARK COLOR IS CAUSED BY THE WATER ABSORBED THROUGH THE SEASON CRACKS AND WHICH IS STARTING FUNGUS GROWTH.

to be relied upon as the chief means of defense and the distances between the subdivided piles cannot be very great, a large and continuous water supply is especially important, and it is well within the range of possibility that a fire may spread from one pile to another, even after the wood in the first pile is nearly consumed as the radiated heat from the burning charcoal will be greater than that from burning wood and sparks will continue until nearly the end of the fire. The surfaces of nearby piles, unless they have been continuously and thoroughly wet, will have been dried by the heat and more easily ignitable; moreover, as the number of piles is increased the surface subject to attack by exposure will



FIGURE 7. FUNGUS PLANTS ON LOGS MAINTAINED AT FAVORABLE MOISTURE CONTENT BY NEARNESS TO THE GROUND.

be proportionally increased, and this surface must be kept well wet down until the fire is completely extinguished, which, judging from past experience, will probably be two or three days for each pile. If a second 10,000-cord pile should become ignited towards the end of the first fire, it would require the water for nearly a week.

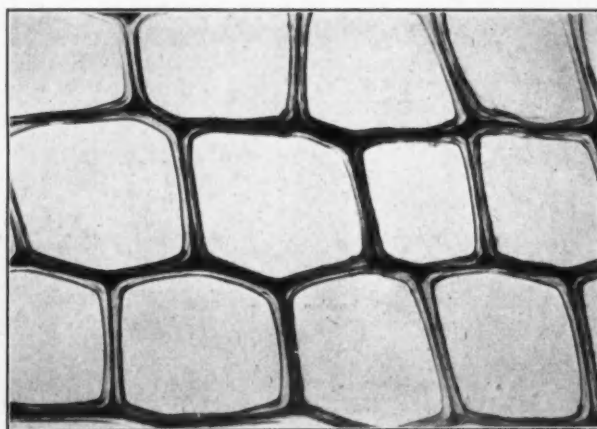


FIGURE 8. A CROSS SECTION OF SPRUCE WOOD HIGHLY MAGNIFIED SHOWING THE AIR FILLED CELL CAVITIES AND THE THIN HONEY COMB LIKE WALLS OF WOOD SEPARATING THEM.

Subdivision of pulp wood piles has two distinct objects, the first, underwriting, and the second engineering.

(Continued on page 52)



TIME saved in the beater room reduces your cost account. Improved quality of product is so much added profit.

Dowd Patented Cluster Filling saves beater time and improves quality at the same time. Let us name to you installations which confirm this broad statement.

You can equip your beater engines with Dowd Cluster Filling in a few hours without removing rolls from beater engines. Your own men can do the work. Try it on one engine.

Let Dowd of Beloit convince you exactly how you will save by equipping with Dowd Cluster Filling.

R. J. Dowd Knife Works
Makers of better cutting knives since 1847
Beloit, Wis.



FIRE PREVENTION IN PULP WOOD

(Continued from page 50)

The object of subdivision from an underwriting standpoint is to reduce the value subject to a single loss to an amount which the companies writing the risk are willing or able to lose, however remote the possibility of a loss. With log piles, experience has shown that a total loss is probable if the fire gets a start; therefore, the underwriting subdivision is more a function of the size and ability to pay on the part of the insurance companies than the chance of the loss occurring. This subdivision can be as well accomplished by dividing the risk among a large number of insurance companies as by subdividing the pile.

Subdivision from an engineering standpoint is governed by hazard and protection or, in other words, the probability of a fire occurring within a given time, and if it does occur the chance of putting it out with small loss. If subdivision is to be chiefly depended upon to safeguard a risk, it should be such that each parcel subject to a single loss will not have a value greater than the average loss per fire in risks of all classes commonly written at the same rate, and the separation of the several parcels should be such that there is no chance of a fire spreading from one parcel to another with the protection at hand.

Danger of Holes Under Log Piles Which Can Admit Air Under the Piles

Any form of openings under a log pile which can serve as a draft hole to rapidly admit air under the base of the fire is dangerous (see Fig. 1), as it will greatly increase the velocity of combustion and may quickly lead the fire down into the pile where it will be impossible to get at it with water from any practicable position. Such holes are common about large log piles, being left to accommodate reclaiming conveyors and the return side of the conveyor cable. Provision should be made for keeping all such holes when not in use, tightly closed to prevent the admission

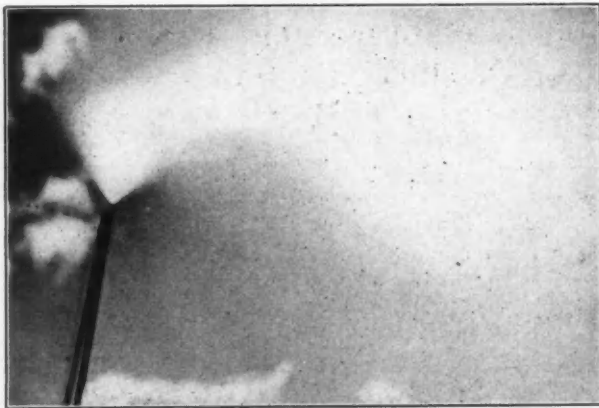


FIGURE 9. SHOWING A SPRAY NOZZLE DISCHARGING TWO GALLONS OF WATER PER MINUTE AT A PRESSURE OF 70 POUNDS. VERY SLIGHT WIND.

of air and immediate attention should be given to stopping them with dirt, bark or logs in the early stages of a fire.

Location of Hose Streams and Monitor Nozzles for Most Effective Service

There has been some discussion as to the relative advantage of locating hose streams or monitor nozzles on top of a log pile or about its base. There are advantages in both positions, and doubtless in most cases part of the apparatus should be placed in each position, but the top of the pile is preferable at the start of the fire, when there is the greatest chance of success in extinguish-

ing the fire. Provision should also be made for the men to easily and quickly attain this position.

At first thought the base of the pile may be considered preferable, as the heat and smoke will make the top of the pile untenable after the fire is under way, and it is thought that water can be shot with reasonably sure aim, like a gun, from a safe and convenient location on the ground. It being assumed that the wind and air current will remain the same with the fire in progress. This is far from true. The first fifteen minutes of the fire is the only time that any really effective fighting can be done where a

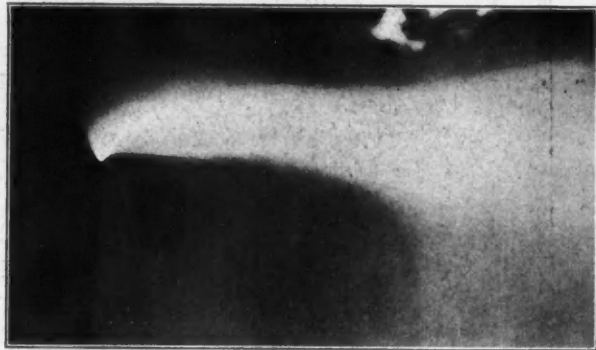


FIGURE 10. SHOWING A SPRAY NOZZLE DISCHARGING ONE QUART OF WATER PER MINUTE AT A PRESSURE OF 70 POUNDS WITH SUMMER AFTERNOON BREEZE. NOTE FINENESS OF SPRAY AND WIDE DISTRIBUTION.

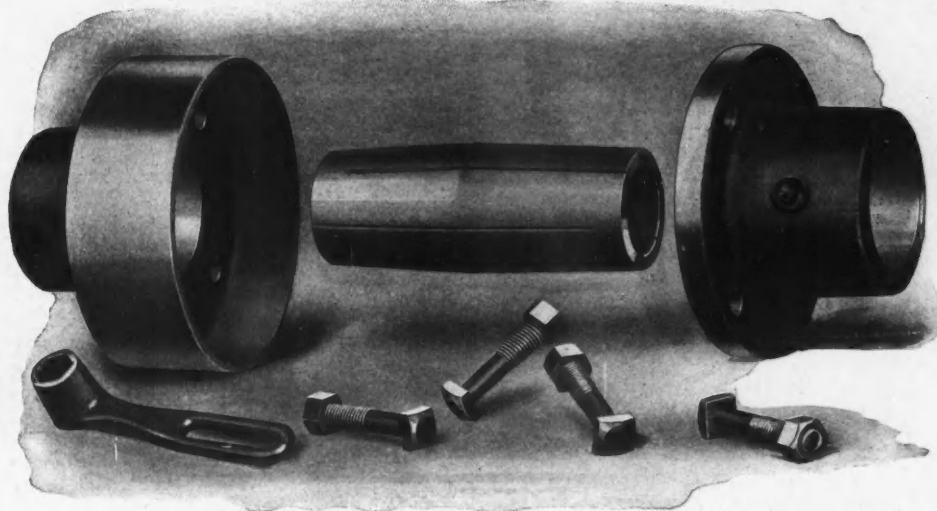
large pile of dry wood is involved, therefore, to be able to get at the fire quickly with a sufficient amount of water is absolutely necessary for success. The best location in the early stages of the fire is unquestionably the top of the pile, as streams can be directed down the slopes of the pile in all directions with the shortest range, less interference from wind and surer aim. After the fire is under way the updraft caused by the heat will be sufficient to deflect large hose streams sent up from the ground away from the base of the fire, as the velocity of the water will be lost and it will come to rest in the air directly at the point where the updraft is greatest. The following photograph (Fig. 2), taken in the early stages of a large log pile fire, shows the hose streams being carried by the updraft directly over the top of the fire. The nearer to the fire the hose stream is located the greater possibilities there are of penetrating this updraft by the force of the water and getting at the fire. With monitor nozzles or large hose connections distributed at short intervals along the top of the pile, it will be possible to keep out of the smoke in the early stages when the updraft is less powerful and there is a chance of successfully extinguishing the fire, whereas, a few minutes later the chance of success is highly doubtful in any position.

Dry or Wet Wood

Paper manufacturers prefer dry wood for making chemical pulp. This is sometimes obtained by piling in thin, well separated piles or by drying the chips, but neither of these practices are common, owing to the high cost of labor and other difficulties. Keeping the wood dry not only makes better pulp, but reduces the loss from rotting.

With the present high prices of wood, more care will be used than in the past to prevent loss by both fire and rotting. In order to dry wood below the fibre saturation point of about 30 per cent moisture, it is necessary to have the piles low with reference to

(Continued on page 54)



A Risk You Never Take

You never try to save time by careless installation of power transmission. But that isn't because you *don't want* to save the time. You would use a quick and careless method—if you could afford disabling breakdowns and rapid depreciation.

The coupling and alignment of line shafting is a tedious and delicate process—to be shortened, if the adjustments can be made automatically and without risk.

They can—with the

JONES KEYLESS COMPRESSION COUPLING

You need not devote special care to the centering of the shafts. The scientific construction of the coupling takes care of that. It adjusts itself. You need not incur delays in lining up keyways. There are no keyways to align.

All you do is to tighten the bolts gradually, one after the other. Then start the power—and *before the coupling will slip, the shaft will break*. We guarantee that it will hold without yielding under the most exacting strains.

Write to-day for prices, or see your nearest dealer.

W.A. Jones Foundry & Machine Co.
 4423 West Roosevelt Road, Chicago.
 New York 20 Murray St.

Manufacturers of Cast Iron Pulleys, Gears of All Kinds, Couplings, Lemley Friction Clutches, Pillow Blocks, Hangers, Speed Reducers and General Power Transmission Machinery.

FIRE PREVENTION IN PULP WOOD

(Continued from page 52)

the spaces between them, otherwise they will absorb and retain sufficient water from rain to maintain the air in their neighborhood at nearly saturation, which will retard the drying. With the great quantities of wood used in the larger paper mills it will require an immense area to store a sufficient supply for the time necessary to dry it by this method, and stacking and recovery methods are expensive for such large areas.

Advantage may be taken of the slope of the land to distribute the wood from the top of an incline by sliding it from the cars at the top down inclined conveyors or chutes into long low piles and recovering it by continuing its course down hill to the wood room cars or conveyor at the bottom. Rough-and-tumble piles should not be over twenty-five feet high and twenty-five feet broad. With such a pile of barked wood on high ground, where the lower average atmospheric moisture will hasten drying, the moisture should be reduced to 20 per cent or less in a few months of dry weather. Ranked piles will doubtless be better. Such low piles, if well separated, as will be required for efficient drying, can be readily protected against fire by hose streams or monitor nozzles and the drying should be rapid enough to prevent loss from fungus for moderate times of storage.

Cable conveyors have valuable possibilities for stacking long logs in low flat piles, convenient for drying and capable of effective hose stream protection, as shown in Fig. 3.

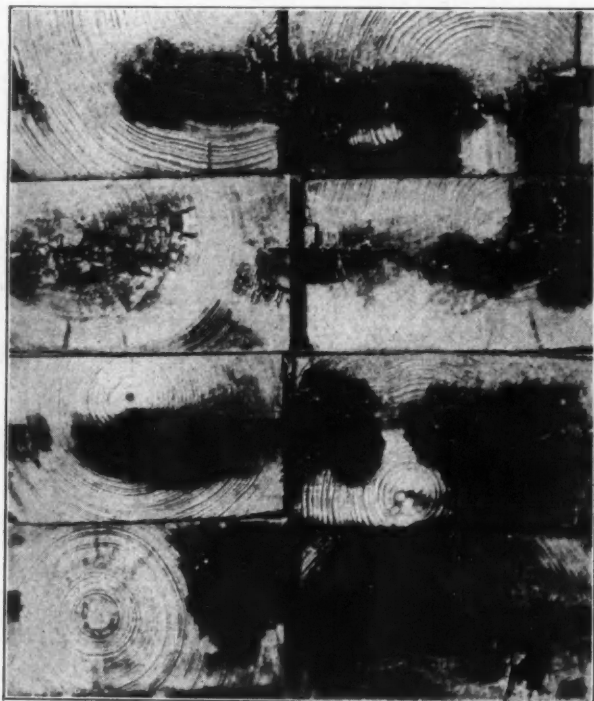


FIGURE 11. SOUTHERN PINE PLANKS FROM A PAPER MILL ROOF SHOWING A WELL DEFINED LINE OF ROTTED WOOD THROUGH THE CENTER OF THE PLANK WHERE THE MOISTURE WAS FAVORABLE FOR FUNGUS GROWTH. AT THE TOP IT WAS TOO WET AND AT THE BOTTOM TOO DRY.

Dry wood can most advantageously be kept dry and wet wood kept wet. Wood received on cars which has been previously peeled and piled in the open for several months and has already dried to less than 30 per cent moisture can best be stored at the mill

in such low open piles as will prevent it from absorbing more water from rain. If dry wood is piled in large piles with wet wood it will take up water from the wet wood, both of them finally coming to a water content of from 30 to 40 per cent, which

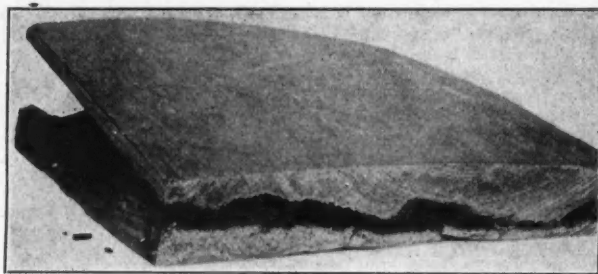


FIGURE 12. SHOWING PLANK FROM THE BOTTOM OF A WATER TANK ROTTED ALONG A NARROW LINE WHERE THE WATER WAS FAVORABLE FOR FUNGUS GROWTH.

is the best amount for the rapid growth of wood-destroying fungi.

Therefore, if the dry wood is piled separately in low, open piles, as described above, and the wet wood in high compact piles, which are kept wet on the outside by water spray operating continuously in dry weather, both wet and dry wood will be kept as far as possible from the moisture content, which causes the maximum rate of rotting, and can be safely stored for the moderate time commonly required.

If it is necessary to store wood for several years, it should either be stored in low, open, uniformly packed piles, protected on top to keep rain water out of the season cracks and well separated from the earth by rot-proof skids, or it can be stored under water. Season cracks in logs on top of piles encourage fungus by admitting water to the center of the stick. This condition is clearly shown in the following photographs (Figs. 4, 5 and 6). Logs on the top of piles exposed to sun and air will dry down to less than 10 per cent of moisture. In so doing, cracks will open on the tops of the sticks, admitting rain water and fungus. The latter will germinate and send out thread-like growths which will puncture the wood cells, admitting water to the wood again, so that the dry wood will reabsorb rain water, coming back to over 30 per cent, at first locally near the cracks, and gradually extending through the stick. It will be noted that in case of partially rotted sticks the fungus plants first appear at the top near the cracks. Fungus plants also appear at the bottom of the pile, where nearest to the earth, and lack of circulation of air maintains the wood at a moisture of 30 to 40 per cent, which is favorable for fungus growth (Fig. 7). Fungus plants first appear at the top near the crack on the surface of the wood, or so called fruiting bodies, shown in Figs. 5 and 6, are supported by thread-like roots which have already penetrated considerable of the wood before the fruiting plants appear. These fruiting plants do not commonly appear on originally sound wood until after two years or more of exposure to the weather. It is probable that if the wood on top of the pile is kept saturated with moisture so that the season cracks cannot open, the introduction of the fungus will be retarded.

Wood saturated with water so that its cells are completely filled will not rot and, wood below 20 per cent of moisture is immune to fungus attack.

The exact moisture limits of the important wood-destroying fungi are not known, but it is evident that the position of most

(Continued on page 56)

DU PONT

PULP COLORS

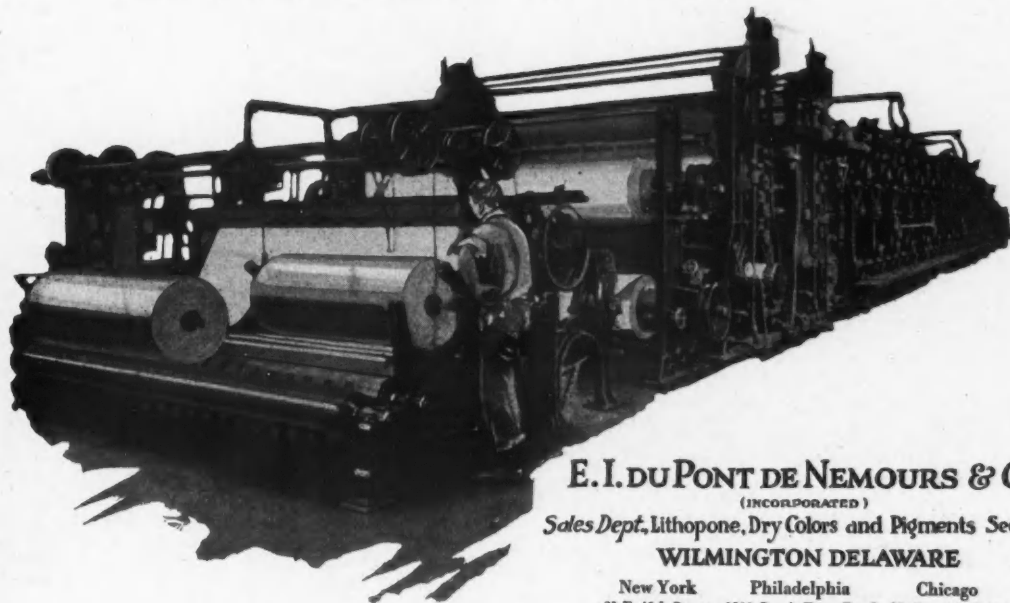
**BLUES
REDS**

BLACKS

**YELLOWS
GREENS**

The unvarying uniformity of Du Pont Pulp Colors enables the paper manufacturer to maintain a standardization for his product that will meet the exacting demands for high class coated papers—he knows that he can match it in his next vat of pulp.

Uniformity of Pigment Content—You get what you pay for.



Made in the Cawley-Clark Plant.

E. I. DU PONT DE NEMOURS & Co.

(INCORPORATED)

Sales Dept., Lithopone, Dry Colors and Pigments Section

WILMINGTON DELAWARE

New York	Philadelphia	Chicago
21 E. 40th Street	3500 Gray's Ferry Road	McCormick Bldg.
Boston	Columbus	San Francisco
Harvey Bldg.	Gugle Bldg.	Chronicle Bldg.

Canadian Sales Agency:

Flint Varnish and Color Works of Canada, Ltd.
Montreal, Canada

FIRE PREVENTION IN PULP WOOD

(Continued from page 54)

rapid fungus growth with common pulp woods is not far from the fibre saturation point, probably slightly above this point, or from 30 to 40 per cent moisture.

