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# PAPER TRADE JOURNAL

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

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# PAPER TRADE JOURNAL

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

## FIFTY-FIRST YEAR

PUBLISHED EVERY THURSDAY BY THE

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# ANNUAL BIDS OPENED FOR GOVERNMENT PAPER

Joint Congressional Committee on Printing Opens Bids for Paper for Use of the Government Printing Office on Monday of This Week—Tenders Are Received for Six Months, Twelve Months or Both Periods Subject to Usual Qualifications—Committee Will Meet Monday, February 5, for the Purpose of Making the Awards—List of Concerns Represented in the Bidding.

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., January 29, 1923.—Bids were opened at the Office of the Joint Committee on Printing for the supply of paper, for the Government Printing Office based, either on the supply for the six months, 12 months, or both periods, and subject to qualifications as noted below. The Committee will meet on Monday, February 5, for the purpose of making the awards. The following bids were received:

## White News Print

No. 1—40,000 lbs., 24x36—32; rolls, 19 ins. wide.  
Dobler & Mudge, Baltimore, Md., 6 months, 4.44c.  
International Paper Company, New York City, 6 months, 4.35c.

No. 2—2,000,000 lbs., 24x36—32; rolls, 48 ins. wide.  
Dobler & Mudge, 6 months, 4.44c.  
Maurice O'Meara Company, New York City, 6 months, 4.03c.  
International Paper Company, New York City, 6 months, 4.35c.

## Machine-Finish Printing, No. 1

No. 3—300,000 lbs., 25x38—35; cut 24x32 ins. flat.  
Bryant Paper Company, Kalamazoo, Mich., 6 months, 7.75c.  
The Allied Paper Mills, Kalamazoo, Mich., 6 months, 7.677c.  
International Paper Company, New York City, 6 months, 7.37c.  
Old Dominion Paper Company, Norfolk, Va., 6 months, 9.386c.; 1 year, 9.386c.

No. 4—1,000,000 lbs., 25x38—35; cut 24x38 and 38x48 ins. flat.  
Bryant Paper Company, 6 months, 7.74c.  
Allied Paper Mills, 6 months, 7.677c.  
International Paper Company, 6 months, 7.37c.  
Old Dominion Paper Company, 6 months, 9.386c.; 1 year, 9.386c.

No. 5—1,000,000 lbs., 25x38—35; cut 24x38 and 38x48 ins. flat.  
Bryant Paper Company, 6 months, 7.74c.  
Allied Paper Mills, 6 months, 7.677c.  
The International Paper Company, 6 months, 7.37c.  
Old Dominion Paper Company, 6 months, 9.386c.; 1 year, 9.386c.

No. 6—1,600,000 lbs., 25x38—35; rolls, 18, 19, 21, and 23 ins. wide.  
Bryant Paper Company, 6 months, 7.19c.  
Old Dominion Paper Company, 6 months, 8.802c.; 1 year, 8.802c.

No. 7—1,000,000 lbs., 25x38—35; rolls, 38 and 48 ins. wide.  
Bryant Paper Company, 6 months, 7.19c.  
The Allied Paper Mills, 6 months, 7.127c.  
Old Dominion Paper Company, 6 months, 7.599c.; 1 year, 8.649c. (a).

No. 8—1,000,000 lbs., 25x38—35; rolls, 38 and 48 ins. wide.  
Bryant Paper Company, 6 months, 7.19c.  
Allied Paper Mills, 6 months, 7.127c.  
Old Dominion Paper Company, 6 months, 7.599c.; 1 year, 8.649c. (a).

No. 9—1,000,000 lbs., 25x38—35; rolls, 38 and 48 ins. wide.  
Bryant Paper Company, 6 months, 7.19c.  
Allied Paper Mills, 6 months, 7.127c.  
Old Dominion Paper Company, 6 months, 7.599c.; 1 year, 8.649c. (a).

(a) Under our bid we offer 500,000 pounds to be distributed over the three lots, 7, 8, and 9, as best suits the Public Printer; under our bid for one year we will fill all requirements for either the six months of the year.

No. 10—200,000 lbs., 25x38—40; rolls, 38 and 48 ins. wide.  
P. H. Glatfelter Company, Spring Grove, Pa., 6 months, 6.49c.; 1 year, 6.49c.  
Bryant Paper Company, 6 months, 6.88c.  
Allied Paper Mills, 6 months, 6.828c.  
Old Dominion Paper Company, 6 months, 8.454c.; 1 year, 8.454c.  
The Whitaker Paper Company, Philadelphia, Pa., 6 months, 7.03c.