Wood Is Filled with Cell Cavities Like a Honey Comb

Wood is not a homogenous solid, but when cut across the grain has the appearance of honeycomb, the interior of the cells being filled with air in the case of wood below fibre saturation, and the wood substance which forms the walls of the cells containing more or less water. When spruce wood contains about 30 per cent by weight of water the wood of the cell walls is just saturated. With from 30 to 65 per cent of moisture in spruce wood, water is found in the cell cavities. Fig. 8 is a micrograph of spruce cut across the grain, showing clearly the air spaces or cell cavities and the wood substance separating them. The wood substance of the cell wall, like cotton, wool and silk, when below the fibre saturation point comes to equilibrium with the moisture in the surrounding air, taking up more or less water according to the relative humidity of the air, the wood absorbing water as the relative humidity increases and giving it up as it decreases. The amount absorbed varies somewhat for different woods, but for the average relative humidity of out of doors air of about 65 per cent, spruce wood protected from the weather will contain from 6 to 12 per cent water. Above the fibre saturation point there is a constant loss of moisture when the wood is exposed to the dry air. The rate of this loss depends on the relative humidity of the air. At the air saturation point of 100 per cent relative humidity, no water will be given up by the wood as it will be impossible for water to evaporate from the wood into an atmosphere already saturated with water. Rotten wood, or punk wood, apparently has a rather greater tendency to absorb water from a saturated atmosphere than sound wood; therefore, such wood remains wet in a saturated atmosphere and also absorbs liquid water like a blotting paper far more quickly than sound wood. If the atmosphere surrounding a log pile can be kept at the saturation point there will be no tendency for the wet wood to dry out on the surface or for the wet punk wood to give up its moisture. The most practicable way to attain this desirable end is to keep the log pile continuously covered with a blanket of artificial fog, consisting of very fine drops of water which float in the air and are carried by it over the log pile. This fog can be formed by spray nozzles which beat up the water into fine droplets, as shown in Figs. 9 and 10.

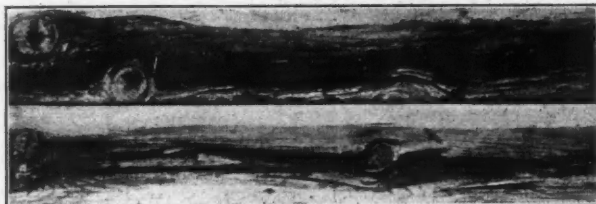


FIGURE 13. TWO SPRUCE PLANKS FROM A WEAVING MILL ROOF. NOTE CENTER OF ROTTED WOOD WITH SOUND WOOD ABOVE AND BELOW WHERE THE MOISTURE WAS TOO GREAT AND TOO LITTLE.

In order to determine how much water will be required to maintain this atmospheric saturation over the pile, an approximate idea can be obtained from the average summer evaporation from the surface of ponds. Such data has been collected for different parts of the country by water works engineers and it shows an average evaporation in August for the eastern section of the United States & Canada of about four gallons of water per minute per acre. The average surface area of a 10,000 cord

conical log pile is about $2\frac{1}{2}$ acres which would therefore require about 12 gallons of water per minute to supply the August evaporation. With a factor of safety of 5 to provide for spray carried away by the wind and other losses and irregularities, 60 gallons of water per minute applied in fine spray should be sufficient to keep the pile continuously wet.

Several experiments are under way on this method of wetting. The object is, first, to keep the wood wet in order to prevent igni-



FIGURE 14. LOG PILE CONTINUOUSLY WET BY SPRAY NOZZLES MADE OF BRASS $\frac{1}{2}$ -IN. PIPE CAPS WITH THREE $\frac{1}{32}$ -IN. HOLES SPACED 25 x 30 FEET.

tion by small sparks and second, to keep the season cracks closed and the wood cells as nearly full of water as possible to slow down the rate of combustion as well as fungus activity. Exact figures on the upper moisture limits of fungus growths are lacking, but judging from the way that tank staves and moist roof planks rot through the middle there is an amount of moisture considerably short of absolute saturation or a water logged condition of about 65 per cent at which fungus growth is considerably retarded. See figures 11, 12 and 13.

The value of spray from a fire protection standpoint consists first, in keeping the punk wood in the pile, which is the common source of ignition, by means of small sparks too wet to ignite. It will also have the advantage of keeping the surface of the pile so wet that if a fire should originate from exposure it would progress so slowly in its early stages as to give time to get hose streams or monitor nozzles into service. These should be conveniently located about the pile and on it so that large streams can be quickly directed on any point of its surface whatever the condition of the wind. Most of the large log pile fires have occurred in summer weather indicating that the dryness of the wood is the important factor.

It will be possible to install a monitor nozzle and spray nozzle system over log piles at a relatively small expense. This will be following the same methods that have been used with sprinkler and hydrant systems that have been in successful use for the fire

(Continued on page 58)

A. M. MEINCKE

Materials for PAPERMAKING

Pearl Filler English China Clay

5 South Dearborn Street, CHICAGO, ILLINOIS

THE adaptability of ORR Felts and Jackets on News and Fast Running Paper Machines and wherever superior quality and serviceability are demanded is marked.

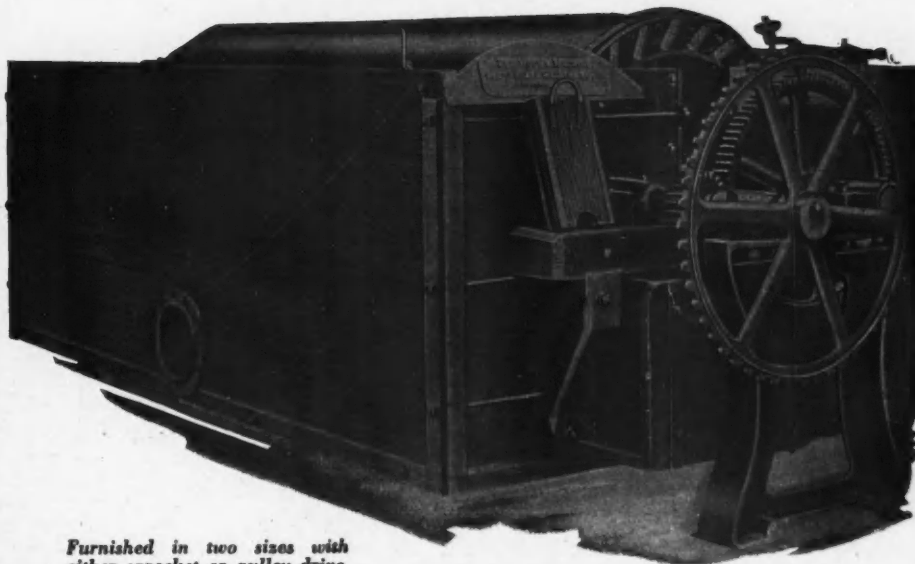
These felts are woven endless—they are proof against the common troubles.

Let us co-operate with you in attaining better results.

The Orr Felt & Blanket Co.

Piqua, Ohio, U. S. A.

THE WOOD'S MACHINE



Reduces wire cost

Works

automatically

No couch roll

No Doctor

Used as

Pulp Thickeners

Save-Alls

Pulp Washers

Water Filters

Guaranteed High Grade
Construction—Built for
Service.

*Furnished in two sizes with
either sprocket or pulley drive.*

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

Try our Split Cams for your Flat Screens.

FIRE PREVENTION IN PULP WOOD

(Continued from page 56)

protection of mills except that fire prevention by means of continuously operating open sprinklers will be expected to be more efficient than fire extinguishing by automatic sprinklers which are only brought into service after the fire starts.

On log piles put up by a stationary stacker, this stacker can support the fire service pipe supplying monitor nozzles and also supplying the spray nozzle system. The spray heads deliver much less water than the automatic sprinkler requiring not over ½ gallon per minute as compared with 20 gallons for the automatic sprinkler. This water can be supplied by ½-in. branch pipes for a common sized pile. A permanent system which suggests itself as highly practicable where fixed conveyors are in use, is to attach the ½-in. pipes to steel cables from the conveyor to the



FIGURE 15. SPRAY NOZZLES USING 2 QUARTS OF WATER PER MINUTE EACH SPACED 30 FEET EACH WAY. THE SURFACE IS NOT QUITE COVERED DUE TO THE UNEQUAL DISTRIBUTION FROM INSUFFICIENT ELEVATION.

ground at a sufficient height above the log pile to prevent damage from the falling logs, the pipes being spaced about 30 feet apart along the conveyor with heads about 30 feet apart along the cables, these heads discharging ½ gallon per minute each.

Where movable stackers are used the heads and monitor nozzles can be fed from a large fire service pipe supported in a plank runway resting on the logs at the top of the pile, and ½-in. pipes supplying the spray nozzles extending down the pile and resting on the wood. These pipes being put up as the pile is made and taken down as it is taken down. Spray heads should be selected which break the water into the finest possible spray so as to get the most efficient use and the best distribution. They should be located from 5 to 10 feet above the surface of the pile to get a satisfactory distribution, the wind being the important factor in distributing the water. The following photographs (figures 14 and 15), show spray nozzles variously spaced. Those in figure 16 are not high enough, therefore the dry areas clearly visible between the heads.

Fire Prevention Better Than Fire Extinguishing

Fire prevention by means of water spray has far greater possibilities in preventing pulp wood losses than fire extinguishing. To extinguish a fire in a large pile of dry pulp wood when the fire is well under way, which is commonly within ten or fifteen minutes of the time it starts, is almost if not quite impossible. Each pound of wood will require a gallon of water to absorb the heat which it generates in complete combustion. The velocity

of combustion in the large log piles which have been destroyed by fire has been surprisingly uniform. The variations appear to be more dependent on the water contained by the wood or the amount of oxygen contained in the surrounding air than the water applied in hose streams. Two of the slowest pulp wood fires burned 14,000 and 17,000 pounds of wood per minute. In the first case the wood contained in the neighborhood of 50 per cent of water and was fought with hose streams; in the second case the pile was ignited by a forest fire. The wood contained about the same amount of water and no hose streams were used, but the surrounding atmosphere was doubtless considerably impoverished in oxygen by the forest fire. A factor in the slowness of the first fire was doubtless the bark on the wood which somewhat clogged the spaces between the sticks and cut down the draft. Two other large fires in which the wood was somewhat drier and free from bark burned at 25,000 and 28,000 pounds per minute with hose streams in continuous service which shows a remarkably constant velocity. It also shows that it would be necessary to apply water to such a fire at a rate of about 30,000 gallons a minute with little effect until the wood was practically all burned. This demonstrates that when a large log pile is well under way it is impossible to stop it with any number of hose streams commonly available and that the only practicable means of avoiding serious loss is to keep the surface of the piles sufficiently wet to prevent them from becoming ignited and to have fire protective appliances instantly at hand to stop a fire in its early stages.

Spray nozzles have undoubted possibilities for cheap and effective square feet of log pile surface can be used with effect on isolated log piles at railway sidings and in the woods where now no practicable form of protection is available. Sufficient water at the required pressure can be supplied by a wind mill and a tank or a small gasoline engine.

Conclusion

Spray nozzles have undoubted possibilities for cheap and effective log pile protection.

Experiments are now underway at six large paper mills at least on the use of spray nozzles, the object being to determine the most effective spacing arrangement of piping and capacity of heads. Results thus far indicate that two quart heads as manufactured by the Spray Engineering Co. spaced 30 feet each way and elevated five feet above the surface of the pile, will give satisfactory service with a pressure of from 50 to 70 pounds at the head. ½-in. branch pipes feeding 5 to 8 heads appears to be large enough. The main feed pipes should be large to supply monitor nozzles and to keep down the water velocity to prevent keeping sediment which would clog the nozzles in suspension. Such wetting of large piles of wood, wet when stacked will not increase rotting, but rather reduce it.

Wood which is to be kept dry had best be piled in low well separated piles with good hydrant protection.

Two Pulp Mills for Florida

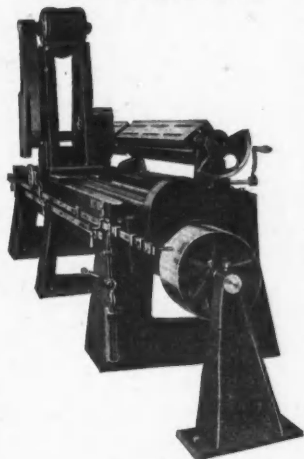
FORT MYERS, Fla., November 17, 1920.—Gilbert Leach of Leesburg, one of the factors in the big company which is erecting a paper pulp mill at Leesburg, has announced that a pulp mill will be started and operated here, and that work on erecting the plant will be started within a few weeks. The mill will make print pulp from sawgrass.

He also announced that a similar plant will be erected at Moore Haven.

The Leesburg plant may be in operation in time to begin shipping the paper pulp to a Northern paper mill to make the finished product by the latter end of December or early in the new year.

Knife Grinding

Automatic—Accurate



Advanced constructions in Straight and Cap Wheel Grinders. Improved features of real economy and service. Many types and sizes for all requirements, simple construction, easily operated, yet full automatic and strictly accurate. This installation means greatest service and minimum expense.

Write for latest general catalog

Machinery Co. of America
Big Rapids, Michigan, U. S. A.

Western Branch: 304 First Ave., So., Seattle, Wash.
Specialists in Saw, Knife and Filting Machinery

OLD FORT BUILT IN 1816
FORT HOWARD PAPER CO.

TISSUE PAPERS

Our Quality Crepe Toilets, Plain Tissue Toilets, Crepe and Plain Tissue Napkins and Paper Towels, have become firmly established with jobbers and public, because they run uniform and are up to specifications. Our Ream Tissue, Bleached and Unbleached—Natural, Manila and White, also our Anti-Tarnish Kraft Tissues, are offered to the public with the same qualifications to guarantee their demand and popularity.

FORT HOWARD PAPER CO.
Green Bay, Wis.

HISTORY REPEATS ITSELF

John Norris Drove the Paper Manufacturing Industry Into Canada by False Propaganda.
This Same Situation Is Being Repeated Again

The TRUTH Regarding IMPORTS of Newsprint

Germany exported in 1913, 68,749 tons, and imported from Sweden 6,953 tons. Of her total exports, America received 438 tons. England received 7,979 tons. America therefore is not a true German market.

Norway produced in 1913, a total of 75,410 tons, exports not given but probably equal to Germany.

Sweden exported in 1913, 68,943 tons, of which the U. S. received 307 tons.

Austria, including Czecho Slovakia exported in 1913, 13,480 tons of which 8,470 tons went to Hungary.

America exported in 1913, 50,213 tons.

During the first nine months of 1920, Germany exported to the United States 676 tons of newsprint, for which a New York newspaper paid in excess of 9c a pound.

Sweden exported to U. S. about 15,000 tons more this year, than in 1913 because premium prices were paid.

MAURICE O'MEARA COMPANY

448-450 PEARL STREET

IMPORT DEPARTMENT

NEW YORK CITY

News of the Fox River Valley

[FROM OUR REGULAR CORRESPONDENT.]

APPLETON, Wis., November 29, 1920.—More than 100,000 tons of coal will have been transported from the coal docks in Green Bay to paper mills along the Fox River when navigation closes November 25, according to information compiled by navigation officials. This is an increase of about 50,000 tons over last year. The season opened April 11. Navigation closes this year about a week earlier than the average for the last half dozen years.

A half dozen tugs and numerous barges were engaged in the work. About 300 tons of coal were carried on each trip from the docks to the coal yards and several barges made as many as four trips a week.

Importance of water transportation was never realized so much as this year. While nearly every mill outside of the Fox River Valley was handicapped by lack of fuel, the valley mills were operating without difficulty and were getting their coal cheaper than other mills. Most of the mills served by water transportation have enough fuel in their yards to keep them operating the greater part of the winter and are in little danger of a coal famine.

Next year it is purposed to increase transportation facilities somewhat. The Government has been asked to deepen the channel of the river to make it possible to haul larger cargoes. If this is done it is believed that the present equipment will be able to handle 125,000 tons of coal next season.

Mills in the Fox River Valley are now drawing 75 per cent of the normal flow of water, an increase of 50 per cent over about a month ago. Mills in the Wisconsin River valley, partially closed down because of a water shortage, are operating at capacity again. Rains of the last few days have partially filled the reservoirs in the northern part of the State, and sufficient waterpower is now provided.

Movement of pulpwood into the Fox River valley is still continuing. Railroad men say that the movement of wood is later this year than usual, probably due to difficulty in getting cars. More than 80,000 cars of forest products, including thousands of cars of pulpwood have been handled by the Northwestern Railroad in Wisconsin so far this year, railroad officials said. Most of the mills have sufficient wood on hand to last them far into the winter and enough wood will be received during the next few weeks to insure a plentiful supply until spring.

A steady improvement in the labor situation is reported by millmen all over the State. Employers are now able to select men from their applicants, a situation different from that of the last few years, when employers were practically forced to take every man available in order to keep mills operating.

There has been an increase in wages in several months, and there has been little discussion of wage increases. Employers say that the labor turnover is rapidly diminishing and that a better class of workmen are now employed. Manufacturers are not compelled to rely on tramp labor or boys now.

President J. A. Kittell of the Peshtigo Fibre Company has announced that the company's new mill at Peshtigo will be ready to begin operations about January 1, 1921.

Open House and Warren Day

ROCHESTER, N. Y., November 24, 1920.—To give printers and advertisers a glimpse into the problems which confront paper manufacturers and paper merchants in their efforts to produce and supply good paper at reasonable cost, the Alling & Cory Company held what it termed an "open house and Warren day" at its warehouse on the afternoon and evening of Thursday, November 18.

About three hundred guests from many parts of New York State responded to the invitations sent to the trade. Of this number, 125 arrived in time to be taken to the Memorial Art

Gallery, on the University of Rochester Campus, to view an exhibition of the history of the art of printing, an exhibition which includes specimens from many hundreds of years before the Christian era down to work done by the most modern printers.

Beginning about 4 o'clock, all guests were shown through the company's warehouse and were given an opportunity to see the methods used and the stocks carried in order to properly serve the printer's needs.

Dinner was served on the second floor of the warehouse, and later all adjourned to the third floor for the evening meeting.

After an address by W. J. Boardman, of the George Batten Company, New York City, on "Advertising and the Printer's Business," Jesse W. Clark, of the S. D. Warren Company, described in detail the process of papermaking, and answered a large number of questions relating to the manufacture and use of printing papers.

Motion pictures of the S. D. Warren Company's paper mills were then thrown on the screen and every one saw in actual operation the machines and processes Mr. Clark had just described.

The meeting broke up about 10.45 P. M., all guests agreeing that the day had been both interesting and instructive.

Larger Earnings for Wayagamack

Among pulp and paper circles the expectation is that earnings of Wayagamack Pulp and Paper Company of Three Rivers, Que., in 1921 will show a liberal increase by reason of extensions which are being carried out for the production of kraft paper. Of the two machines which are to be installed, there are hopes that both may arrive before the close of navigation and installations will be immediately begun, which by the spring should increase the output of the company by fifteen tons of kraft paper per day. Four more machines will be installed next year, bringing the total kraft paper output to 175 tons per day. The necessary addition to the pulp plant, to keep pace with the paper output, will take place. The price of kraft is exceptionally high, though at the moment it is a little below the recent record.

Box Makers Reduce Wages

[FROM OUR REGULAR CORRESPONDENT.]

LEOMINSTER, Mass., November 27, 1920.—Announcement was made at the plant of Whitney & Co., paper box manufacturers, the past week of a wage reduction of from 10 per cent. to 15 per cent., effective at once. There are about 150 girls employed at the plant, and when the announcement was made a delegation from the employees went to the office and asked that the reduction be postponed until after Christmas. They were told that the employees would be lucky if the plant would be running at all after Christmas. Fred Whitney, president of the concern, said that the reduction might not affect all of the employees at once, but that it was likely to become general. He assigned as the reason the falling off of business.

To Be Sherman Paper Co., Inc.

[FROM OUR REGULAR CORRESPONDENT.]

WATERTOWN, N. Y., November 29, 1920.—Taggart's Paper Company directors met in special session this morning and passed a resolution which changes the name of the company to The Sherman Paper Company, Inc.

The new name becomes effective on January 1. The reasons for retaining the old name had entirely passed some years ago, and it was decided that the new name would more nearly express the personality of the company. Besides that, it eliminated considerable annoyance because of the fact that Taggart Brothers Company's mail was frequently interchanged.

The Union Sulphur Company

Producers of the Highest Grade
Brimstone on the Market

ABSOLUTELY FREE FROM ARSENIC OR SELENIUM

The Largest Sulphur Mine in the World

CALCASIEU PARISH, LOUISIANA

Main Offices: Whitehall Bldg., 17 Battery Place, New York

A. SALOMON, Inc.

15 PARK ROW NEW YORK

Consult us if you are looking
for Foreign Rags.

PAPER MAKERS' SUPPLIES

THE WHITE TAR ANILINE CORPORATION

New York Office: 56 Vesey Street

Works: Kearny, N. J.