No. 11—400,000 lbs., 25x38—40; cut 24x38 and 38x48 ins. flat.  
P. H. Glatfelter Company, 6 months, 6.74c.; 1 year, 6.74c.  
Bryant Paper Company, 6 months, 7.43c.  
Allied Paper Mills, 6 months, 7.37c.  
The International Paper Company, 6 months, 7.12c.  
Old Dominion Paper Company, 6 months, 9.537c.; 1 year, 9.537c.  
Whitaker Paper Company, 6 months, 7.53c. (a).  
(a) Reduction of 15 cents if packed in skeleton frames.

No. 12—250,000 lbs., 25x38—40; rolls, 36¾ ins. wide.

P. H. Glatfelter Company, 6 months, 6.49c.; 1 year, 6.49c.  
Bryant Paper Company, 6 months, 6.88c.  
Allied Paper Mills, 6 months, 6.828c.  
Old Dominion Paper Company, 6 months, 8.454c.; 1 year, 8.454c.  
Whitaker Paper Company, 6 months, 7.03c. (a).  
(a) Reduction of 15 cents if packed in skeleton frames.

No. 13—80,000 lbs., 25x38—50; rolls, 33¾ ins. wide.

P. H. Glatfelter Company, 6 months, 6.49c.; 1 year, 6.49c.  
Bryant Paper Company, 6 months, 6.58c.  
Allied Paper Mills, 6 months, 6.525c.  
International Paper Company, 6 months, 6.47c.  
Old Dominion Paper Company, 6 months, 7.996c.; 1 year, 7.996c.  
Whitaker Paper Company, 6 months, 6.98c. (a).  
(a) Reduction of 15 cents if packed in skeleton frames.

No. 14—350,000 lbs., 25x38—50; cut 24x38, 28x40, 32x42, 38x48, and 41x52 ins., flat.

P. H. Glatfelter Company, 6 months, 6.74c.; 1 year, 6.74c.  
Bryant Paper Company, 6 months, 7.12c.  
Allied Paper Mills, 6 months, 7.018c.  
International Paper Company, 6 months, 6.97c.  
Old Dominion Paper Company, 6 months, 7.249c.; 1 year, 7.249c.  
R. P. Andrews Paper Company, Washington, D. C., 6 months, 6.92c.  
The Whitaker Paper Company, 6 months, 7.23c. (a).  
(a) Reduction of 15 cents per 100 lbs. if packed in skeleton frames.

No. 15—300,000 lbs., 25x38 ins., 60 and 70; cut 29x41 and 38x48 ins., flat (the grain of sheet to run as ordered).

P. H. Glatfelter Company, 6 months, 6.74c.; 1 year, 6.74c.  
Bryant Paper Company, 6 months, 7.12c.  
Allied Paper Company, 6 months, 7.018c.  
Old Dominion Paper Company, 6 months, 9.189c.; 1 year, 9.189c.  
R. P. Andrews Paper Company, 6 months, 6.92c.  
The Whitaker Paper Company, 6 months, 7.23c. (a).  
(a) Reduction of 15 cents per 100 lbs. if packed in skeleton frames.

No. 16—20,000 lbs., salmon, 25x38 ins., 50; flat, min. order, 5,000 lbs.

The Bryant Paper Company, 6 months, 8.63c.  
The Whitaker Paper Company, 6 months, 8.9c. (a).  
(a) Reduction of 15 cents per 100 lbs. if packed in skeleton frames.

## Plant-Fiber Machine-Finish Printing, No. 1

No. 17—500,000 lbs., 25x38—40; rolls, 19, 38, and 48 ins. wide.

No bids

No. 18—500,000 lbs., 25x38—40; rolls, 19, 38, and 48 ins. wide.

No bids.

## Antique Printing

No. 19—50,000 lbs., 25x38—50; cut 25x38, 29x41, and 38x50 ins. flat.

Bryant Paper Company, 6 months, 8.12c.  
Allied Paper Mills, 6 months, 7.018c.  
International Paper Company, 6 months, 7.22c.  
Old Dominion Paper Company, 6 months, 7.449c.; 1 year, 7.499c.  
Whitaker Paper Company, 6 months, 8.5c. (a).  
(a) Reduction of 15c. per 100 lbs. if packed in skeleton frames.

## Opaque Printing, High Machine Finish

No. 20—50,000 lbs., 25x38—30; cut 32x48 and 38x48 ins. flat.

Bryant Paper Company, 6 months, 10.9c.  
Old Dominion Paper Company, 6 months, 10.99c.; 1 year, 10.99c.

## Rag Machine-Finish Printing

No. 21—100,000 lbs., 25x38—40; cut 32x48 ins. flat.

Bryant Paper Company, 6 months, 10.2c.  
Old Dominion Paper Company, 6 months, 9.999c.; 1 year, 9.999c.  
Whitaker Paper Company, 6 months, 11.5c. (a).  
(a) Reduction of 15c. per 100 lbs. if packed flat in skeleton frames.