HEADQUARTERS FOR

PAPERMAKERS' COLORS

Special Shades Matched and Complete Formulas Furnished

New England Representatives: Union Chemical Company, Boston, Mass.

FORGE LAP-WELDED

SOFT STEEL

DIGESTERS

ALL SEAMS LAP-WELDED

AMERICAN WELDING COMPANY

CARBONDALE, PA.

VERTICAL
SEAMS
HEATED WITH
FURNACES
AND WELDED
WITH
HYDRAULIC
POWER

CIRCUMFEREN-
TIAL SEAMS
HEATED WITH
FURNACES
AND HAMMER
WELDED

WILLIAM A. HARDY & SONS COMPANY, Fitchburg, Mass., U. S. A.



Rescript Handed Down Against U. S. Envelope Co.

[FROM OUR REGULAR CORRESPONDENT.]

AUGUSTA, Me., November 29, 1920.—A rescript has just been handed down by the Maine law court in the case of Carrie M. Stone vs. the United States Envelope Company, et als, sustaining the bill brought by a common stockholder to restrain the corporation from giving to the preferred stockholders the right to purchase stock at less than its value.

The United States Envelope Company has 40,000 shares of 7 per cent cumulative preferred and 10,000 shares of common stock. These classes of stock have equal voting power, share for share. All of this stock having been issued and sold at par, except 2,500 shares of common stock, a vote was passed to issue this 2,500 shares and to give all stockholders, both common and preferred, the pre-emptive right to buy it in proportion to their holdings at \$150 a share. This price was substantially less than the actual market value of the stock.

The plaintiff contended that to give preferred stockholders the right to purchase stock at a fixed price less than its value is in effect to pay to the preferred stockholders a dividend in addition to the preferential dividend which has been regularly declared and paid. The defendant contends that the preferred stockholders are not limited to their preferential dividends, but are entitled to share the surplus with the common stockholders.

The rescript, which was drawn by Associate Justice Luere B. Deasy of Bar Harbor, holds that the respective rights of common and preferred stock are fixed by a contract which is commonly set forth in the corporate by-laws. Within wide limitation any preferential rights provided for in the by-laws will be given effect by the court.

Where nothing to the contrary appears, the creation of a preferred stock prima facie implies that the preferential rights of the stockholders are given in lieu of or to the exclusion of the equality in participation which would otherwise exist. The opinion is concluded by the statement that to carry into effect the vote above referred to and to sell stock to preferred stockholders at less than its value is to violate the right of the common stockholders.

Employment in Paper Mills

The Bureau of Labor Statistics of the Department of Labor has just announced comparisons of employment for October of this year.

The bureau received replies from 55 paper mills, showing the employment in these mills in October of this year to have been 33,022 as compared with 29,864 for the same month of last year, which was an increase this year of 10.6 per cent. The payrolls in these 55 establishments in October of this year totaled \$998,616 as compared with \$740,699 for the same month of last year, being an increase this year of 34.8 per cent.

The bureau received replies from 56 paper mills, comparing the employment for September and October of this year. The bureau's figures show that in September of this year in these 56 mills there were 33,864 persons employed, decreasing very slightly in October to 33,814, a decrease of .1 per cent. The payrolls in these establishments on the other hand, increased from \$1,013,042 in September to \$1,025,030 in October an increase of 1.2 per cent.

Coty Bag Machine Co. Moves to Toledo

[FROM OUR REGULAR CORRESPONDENT.]

WATERTOWN, N. Y., November 29, 1920.—The Coty Bag Machine manufacturing plant is now being transferred from this city to Toledo, Ohio. For several months the work of manufacturing the machines has been carried on at the plant of the Massey Machine Company in Pearl street, but it is understood that a plant more

adapted for the production of the bag machines has been acquired in the Ohio city. The offices of the Coty Bag Machine Company will still be retained in this city.

A. C. Coty, inventor of the high speed bag machine which bears his name will go to the Ohio plant at once to take personal charge of the manufacturing.

There is located in Toledo the Valve Bag Company of America, and the City plant will share a plant with this concern, according to information here. Just what the future plans are as to distribution of machines or the extent of production is now not announced.

Zellerbach Co. Buys Pulp Plant

SAN FRANCISCO, Cal., November 22, 1920.—The Zellerbach Paper Company and associated interests have invested \$1,500,000 in the Washington Pulp & Paper Corporation of Port Angeles, Wash., it was announced yesterday, in order to meet the increasing demand for news print paper.

The Port Angeles plant is in operation, and the paper plant, with a rated annual capacity of 16,500 tons of news print, will be placed in operation December 1.

The corporation owns about sixty acres at Port Angeles, fronting on deep water, and its plant is favorably situated in view of its timber supply, cheap power rates and rail and water transportation facilities.

Pressure Between Calender Cylinders

Fritz Tscheike, of Fuerth, has obtained a patent on what he calls a simple manner of maintaining an unvarying pressure between the two cylinders of a calender press. He has a sort of bolster running between the paper and the paper- or cotton-covered cylinder, having the same speed as the paper. The paper is separated from the bolster immediately after leaving the cylinder. The inventor claims he produces a uniform gloss, no matter how long the calender has been in use. Instead of renewing the cylinders when they have worn off, it is only necessary to insert a heavier bolster, which makes up the difference in space between the two cylinders. It is also claimed that the use of the bolster prevents any damage to the steel cylinders.

Raises \$1,000,000 in One Hundred Minutes

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Quebec, November 22, 1920.—A cable from London states that Lord Northcliffe raised the sum of \$1,000,000 in selling new issue of stock of the Anglo-Newfoundland Development Company in one hundred minutes. Lord Northcliffe, who is president of the concern, was offered ten times the amount of the issue, and could have obtained one hundred million dollars in two days had the lists remained open. The Anglo-Newfoundland Development Company has a large lease of timber land in Newfoundland, and manufactures paper for the *Daily Mail* and *Mirror*.

Paper Companies on the Pacific

A despatch from Vancouver, B. C. states that a large tonnage of paper and pulp is now being produced on the Northern British Columbia Coast. The Powell River plant is turning out about 225 tons a day, the Ocean Falls, 250 tons of paper and pulp, the Swanson Bay plant about 50 tons a day, and the Beaver Cove plant about 25 tons of pulp a day. On Quatsino the plant at Port Alice is also turning out large quantities of pulp and paper.

Close Pulpwood Contract

The "Union Co-operative Agricole," of Harricana, Abitibi, in Northern Quebec, has signed a big contract with the International Paper Company of New York, for pulpwood at very fair prices.

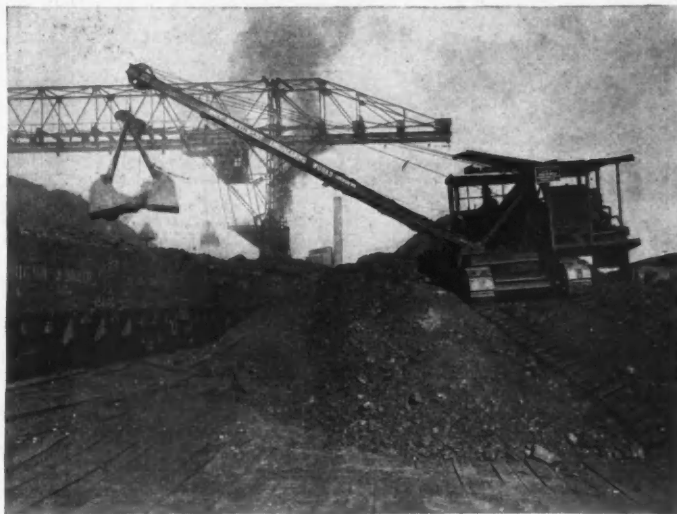
NORTHWEST

Steered—Driven—Operated from the Rotating Base by One Man

With a
Wood Grapple
or
Clam Shell
Bucket

On a NORTHWEST Crawler Type Crane, there are so many places that you can use it to advantage that it is impossible to even itemize them in one advertisement.

It—



Goes Anywhere Any Time—



Reasons Why

1. Steers from the operator's platform by movement of one lever.
2. Travels under its own power on two crawler type wheels, same as war tanks.
3. Operates clam shell, dragline bucket, pile driver hammer, or electric lift magnet.
4. Equipped with 4 cyl., 60 H. P., Gasoline Engine.

Write for specifications and prices.

**DOES NOT
REQUIRE
RAILROAD
TRACK OR
PLANK**

Northwest Engineering Works

General Sales Offices

28 E. Jackson Blvd., Chicago, Ill.

Phone: Wabash 9326

Works: Green Bay, Wisconsin

**USE IT
WHERE YOU
WANT IT
WHEN YOU
WANT IT**

AUTOMATIC MICROMETER

(Made in U. S. A.)



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

E. J. Cady & Company

326 WEST MADISON STREET

CHICAGO, ILL.



EASTERN MANUFACTURING COMPANY

General Sales Offices: 501 FIFTH AVENUE, NEW YORK

Western Sales Offices: 1223 CONWAY BUILDING, CHICAGO

MAKERS OF FINE WRITING PAPERS

JAMES D. LACEY & CO.
Timberland Factors
 TIMBER LANDS TIMBER SECURITIES
 REPORTS MANAGEMENT

TECHNICAL SERVICE
"Forty Years in Timber"
 Seven East 42nd St.
 NEW YORK CITY

CHICAGO PORTLAND, ORE. SEATTLE



The Ashcroft Paper Tester **The Ashcroft Thickness Gauge**

Actual necessities for all those who make, sell or purchase paper in any form. The thousands in daily use testify to their efficiency.

THE ASHCROFT MFG. CO.
 119 West 40th Street 29 North Jefferson Street 19 High Street
 New York Chicago, Ill. Boston, Mass.
 Canadian Sales Agents: The Canadian Fairbanks Morse Co., Montreal and Toronto.

ESTABLISHED 1842

FOURDRINIER WIRES

DANDY ROLLS
 CYLINDER
 MOLDS

CHENEY BIGELOW WIRE WORKS
 SPRINGFIELD, MASS.

MANUFACTURERS

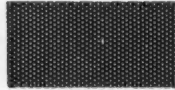
**Brass, Copper and Wire Cloth,
 Bank and Office Railings and Grille Work**

Perforated Metal Screens

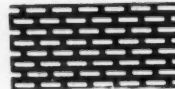
FOR
PULP AND PAPER MILLS

STEEL, COPPER
BRASS, BRONZE
and other Alloys

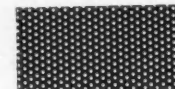
punched for Centrifugal
and Rotary Screens,
Pulp Washers, Drainer
Bottoms, Filter Plates,
etc.



.065 Inch Round



1/4 x 1/4 Inch Slots



3/32 Inch Round

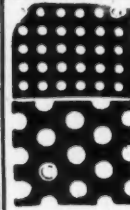
CHARLES MUNDT & SONS

53-65 Fairmount Ave.,
Jersey City, N. J.

Penn Paper and Stock Company

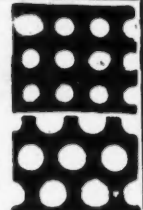
*Packers of All Grades of
Waste Paper*

206 N. DELAWARE AVENUE
PHILADELPHIA



**MANHATTAN
PERFORATED METAL CO.**
Office and Works: 257-259 Centre St.,
New York

PERFORATORS
of COPPER, BRASS, ZINC, ALUMINUM,
TIN, STEEL, IRON, Etc.
Write for Copper, Brass, Tin or
Aluminum Catalog.
Brass and Copper Centrifugal and
Juice Strainer Plates a Specialty



A good business man knows
the value of thoughtful adver-
tising.
The Paper Trade Journal is
an unexcelled medium.

TEXAS GULF SULPHUR

99½ Per Cent. Pure

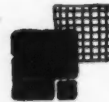
Produced from one
of the largest known
deposits in the world.

Texas Gulf Sulphur Company

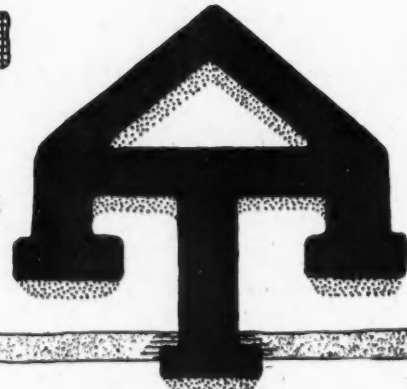
General Offices

50 East 42nd Street, New York, N. Y.

*Sulphur Deposit and Plant, Matagorda
County, Texas*



TRADE



MARK

**AUER & TWICHELL
PAPER**

In addition to being general paper distributors,
we are manufacturers of

**Paper Twine, Paper Tubes, and Paper Cores
for Paper Mills**

Manufacturing Plants at
Philadelphia Unionville, Conn.
Beverly, N. J.


Offices
Philadelphia Beverly, N. J. New York

ESTABLISHED 1861
 IRA L. BEEBE CYRUS E. JONES

IRA L. BEEBE & CO.

132 Nassau St., New York

IMPORTERS AND DEALERS IN



WOOD PULP

HIGH GRADE
Paper Mill Machinery

Web Sheet CALENDERS Breaker Friction
 Belt Driven PLATERS Motor Driven

Rag Room Equipment
 Fan Dusters Rag Thrashers Railroad Dusters

NORWOOD ENGINEERING COMPANY
 FLORENCE, MASS.

FOREIGN and DOMESTIC
 Paper Stock
 New Cuttings
 and Rags

CASTLE, GOTTHEIL & OVERTON

Jute Stock
 Sizing, Sulphite
 and Soda Pulps

200 FIFTH AVE. NEW YORK

“DRAPER”
FELTS

For Any Grade of Paper or Pulp

ARE GUARANTEED
To Give Entire Satisfaction

MANUFACTURED BY
DRAPER BROS. CO., CANTON, MASS.



There is Only One Way
 to make paper mill tanks—the Caldwell way. The engineers of the W. E. Caldwell Co. have spent years in discovering it. Caldwell Heavy Yellow Pine Acid Tanks are scientifically constructed according to the strictest engineering principles. Their extreme thickness assures long life; their construction absolutely prevents bulging and breaking. The Caldwell is the only tank for storing acids and for holding stock in solution.

A reputation for the highest grade of products and an experience of over 30 years stands back of Caldwell service.

Send for Catalogue
W. E. CALDWELL CO.
 Incorporated
 2040 Brook Street,
 Louisville, Ky.

Caldwell
TANKS AND TOWERS



FOR FINE
WHITE BOXES

Nashua White Embossed Papers are famous wherever boxes are made.

Sell These Papers to Your Trade for Christmas Boxes

Nashua Gummed & Coated Paper Co.
 NASHUA, N. H.

Canadian Plant: CANADIAN NASHUA PAPER CO., LTD., PETERBORO, ONT.

CLAFLIN CONTINUOUS BEATERS
 produce a fine, smooth, strong, uniform stock

The 250 Claflin Continuous Beaters
 Now in use prove that they are the Ideal Equipment for

Rope Manilla Kraft Paper
 Wall Board Sulphite Screenings
 Leather Board Waste from Pulp Stones

THE CLAFLIN ENGINEERING CO.
 Lancaster, Ohio

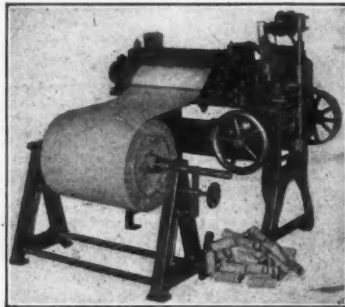
The Canadian Fairbanks-Morse Co., Montreal, Quebec
 Agents for Dominion of Canada

DIETZ

LATEST IMPROVED PATENTED

Automatic Tube Machines

For Making Tubes for Toilet
Paper Rolls, Paper Towel Rolls



Capable of producing 3,600

Toilet Tubes

per hour direct from roll.

Towel Tubes

are made at rate of 1,800 per hour. Substantially built and fully guaranteed.

Patented Feb. 22, 1916, May 18, 1920.

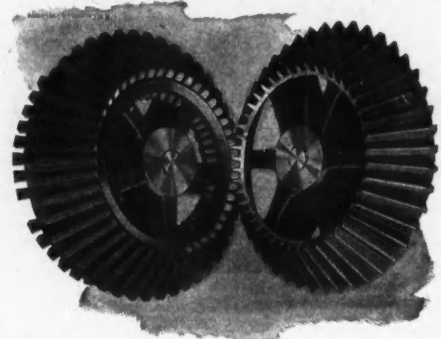
We also manufacture Toilet Paper Machines for making Toilet Paper Rolls with or without perforations and machines for making Sanitary Crêpe Paper Towels, Drop Roll Slitters, Slitting and Rewinding Machines, Side and Center Seam Merchandise Envelope Machines, Photo Mount Beveling Machines, Candy Bag Machines, Punch Presses for Playing Cards, Rotary Card Cutting and Collating Machines, Etc.

DIETZ MACHINE WORKS

126-128 Fountain Street PHILADELPHIA, PA.
Corner Waterloo St., Below Diamond St., Bet. Front and 2d Sts.

MORTISE WHEELS

SPUR, BEVEL AND MITER



Castings of semi-steel by our improved method of machine molding, thus insuring uniform tooth spacing, true rims and smooth running, with high efficiency. Teeth of both Mortise wheel and pinion finished by accurate gear cutting machinery.

DESIGNERS AND BUILDERS
OF WATER WHEEL HARNESS

H. W. Caldwell & Son Co.

CHICAGO, 17th Street and Western Avenue
NEW YORK, Fulton Bldg., Hudson Terminal, 50 Church St.
DALLAS, TEXAS, 711 Main St.

KVP

“**W**HY sit mournfully under a weeping willow tree and weep about the shortage of pulp wood when Luther Burbank can grow a black walnut tree two and one-half feet in diameter in sixteen years?”

KALAMAZOO VEGETABLE PARCHMENT COMPANY
Kalamazoo, Michigan
World's Model Paper Mill
Manufacturers of wood and vegetable parchment paper.

PULP FAMINE FEARS

Jenkins Standard Iron Body Gate Valves

Double face solid wedge type. Bodies and bonnets high grade cast iron. Seat rings are bronze and gates or wedges cast iron, faced with bronze rings, except in smaller sizes, in which wedges are made entirely of bronze. Improved shape of body and bonnet not only insures perfect castings free from internal shrinkage strains but secures the maximum of strength and rigidity.

Sizes 16" and smaller for 125 pounds working steam pressure and 175 pounds working water pressure. Sizes 18" and above for 100 pounds working steam pressure and 125 pounds working water pressure. Screwed or flanged, rising, or stationary spindles.

Know genuine Jenkins Valves by the name and Jenkins Diamond Mark—at supply houses everywhere.



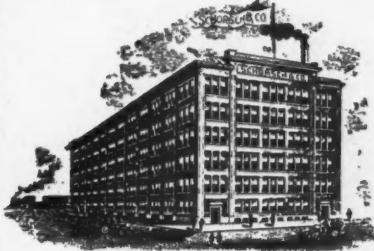
Fig. 331

JENKINS BROS.

New York Boston Pittsburgh
St. Louis Philadelphia Washington
Chicago San Francisco
Montreal London Havana

Jenkins Valves
SINCE 1864

The Home of Quality



FACTORY
132ND TO 133RD ST & BROOK AVE

PAPER BAGS

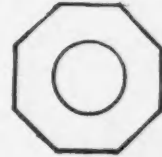
Sacks and Specialties

ESTABLISHED 1901

SCHORSCH & CO.

Manufacturers

500 East 133d Street : New York



on a Paper Bag vouches for its Good Quality

Guaranteed Flat Gummed Paper



The Leader for Seventy-five Years

IDEAL COATED PAPER CO.

Mills and Main Office, BROOKFIELD, MASS.
NEW YORK CHICAGO CINCINNATI

Missisquoi Pulp and Paper Company

SHELDON SPRINGS VERMONT

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



We announce the completion at Cincinnati, Ohio, of the most modern plant, built and operated by practical experts of the highest standing in the manufacture of Silicate of Soda.

It is our purpose to merit your business on the basis of standard quality and dependable service.

Inquiries are solicited for spot and contract deliveries.

THE STANDARD SILICATE COMPANY

MANUFACTURERS OF

SILICATE OF SODA

CINCINNATI, OHIO.

New York Market Review

Office of the PAPER TRADE JOURNAL,
WEDNESDAY, December 1, 1920.

The revival of action in the paper market still depends upon the renewing of interest by the buyer. As yet there has come no report of a freer distribution of goods and the jobbers all complain that they are unable to get any turn over, there certainly is less than there is ordinarily at this season. However, the longer buying is deferred the more certain its future development becomes, and several paper men seem to doubt whether consumption has actually fallen off as much as the slowness of the demand would appear to indicate. Since the mills cannot operate without orders being placed, contracts are being made sparingly and production has been decreasing somewhat in several parts of the market, particularly board. The purpose of the jobber is to reduce any supplies he may have on hand from that period of excessively high price, the manufacturer is sitting tight and keeping prices up until he sees a definite and appreciable reduction in the price of raw material and labor in sight, and the consumer thinks if he scrapes along somehow and buys as little as possible he will be able to force prices down.

All this is simply an indication that there is a perfectly definite contest on between the buyer and the seller. The buyers saw the commodity market tumble early in the fall and they immediately jumped to the conclusion that the paper prices would fall too. There really was no very good reason to expect this except in board and possibly some of the pulps, because the paper manufacturer has not been making an excessive profit. Some of the middle men, perhaps, saw an opportunity to make big gains during the war and the period immediately following and they took advantage of it, but the manufacturer who depends so largely on a contract business could not, had he so desired, jump his price with every wind of rumor. In the present situation the manufacturer is playing it safe and the consumer is playing it safe, if any sharp break comes it will be among the middle men, particularly the small jobbers, who may unload suddenly at any price, in the fear of getting caught with no ready money. If this occurs it is liable to precipitate a dangerous situation. On the other hand if everyone keeps steady the price of paper will soon strike its proper level and an era of prosperous business may be expected.

Fine paper is continuing slow with little doing in the spot market where attractive prices have failed to interest buyers. The mill men all claim that they do not see any radical reduction of the price of fine and book papers ahead. Several mills are taking advantage, it is said, of this dull period to shut down or run on part time in order to make some much needed repairs.

News print is better than most of the rest of the market. Low water conditions throughout the North Eastern part of the United States and the Southern parts of Canada has made the shortage of this material even more acute, but this is not serious since there has been some lack of interest shown by purchasers. The announcement by the International Paper Company that their price for the new quarter would be \$6.50 per cwt. f.o.b. mill, has been causing considerable comment throughout the trade.

Mechanical Pulp

Mechanical pulp has fallen off even more during this week; some sales are reported at as low a price as \$100 per ton. There have been several buyers recently in town trying to get it at even a lower figure; one was offering \$75, but the manufacturers and jobbers only appeared mildly amused. There is no denying the fact, however, that even at a hundred dollars, little interest is being shown by the buyers.

Chemical Pulp

Chemical pulp, too, has been falling off a good bit, particularly kraft. It is only due to the holding off of buying, because the supply is even more limited than it was before since there is a condi-

tion of low water throughout the North and a freeze up of the Scandinavian ports is due very soon now, thus cutting off all importations.

Domestic and Imported Rags

Even the higher grades of rags which held out strong against the falling off in buying in the rest of this market have at last succumbed and are now just as slow as the other grades. Importations have not been so heavy within the last week and many of the garment mills have stopped cutting rags as the result of the lowering of price.

Waste Paper

The drop in board prices has caused a corresponding drop in waste paper, which is pretty dependent on this stock. As yet there is no sign of their livening up and probably will not be until board strikes some kind of a level again.

The lower grades of waste paper have sunk in some cases to 25 and 30 cents per pound which does not make them worth collecting and baling.

Old Rope and Bagging

Old rope and bagging are both in a slough of dullness and at present there is no indication of any speeding up of buying, although the longer the mills hold off the more they will have to buy when they do begin.

Twine

There has been no change in twine during the current week.

PRODUCTION OF WOOD PULP

(Continued from page 30)

- Mitscherlich sulphite mill stocks equal slightly less than 5 days' average output.
- Sulphate mill stocks equal slightly more than 10 days' average output.
- Soda pulp mill stocks equal slightly less than 5 days' average output.
- Mill stocks of "other than wood pulp" equal about 6 days' average output.
- Total mill stocks of all grades equal slightly less than 12 days' average output.

Loss of Production

The idle machine time of grinders and digesters reported to the Commission for the month of October, 1920, is shown in detail in the attached tabulation. The lost time is compiled from the following operating reports: Ground Wood Pulp, 97 companies operating 127 mills and 926 machines; News Grade Sulphite, 43 companies operating 50 mills and 196 machines; Bleached Sulphite, 20 companies operating 21 mills and 3 machines; Easy Bleaching Sulphite, 7 companies operating 7 mills and 25 machines; Mitscherlich Sulphite, 7 companies operating 7 mills and 44 machines; Sulphate pulp, 15 companies operating 15 mills and 55 machines; Soda Pulp, 24 companies operating 20 mills and 184 machines; other grades, 3 companies operating 3 mills and 5 machines. The reasons tabulated for lost time are lack of labor and repairs. "Other Reasons" include lack of wood, lack of water power, etc. The time lost in October, 1919, is shown by grades and reasons for purpose of comparison. These figures do not include 4 mills which were not in operation.

Paper Concerns Distribute Turkeys

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., November 29, 1920.—Among the paper mill companies which distributed turkeys for Thanksgiving to their employees were the Strathmore Paper Company, of Mittineague and Woronoco, and the Ideal Coated Paper Company of Brookfield. The Strathmore Company disposed of 450 turkeys and the Ideal Coated Paper Company distributed 200 turkeys among its employees.

Market Quotations

Paper Company Securities

New York Stock Exchange closing quotations November 30, 1920:

Stocks.	BID	ASKED
American Writing Paper Company, pref.	38 3/4	41
International Paper Company, com.	46 3/4	47
International Paper Company, pref., stamped.	71	72
Union Bag & Paper Corporation.	75	77
United Paper Board.	28	28

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

Paper

F. o. b. Mill.			
Bonds	19	@	66
Ledgers	18	@	48
Writing—			
Extra Superfine.	28	@	38
Superfine	22	@	26
Tab Sized	17	@	22
Engines Sized	15	@	22
News—f. o. b. Mill—			
Rolls, contract.	6.50	@	6.60
Rolls, transit.	9.00	@	10.00
Sheets	7.35	@	8.25
Side Run	6.50	@	7.00
Book, Cased—f. o. b. N. Y.—			
S. & S. C.	13.00	@	15.00
M. F.	13.00	@	14.00
Coated and Enamel	16.00	@	20.00
Lithograph	17.50	@	20.00
Tissues—f. o. b. N. Y.—			
White, No. 1.	1.80	@	2.00
White, No. 2.	1.60	@	1.70
Manila No. 1.	1.60	@	1.70
Kraft	2.00	@	2.25
Colored	2.00	@	3.50
Anti-Tarnish	2.25	@	3.50
Kraft—f. o. b. Mill—			
No. 1 Domestic.	12.00	@	13.00
No. 2 Domestic.	11.50	@	11.75
Imported	14.00	@	15.00
Screenings	7.00	@	8.00
Manila—			
No. 1 Jute.	16.00	@	18.00
No. 2 Jute.	11.00	@	12.00
No. 1 Wood.	10.00	@	11.00
No. 2 Wood.	9.00	@	10.00
Butchers	8.00	@	9.00
Fibre Papers—			
No. 1 Fibre.	8.00	@	9.00
No. 2 Fibre.	7.00	@	8.00
Common Bogus.	6.00	@	7.00
Card Middles	5.50	@	6.00
Boards—per ton—			
News	75.00	@	85.00
Straw	100.00	@	110.00
Chip	65.00	@	75.00
Binders' Board.	100.00	@	130.00
Sgl. Mla. Ld. Chip.	120.00	@	130.00
Wood Pulp	140.00	@	150.00
Container	100.00	@	110.00

Mechanical Pulp

(F. o. b. Pulp Mills.)
No. 1, f. o. b. Mill. 100.00 @ 105.00

Chemical Pulp

(Ex-Dock, New York.)			
Sulphite (Foreign)—			
Bleached	11.00	@	13.00
Easy Bleaching.	9.00	@	10.00
No. 1, unbl'ch'd.	9.00	@	10.00
No. 2, unbl'ch'd.	8.50	@	9.00
Kraft (Foreign)	5.75	@	6.25
Sulphate—			
Bleached	nominal		
(F. o. b. Pulp Mill.)			
Sulphite (Domestic)—			
Bleached	12.00	@	13.00
Strong Unbl'ch'd.	9.00	@	10.00
Easy Bleaching			
Sulphite	9.00	@	9.50
News Sulphite	8.00	@	8.50
Mitscherlich	9.50	@	10.00
Kraft (Domestic)	5.75	@	6.25
Soda Bleached	nominal		

Domestic Rags

Prices to Mill, F. o. b. N. Y.			
Shirt Cuttings—			
New White, No. 1.	24.00	@	25.00
New White, No. 2.	12.25	@	12.75
Silesias, No. 1.	12.00	@	12.50
New Unbleached.	16.50	@	17.00
Washables	11.50	@	12.00
Fancy	13.00	@	13.50
Cottons—according to grades—			
Blue Overall.	11.50	@	12.00
New Blue.	9.50	@	10.00

New Black Soft.	7.50	@	8.00	
New Light Sec.	onds	6.75	@	7.00
Khaki Cuttings.	7.50	@	8.00	
Corduroy	7.25	@	7.75	
New Canvas	14.00	@	14.50	
New Black Mixed	5.00	@	5.25	
Old				

White, No. 1—			
Repacked	12.00	@	12.50
Miscellaneous	10.50	@	11.00
White, No. 2—			
Repacked	6.25	@	6.75
Miscellaneous	5.00	@	5.50
St. Soiled White.	3.90	@	4.10
Thirds and Blues—			
Repacked	4.00	@	4.25
Miscellaneous	2.90	@	3.15
Black Stockings	3.75	@	4.00
Cloth Strippings	1.90	@	2.00
No. 1	2.00	@	2.15
No. 2	1.20	@	1.30
No. 3	1.10	@	1.25
No. 4	1.10	@	1.25
No. 5A	2.20	@	2.30
B	2.00	@	2.20
C	.60	@	.70

Foreign Rags

New Light Silesias.	11.00	@	12.50
Light Flannelettes.	12.00	@	13.00
Unbleached Cottons.	14.00	@	15.00
New White Cut-			
tings	18.00	@	20.00
No. 1	1.10	@	1.25
No. 2	1.10	@	1.25
No. 3	1.10	@	1.25
No. 4	1.10	@	1.25
No. 5A	2.20	@	2.30
B	2.00	@	2.20
C	.60	@	.70

Bagging

Prices to Mill F. o. b. N. Y.			
Gunny No. 1—			
Foreign	2.50	@	2.70
Domestic	2.60	@	2.75
Wool Tares, light.	3.15	@	3.30
Wool Tares, heavy	3.00	@	3.50
Bright Bagging	3.00	@	3.25
No. 1 Scrap	2.75	@	2.90
Sound Bagging	2.75	@	3.00
Manila Rope—			
Foreign	6.25	@	6.50
Domestic	6.00	@	6.50
New Bu. Cut.	5.25	@	5.50
Hessian Jute Threads—			
Foreign	7.00	@	7.50
Domestic	6.50	@	7.00
Mixed Strings	2.25	@	2.75

Twines

(F. o. b. Mill)			
Cotton—			
No. 1	50	@	60
No. 2	60	@	70
No. 3	40	@	50
India, No. 6 basis—			
Light	20	@	30
Dark	26	@	27
A. C. 18 Basis.	42	@	45
A. B. Italian.	18	@	18
Basis	1.00	@	1.00
Finished Jute—			
Light, 18 basis.	26	@	28
Dark, 18 basis.	40	@	41
Jute Wrapping, 2-6 Ply—			
Extra No. 1.	33	@	34

No. 1	33	@	34
No. 2	24	@	27
Tube Rope—			
5-ply and larger.	20	@	21
Fine Tube Yarn—			
5-ply and larger	35	@	38
4-ply	36	@	38
3-ply	37	@	39
Unfinished India—			
No. 2 (3-ply and larger)	25	@	26
Paper Makers Twine			
Balls	17	@	18
Box Twine, 2-4 ply	20	@	21
Jute Rope	20	@	21
Amer. Comp. 6.	37	@	39
Sisal Hay Rope—			
No. 1 Basis.	20	@	22
No. 2 Basis.	18.50	@	20
Sisal Lath Yarn—			
No. 1	19.25	@	19.75
No. 2	17.50	@	19.50
Manila Rope	27	@	28

Old Waste Papers

(F. o. b. New York.)
Shavings—
Hard White, No. 1 8.50 @ 8.75

Hard White, No. 2	7.25	@	7.50
Soft White, No. 1	7.25	@	7.50
Colored, No. 1.	3.00	@	3.25
Flat Stock—			
Stitchless	2.75	@	3.00
Over Issue Mag.	2.25	@	3.00
Solid Flat Book.	1.75	@	2.60
Crumpled, No. 1.	1.40	@	1.90
Solid Book Ledger	4.25	@	4.50
Ledger Stock.	3.90	@	4.12
No. 1 White New	4.50	@	5.00
New B. B. Chips.	.70	@	.80
Manila—			
New Env. Cut.	5.25	@	5.50
New Cut. No. 1.	4.50	@	4.75
Extra No. 1 Old.	1.75	@	1.80
Print	1.00	@	1.25
Container Board.	.70	@	.80
Bogus Wrappers.	1.00	@	1.25
Old Krafts, machine compressed			
Bales	4.25	@	4.50
News—			
Strictly Overissue	1.40	@	1.60
Strictly Folded.	1.00	@	1.20
No. 1 Mixed Paper	.60	@	.70
Common Paper.	.40	@	.50

CHICAGO

[FROM OUR REGULAR CORRESPONDENT.]

Paper	F. o. b. Mill.		
All Rag Bond	45	@	—
No. 1 Rag Bond	30	@	40
No. 2 Rag Bond	26	@	38
Water Marked Sulphite	21	@	23
Sulphite Bond	19	@	21
Sulphite Ledger	22	@	25
Superfine Writing	28	@	35
No. 1 Fine Writing	26	@	33
No. 2 Fine Writing	24	@	31
No. 3 Fine Writing	20	@	22
No. 1 M. F. Book	15	@	16
Book	17	@	18
Coated Book	20	@	24
Coated Label	19	@	24
News—Rolls mill.	11	@	11 3/4
News—Sheets mill.	12	@	12 3/4
No. 1 Manila	10	@	10 3/4
No. 1 Fibre	9	@	9 3/4
No. 2 Manila	—	@	—
Butchers' Manila	—	@	—
No. 1 Kraft	12	@	12 3/4
No. 2 Kraft	10	@	10 3/4
Wood Tag Board	12	@	12 3/4
Screenings	7 1/2	@	8
Board being sold at price prevailing at time of shipment.			
Boards, per ton—			
Plain Chip	40.00	@	45.00
Solid News	40.00	@	45.00
Manila Lined			
Chip	75.00	@	80.00
Container liner 85			
85 Test	70.00	@	75.00

Old Papers

Shavings—			
No. 1 Hard White	4.00	@	4.50
No. 1 Soft Shav.	3.50	@	4.00
No. 1 Mixed	1.50	@	1.75
No. 2 Mixed	1.05	@	1.50
White Envel. Cutting	4.00	@	4.25
Ledgers and Writings	2.25	@	2.50
Solid Books	1.75	@	2.00
No. 1 Books, light	1.00	@	1.25
Blanks	2.75	@	3.00
Ex. No. 1 Manila	2.00	@	2.25
Manila Envelope	2.75	@	—
Cuttings	1.00	@	—
No. 1 Manilas	1.00	@	—
Folded News (over issue)	1.00	@	—
Old Newspapers	.75	@	—
Mixed Papers	.50	@	—
Straw Clippings	.50	@	—
Binders' Clippings	.50	@	—
Kraft	3.00	@	—
New Craft Cuts.			

Imports and Exports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING NOVEMBER 27, 1920.

SUMMARY.

Cigarette paper	33 cs.
Writing paper	4 cs.
Super coated paper	21 rolls, 15 cs.
Hangings	17 bls., 4 cs., 213 pkgs.
Wallpaper	15 bls., 6 cs.
Drawing paper	155 cs.
Blueprint paper	2 crates
Tracing paper	18 cs.
Litho paper	75 cs.
Wrapping paper	64 cs.
Photo paper	1 cs.
News print	302 cs., 1,072 rolls
Print paper	598 cs., 779 bls., 1,969 rolls
Miscellaneous paper	2,772 rolls, 160 bls., 152 cs.

CIGARETTE PAPER.

Schmid & Co., Isle de Panay, Barcelona, 30 cs.
Southern Pacific Company, La Savoie, Havre, 3 cs.

WRITING PAPER.

A. Flinn & Co., La Savoie, Havre, 4 cs.

SURFACE COATED PAPER.

Rose & Frank, Kroonland, Antwerp, 21 rolls, 15 cs.

PAPER HANGINGS.

W. H. S. Lloyd & Co., Bardic, London, 14 bls., 4 cs.
A. C. Dodman, Jr., Belgic, Liverpool, 3 bls.
The Prager Company, Kroonland, Antwerp, 213 pkgs.

WALL PAPER.

A. Murphy & Co., Valacia, London, 2 bls.
R. F. Lang, by same, 4 cs.
W. H. S. Lloyd & Co., Manhattan, London, 2 cs., 8 bls.
A. Murphy & Co., Carmania, Liverpool, 2 bls.
R. F. Lang, Caronia, Liverpool, 2 bls.
A. Murphy & Co., Belgic, Liverpool, 1 bl.

DRAWING PAPER.

Meadows, Wye & Co., Bardic, London, 1 cs.
Keuffel & Esser, Manchuria, Hamburg, 154 cs.

BLUEPRINT PAPER.

Keuffel & Esser, Manchuria, Hamburg, 2 crates.

TRACING PAPER.

Keuffel & Esser, Manchuria, Hamburg, 18 cs.

LITHO PAPER.

E. Benecke & Co., Akita Maru, Hongkong, 60 cs.
Guaranty Trust Company, by same, 15 cs.

WRAPPING PAPER.

Equitable Trust Company, Western Glen, Rotterdam, 64 cs.

PHOTO PAPER.

G. Gennert, Manhattan, London, 1 cs.

NEWS PRINT PAPER.

Agar Bernason Corporation, Westerdijk, Rotterdam, 680 rolls.
Columbia Trust Company, by same, 302 cs.
Columbia Trust Company, Rijndam, Rotterdam, 492 rolls.

PRINT PAPER.

J. L. N. Smythe & Co, Manchuria, Hamburg, 70 cs.
J. L. N. Smythe & Co, Mystic, Hamburg, 506 cs.
J. L. N. Smith & Co., by same, 60 rolls.
Knauth, Nachod & Kühne, by same, 1,818 rolls.
W. Schall & Co., Fred'k XIII, Copenhagen, 91 rolls.
W. Schall & Co., by same, 799 bales.
B. F. Drakenfeld, Carmania, Liverpool, 22 cs.

PAPER.

J. F. Patton Co., Inc., Rosaland, Halifax, 1,468 rolls.
Equitable Trust Co., Manchuria, Hamburg, 1,314 rolls.
Equitable Trust Co., by same, 63 bales.
Chemical Nat'l Bank, Fred'k VIII, Copenhagen, 97 bales.
Reeve, Angel & Co., Bardic, London, 9 cases.
H. Lindenmeyr Sons, Westerdijk, Rotterdam, 145 cases.

IN TRANSIT TO NORWOOD, OHIO.

PRINTING PAPER.

Palm Bros., Carmania, Liverpool, 10 cs.
RAGS, BAGGING, ETC.
E. J. Keller Co., Westerdijk, Rotterdam, 24 bales rags.
E. J. Keller Co., by same, 237 bales old cottons.
Main Paperstock Co., by same, 218 bales old cottons.
Main Paperstock Co., by same, 9 bales old wipers.
Main Paperstock Co., by same, 82 bales old prints.
Wilkinson Bros., & Co., by same, 117 bales paper stock.
Maurice Frank, by same, 54 bales paper stock.
Castle, Gottheil & Overton, by same, 53 bales old wipers.
Castle, Gottheil & Overton, by same, 185 bales bagging.
Baeder, Adamson & Co., Bonic, Manchester, 125 bales hide cuttings.
L. H. Ahenheimer, by same, 236 bales bagging.
E. Butterworth & Co., by same, 184 bales bagging.
Castle, Gottheil & Overton, Coronia, London, 310 bales waste paper.
Albion Trading Co., Manhattan, London, 90 bales rags.
Eastman Kodak Co., Burmese Prince, Havre, 50 bales rags.
Schultz & Ruckgaber, by same, Havre, 20 bales rags.
Mechanics & Metals Nat'l Bank, by same, 932

bales rags.

Salomon Bros. & Co., Rijndam, Rotterdam, 165 bales paper stock.
E. J. Keller Co., by same, 53 bales rags.
M. O'Meara Co., by same, 42 bales hide cuttings.
Castle, Gottheil & Overton, Westerdijk, Amsterdam, 53 bls rags, 185 bls. bagging.

BOSTON IMPORTS

WEEK ENDING NOVEMBER 27, 1920.

R. F. Downing & Co., Westerdijk, Rotterdam, 662 bales rags.
Train, Smith & Co., by same, 116 bales old pickers.
International Purchasing Co., by same, 257 coils old rope.