No. 22—150,000 lbs., 25x38—40; cut 38x48 ins. flat.

Bryant Paper Company, 6 months, 10.2c.  
Old Dominion Paper Company, 6 months, 9.999c.; 1 year, 9.999c.  
Whitaker Paper Company, 6 months, 11.5c. (a).  
(a) Reduction of 15c. per 100 lbs. if packed in skeleton frames.

## No. 23—150,000 lbs., 25x38—40; cut 38x48 ins. flat.

Bryant Paper Company, 6 months, 10.2c.  
 Old Dominion Paper Company, 6 months, 9.999c.; 1 year, 9.999c.  
 The Whitaker Paper Company, 6 months, 11.5c. (a).  
 (a) Reduction of 15c. per 100 lbs. if packed in skeleton frames.

## No. 24—40,000 lbs., 25x38—40 and 45; cut any size. flat, max. width 42 ins.

Bryant Paper Company, 6 months, 10.2c.  
 Old Dominion Paper Company, 6 months, 9.999c.; 1 year, 9.999c.  
 The Whitaker Paper Company, 6 months, 11.9c. (a).  
 (a) Reduction of 15c. per 100 lbs. if packed in skeleton frames.

## No. 25—40,000 lbs., 25x38—40 and 45; cut any size, flat, max. width 42 ins.

Bryant Paper Company, 6 months, 10.2c.  
 Old Dominion Paper Company, 6 months, 9.999c.; 1 year, 9.999c.  
 The Whitaker Paper Company, 6 months, 11.9c. (a).  
 (a) Reduction of 15c. per 100 lbs. if packed in skeleton frames.

**Sized and Supercalendered Printing (Sample A)**

## No. 26—70,000 lbs., 25x38—45; cut 24x32 and 32x48 ins. flat.

Bryant Paper Company, 6 months, 7.69c.  
 Old Dominion Paper Company, 6 months, 9.949c.; 1 year, 9.949c.  
 (a)  
 The Whitaker Paper Company, 6 months, 8.13c. (b).  
 (a) Reduction of 20c. per 100 lbs. if packed in skeleton frames.  
 (b) Reduction of 15c. per 100 lbs. if packed in skeleton frames.

## No. 27—600,000, 25x38—45; cut 31¼x45½ ins. flat.

Bryant Paper Company, 6 months, 7.69c.  
 Old Dominion Paper Company, 6 months, 9.949c.; 1 year, 9.949c.  
 (a)  
 The Whitaker Paper Company, 6 months, 7.87c. (b).  
 (a) Reduction of 20c. per 100 lbs. if packed in skeleton frames.  
 (b) Reduction of 15c. per 100 lbs. if packed in skeleton frames.

## No. 28—1,000,000 lbs., 25x38—45; cut 24x38 and 38x48 ins. flat.

Bryant Paper Company, 6 months, 7.69c.  
 Old Dominion Paper Company, 6 months, 9.949c.; 1 year, 9.949c.  
 (a)  
 Whitaker Paper Company, 6 months, 7.87c. (b).  
 (a) Reduction of 20c. per 100 lbs. if packed in skeleton frames.  
 (b) Reduction of 15c. per 100 lbs. if packed in skeleton frames.

## No. 29—1,500,000 lbs., 25x38—45; rolls, 38 ins. wide.

Bryant Paper Company, 6 months, 7.14c.  
 Old Dominion Paper Company, 6 months, 8.966c.; 1 year, 8.966c.  
 (a)  
 R. P. Andrews Paper Company, 6 months, 6.99c.  
 The Whitaker Paper Company, 6 months, 7.37c. (b).  
 (a) Reduction of 20c. per 100 lbs. if packed in skeleton frames.  
 (b) Reduction of 15c. per 100 lbs. if packed in skeleton frames.

## No. 30—10,000 lbs., 25x38—45 and 50; cut any size; flat, max. width 42 ins.

Bryant Paper Company, 6 months, 7.69c.  
 Old Dominion Paper Company, 6 months, 9.49c.; 1 year, 9.49c. (a).  
 (a) Reduction of 20c. per 100 lbs. if packed in skeleton frames.

**Sized and Supercalendered Printing (Sample B)**

## No. 31—10,000 lbs., 25x38—40 and 45, cut any size; flat, max. width 42 ins.

Bryant Paper Company, 6 months, 10.45c.  
 The Whitaker Paper Company, 6 months, 15.33c. (a).  
 (a) Reduction of 15c. per 100 lbs. if packed in skeleton frames.

**Half-tone Printing**

## No. 32—150,000 lbs., 25x38—70; cut 24x38 and 38x48 ins. flat.

Bryant Paper Company, 6 months, 8.59c.  
 Allied Paper Mills, 6 months, 7.518c.  
 International Paper Company, 6 months, 7.47c.  
 Old Dominion Paper Company, 6 months, 8.999c.; 1 year, 8.999c.  
 (a)  
 R. P. Andrews Paper Company, 6 months, 8.39c.  
 The Whitaker Paper Company, 6 months, 7.9c.  
 (a) Reduction of 20c. per 100 lbs. if packed in skeleton frames.

**Single-Coated Both Sides Book**

## No. 33—70,000 lbs., 25x38—70; cut any size; flat, max. width 42 ins.

Bryant Paper Company, 6 months, 9.23c.  
 Allied Paper Mills, 6 months, 9.09c.

**Double-Coated Both Sides Book (Sample A)**

## No. 34—150,000 lbs., 25x38—70 and 80; cut any size; flat, max. width 42 ins.

Bryant Paper Company, 6 months, 9.72c.  
 Allied Paper Mills, 6 months, 10.59c.

**Double-Coated Both Sides Book (Sample B)**

## No. 35—35,000 lbs., 25x38—70 and 80; cut any size; flat, max. width 42 ins.

Bryant Paper Company, 6 months, 13.22c.

**U S M O Writing**

## No. 36—4,000 lbs., White and Blue, Machine-dried, No. 16; rolls, 8½ ins. wide.

No bids.

**White French Folio**

## No. 37—1,500 lbs., No. 10; cut 17x22 ins.; flat, min. order, 750 lbs.

Dobler & Mudge, 6 months, 13c.; 1 year, 13c.  
 R. P. Andrews Paper Company, 6 months, 13c.; 1 year, 13c.

**Writing, White and Colored, High Machine Finish**

## No. 38—25,000 lbs., No. 13; cut 23x32 ins. flat.

The Champion Fiber Company, 6 months, 9.18c.; 1 year, 9.18c.  
 International Paper Company, 6 months, 8.07c.  
 The Aetna Paper Company, Dayton, Ohio, 6 months, 10.72c.; 1 year, 10.72c.  
 Old Dominion Paper Company, 6 months, 9.99c.; 1 year, 11.49c.  
 The Whitaker Paper Company, 6 months, 10.10c.

## No. 39—400,000 lbs., No. 16; cut 21¼x32½ and 26x34½ ins. flat.

The Champion Fiber Company, 6 months, 8.88c.; 1 year, 8.88c.  
 International Paper Company, 6 months, 7.62c.  
 The Aetna Paper Company, 6 months, 9.42c.; 1 year, 9.42c.  
 Old Dominion Paper Company, 6 months, 8.467c.; 1 year, 9.74c.  
 The Whitaker Paper Company, 6 months, 8.24c.

## No. 40—600,000 lbs., No. 20; cut 17x28 and 21x32 ins. flat.

The Champion Fiber Company, 6 months, 8.88c.; 1 year, 8.88c.  
 International Paper Company, 6 months, 7.47c.  
 The Aetna Paper Company, 6 months, 9.42c.; 1 year, 9.42c.  
 Old Dominion Paper Company, 6 months, 8.314c.; 1 year, 9.49c.  
 R. P. Andrews Paper Company, 6 months, 7.39c.  
 The Whitaker Paper Company, 6 months, 8.74c.

## No. 41—60,000 lbs., No. 13; rolls, min. width 8 ins., max. width 38 ins.

The Champion Fiber Company, 6 months, 8.43c.; 1 year, 8.43c.  
 International Paper Company, 6 months, 7.57c.  
 Old Dominion Paper Company, 6 months, 9.279c.; 1 year, 10.49c.  
 The Whitaker Paper Company, 6 months, 10.10c.

## No. 42—40,000 lbs. No. 16; rolls, min. width 8 ins., max. width 48 ins.

The Champion Fiber Company, 6 months, 8.38c.; 1 year, 8.38c.  
 International Paper Company, 6 months, 7.12c.  
 Old Dominion Paper Company, 6 months, 8.529c.; 1 year, 9.79c.  
 The Whitaker Paper Company, 6 months, 8.74c.

## No. 43—600,000 lbs., No. 20; rolls, min. width 8 ins., max. width 48 ins.

The Champion Fiber Company, 6 months, 8.08c.; 1 year, 8.08c.  
 International Paper Company, 6 months, 6.97c.  
 Old Dominion Paper Company, 6 months, 7.864c.; 1 year, 8.019c.  
 (a).

R. P. Andrews Paper Company, 6 months, 6.92c.  
 The Whitaker Paper Company, 6 months, 7.74c.  
 (a) Quantity for the last 6 months to be declared by August 30, shipments to be made to suit purchaser.

## No. 44—30,000 lbs., blue, green, pink, and yellow, Nos. 11 and 13; cut 17x28, 21x32, and 22x34 ins. flat.

Old Dominion Paper Company, 6 months, 16.49c.; 1 year, 16.49c.