NEW ORLEANS IMPORTS

WEEK ENDING NOVEMBER 27, 1920.

Mente & Co., Bonic, Manchester, 134 bales bagging.

CHINA CLAY.

Baring Bros. & Co., Olympe, Fourney, 1,420 tons, 2 cwt.
L. A. Salomon & Bros., by same, 105 tons, 7 cwt.
G. Knowles & Son, by same, 411 tons, 11 cwt.
J. W. Higman Co., Inc., by same, 1,139 tons, 4 cwt.
Paper Makers Chemical Co., by same, 1,014 tons, 15 cwt.

WOOD PULP.

A. J. Pagel & Co., Fred'k VIII, Copenhagen, 1,800 bls. sulphite pulp.
J. Andersen & Co., by same, 1,350 bls. wood pulp.
J. Andersen & Co., Thordis, Kristania, 1,200 bls., 203 tons sulphite pulp.
J. Andersen & Co., by same, 566 bls., 94 tons, dry sulphite pulp.
E. M. Sergeant & Co., by same, 250 bls. 50 tons, sulphite pulp.
E. M. Sergeant & Co., by same, 400 bls., 50 tons chemical pulp.
Brown Bros. & Co., Mystic, Hamburg, 1,400 bls., 281 tons wood pulp.

PHILADELPHIA IMPORTS

WEEK ENDING NOVEMBER 27, 1920.

Castle, Gottheil & Overton, West Ekonk, from London, 79 bls. bagging, 78 bls. rags.
Castle, Gottheil & Overton, Mackinaw, from London, 78 bls. rags.

NEWS PRINT EXPORT PRICE

(Continued from page 22)

progress in laying in a supply of pulpwood this winter according to an official of the company.

Up to the present, no difficulty has been experienced from one of the enemies of the wood cutter, namely, deep snow, and yet the snowfall has been sufficient to cover the ground well. The company has been able to secure a good supply of choppers and the work is going forward in a satisfactory manner.

Asked whether costs were exceptionally high, the answer was given that they would probably reach the peak this winter. Operations in the woods were slower to reflect changes in wages and labor conditions than most other industries, so that the tendency towards lower wages, which is now beginning to manifest itself will probably not affect the cost of getting out pulpwood this season.

Packing Boxes from Pulp

A charter has been granted to a company known as Best Boxes, Limited, with an authorized capital of \$250,000 and headquarters in Ottawa, for the manufacture of packing boxes and containers, principally from mechanical pulp.

The company owns or controls patents covering processes of manufacture by which its finished boxes and containers are rendered waterproof, odorless, and taintless.

Its product will consist principally of cheese boxes, tea chests, apple boxes, oil can jackets, butter boxes, canned goods boxes, nail kegs, mica boxes, coffee containers, yeast boxes and paint containers.

At the present time practically all cylindrical boxes and containers used in Canada are made from elm. Owing to the supply of this wood being almost exhausted, and what remains being of such poor quality, it has become imperative to produce a better and stronger box. The boxes and containers as manufactured from mechanical pulp by this company's process have proven to be much stronger than the best box ever manufactured from elm and therefore, the breakage in handling and transportation is much less. The directors of the company include: T. H. Percival, J. H. Hughes, Andrew Haydon, R. S. Percival, B. Moses, all of Ottawa. Mr. T. H. Percival the President, formerly held the controlling interest in the firm now known as the Percival Plough and Stove Company. The solicitors are McGivern, Hayden & Ebbs, Ottawa.

RIORDON SALES COMPANY

LIMITED

367 BEAVERHALL SQ.

MONTREAL, CANADA



The operation at "KIPAWA" mill of
TWO ADDITIONAL DIGESTERS
now provides an
EXCEPTIONALLY STRONG FIBRE
HIGH GRADE ELECTROLYTIC BLEACHED
SULPHITE WOOD PULP

for
IMMEDIATE AND FUTURE DELIVERY
AT PREVAILING MARKET PRICES

INQUIRIES WILL RECEIVE PROMPT ATTENTION

T. J. STEVENSON

Sales Managers

GEO. E. CHALLES

Miscellaneous Markets

Office of the PAPER TRADE JOURNAL,
WEDNESDAY, December 1, 1920.

This week finds the buyers and sellers in the chemical market still deadlocked. There has been little or no action, except some sporadic movements in spot goods, and in the contract field almost nothing is being done. The buyers still seem to believe that prices are going to tumble, providing they can hold off long enough, while the chemical manufacturers say that there is too small a space between cost price and selling price to permit material reductions. If there have been enormous profits made in this field in the past two or three years the manufacturers have not been getting them, but when the demand for chemicals became so acute the smaller jobbers saw a chance to profit by it and prices went up. The contract prices for the new year do not show any marked change over those of last, but spot prices have been steadily declining.

ALUM.—The supply of alum is about the same as it has been, but the demand has shown a marked falling off. As a result there is more on the open market than before, and no one should have any trouble in getting all he wants. The price is a little lower, being about 4 cents per pound for the lump, 4.25 for the ground and 6 cents for the powdered.

BLEACHING POWDER.—For a time bleach was one of the most difficult things on the market to get in any considerable quantity, but now there is a good deal on spot in this city, and the turn-over is slow. It is from 3.75 to 4 cents per pound for spot and contracts are being made for 3.50 cents f.o.b. works.

CASEIN.—Casein is at present no exception to the rest of the market. Action is almost absent, but the supply is rather short, so perhaps it is just as well the demand is not excessive. There has been a slight falling off in price, and it is now quoted at from 14 to 15 cents per pound.

CAUSTIC SODA.—Caustic has been falling off a little in price, too, this week. A good deal of the stock is reported to be on the open market, and manufacturers do not report that there is much enthusiasm over contracts among the buyers. It is now 3.25@3.75 cents per pound.

CHINA CLAY.—The demand for China clay has not been any better during the past week than it was before, but manufacturers are optimistic and believe things are going to liven up soon for them. They have been kept pretty busy filling back orders which accumulated during the summer because of the extreme shortage of cars throughout the South and the difficulties a number of them had with labor. The quotations have not changed, being \$10 per ton for domestic unwashed clay, \$13 for washed and \$16 for the imported.

ROSIN.—Rosin has not shown any signs of life. The demand has decreased until there is almost no business being done and prices are still down around \$11 per ton.

SULPHATE OF ALUMINA.—Sulphate of alumina is still quiet, and it is hard to tell when it will brace up. Prices have dropped a little in the past week, but still the buyers are not very interested. The iron free is now 3@4 cents per pound and the commercial grade is 2.50@3 cents.

STARCH.—Starch is low and there is little action. The tendency of the price is downward.

TALC.—Talc is also quiet, with no change. The price is \$16 to \$18 per ton.

Alfred E. Curtienius, secretary of the Kalamazoo Paper Company and A. Allen Fox, secretary-treasurer, of the Bryant Paper Company, have been elected members of the Kalamazoo city commission. Mr. Curtienius served two terms as member of the school board and in that capacity made an enviable reputation for business ability and progressive handling of all matters that came up. This is Mr. Fox's initial plunge into politics.

Market Quotations

(Continued from page 71)

No. 1 Soft White	7.25	@	7.50
No. 2 Soft White	5.75	@	6.25
No. 1 Mixed	2.00	@	2.50
No. 2 Mixed	1.75	@	2.00
Solid Ledger Stock	4.50	@	4.60
Writing Paper	4.00	@	4.25
No. 1 Books, heavy	Nominal		
No. 2 Books, light	2.50	@	2.75
No. 1 New Manila	6.00	@	6.50
No. 1 Old Manila	3.50	@	4.00
Container Manila	3.00	@	3.25
Old Kraft	6.25	@	6.50
Overissue News	1.50	@	1.75
Old Newspaper	1.00	@	1.25
No. 1 Mixed Paper	.65	@	.75
Common Paper	.65	@	.75
Straw Board, Chip	1.75	@	2.00
Binders' Bd. Chip	1.75	@	2.00
Domestic Rags—New			
Price to Mill, f. o. b. Phila.			
Shirt Cuttings—			
New White, No. 1	.19	@	.21
New White, No. 2	.12	@	.12½
Silesias, No. 1	.1200	@	.1250
New unbleached	15.75	@	16.50
Washables	9.00	@	10.00
Fancy	11.50	@	12.25
Cottons—according to grades—			
Blue Overall	9.00	@	9.75
New Blue	6.00	@	6.50
New Black Soft	6.00	@	6.50
New Light Sec-			
onds	4.50	@	5.00
Khaki Cuttings	5.75	@	6.50
Corduroy	5.50	@	6.00
New Canvas	11.00	@	11.50
New Black Mixed	4.15	@	4.25
Old			
White, No. 1—			
Repacked	11.50	@	12.00
Miscellaneous	9.50	@	10.00
White, No. 2—			
Repacked	5.25	@	5.75
Miscellaneous	4.75	@	5.25
Thirds and Blues—			
Repacked	3.00	@	3.50
Miscellaneous	2.25	@	2.75
Black stockings	3.35	@	3.50
Roofing Stock—			
No. 1	1.00	@	1.10
No. 2	.90	@	1.00
No. 3	.60	@	—
No. 4	.70	@	—
No. 5A	Nominal		
B	Nominal		
C	Nominal		

BOSTON

[FROM OUR REGULAR CORRESPONDENT.]

Paper			
Bonds	.21	@	.60
Ledgers	.21	@	.60
Writings—			
Superfine	.21	@	—
Fine	.21	@	—
Books, S. & S. C.	.15	@	.18
Book, M. F.	.14½	@	.18
Book, Coated	.21	@	—
Label	.22	@	—
New Sheets	.13	@	—
News, Rolls	.08	@	.08½
Manilas—			
No. 1 Manila	.08	@	.09½
No. 1 Fibre	.09	@	.09½
No. 1 Jute	.14	@	.14½
Kraft Wrapping	.12	@	.13
Common Bogus	.04½	@	.05
Boards			
Per ton f. o. b. mill			
Chip	\$55.00	@	\$60.00
News Vat Lined 57.50 @ 62.50			
Wood Vat Lined	65.00	@	80.00
Filled News Board	60.00	@	65.00
Solid News Board	65.00	@	80.00
S. Manila Chip	100.00	@	115.00
Pat. Coated	135.00	@	160.00
Old Papers			
Shavings—			
No. 1 Hard White	8.00	@	8.50
No. 1 Soft White	7.50	@	8.00
No. 1 Mixed	4.00	@	4.50
Ledger and Writ-			
ings	4.50	@	5.00
Solid Books	4.75	@	—
Blanks	5.00	@	5.50
No. 2 Books, light	2.50	@	3.00
No. 1 Manila	4.25	@	4.50
Folded News (over-			
issues)	2.25	@	2.50
Old Newspapers	1.50	@	1.75
Mixed Paper	1.25	@	1.50
Gunny Bagging	4.00	@	4.50
Manila Rope	5.50	@	5.75

TORONTO

[FROM OUR REGULAR CORRESPONDENT.]

Paper			
(Mill Prices to Jobbers f. o. b. Mill)			
Bond—			
Sulphite	23½	@	—
Light tinted	24½	@	—
Dark tinted	26	@	—
Ledgers	24	@	—
Writing	20½	@	—
News, f. o. b. Mill—			
Rolls (carloads)	5.50	@	6.00
Sheets (2 tons or over)	6.00	@	6.50
Sheets (less than 2 tons)	6.50	@	6.75
Book—			
No. 1 M. F. (carloads)	19.00	@	—
No. 2 M. F. (carloads)	18.00	@	—
No. 3 M. F. (carloads)	17.00	@	—
No. 1 S. C. (carloads)	19.50	@	—
No. 2 S. C. (carloads)	18.50	@	—
No. 1 Coated and litho.	20.50	@	—
No. 2 Coated and litho.	19.50	@	—
No. 3 Coated and litho.	18.75	@	—
Coated and litho., colored	20.75	@	—
Wrapping—			
Grey	10.75	@	—
"B" Manila	11.00	@	—
No. 1 Manila	12.50	@	—
Fibre	12.00	@	—
Kraft, M. F. or	13.00	@	—
M. G.	13.00	@	—
Pulp			
(F. o. b. Mill)			
Ground Wood	105.00	@	120.00
Sulphite, easy bleach-	165.00	@	170.00
ing	165.00	@	170.00
Sulphite, news grade	155.00	@	160.00
Sulphite, bleached 195.00 @ 205.00			
Sulphate	140.00	@	150.00
Old Waste Papers			
(In carload lots, f. o. b. Toronto)			
Shavings—			
White Env. Cut	7.50	@	—
Soft White Book	—	@	—
Shavings	7.25	@	—
White Blk News	4.00	@	—
Book and Ledger—			
Flat Magazine and Book Stock (old)	2.40	@	—
Light and Crumpled Book Stock	2.20	@	—
Ledgers and Writings	3.75	@	—
Solid Ledgers	3.75	@	—
Manilas—			
New Manila Cut	6.00	@	—
Printed Manilas	1.75	@	—
Kraft	5.00	@	—
News and Scrap—			
Strictly Overissue	1.95	@	—
Folded News	1.50	@	—
No. 1 Mixed Papers	1.00	@	—
Domestic Rags—			
Price to mills, f.o.b. Toronto. Per lb.			
No. 1 White shirt cuttings	22	@	22½
No. 2 White shirt cuttings	.14	@	—
Fancy shirt cuttings	13	@	13½
No. 1 Old whites	.09	@	.09½
Thirds and blues	.03½	@	.03¾
Per cwt.			
Black stockings	5.00	@	—
Roofing stock	2.50	@	—
No. 1	2.50	@	—
No. 2	2.40	@	—
Roofing stock			
Manila rope	.06	@	.06½
Gunny bagging	3.50	@	3.75
No. 2	3.50	@	—

The Mathieson Alkali Works (Inc.)

General Offices

25 West 43rd Street

New York City

Works
Niagara Falls, N. Y.

Works
Saltville, Va.

"EAGLE THISTLE" BRAND OF PRODUCTS

High Test Bleaching Powder

Packed in Steel Drums, air tight, insuring full strength at point of consumption.

Special wooden lined drums for export.

Liquid Chlorine

100% pure, anhydrous, in improved 100 lb.—150 lb.—2,000 lb. containers.

Soda Ash

58 per cent, both light and dense shipped in bulk—Bags and Barrels
Special packages for export.

Caustic Soda

Solid—Ground—Flaked

60%—70%—72%—74%—76%—78% Grades.

The electrolytic 78% Grade, analyzing 99.70% Hydrate of Soda, purest caustic made.

Bicarbonate of Soda

Packed in Cases—Bags—Barrels—Kegs

If you have a problem to solve write us and get the advantage of our Technical Department.

WANT AND FOR SALE ADVERTISEMENTS

HELP WANTED

CLASSIFIED RATES

Minimum rate for advertisements of 35 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 29th 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.

WANTED—Superintendent for two-machine mill, running tissues and light weight papers on cylinder machines. Wanted high grade man, and to such would be paid satisfactory salary. Address, Box 2690, care Paper Trade Journal. **tf**

WANTED—Up-to-date beaterman for two-machine mill, Fourdrinier and cylinder, making glassine bond and waxing. Address, Box 2806, care Paper Trade Journal. **D-2**

WANTED—Superintendent for two-machine board mill. Must have experience making high grade middles for coating purposes and high grade plain white lined blanks. State age, experience and salary expected. All replies treated strictly confidential. Address, Box 2806, care Paper Trade Journal. **D-2**

WANTED—Paper brokers to handle a line of plain waxed papers. Give territory covered and other information. Address, Box 2795, care Paper Trade Journal. **D-16**

WANTED—A chief draftsman. One with knowledge of paper mill machinery preferred. Address, The Shartle Brothers Machine Company, Middletown, Ohio. **D-2**

WANTED—Capable Assistant Superintendent in mill manufacturing light weight straw paper, one familiar with manipulation of stock for the manufacturing of .009 point corrugating. Advise age and experience in detail in replying. Address, Box 2756, care Paper Trade Journal. **tf**

WANTED—Large Paper Mill Organisation increasing its sales force, has opening for aggressive, successful paper salesman, who controls trade, knows how to obtain quantity business and is accustomed to make large income, but wants to progress. Address, Box 2739, care Paper Trade Journal. **tf**

WANTED—First class machine tender; 81 cents an hour, and backtender, 64 cents an hour. Eight-hour shift for cylinder machine making crepe, waxing and specialty tissues. New Mill. Address, Box 2820, care Paper Trade Journal. **D-9**

WANTED—First class millwright for asbestos paper mill. Steady job and good pay for right party. Apply to National Asbestos Mfg. Co., Jersey City, N. J. **D-2**

HELP WANTED

WE have a Cylinder Machine Mill. We want a man to run it economically and who can put mill on a line of paper for some special use which will take out-put of plant. If you are the man, write in confidence stating product you are accustomed to make, with samples showing your work. Good connection assured to a hustling production getter. Address, Box 2832, care Paper Trade Journal. **D-2**

WANTED—One Night Foreman, three first class Machine Tenders, three first class Beater Engineers, three first class Backtenders on 108", 6 cylinder machine running on Container Board; 8 hour shift. First class wages to good men. Address, Box 2833, care Paper Trade Journal. **D-23**

WANTED—One thorough Boss Millwright. Well up on construction and reconstruction. State age and wages wanted. If you cannot produce, do not answer this ad. Address, Box 2834, care Paper Trade Journal. **D-9**

SALESMAN WANTED to sell prepared gums to the paper box and allied industries. Good proposition and chance for advancement. Address, Box 2835, care Paper Trade Journal. **D-2**

SALESMAN to sell corrugated paper products on straight commission basis. Norsam Mfg. Co., Inc., 233 Washington Street, Brooklyn, N. Y. **D-2**

WANTED

An Expert Mill Superintendent

We are seeking a man who has thorough knowledge of the manufacture of various grades of paper. He must be familiar with all details in connection with fully equipping a new mill—the purchase of necessary machinery and its erection.

This is a position for a big man with a foreign mill project, backed by real money. Write giving full details of experience and salary.