## No. 45—50,000 lbs., blue, green, pink, and yellow, Nos. 16 and 20; cut 17x28, 21x32, and 22x34 ins. flat.

The Aetna Paper Company, 6 months, 9.98c.; 1 year, 9.98c.  
 Old Dominion Paper Company, 6 months, 10.99c.; 1 year, 10.99c.

**White Writing, Tub-Sized, Air or Loft Dried**

## No. 46—150,000 lbs., No. 13; cut 23x36, 24x38, and 28x34 ins. flat.

The Aetna Paper Company, 6 months, 13.11c.; 1 year, 13.11c.  
 The Whitaker Paper Company, 6 months, 16.06c.

## No. 47—800,000 lbs., No. 16; cut any sizes; flat, min. width 17 ins., max. width 32 ins.

The Aetna Paper Company, 6 months, 10.72c.; 1 year, 10.72c.  
 The Whitaker Paper Company, 6 months, 13.11c.

## No. 48—100,000 lbs., No. 16; cut 22¼ x 31½ ins.

The Aetna Paper Company, 6 months, 10.72c.; 1 year, 10.72c.  
 The Whitaker Paper Company, 6 months, 13.41c.

## No. 49—1,100,000 lbs., No. 20; cut any size; flat, min. width 17 ins., max. width 32 ins.

The Aetna Paper Company, 6 months, 10.72c.; 1 year, 10.72c.  
 The Whitaker Paper Company, 6 months, 13.11c.

No. 50—1,100,000 lbs., No. 20; cut any size; flat, min. width 17 ins., max. width 32 ins.

The Aetna Paper Company, 6 months, 10.72c.; 1 year, 10.72c.  
The Whitaker Paper Company, 6 months, 13.11c.

No. 51—700,000 lbs., No. 24; cut any size; flat, min. width 17 ins., max. width 32 ins.

The Aetna Paper Company, 6 months, 10.72c.; 1 year, 10.72c.  
The Whitaker Paper Company, 6 months, 13.11c.

No. 52—700,000 lbs., No. 24; cut any size; flat, min. width 17 ins., max. width 32 ins.

The Aetna Paper Company, 6 months, 10.72c.; 1 year, 10.72c.  
The Whitaker Paper Company, 6 months, 13.11c.

No. 53—5,000 lbs., No. 36; cut 19x24 and 20x28 ins. flat.

The Aetna Paper Company, 6 months, 14.42c.; 1 year, 14.42c.

#### Colored Writing, Tub-Sized, Air or Loft Dried

No. 54—250,000 lbs., blue, buff, green, dark pink, light pink, salmon, and yellow, No. 16; cut any size; flat, min. width 17 ins., max. width 32 ins.

The Aetna Paper Company, 6 months, 12.72c.; 1 year, 12.72c.  
The Whitaker Paper Company, 6 months, 14.61c.

No. 55—350,000 lbs., blue, buff, green, dark pink, light pink, salmon, and yellow, No. 20; cut any size; flat, min. width 17 ins., max. width 32 ins.

The Aetna Paper Company, 6 months, 12.62c.; 1 year, 12.62c.  
The Whitaker Paper Company, 6 months, 14.61c.

No. 56—350,000 lbs., blue, buff, green, dark pink, light pink, salmon, and yellow, No. 20; cut any size; flat, min. width 17 ins., max. width 32 ins.

The Aetna Paper Company, 6 months, 12.62c.; 1 year, 12.62c.  
The Whitaker Paper Company, 6 months, 14.61c.

No. 57—100,000 lbs., blue, buff, green, dark pink, light pink, salmon, and yellow, No. 24; cut any size; flat, min. width 17 ins., max. width 32 ins.

The Aetna Paper Company, 6 months, 12.62c.; 1 year, 12.62c.  
The Whitaker Paper Company, 6 months, 14.61c.

No. 58—100,000 lbs., blue, buff, green, dark pink, light pink, salmon, and yellow, No. 24; cut any size; flat, min. width 17 ins., max. width 32 ins.

The Aetna Paper Company, 6 months, 12.62c.; 1 year, 12.62c.  
The Whitaker Paper Company, 6 months, 14.61c.

#### Fine White Writing, Tub-Sized and Loft-Dried

No. 59—2,500 lbs., Nos. 28 and 32; cut 21x32 ins. flat, min. order, 2,500 lbs.

The R. P. Andrews Paper Company, 6 months, 24.9c.  
The Whitaker Paper Company, 6 months, 32.82c.

#### Safety Writing, Machine Finish

No. 60—10,000 lbs., blue, gray, green, pink, salmon, and yellow, No. 20; cut 17x28, 21x32, and 22x34 ins. flat.

No bids.

#### U S M O Blue Safety Writing, Machine Finish, Safety or Sensitive Design

No. 61—500,000 lbs., No. 16; rolls, 11 and 22 ins. wide.

R. P. Andrews Paper Company, 6 months, 19.6c.; 1 year, 19.6c.  
Whiting Paterson Company, Inc., Philadelphia, Pa., 6 months, 18.75c.; 1 year, 18.75c.  
The Perfect Safety Paper Company, Holyoke, Mass., 6 months, 20.0c.; 1 year, 20c.

#### Map, Lithograph Finish (Sample A)

No. 62—60,000 lbs., Nos. 16 and 20; cut any size, flat, max. width 44 ins.

Dobler & Mudge, 6 months, 13.0c.; 1 year, 13.0c.  
Old Dominion Paper Company, 6 months, 14.294c. (a); 13.364c. (b)  
The Whitaker Paper Company, 6 months, 13.75c.  
(b) F. o. b. Neenah, Wis.  
The Whitaker Paper Company, 6 months, 13.25c. f. o. b. Holyoke.

#### Map, Lithograph Finish, Tub-Sized, Air or Loft Dried (Sample B)

No. 63—80,000 lbs., Nos. 16 and 20; cut any size, flat, max. width 44 ins.

Dobler & Mudge, 6 months, and 1 year, 17c.

Old Dominion Paper Company, 6 months, c. l., 16.479c.; l. c. l., 16.794c.; 15.864c. f. o. b. Neenah, Wis.  
Whitaker Paper Company, 6 months, 18.11c.; 17.61c. f. o. b. Holyoke.

#### Thin Bond, White and Colored, Glazed and Unglazed, Tub-Sized, Machine or Air Dried

No. 64—160,000 lbs., white, No. 9; cut 17x28, 19x24, 21x32, and 22½x34½ ins. flat.

Dobler & Mudge, 6 months, 18.7c.; 1 year, 18.7c.  
The Old Dominion Paper Company, 6 months, 18.889c.; 1 year, 18.889c.  
R. P. Andrews Paper Company, 6 months, 18.78c.; 1 year, 18.78c.  
The Whitaker Paper Company, 6 months, 18.97c.

No. 65—30,000 lbs., white, No. 13; cut 21x32, 24x38, and 28x34 ins. flat.

Dobler & Mudge, 6 months, 18.1c.; 1 year, 18.1c.  
The Aetna Paper Company, 6 months, 13.11c.; 1 year, 13.11c.  
Old Dominion Paper Company, 6 months, 18.239c.; 1 year, 18.239c.  
R. P. Andrews Paper Company, 6 months, 18.13c.; 1 year, 18.13c.  
The Whitaker Paper Company, 6 months, 17.97c.

No. 66—3,000 lbs., buff, green, pink, salmon, and yellow, No. 9; cut 17x28, 21x32, and 22x34 ins. flat.

The Old Dominion Paper Company, 6 months, 20.94c.; 1 year, 20.94c. (a).

(a) Unglazed.

No. 67—20,000 lbs., blue, buff, green, pink, salmon, and yellow, No. 13; cut 21x32, 24x38, and 28x34 ins. flat.

The Aetna Paper Company, 6 months, 14.82c.; 1 year, 14.82c.  
Old Dominion Paper Company, 6 months, 19.93c.; 1 year, 19.93c. (a).

(a) Unglazed.

#### Stationery Bond, White and Colored, Glazed and Unglazed, Tub-Sized, Air or Loft Dried

No. 68—40,000 lbs., white, Nos. 16 and 24; cut 17x28, 18x23, and 21x32 ins. flat.

Dobler & Mudge, 6 months, 14c.; 1 year, 14c.  
The Aetna Paper Company, 6 months, 10.72c.; 1 year, 10.72c.  
Old Dominion Paper Company, 6 months, 18.999c.  
The Whitaker Paper Company, 6 months, 14.11c.

No. 69—300,000 lbs., white, No. 20; cut any size flat, min. width 17 ins., max. width 32 ins.

Dobler & Mudge, 6 months, 14c.; 1 year, 14c.  
The Aetna Paper Company, 6 months, 10.72c.; 1 year, 10.72c.  
Old Dominion Paper Company, 6 months, 17.999c.  
The Whitaker Paper Company, 6 months, 13.61c.

No. 70—300,000 lbs., white, No. 20; cut any size flat, min. width 17 ins., max. width 32 ins.

Dobler & Mudge, 6 months, 14c.; 1 year, 14c.  
The Aetna Paper Company, 6 months, 10.72c.; 1 year, 10.72c.  
Old Dominion Paper Company, 6 months, 17.999c.  
The Whitaker Paper Company, 6 months, 13.61c.

No. 71—10,000 lbs., blue, green, pink, salmon, and yellow, Nos. 16 and 20; cut any size flat, min. width 17 ins., max. width 32 ins.