Address, Box 2849, care Paper Trade Journal. **D-9**

SITUATIONS WANTED

POSITION WANTED by Superintendent who is a practical Papermaker with eighteen years' experience on all the better grades of Combination and Container Board. Thoroughly familiar with all repairs and general upkeep of mill and a knowledge of steam and power plant operation. Can furnish the very best of references. Address, Box 2782, care Paper Trade Journal. **tf**

WANTED—A position as Purchasing Agent by a technical graduate, age 28. Has had excellent experience. Address, Box 2823, care Paper Trade Journal. **D-9**

SITUATIONS WANTED

YOUNG MAN, 24, ambitious, having knowledge of practically all grades of paper, wishes to connect with reliable firm where good future awaits. Address, Box 2643, care Paper Trade Journal. **tf**

WANTED POSITION as Manager or General Superintendent. Have practical experience in all lines of work required in paper making on nearly all grades of paper. Have practical experience on Fourdrinier, Harper, Dutch Tissue, Cylinder and Combination machines. At present manager and general superintendent. Have legitimate reasons for changing. Past positions are open for inspection. Address, Box 2814, care Paper Trade Journal. **D-23**

MANUFACTURERS OF PAPER and Paper Products desiring services on commission basis of capable salesman with an established following among New England jobbing trade. Address, Box 2812, care Paper Trade Journal. **D-9**

PAPER SALESMAN, NEW YORK CITY, can produce large volume of business. Wishes connection with Mill Agency Company or Mill. Substantial drawing account on commission basis. Address, Box 2734, care Paper Trade Journal. **tf**

SUPERINTENDENT now employed, but desires to make a change. 20 years' experience in paper making, tissues, crepe, news, bag and wrappings, also experienced in manufacture of ground wood. Prefer a ton or two machine mill. Best of references. Address, Box 2639, care Paper Trade Journal. **tf**

WANTED—Position as Superintendent. 20 years' experience. Understand all acid systems and latest methods of cooking, and have thorough knowledge of bleaching. I know my business and am qualified to build, equip or reorganize any existing plant. A personal interview will enable me to submit further details. Best of references. Married. Address, Box 2797, care Paper Trade Journal. **D-3**

MASTER MECHANIC wants position. Expert construction, reconstruction, installing, equipment and economical maintenance of mills making Book, Bond, News or Cylinder machines making Board, Bristol or Tissue with and without Edwards attachment. Address, Box 2778, care Paper Trade Journal. **D-2**

MANAGER DESIRES CHANGE. Sixteen years with present connection. Experienced in all office lines except selling. Good general knowledge of manufacture from log to finished product. Address, Box 2779, care Paper Trade Journal. **D-1**

MAN WITH TWENTY YEARS' EXPERIENCE, grinding, calender rolls, also brass and rubber rolls, and knowing the required crowns, wants temporary or permanent work, by hour or contract. Address, Box 2810, care Paper Trade Journal. **D-2**

WANTED—Position as Manager or Chief Engineer by man with 15 years of broad experience in the paper and pulp industry. Capable executive, good organizer, full of initiative and resourcefulness. Engineering experience covers complete design and construction of pulp, paper and chemical plants and hydro-electric developments. Management covers board manufacturing and conversion, and news mill experience. Address, Box 2811, care Paper Trade Journal. **D-9**

POSITION WANTED by ambitious man, married, as office manager and to assist superintendent in increasing production along efficiency lines. Conscientious, willing, capable of handling men to the best advantage. Address, Box 2825, care Paper Trade Journal. **D-2**

POSITION WANTED as Machine Tender. 19 years' experience on all grades of Tissue. Good on Fourdrinier and Cylinder. Steady and industrious. Address, Box 2837, care Paper Trade Journal. **D-2**

SITUATIONS WANTED

EXPORT MANAGER. Reliable paper exporter desires to establish Export Department for important paper concern. Best references from paper trade. Address, Box 2841, care Paper Trade Journal. D-16

MANAGER, with thorough knowledge of paper industry, would consider change January first. Have practical experience in nearly all departments of manufacture, also several years as Jobber's salesman. At present connected with Mill Office as Manager of Sales. Would consider position as Manager of Small Mill or Sales Office or Coarse Paper Department of Wholesale Paper House. Address, Box 2843, care Paper Trade Journal. D-16

YOUNG MAN, 23 years, high school graduate, three years paper experience, with knowledge of all grades of paper, desires executive or salesman's position. Best references. Address, Box 2843, care Paper Trade Journal. D-9

IF You Are Seeking the Services of a paper bag salesman with an established following and twenty years' experience in New York, Pennsylvania and Connecticut, address Box 2844, care Paper Trade Journal. D-23

POSITION wanted as Sulphite Superintendent. Have had 16 years of practical experience. Have worked in all departments of mill and consider myself capable of handling a mill. Steady, industrious and can furnish good references. Address, Box 2838, care Paper Trade Journal. D-16

MECHANICAL DRAFTSMAN, thoroughly familiar with Automatic Paper Working Machines, would like to hear from first class and reliable concern where efficient and accurate work is required. Also willing to consider offers from Pulp and Paper Making Machine concerns, to assist and produce assembled drawings. Best references. Address, Box 2839, care Paper Trade Journal. D-16

CHANGE Desired by Superintendent. Now employed, Twenty years' experience on Book, Bond, Ledger and Special Papers. Also various grades of Board. Progressive. Can cut costs and build up mill. Excellent references. Address, Box 2840, care Paper Trade Journal. D-16

PRACTICAL and up-to-date Paper Maker, now employed as Boss Machine Tender, wants position as Superintendent. Have had 25 years' experience making Book, News, Manila Fibre and Tissues. Age 39. Address 2836, care Paper Trade Journal. Jan-13

NIGHT SUPERINTENDENT or Assistant Day Superintendent, can handle help, also keep up production. Practical man. 40 years of age, experienced on book and writings, also other grades. At present employed, but desires change. Address, Box 2826, care Paper Trade Journal. D-9

WANTED—POSITION as Master Mechanic, 19 years actual experience installing and maintenance of paper and board pulp mill machinery. Can handle men and get good results. Can keep mill in good shape as my motto is to do good jobs in good time. References furnished. Address, Box 2827, care Paper Trade Journal. D-9

Paper Man

A paper man of executive ability and wide experience, whose work has been mostly in connection with the fine papers of the jobbing business, is open for employment with a house or mill that desires the services of one who is reliable.

He is well known by many of the mills of the East and Middle West and enjoys their confidence. If you are looking for a man who is steady and who works constructively, a letter, which will be treated in confidence, may demonstrate that you have found him. Address, Box 2831, care Paper Trade Journal. D-9

FOR SALE

FOR SALE—Two Duplex Moore & White paper cutters, knives 120" long, in first class condition. Address, Box 2894, care Paper Trade Journal. tf

FOR SALE—One Miller Duplex Beating Engine, manufactured by Downington Mfg. Company; for information address, Box 2665, care Paper Trade Journal. tf

WANTED—Used cylinder of Fourdrinier Machine of 50 to 90-inches width. Address, Box 2829, care Paper Trade Journal. D-2

REQUIRE FULL SET OF BLUE PRINT DRAWINGS of steam heated rotating cylinder pulp drying machine, complete with wet and finishing ends. Send particulars and costs to Aerial Transporters, Limited, 2343 Collingwood street, Vancouver, B. C., Can. D-9

For Sale

1 62" Langston Surface or Drum Rewinder and Slitter, with 21 sets of cutters, for immediate delivery.

For price address St. Louis Paper Can & Tube Co., St. Louis, Mo. tf

FOR SALE—14 Noble & Wood 1,800 lb. beaters roll 72"x44", condition good. For further information, apply the Stamsocott Company, Hopewell, Virginia. N-18

FOR SALE—88 No. 2½ Stickle Thermic Traps, with gauge glasses. 2 Burnham Vacuum Pumps, size 8x10x12, with Schade controlling valves and Vacuum gauges. 1 Nash Engineering Co. Rotary Vacuum Pump with Tank, size E, test 2082. SCHMIDT & AULT PAPER CO., York, Penna.

FOR SALE—A New Mitts and Merrill chipper and shredder, 550 feet, 73R. Jeffrey Chain. Bargains for quick action. For price and specifications, address Box 2845, care Paper Trade Journal. D-2

Information Requested

as to present whereabouts of Mr. R. W. Walker, Superintendent some ten years ago for the Columbia Paper Mills, Buena Vista, Virginia. Address Box 36, Marrero, Louisiana.

PULP WOOD
EDM. CONWAY & SON
282 ST. PAUL STREET,
QUEBEC, P. Q.,
CAN. D-

MISCELLANEOUS

WANTED—Additional capital for small Wrapping Paper Mill. Would prefer to have Practical Paper Maker become interested. Address, Box 2846, care Paper Trade Journal. D-9

WANTED—A small Beater, 1,000 lbs. or less capacity. Address, Box 2847, care Paper Trade Journal. D-9

Manufacturers of Kraft Papers

who are looking for favorable locations, or whose present plants are embarrassed by lack of raw material or limited financial resources will be interested in the economic advantages of Sault Ste. Marie.

Raw Material—a practically inexhaustible supply of soft woods, easily available by both rail and water.

Transportation—Both lake and rail transportation.

Power—Cheap dependable electric power. **Labor—**An amply supplied both skilled and common labor market.

We invite personal examination of the advantages herein stated.

(All negotiations strictly confidential).

**C. E. Chipley, Industrial Secretary,
Sault Ste. Marie, Michigan.**

N-25

FOR SALE

Fourdrinier Part—101" x 60 ft. with Savary Shake.

Dryers: 12—48" x 110"; 8—48" x 106"; 1—34" x 67"; 3—28" x 62"; 5—36" x 40".

Pressers: 2 sets first and second with rolls 18" x 110"; 1 set first and second presses with rolls 18" x 96", all equipped with Pusey Jones Bell crank housings.

Beaters: 1—70" x 54" Dillon; 2—60" x 60" Downingtown Iron Tub; 1—60" x 52" Jones; 3—40" x 40".

Jordans: 1—Wagg Majestic; 1—large Horne; 2—49" Horne; 2—No. 1 Claffins.

Super Calenders: 1—55" Granger, 7 roll; 1—48" Holyoke, 7 roll; 2—43" Holyoke, 7 roll.

Revolving Sheet Cutters: 1—104" Horne; 1—34" Clark; 2—74", 1—56", 1—52", 1—50" and 1—43" Hamblets; 1—48" and 1—40" Moore & White; 2—43" Finlays.

Reels: 1—34", 1—36", 1—110" Upright Pusey & Jones two drum.

Slitters & Winders: 1—120" Warren; 1—114" Kidder; 1—110" Kidder; 1—90" Pusey & Jones single drum; 1—46" Kidder; 1—36" Kidder; 1—31" Meisel.

Screens: 14—Packer 12 plate open-side; 6—6 plate New Success; 2—Wandel double cylinder; 3—Wandel single cylinder.

Stuff Pumps: 2—Goulds 8" x 112" triplex; 1—Deane triplex, 8" x 12"; 1—Goulds triplex, 9" x 10".

FRANK H. DAVIS COMPANY
Established 1839

Rebuilt Paper Mill Machinery
175 Richdale Avenue Cambridge, Mass

PAPER MILL FOR SALE

In Middle West. Excellent Bag, Butchers', Coarse Paper and Water Finished Specialties Mill. Eight 1,000-lb. Beating and three Jordan Engines, one 74" and one 84" Fourdriniers. Two 7-roll calender stacks on each machine. Electricity, Steam and Water Power, 750 Permanent H.P. Production, twenty tons. Also Pulp Mill. Four Grinders, one Wet Machine. Water Power. Production, seven tons, air dried. Railroad Sidings. Brick and Stone Buildings. Mills and equipment in A1 condition. Immediate delivery. Price is right.

GIBBS-BROWER COMPANY

Paper and Pulp Mill Brokers

No. 261 Broadway, New York City

Telephone—Barclay 8020

OUR MOTTO—"Service First."

Pulp Wood For Sale

We are taking out Pulpwood from freehold lands in Quebec, 50 miles east of Cochrane, Ont., on the main line Canadian National Railway. About 95% Spruce—is now being hauled, could start shipment almost at once. Prefer to ship rough but could arrange to resaw. For full information address Bartram & Ball, Limited, No. 213 Drummond Building, Montreal, Que.

Results Speak for Themselves

The following paragraph is an extract from a letter written by a prominent Engineer who has used the classified columns of *The Paper Trade Journal* to dispose of a Cylinder Paper Machine:

"You may be interested to know that I received answers from England and others from Connecticut to California and South as far as Virginia and Arkansas, and can testify to the value of your journal as an advertising medium."

Hundreds of replies were obtained from a twenty-five-word advertisement inserted four times in *The Paper Trade Journal* and costing four dollars. The replies came from all parts of the United States and Europe, proving the buying appeal of *The Paper Trade Journal*.

We are constantly receiving letters like the above from advertisers who have used our classified columns and obtained good results. One mill, after two insertions of their ad, asked us to please take it out of the paper. They said they had received so many replies it would take an added office force to answer all of them!

We could fill an entire issue of this paper with testimonials we have received from satisfied advertisers, but we prefer to let results speak for themselves.

Note—Complete information as to charges for Help Wanted, Situations Wanted and For Sale Classified advertisements will be found at top of page 76.

At the top of the column on page 76 will be found full information covering the classified section of THE PAPER TRADE JOURNAL.

Our readers and advertisers are requested to observe these rules.

When replying to advertisers please give the address the advertisement directs.

If the advertisement is keyed with a box number, be sure to give the correct box number and send it in care of THE PAPER TRADE JOURNAL.

Observance of these rules will facilitate our forwarding replies to the proper sources with the least possible delay.

FOR SALE

- BEATERS**—One 500-lb. Beater. Two with rolls 72" x 44". Two rolls 44" x 44".
- RED PLATES**—Large number, all sizes.
- CALENDERS**—One 7-roll 72"; one 9-roll 72"; one 5-roll 78" face. One 7-roll open side stack 84". Lot of Odd rolls.
- COATERS**—One 45" Waldron double coater.
- CUTTERS**—One 46" Finaly; 43" Howard; 36" Sanborn; 38" guillotine.
- CYLINDER MOULDING**—One 36" x 72", ready for shipment.
- DRIVES**—One Reeves; one Moore & White.
- DYERS**—Ten new shells 36" x 106".
- EVERERS**—Two Mellor Everers.
- FOURDRINIER PART**—One 90" P & J Jourdrinier part with Millspaugh suction couch roll and pump, 40 ft. wire.
- JORDANS**—Several Horne and Emerson on way to our works. One Noble & Wood; two No. 1 Claflina.
- KOLLERGANGS**—One kollergang; size of stone 56" x 15" face.
- PULLEYS**—One 92" dia. x 34" double arm, modern pulley. Large cone pulleys. Large stock of iron pulleys, including some cone pulleys for Marshall drives. New wood pulleys with friction clutches. Also steel pulleys.
- PUMPS**—One dry suction, single vacuum, 12 x 22 x 18 Knowlces; 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 Diets 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.**

YOUR OPPORTUNITY

Wanted—TWO FIRST CLASS SALESMEN. MUST BE ABLE TO SELL PAPER BAGS and TOILET PAPER. One with Headquarters at Chicago and one to travel Eastern Territory. Salary commensurate with your **ABILITY.** H. Norwood Ewing Co., Woolworth Building, New York City.

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, 28 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.

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

CHASE & NORTON, High Grade Savings and Book Stock a specialty. 277 Water street, New York.

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

COLDSTEIN, R., & SON, 1163 Scott Street, Baltimore, Md. Cotton Rags and Paper Stock.

JACOB & CO., Alexander, Wapping, London, England. Supply all Classes Waste Papers and Shavings, Paper Making, Rags, etc. Correspondence solicited. Paris Office, 3 Cite d'Hauteville.

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

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

ROSENBAUM, INC., L., Lafayette street, New York City. Packers exclusively of new cuttings.

SIMMON'S, JOHN, SONS, Paper and Paper Stock. 28 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 32nd street, New York City.

Boards

MILLER PAPER CO., FRANK P., high grade specialties. Boards. East Downton, Pa.

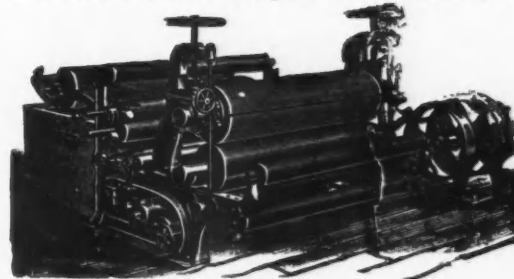
Special Machinery

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

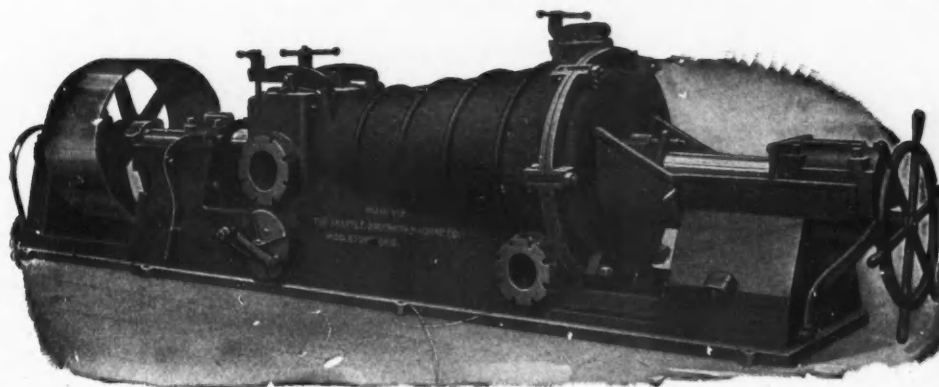
H. C. CLARK & SON MACHINE CO.

Manufacturers of **PAPER MILL MACHINERY**
LEE, MASS.

Revolving Paper Cutters Rag Cutters Cylinder Paper Machines Washing and Beating



- Engines
- Chilled Iron and Paper Calenders
- Fan and Stuff Pumps
- Engine Roll Bars and Bed Plates
- Cylinder Molds
- Marshall Drives
- Slitters and Rewinders
- Reels
- Dryers with Improved Packing Boxes
- Wet Machines
- Gun Metal and Rubber Rolls
- Rolls Reground



**The
Shartle Bros.
Machine Co.
Middletown
Ohio**

GIBBS-BROWER BULLETIN MILLS FOR SALE

News Mills With and Without Pulp Mills

Boxboard and Newsboard Mill—50 tons capacity.

Chipboard and Sheathing Specialties Mill—5 tons capacity.

Wrapping Mills, Kraft, Manila, Bogus, Textile and High Grade Wrappings.

Tissue Mills, Toilet, Crepe, Twisting and Copying—5 to 15 tons capacity.

Book, Writings and Ledger Mill—10 tons capacity.

Leather and Fibre Board Mills—5 and 10 tons capacity.

Felt Roofing Mill—10 tons capacity.

Specialty Paper Mills—Onion Skin, Water Finished Papers, etc.

Ground Wood Mill.

We Invite Your Inquiry

GIBBS-BROWER COMPANY

Paper and Pulp Mill Brokers

261 Broadway Telephone, Barclay 8620 New York City

Our Motto "Service First"

FOR SALE Two Leffel Water Turbines Never Used

Built to operate under 16' head and develop 70 H. P. at a speed of 266 RPM, using 48 cu. ft. of water per minute for each Turbine. Can be used for 20' head.

These turbines are part of the Du Pont war surplus and are offered subject to prior sale at an unusually low price.

Du Pont Chemical Company

Incorporated

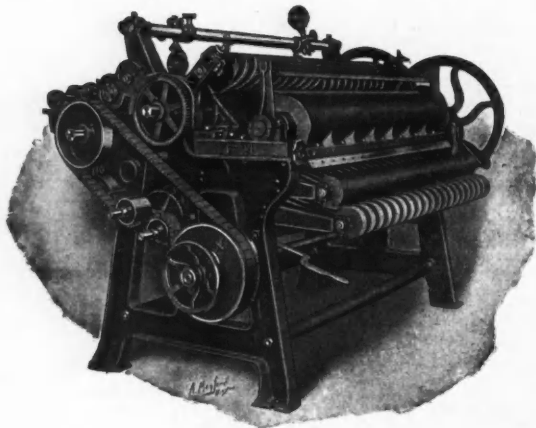
WILMINGTON

DELAWARE

D-2-9

Paper Cutters

Single, Duplex and Diagonal



Cutter Knives Patent Top Slitters

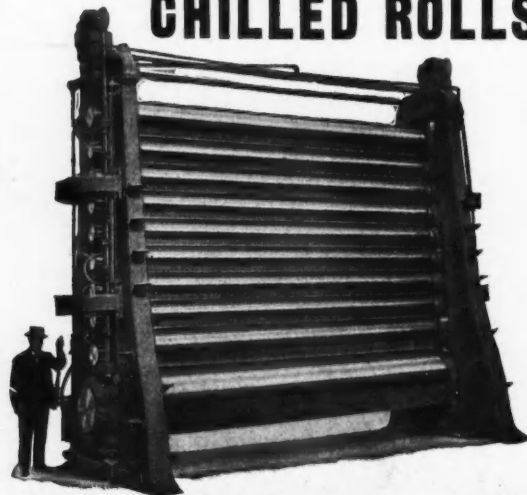
HAMBLET MACHINE CO.

Lawrence, Mass.

Farrel Foundry & Machine Co.

ANSONIA, CONN., U. S. A. Largest Manufacturers
in the World of

CHILLED ROLLS



CALENDERS

with Patent Hydraulic Lift

ROLL GRINDING MACHINES

FREDERICK L. SMITH
 21 EAST 40TH STREET, NEW YORK
**PULP AND PAPER MILL
 ENGINEER**

HARDY S. FERGUSON CONSULTING ENGINEERS
 Member AM. SOC. C. E., Member AM. SOC. M. E.,
 Member Eng. Inst. Can.
 280 FIFTH AVENUE, NEW YORK CITY
 Paper, Pulp and Fibre Mills, Including Building and Complete
 Mechanical Equipment, Water Power Development, Dams,
 Storage Reservoirs and Other Hydraulic Structures
 Examinations, Reports, Estimates of Cost, Designs,
 Specifications, Valuations

GEORGE F. HARDY
 M. AM. SOC. C. E., M. AM. SOC. M. E., M. ENG. INST. CAN.
 Mill Architect and Consulting Engineer
 Langdon Building, 309 Broadway, New York
 SPECIALTY: Paper, Pulp and Fibre Mills, Water Power Develop-
 ments, Steam Power Plants, Plans and Specifications,
 Evaluations, Reports, Consultation
 Cable Address: "Hardistock." A B C 5th Edition, Bedford McNeill.
 Western Union—Bentley's

J.H. WALLACE & COMPANY.
 TEMPLE COURT BUILDING
 NEW YORK CITY, U.S.A.
 CABLES. TRIPLEX, N.Y.

PULP PAPER AND POWER PLANTS ENGINEERS & CHEMISTS
 INDUSTRIAL DESIGN
 PLANT IMPROVEMENT
 LABORATORY TESTS

JOHN F. CARRIGAN ENGINEERING
 Consulting and Sales Engineering
POWER IS OUR SPECIALTY
 Estimates, Reports, Detail Plans of Power Plants.
 CARRIGAN STOKERS for any BOILER, 50 to 300 H. P.
 AUTOMATIC HOT WELLS specially designed for PAPER MILLS.
 504 CUNARD BLDG., CHICAGO, ILL.