Dobler & Mudge, 6 months, 15c.; 1 year, 15c.  
The Aetna Paper Company, 6 months, 17.42c.; 1 year, 17.42c.

#### Fine Bond, White, Glazed and Unglazed, Tub-Sized and Loft-Dried

No. 72—2,500 lbs., Nos. 16, 20, and 24; cut 16x21 and 17x22 ins. flat.

R. P. Andrews Paper Company, 6 months, 31.8c.  
The Whitaker Paper Company, 6 months, 31.46c.

#### Declaration Bond, Tub-Sized and Loft-Dried

No. 73—5,000 lbs., No. 20; cut 17x22 ins. flat, min. order, 2,000 lbs.

Southworth Company, Mittineague, Mass., 1 year, 35c.  
R. P. Andrews Paper Company, 6 months, 32c.

#### Parchment Deed

No. 74—1,000 lbs., Nos. 32 and 36; cut 33x34 ins. flat, min. order, 1,000 lbs.

Southworth Company, 1 year, 37c.  
R. P. Andrews Paper Company, 6 months, 49.7c.

#### Commercial Ledger, White, Tub-Sized, Air or Loft Dried

No. 75—80,000 lbs., No. 28; cut 17x28, 18½x36, 21x32, 28x29, and 28x34 ins. flat.

Dobler & Mudge, 6 months, 20.5c.; 1 year, 20.5c.

The Aetna Paper Company, 6 months, 13.82c.; 1 year, 13.82c.  
The Old Dominion Paper Company, 6 months, 15.978c.; 1 year, 18.068c.  
R. P. Andrews Paper Company, 6 months, 17.93c.; 1 year, 17.93c.  
Carew Manufacturing Company, South Hadley Falls, Mass., 6 mos., 21.4c.  
The Whitaker Paper Company, 6 months, 16.97c.

No. 76—60,000 lbs., No. 32; cut 21x32 and 23x36 ins. flat.

Dobler & Mudge, 6 months, 20.5c.; 1 year, 20.5c.  
The Aetna Paper Company, 6 months, 13.82c.; 1 year, 13.82c.  
Old Dominion Paper Company, 6 months, 15.978c.; 1 year, 18.068c.  
R. P. Andrews Paper Company, 6 months, 17.93c.; 1 year, 17.93c.  
Carew Manufacturing Company, 6 months, 21.4c.  
The Whitaker Paper Company, 6 months, 16.97c.

No. 77—130,000 lbs., Nos. 36 and 40; cut 19x24, 20x28, and 21x32 ins. flat. (Strength shall be not less than 58 points, No. 40.)

Dobler & Mudge, 6 months, 20.5c.; 1 year, 20.5c.  
The Aetna Paper Company, 6 months, 13.82c.; 1 year, 13.82c.  
Old Dominion Paper Company, 6 months, 15.978c.; 1 year, 18.068c. on No. 36 only.  
R. P. Andrews Paper Company, 6 months, 17.93c.; 1 year, 17.93c.  
Carew Manufacturing Company, 6 months, 21.4c.  
The Whitaker Paper Co., 6 months, 16.97c.

No. 78—5,000 lbs., No. 48; cut 21x32½ ins. flat. (Strength shall be not less than 65 points.)

Dobler & Mudge, 6 months, 20.5c.; 1 year, 20.5c.  
R. P. Andrews Paper Company, 6 months, 17.93c.; 1 year, 17.93c.  
Carew Manufacturing Company, 6 months, 21.4c.  
The Whitaker Paper Company, 6 months, 19.17c.

#### Commercial Ledger, Colored, Tub-Sized, Air or Loft Dried

No. 79—70,000 lbs., blue, buff, green, pink, salmon, and yellow, Nos. 28, 32, and 36; cut 17x28, 18½x36, 19x24, 21x32, and 23x36 ins. flat.

Dobler & Mudge, 6 months, 21.5c.; 1 year, 21.5c.  
The Aetna Paper Company, 6 months, 14.99c.; 1 year, 14.99c.  
Old Dominion Paper Company, 6 months, 19.998c.; 1 year, 19.998c.  
The Whitaker Paper Company, 6 months, 18.47c.

No. 80—40,000 lbs., blue, buff, green, pink, salmon, and yellow, No. 48; cut 21x32½ ins. flat. (Strength shall be not less than 65 points.)

Dobler & Mudge, 6 months, 21.5c.; 1 year, 21.5c.  
The Whitaker Paper Company, 6 months, 19.27c.

No. 81—15,000 lbs., blue, buff, green, pink, salmon, and yellow, No. 60; cut 21x32½ ins. (Without watermark. Strength shall be not less than 80 points.)