Timber Lands Bought and Sold.
Timber and Pulp Wood Estimates.
R. R. BRADLEY,
Consulting Forester
 58 Telegraph Building, Hospital St., Montreal, P. Q.

Samuel M. Green Company
Engineers
**CHLORINE and BLEACH
 SPECIALISTS**



SPRINGFIELD

MASS.

THOMAS L. TOMLINES & SON
CONSULTING ENGINEERS
 ASSOC. M. AM. SOC. C. E.; 317-319 CITY BANK BLDG.,
 M. AM. SOC. M. E. SYRACUSE, N. Y.
 Paper, Pulp and Fibre Mills, Hy- Steam Power Plants, Plans and
 draulic Developments, Hydro- Specifications, Efficiency Eng-
 Electric Plants neering
CONSULTATION AND REPORTS

H. B. PRATHER
CONSULTING ENGINEER
CONSULTATIONS REPORTS ESTIMATES
 Complete Designs Pulp and Paper Mills—Steam and Electric
 Power Plants—Equipments
600 ROCKEFELLER BLDG., CLEVELAND, OHIO

WILLIAM T. FIELD
Consulting Engineer
 Watertown, N. Y.
DESIGNS ESTIMATES REPORTS

VITALE & ROTHERY
FOREST ENGINEERS
 527 Fifth Avenue New York, N. Y.

Timber Cruises Valuation and Maps
 The largest house of its kind in America
JAMES W. SEWALL *Forest Engineer*
 Southern and Central Office Northern Office
 832 Munsey Bldg., Old Town, MAINE
 Washington, D. C.

For All Size Shafts
 Any Horsepower
 Shafts Either in
 Line or at
 Angle

I.H. DEXTER CO.
 172 Greenwich Ave.,
 Goshen, N. Y.

**Your Card in this Space
 will bring
 RESULTS**

TRADE MARK
CAMACHINE
SLITTERS AND WINDERS
 CAMERON MACHINE CO. BROOKLYN, N. Y.

Mill Connections Wanted

We have quite an efficient Sales Organization, and can handle the entire output of smaller mills, making News, Sulphite Bond or R. R. Manilla.

PHILIP HANO & CO.
NEW YORK, N. Y.

TAGGARTS PAPER COMPANY

MANUFACTURERS OF
ROLL NEWSPRINT H. W. & W. PROCESS
ENTIRE PRODUCT FOR 1920 CONTRACTED
Mills at Felts Mills, Great Bend and Lefebvre, N. Y.
Main Office,
Sherman Building, WATERTOWN, N. Y.

CRANE DRAINAGE FITTINGS

Dry Rosin Size



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

Arabol Manufacturing Co.
100 William Street : NEW YORK

VERA ROSIN SIZE

Guaranteed to Be Absolutely Clean and Pure
SHIPPED IN BARRELS and TANK CARS
OUR VERA PAPER SIZE

is the purest, strongest and highest free rosin size made. We can furnish you with an ideal rosin size and patented apparatus to use same.
OUR VERA MILL SIZE

is the best soluble paper makers' rosin size made. Ready to use in cold or warm water in the ordinary way without apparatus. Gives better satisfaction and is more economical than mill made size.
OUR VERA BEATER SIZE

Especially prepared to be dumped direct from the barrels into the Beater, without first dissolving it.

VERA CHEMICAL COMPANY
North Milwaukee, Wis. Stoneham, Mass.
Burlington, Ont., Canada

UNION TALC COMPANY

Finest Grades of Agalite

132 Nassau Street New York

The Paper Trade Journal's Want Column will get rid of that surplus material you have on hand.

Others have tried it with great success.
Why not you?

STEARNS TANKS

BLOW-PIPES, STORAGE
TANKS, ACID TOWERS, ETC.,
OF WOOD.

HEAVY PAPER MILL WORK
IS OUR SPECIALTY.

70 YEARS EXPERIENCE.

*Enquire for quotations
Have you our catalogs?*

THE A. T. STEARNS LUMBER COMPANY
125 Taylor St., Neponset, Boston, Mass.



AGALITE FILLER

UNITED STATES TALC CO.

GOUVERNEUR : NEW YORK

ENGINEERS PLANNING POWER TRANSMISSIONS

Secure Data and Estimates of "MORSE" DRIVES

SAVE Construction, Space, Light, Fuel. Producing More with Less

MORSE CHAIN CO. - ITHACA, N. Y.

Engineering Service, Assistance, Bulletins

Baltimore Chicago Kansas City Pittsburgh Montreal
Boston Cleveland New York San Francisco Minneapolis
Charlotte, N. C. Detroit Philadelphia Atlanta St. Louis

SLITTERS and SPECIAL MACHINES

for use in paper industry

C. BENNINGHOFEN & SONS

Hamilton, Ohio

Send us your requirements regardless of what they may be.

NOT only for ocean transportation, but wherever dampness and damage are a shipping menace, you need "NATIONAL DUPLEX," the highest development of waterproof case lining.

National Duplex Waterproof Case Lining

NATIONAL WATERPROOFING COMPANY
1954-1956 Drexel Bldg., 5th & Chestnut Sts., PHILADELPHIA, PA.
Manufacturers of Waxed Papers

SUPERIOR CHEMICAL CO.

JOLIET, ILLINOIS

Manufacturers

**PAPER MAKERS' and FILTER
ALUM**

Blotting Paper of the Best Quality

MANUFACTURED BY

**THE EATON-DIKEMAN COMPANY
LEE, MASS.**

Manufacturers of Blotting, Matrix, Filter and all other grades of absorbent papers.

Registered brands Magnet and Columbian, also Lenox and Arlington.

SEND FOR SAMPLES AND PRICES

BLEACHED SULPHITE

FOR

Writing, Book and Tissue Papers

**PARSONS
Pulp & Lumber Co.**

EDWIN J. DEWEY, Manager Pulp Sales

Offices, 1207-1210 Finance Bldg.,
PHILADELPHIA, PA.

Mills at
PARSONS, WEST VA.

Federal Paper

Stock Co. St. Louis, Mo.

Graders and
Packers of

**Rags and
Waste Paper**

Salomon Bros. & Co.

IMPORTERS OF

All Grades of Rag and Paper Stock

200 FIFTH AVENUE, NEW YORK

Cotton Waste : Linters : Ramie

CLAY

Atterbury Bros., Inc.
Sole Agents
145 Nassau St., N. Y.

West Carclaze China
Clay Co.,
St. Austell, England

JAMES ROSENBERG, Pres.

L. W. BOWMALL, Vice Pres.

AMERICAN WOODPULP CORPORATION

FOREIGN AND DOMESTIC

**CHEMICAL and MECHANICAL
WOODPULPS**

*Rags, New Cuttings, Bagging, Etc.
Chemicals of All Descriptions*

New York—347 Madison Ave.

BRANCHES:
Stockholm—Sweden
Helsingfors—Finland

Holyoke—J. B. Woodruff, Inc.
Kalamazoo—F. D. Haskell
Dayton—R. R. Reed

“TYLER”

Fourdrinier Wires

In all widths up to 250 inches

CYLINDER FACES

WASHER WIRES

In Brass, Bronze and Phosphor Bronze

**The W. S. Tyler Company
Cleveland, Ohio**

Van Noorden Skylights

are as

Indispensable

To work by the Sun
Means twice the work done.

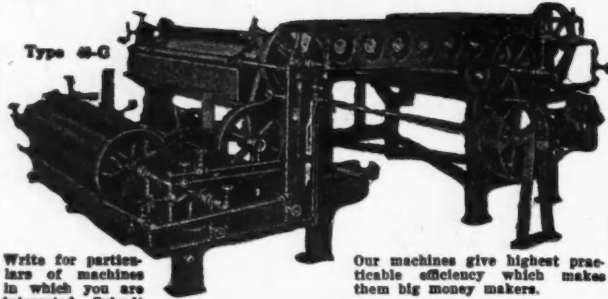


To a modern Paper Mill as its important inner equipment. "DAYLITE" means Nature's light without weather or condensation drip.

E. VAN NOORDEN & CO. 103 Magazine St. Boston, Mass.

PAPER COATING MACHINES

for making Carbon, Waxed, Oiled, Glued, Gummed, Asphalt and Veneered Papers. Allied lines to order.



Write for particulars of machines in which you are interested. Submit your problems to our Engineering Department B.

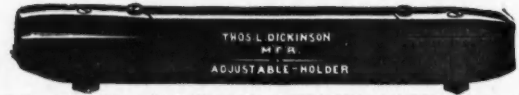
Our machines give highest practicable efficiency which makes them big money makers.

MAYER COATING MACHINES CO., Inc.
295-213 St. Paul Street, Rochester, N. Y., U. S. A.

WILLIAM B. DILLON

DILLON & BARNES

Paper Mill Products and Supplies
52 VANDERBILT AVENUE NEW YORK
Telephone, 7353 Murray Hill



Special Shaped Carbon, Black Diamond POINTS FOR TURNING Paper, Cotton, Chilled Iron and Hardened Steel Calender Rolls, Hard Rubber, Fibre, etc.

Manufactured by **THOS. L. DICKINSON**, 26 Gold St., NEW YORK
Successor to John Dickinson, Established 1796.
Agents for Great Britain, C. W. BURTON, GRIFFITHS & CO., Ludgate Square, London.

WINDERS AND REWINDERS
SAMUEL M. LANGSTON COMPANY
CAMDEN, N. J.

Job Lots, Rejections, Side Rolls Wanted
SPOT CASH paid for jobs in bond paper, white or colors, any grade that will cut down to 11 x 17, any weight. Send samples, with lowest spot cash prices. No lot too small, and none too large.
MIDWEST PAPER CO., 712 Federal Street, Chicago, Ill.

Write today for complete information.

WALL BOARD CUTTER
Cuts to length all kinds of heavy Sheet Stock, Fiber and Wall Board. Gives Uniform Sheet Lengths. Clean Cut Edges. No Buckling of Web.
M. D. KNOWLTON CO., 22 Elizabeth St., Rochester, N. Y. U. S. A.

GRISSINGER
Patented
AUTOMATIC TUBE MACHINE
Wire Stitched Tube
TOILET PAPER MACHINERY
GRISSINGER MACHINE WORKS
PHILADELPHIA, PA.
Patented { June 24, 1913.
 { August 10, 1915.

Manufacturers of All Special Small Roll Products

Adding Machine, Cash Register, Die Wiping, Hand Rolls, Etc., Etc.

PAPER MANUFACTURERS CO., Inc., Phila., Pa.

SLITTERS AND REWINDERS
FOR EVERY PURPOSE
MEISEL PRESS MFG. CO.
944 DORCHESTER AVE., BOSTON
44 YEARS' EXPERIENCE

ALUM
FOR THE PAPER MAKER
Manufactured by
The Jarecki Chemical Co.
QUALITY SERVICE
Sole Selling Agents
ISAAC WINKLER & BRO.
CINCINNATI :: :: NEW YORK

NEW ENGLAND TANK & TOWER CO.

WOOD TANKS FOR ALL PURPOSES
Everett Station, Boston, Mass.

NEW EDITION OF
Lockwood's Directory of the Paper, Stationery
and Allied Trades

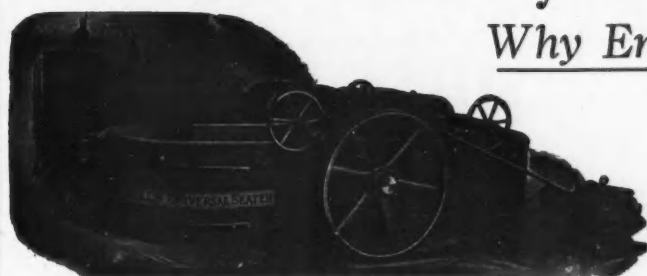
Now Ready

*Thoroughly Revised and Brought
Up to Date*

1921 Edition. Price \$7.00, Express Prepaid.

Published by Lockwood Trade Journal Company, Inc., 10 East 39th St., New York, N. Y.

Fourdrinier and Cylinder Paper Machines



*All infringements on present patents and patents to be issued
will be vigorously prosecuted*

Why Enlarge Your Beater Room?

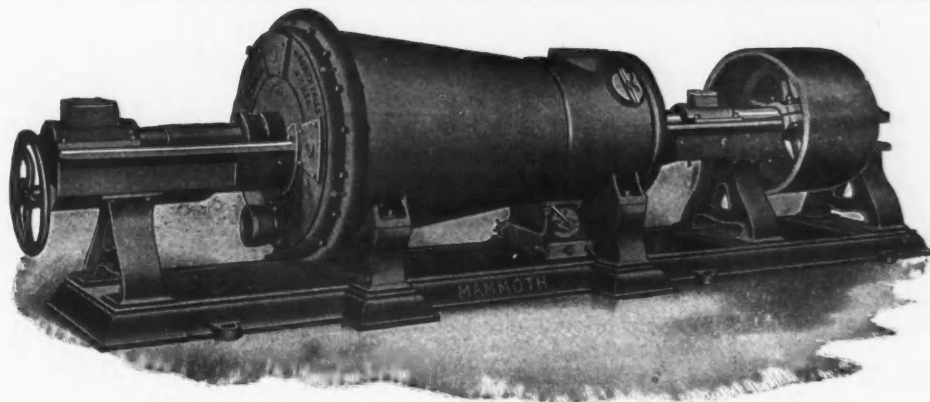
Why Add More Power?

This beater reduces stock to fibre of equal or better quality in half to one quarter of the time and with a saving of power which is remarkable. Do not take our word. Investigate. Manufactured by

MILLS MACHINE COMPANY ∴ **Lawrence, Mass., U. S. A.**
Builders of all kinds of paper mill machinery

**WE MAKE
BEATERS AND
JORDANS OF
QUALITY**

**SIX SIZES OF
JORDANS,
BEATERS,
FROM ¾ LBS.
TO 3000 LBS.**



The Noble & Wood Machine Co., Hoosick Falls, N. Y.



CUT down excessive wrapping paper investment. Why carry two wrapping paper lines for one wrapping paper purpose?

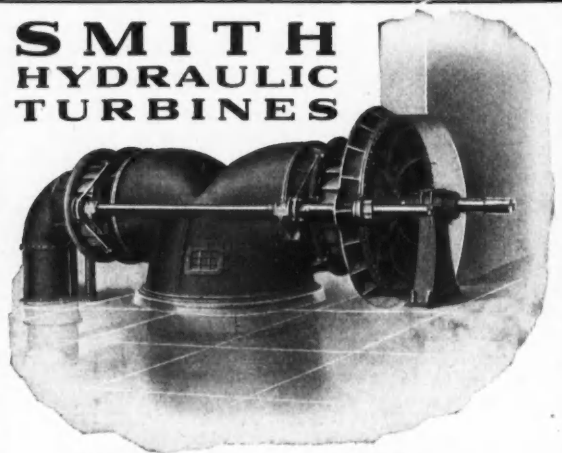
MOSINEE

presents a perfect wrapping paper, weight and strength for each wrapping purpose. Made in all weights, from 15 lb. to 100 lb. basis. The one complete, standardized and economical line of wrapping paper sold.

MOSINEE KRAFT

"The Wrapper That Delivers the Goods"

SMITH HYDRAULIC TURBINES



Seven Pairs of Turbines

As above illustrated are in successful operation developing 7,400 H. P. under 24 feet head in the new mill of the

MANISTIQUE PULP & PAPER CO.
MANISTIQUE, MINN.

If interested, write Dept. "X" for Bulletin of Designs

S. MORGAN SMITH CO.

CHICAGO
76 W. Monroe St.

BOSTON
176 Federal St.

YORK, PA.

MONTREAL
405 Power Bldg.

POTDEVIN MACHINE CO.

ESTABLISHED 1893

1221 38th Street, Brooklyn, N. Y.

MANUFACTURERS OF

IMPROVED MACHINERY FOR MAKING
SELF OPENING BAGS SATCHEL BOTTOM BAGS
FLAT AND SQUARE BAGS (All Lined or Unlined)
PAPER BAG BUNDLING PRESSES

WAX PAPER

CORRUGATED PAPER

ENVELOPES

Scallop Strips for Candy Boxes

For COLD or HOT GLUES
GUMMING MACHINES

E. J. KELLER COMPANY

INCORPORATED

200 FIFTH AVENUE

NEW YORK

FOREIGN AND DOMESTIC

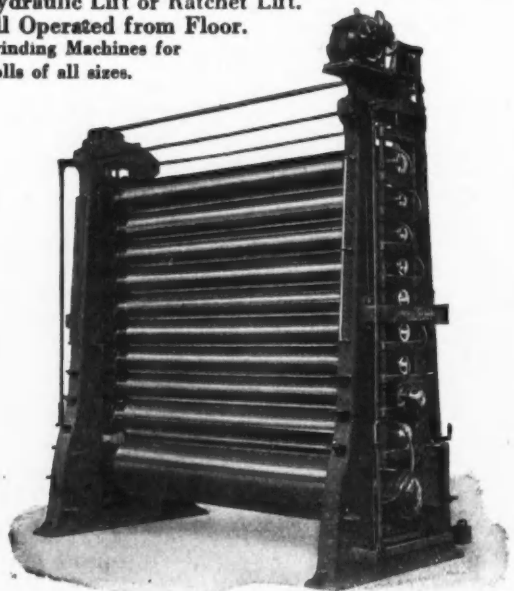
PAPER MAKERS' SUPPLIES
COTTON, JUTE and FLAX WASTES
COTTON BAGGING MATERIALS
EAST INDIA MERCHANDISE

CALENDERS

Furnished Complete, with Electric Motor Lift,
Hydraulic Lift or Ratchet Lift.

All Operated from Floor.

Grinding Machines for
Rolls of all sizes.



LOBDELL CAR WHEEL CO.

Wilmington, Del., U. S. A.

Our Millspaugh Shower Pipes offer you an opportunity to save considerable money. They use only $1/3$ to $1/2$ as much water as the old style drilled pipes, yet they do better work.

THE SANDUSKY FOUNDRY & MACHINE COMPANY
SANDUSKY OHIO

23

Fitchburg, Mass.,
 U. S. A.

UNION SCREEN PLATE COMPANY

Lennoxville, P. Q.
 Canada



UNION BRONZE SCREEN PLATES ROLLED BRASS
 (Best phosphorized Cast Metal) (Union Quality)

Old Plates RECLOSED and RECUT to accurate gauge.

UNION BRONZE SCREWS for Screen Plates

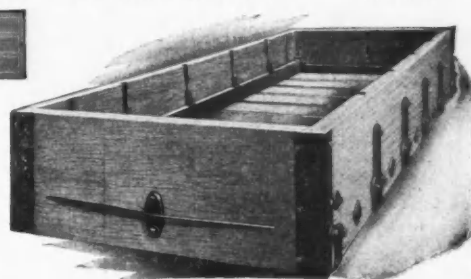
UNION BRONZE SUCTION BOX PLATES

Immediate Delivery of the Largest Orders. Satisfaction Guaranteed.

THE UNION-WITHAM SCREEN PLATE VAT AND FASTENERS

THE ORIGINAL
 Over One Thousand in Successful Operation

THE BEST
 Recommended by Screen Makers



ALL QUALITIES
JUTE THREADS, WASTES & CUTTINGS

WASTE PAPERS
 BAGGING: CANVAS
 NEW CUTTINGS: RAGS
 WHITE MANILA ROPE

IMPORTERS AND EXPORTERS

JOHN M. WATSON & CO.
 CROWNPOINT WORKS, DAVID ST.
 Glasgow, Scotland

The Grasselli Chemical Co.

Dyestuffs Department

117 Hudson Street New York

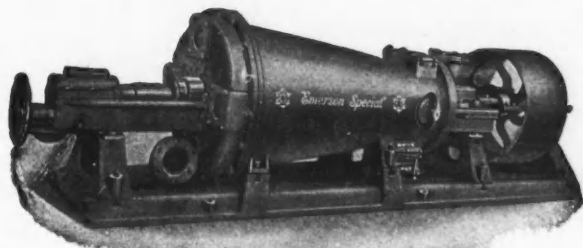
ANILINE COLORS
 FOR
PAPER MAKERS

Branches:

Boston Charlotte Providence Toronto Philadelphia Montreal Chicago

Sole Selling Agents for
ESSEX ANILINE WORKS, INC., Boston, Mass.

EMERSON MANUFACTURING CO. LAWRENCE MASS.



See the Second-Hand Machinery ads and note the
 ABSENCE of

EMERSON
BEATING ENGINES

They seldom wear out and are never thrown out.
 PERFECT CIRCULATION. NO "PADDLING."


The "EMERSON" JORDAN

does its work with half the power required by others of an
 greater capacity.

WRITE FOR DETAILS

CLASSIFIED INDEX TO ADVERTISEMENTS

ADDING MACHINE ROLLS.	Page	CLAY (Continued).	Page	FOURDRINIER WIRES.	Page
Paper Manufacturers Co.....	84	Miner-Edgar Co.....	—	Appleton Wire Works.....	92
AGALITE.		Star Clay Company.....	92	Buchanan & Bolt Wire Co.....	88
Union Talc Co.....	82	COATING MACHINERY.		Cable Excelsior Wire Mfg. Co.....	92
U. S. Talc Co.....	82	Mayer, Coating Machine Co., Inc.....	84	Cheney, Bigelow Wire Works.....	65
ALUM.		COMPRESSORS (AIR).		Eastwood Wire Mfg. Co.....	92
Pennsylvania Salt Mfg. Co.....	92	Nash Engineering Co.....	49	Thomas E. Gleason.....	6
The Kalbfleisch Corp.....	33	CORDAGE.		Jos. O'Neill Wire Works.....	12
Superior Chemical Co.....	83	Columbian Rope Co.....	—	The W. S. Tyler Co.....	83
Isaac Winkler & Bro.....	83	CORES.		Wisconsin Wire Works.....	5
ARCHITECTS AND ENGINEERS.		Elixman Paper Core Co.....	—	GUMMED PAPERS.	
John F. Carrigan.....	81	COUPLINGS (TEXTILE).		Ideal Coated Paper Co.....	69
Hardy S. Ferguson.....	81	J. H. Dexter Co.....	81	Nashua Gummed & Coated Paper Co.....	67
William T. Field.....	81	CRANES.		JOINTS (UNIVERSAL).	
Samuel M. Green Co.....	81	N. J. Foundry & Machine Co.....	—	I. H. Dexter Co.....	81
George F. Hardy.....	81	Northwest Engineering Works.....	63	KNIVES, ETC.	
F. R. Meier.....	—	CUTTING MACHINERY.		Bolton & Sons, J. W.....	9
H. B. Prather.....	81	M. D. Knowlton Co.....	84	Dowd Knife Works.....	51
F. L. Smith.....	81	DIE CUTTERS.		Machinery Co. of America.....	59
Thomas L. Tomlins & Son.....	81	Hogson & Pettis Mfg. Co.....	4	MICROMETERS.	
Vitale & Rothery.....	81	DIGESTERS		E. J. Cady & Co.....	64
Joseph H. Wallace & Co.....	81	American Welding Co.....	61	MILL COGS.	
ASBESTINE PULP.		DRIVES FOR PAPER MACHINES.		Bowsher Co., N. P.....	92
International Pulp Co.....	Front Cover	Westinghouse Electric & Mfg. Co.....	—	PACKING.	
BALL BEARINGS.		DRIVES, SILENT CHAIN.		B. F. Goodrich Co.....	—
S. K. F. Industries, Inc.....	91	Morse Chain Co.....	82	PAPER BAG MACHINERY.	
BELTING.		DRYER EXHAUSTS.		Potdevin Machine Co.....	86
B. F. Goodrich Rubber Co.....	21	Nash Engineering Co.....	49	PAPER BAG MANUFACTURERS.	
Goodyear Tire & Rubber Co.....	—	DRYING SYSTEMS.		Schorsch & Co.....	69
BEATING ENGINES.		Farnsworth Company.....	—	A. M. Simon & Co.....	6
Claffin Engineering Co.....	67	OYES, ANILINE.		PAPER BOX BOARD.	
Ditta Machine Co., Inc.....	4	National Aniline & Chemical Co.....	8	C. L. La Boiteaux Co.....	12
Dillon Machine Co.....	—	DYESTUFFS.		PAPER CUTTERS.	
Downington Mfg. Co.....	90	E. I. du Pont de Nemours & Co.....	55	Hamblet Machine Co.....	80
Emerson Mfg. Co.....	87	Heller & Merz Co.....	41	PAPER DEALERS.	
Mills Machine Co.....	85	ELECTRIC EQUIPMENT.		Hano, Philip, & Co.....	82
Noble & Woods Machine Co.....	85	General Electric Co.....	—	Midwest Paper Co.....	84
CALENDER ROLLS.		EQUIPMENT.		PAPER EXPORTERS.	
Farrell Foundry & Machine Co.....	80	Du Pont Chemical Co.....	37, 80	Auer & Twitchell.....	Front Cover and 66
Loddell Co., Wheel Co.....	86	FELTS AND JACKETS.		A. M. Capen's Sons, Inc.....	92
CARBON TOOLS.		Appleton Woolen Mills.....	89	Hudson Trading Co.....	2
Thomas L. Dickinson.....	84	F. Bredt & Co.....	from above	Interstate Pulp & Paper Co.....	33
CASEIN.		Draper Bros. Co.....	67	Maurice O'Meara Co.....	59
Aldgate Casein Works.....	7	F. C. Huyck & Sons.....	11	Parsons Trading Co.....	Front Cover
CHEMICALS, COLORS, ETC.		Knox Woolen Co.....	57	Parsons & Whittemore.....	3
Dicks, David Co., Inc.....	4	Orr Felt & Blanket Co.....	6	W. M. Pringle Co., Inc.....	31
E. I. du Pont de Nemours & Co.....	55	FELT ROLLS.		State Pulp & Paper Co.....	3
Grasselli Chemical Co.....	87	American Wringer Co.....	4	Storm & Bull.....	—
Kretzoff, Pickhardt & Co.....	3	Waterbury & Son Co.....	47	Fred C. Strype.....	31
Mathieson Alkali Works.....	75	FILTERING SYSTEMS.		PAPER AND PULP MACHINERY.	
Newport Chemical Works.....	11	Norwood Engineering Co.....	67	Appleton Machine Co.....	4
The White Tar Aniline Corp.....	61			The Bagley & Sewall Co.....	—
C. K. Williams Co.....	92			Baker Mfg. Corp.....	90
CIRCULAR KNIFE GRINDERS.				Bird Machine Co.....	27
Gibbs-Brower Co.....	80			H. C. Clark & Son.....	79
CLAY.				Frank H. Davis.....	79
Aterbury Bros.....	83			Glens Falls Machine Works.....	57
English China Sales Corp.....	29			Improved Paper Machinery Co.....	25
John W. Higman Co.....	9			Sandusky Foundry & Machinery Co.....	87
A. M. Meincke.....	57			Sandy Hill Iron & Brass Co.....	25
				Shurtle Bros. Machine Co.....	79
				Smith & Winchester Mfg. Co.....	90
				Valley Iron Works.....	45
				Waterville Iron Works.....	2



RELIEVING THE SHORTAGE OF RAW MATERIALS

Out of our forty different grades of paper stock you are assured a steady, reliable source for procuring raw materials in practically every branch of paper making. Having specialized for 35 years in this one field you can depend upon a clean, well-packed, uniform product throughout; fulfillment of delivery promises; and because of our output of 300 tons daily, big tonnage at all times. Write us your wants.

Mendelson Bros. Paper Stock Co., General Offices: 910 So. Michigan Ave., Chicago, Ill.
Long Distance Phones, Harrison 2346 and 1487

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

CLASSIFIED INDEX TO ADVERTISEMENTS (Continued)

	Page		Page		Page
PAPER PIE PLATES.		PULP DISTRIBUTORS.		SULPHITE BLEACHED AND UNBLEACHED (Continued).	
Alfred Bleyer & Co.....	31	Procter & Gamble Distributing Co.....	8	Parsons Pulp & Lumber Co.....	83
PAPER MANUFACTURERS.		PULP PROCESS.		Pulp & Paper Trading Co.....	6
American Coating Mills.....	33	Castle, Gottheil & Overton.....	8	Riordon Sales Co., Ltd.....	73
American Writing Paper Co.....	—	PULP STONES.		SULPHUR.	
Bayless Mfg. Co.....	6	Lombard & Co.....	Front Cover	Texas Gulf Sulphur Co.....	66
Brown Co.....	9	PUMPS.		Union Sulphur Co.....	61
Collins Mfg. Co.....	12	Frederick Iron & Steel Co.....	2	TANKS.	
Daniels Mfg. Co.....	43	Hayton Pump & Blower Co.....	—	W. E. Caldwell Co.....	67
Diamond State Fibre Co.....	Front Cover	PUMPS (VACUUM).		New England Tank & Tower Co.....	84
Eastern Mfg. Co.....	65	Nash Engineering Co.....	49	Stearns Lumber Co.....	82
Eaton Dikeman Co.....	83	RAG CUTTERS.		TAPE MOISTENERS.	
Flower City Tissue Mills.....	9	B. F. Perkins & Son, Inc.....	13	Liberty Paper Co.....	5
Fort Howard Paper Co.....	59	ROSIN SIZE.		TIMBER ESTIMATES.	
Hammermill Paper Co.....	—	Arabol Mfg. Co.....	82	R. R. Bradley.....	81
Howard Paper Mills.....	41	Paper Makers Chemical Co.....	—	James D. Lacy & Co.....	65
Missisquoi Pulp & Paper Co.....	69	Vera Chemical Co.....	6	James W. Sewall.....	81
Mountain Mill Paper Co.....	39	SALT CAKE.		TOILET PAPER AND TOWELS.	
Seaman Paper Co.....	Front Cover	D. A. Himadi & Co., Inc.....	5	H. Norwood Ewing Co.....	68
Stratford Paper Co.....	89	SCALES.		Foley Paper Co.....	—
Taggart's Paper Co.....	82	American Kron Scale Co.....	—	TRANSMISSION MACHINERY.	
Wausau Sulphite Fibre Co.....	86	Fairbanks-Morse Co.....	—	H. W. Caldwell & Sons Co.....	68
PAPER MILL AGENTS		SCREENS.		Jeffrey Mfg. Co.....	—
Dillon & Barnes.....	84	Central Mfg. Co.....	—	W. A. Jones Foundry & Machine Co.....	53
Elish & Co., Inc., M. M.....	33	Wm. A. Hardy & Sons Co.....	61	Reeves Pulley Co.....	—
Hart Trading Co., Inc.....	13	Union Screen Plate Co.....	87	TURBINES.	
Hill Co., Berton C.....	11	SHAFT COUPLINGS (TEXTILE).		James Leffel & Co.....	—
Invincible Pulp & Paper Corp.....	77	I. H. Dexter Co.....	81	S. Morgan Smith Co.....	86
McIver, D. T.....	2	SILICATE.		TWINES.	
Rapp Co., Arthur R.....	31	Standard Silicate Co.....	69	American Manufacturing Co.....	39
Royal Card & Paper Co.....	13	SKYLIGHTS.		VALVES.	
Sabin Robbins Paper Co.....	10	E. Van Noorden & Co.....	83	Crane Co.....	91
PAPER AND PULP MILL BROKERS		SLITTER GRINDERS.		Jenkins Bros.....	68
Gibbs-Brower Co.....	78, 80	Gibbs-Brower Co.....	80	Voorhees Rubber Co.....	—
PAPER STOCK.		SLITTERS AND REWINDERS.		VEGETABLE PARCHMENT PAPERS.	
E. Butterworth & Co.....	47	Benninghofen & Sons.....	82	Kalamazoo Vegetable Parchment Co.....	68
Castle, Gottheil & Overton.....	67	Cameron Machine Co.....	81	WATERPROOF PAPERS.	
Federal Paper Stock Co.....	83	Samuel M. Langston Co.....	84	National Waterproofing Co.....	—
Gumbinsky Brothers.....	92	Meisel Press Mfg. Co.....	84	WOOD PIPES.	
Francis Hughes Co.....	86	STARCH.		A. Wyckoff & Sons Co.....	7
E. J. Keller & Co.....	3	Corn Products Refining Co.....	7	WOOD PULP IMPORTERS.	
Mendelson Bros. Paper Stock Co.....	88	SULPHITE PULP ("Kraft" Soda).		American Wood Pulp Corp.....	83
Penn Paper & Stock Co.....	66	Dryden Pulp & Paper Co., Ltd.....	5	J. Andersen & Co.....	6, 23
A. Salomon, Inc.....	61	SULPHITE BLEACHED AND UNBLEACHED.		Ira L. Beebe & Co.....	67
Salomon Bros. & Co.....	83	J. Andersen & Co.....	6, 23	M. Gottesman & Co., Inc.....	35
Train-Smith Co.....	Front Cover	Brown Company.....	9	Lagerloef Trading Co.....	14 and Front Cover
Watson & Co., J. M.....	87	Craig-Becker Co.....	5	New York Oversea Co., Inc.....	49 and Front Cover
PAPER TESTERS.		SULPHITE BLEACHED AND UNBLEACHED.		A. J. Pagel & Co., Inc.....	19
Manning, Maxwell & Moore Co.....	65	J. Andersen & Co.....	6, 23	J. F. Patton.....	10
PAPER TUBE MACHINERY.		Brown Company.....	9	Price & Pierce, Ltd.....	Front Cover
Dietz Machine Works.....	68	Craig-Becker Co.....	5	Scandinavian-American Trading Co.....	12
Grissinger Machine Works.....	84				
PERFORATED METAL SCREENS.					
Harrington & King Perforating Co.....	39				
Hendrick Manufacturing Co.....	3				
Manhattan Perforated Metal Co.....	66				
Chas. Mundt & Sons.....	66				

STRATFORD PAPER CO. 160 Cornelison Ave. Jersey City, N. J.

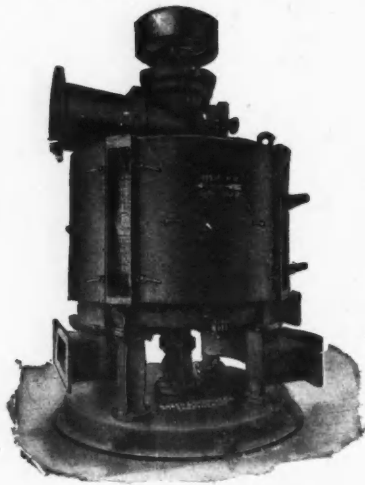
High Grade Fourdrinier Tissues in Stock for Immediate Delivery

APPLETON FELTS AND JACKETS

Manufactured by

APPLETON WOOLEN MILLS, Appleton, Wis.





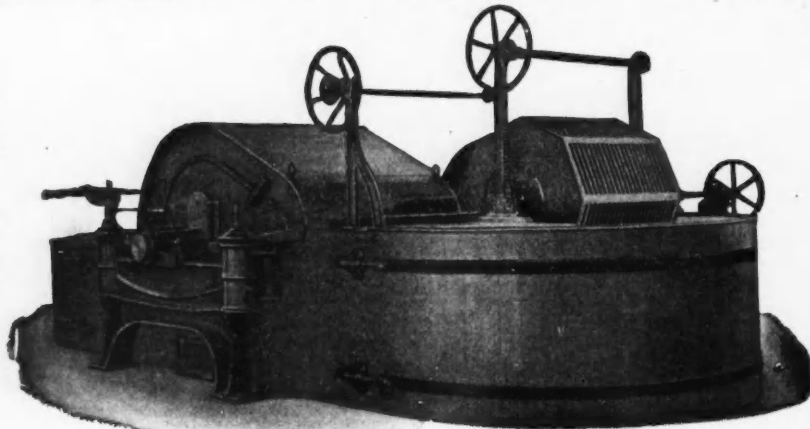
The Centrifugal Screen

THIS illustration is of The Centrifugal Screen of which we are the sole manufacturers. This screen is still the peer of all machines constructed for screening either sulphite, sulphate, soda or ground wood pulp. It does more work and better work with the use of less power than any other screen being built today.

The fact that we are now receiving orders from parties who purchased this screen as many as fifteen to seventeen years ago, is ample proof, we think, of the fact that it has stood the test of time.

BAKER MANUFACTURING CORPORATION

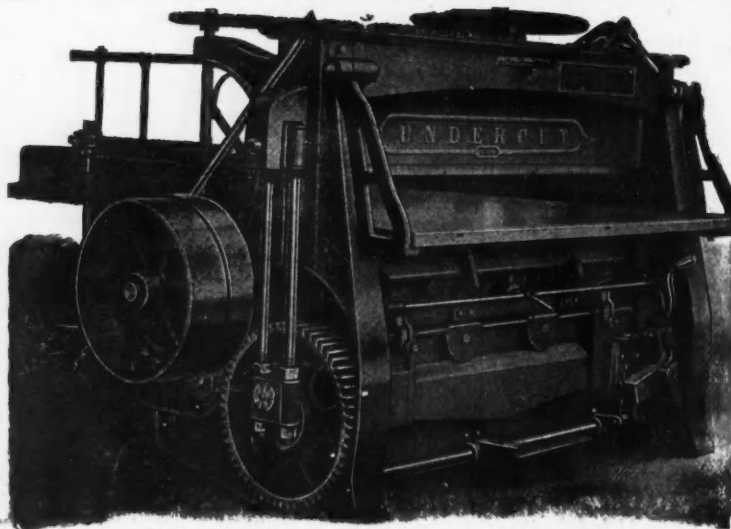
Formerly BAKER & SHEVLIN CO. Saratoga Springs, N. Y.
Sole Manufacturers



WOOD AND IRON TUB BEATERS

**Fourdrinier
Machines
Cylinder
Machines
Pulp
Machinery**

Downington Mfg. Co.
Downington, Pa.



The Undercut Trimmer

The Paper Mill Cutter, combining the highest degree of accuracy, speed and simplicity for the most exact trimming.

The clamping power of the Undercut is not equalled by any other cutter, and assures absolute accuracy in trimming. The safety in operating an Undercut is a very important fact to be considered, as well as simplicity of design and construction carried out in the best manner and workmanship possible.

The speed of the Undercut is such that more cuts can be utilized in the working of our machine than in the high-speed cutters, which not only consume power, but wear out rapidly.

Our Power Back Gauge Drive enables the operator to handle material quickly, easily, and more in quantity than can be secured in the use of other machines.

For further and full information, call upon

The Smith & Winchester Mfg. Co.

Builders of High Grade Paper Mill
Machinery and Paper Bag Machinery
South Windham, Conn.



IN the bearings sponsored by **SKF** its type of anti-friction bearings have been developed to their highest perfection. And **SKF** further provides an engineering service not only to assure to itself proper application and use of **SKF** marked products but to help the buyer to fully capitalize the mechanical value built into each device. This service is freely offered and is being continually broadened and advanced by laboratory research that is international in scope. You are assured a similar service behind every product bearing the mark—

SKF

Among these products now offered are:

Single row deep groove ball bearings.

Double row self aligning ball bearings.

Thrust bearings.

Steel balls.

Transmission equipment.

SKF Industries, Inc.
165 Broadway, New York City

Supervising at the
request of the stockholders

The Hess-Bright Manufacturing Co.

SKF Ball Bearing Co.

Atlas Ball Co.

Hubbard Machine Co.

SKF Research Laboratories



SKF Research Laboratory established at Philadelphia to co-operate with the Gothenberg Laboratories in the study of the American Manufacturers' friction problems.

EXPORT ONLY All Grades of PAPER and BOARDS
A. M. Capen's Sons, Inc.
 Established 1879
 60 Pearl Street, New York City

THE WM. CABLE EXCELSIOR WIRE MFG. CO.
 Established 1848
 Incorporated 1870-1894
 Manufacturers of Superior Fourdrinier Wires Brass, Copper and Iron Wire Cloth of Every Description. Best Quality of Wire Rope
 Write for Price List
 74-90 Ainslie St. BROOKLYN, N. Y.

Mill Cogs
 ON SHORTEST POSSIBLE NOTICE
 We make all kinds of Mill Cogs and have special facilities that will be of great service to you. We make a specialty of "ready dressed" cogs which are
READY TO RUN
 the moment driven and keyed. Write at once for circular "G" and instruction sheets, free.
 THE N. P. DOWSER CO., South Bend, Ind.
 Established 1882.

NATRONA POROUS ALUM
 MANUFACTURED BY
PENNSYLVANIA SALT MFG. COMPANY
 PHILADELPHIA

C. K. WILLIAMS & CO., EASTON PA.



Proprietors of the Penna. Dry Paint and Color Works and the Holton Dry Color, Chemical and Copperas Works of Allentown, Pa.

Manufacturers, Miners and Importers of Coloring Materials, such as Venetian Red, Red, Brown, Black, Yellow, Oxides, Chrome and other Ocheres, also Paper Fillers—as Agallite, Mineral Pulp, Talc, China and other Clays.

COLORS FOR PAPER MANUFACTURERS' USE

Rags are the most expensive paper-making material. Lower your ultimate costs with America's best

"G.B." 3RDS & BLUES

Inquiries solicited

GUMBINSKY BROS. CO.

America's Largest Packers of Rags and Waste Paper
 2261 South Union Ave., Chicago, Illinois

FOURDRINIER CYLINDER WASHER WIRES

50 years' experience as wire makers insures highest quality of product

"Appleton Wires Are Good Wires"

Appleton Wire Works

Appleton, Wis.