Dobler & Mudge, 6 months, 21.5c.; 1 year, 21.5c.  
The Whitaker Paper Company, 6 months, 22.27c.

#### Ledger, White, Tub-Sized and Loft-Dried

No. 82—60,000 lbs., No. 24; cut 17x28, 22¼x31½, and 24x38 ins. flat.

Old Dominion Paper Company, 6 months, 38.489c.  
R. P. Andrews Paper Company, 6 months, 31.74c.  
Carew Manufacturing Company, 6 months, 32.7c.  
Whitaker Paper Company, 6 months, 27.82c.

No. 83—70,000 lbs., No. 28; cut 17x28, 21x32, 23x36, and 24x38 ins. flat.

Old Dominion Paper Company, 6 months, 38.489c.  
R. P. Andrews Paper Company, 6 months, 31.74c.  
Carew Manufacturing Company, 6 months, 32.7c.  
The Whitaker Paper Company, 6 months, 27.82c.

No. 84—60,000 lbs., No. 32; cut 17x28, 18½x42, 21x32, and 23x36 ins. flat.

Old Dominion Paper Company, 6 months, 38.489c.  
R. P. Andrews Paper Company, 6 months, 31.74c.  
Carew Manufacturing Company, 6 months, 32.7c.  
The Whitaker Paper Company, 6 months, 27.82c.

No. 85—30,000 lbs., No. 36; cut 17x28, 20x28, and 24x38 ins. flat.

Old Dominion Paper Company, 6 months, 38.489c.  
Carew Manufacturing Company, 6 months, 32.7c.  
The Whitaker Paper Company, 6 months, 27.82c.

No. 86—25,000 lbs., No. 40; cut 21x32½ and 21x42 ins. flat. (Strength shall be not less than 88 points.)

The Old Dominion Paper Company, 6 months, 38.489c.  
Carew Manufacturing Company, 6 months, 32.7c.  
The Whitaker Paper Company, 6 months, 27.82c.

No. 87—50,000 lbs., No. 48; cut 20½x24¾, 21x32½, and 22¼x31½ ins. flat. (Strength shall be not less than 100 points.)

Old Dominion Paper Company, 6 months, 38.489c.  
Carew Manufacturing Company, 6 months, 32.7c.  
The Whitaker Paper Company, 6 months, 27.82c.

#### Heavy Ledger, White, Single-Ply, Tub-Sized and Loft-Dried

No. 88—150,000 lbs., Heavy Ledger, White, Single-ply, Tub-sized and Loft-dried, No. 60; cut 20½ x 30½ and 21x32½ ins. flat.

Old Dominion Paper Company, 6 months, 26.23c.; 1 year, 26.23c.  
R. P. Andrews Paper Company, 6 months, 26.1c.; 1 year, 26.1c.  
Carew Manufacturing Company, 6 months, 29.7c.  
The Whitaker Paper Company, 6 months, 26.42c.

#### White Tissue

No. 89—1,000 lbs., 20x30—8 lbs. flat. min. order, 500 lbs.

R. P. Andrews Paper Company, 6 months, 32.5c.

#### Facing Stereo Tissue

No. 90—600 lbs., 19x24—4½lbs. min. order, 300 lbs.

R. P. Andrews Paper Company, 6 months, 74.8c.; 1 year, 74.8c.  
Dobler & Mudge, 6 months, 90.0c.; 1 year, 90.0c.  
Old Dominion Paper Company, 6 months, 76.67c.; 1 year, 76.67c.  
The Whitaker Paper Company, 6 months, 79.0c.

#### Smooth Cover, Colored

No. 91—150,000 lbs., dark blue, light blue, brown, granite, green, pink, tea, and yellow, 20x26—50; cut 20x25 and 33x46 ins. flat, in wrapped bundles, with projecting colored-paper marker between reams.

Knowlton Brothers, Watertown, N. Y., 6 months, 8.84c.; 1 year, 8.84c.  
Old Dominion Paper Company, 6 months, 10.347c.  
R. P. Andrews Paper Company, 6 months, 8.43c.  
The Whitaker Paper Company, 6 months, 8.55c.

#### Rough Cover, Colored (Sample A)

No. 92—15,000 lbs., quaker drab, robin's egg, and terra cotta, 20x25, 48 flat, in wrapped bundles, with projecting colored-paper marker between reams.

Knowlton Brothers, 6 months, 8.59c.; 1 year, 8.59c.  
Old Dominion Paper Company, 6 months, 10.347c.  
R. P. Andrews Paper Company, 6 months, 8.43c.  
The Whitaker Paper Company, 6 months, 8.55c.

#### Rough Cover, Colored (Sample B)

No. 93—80,000 lbs., dawn, sage, goblin blue, suede, khaki, and moss green, 20x25, 48 flat, in wrapped bundles, with projecting colored-paper marker between reams.

Knowlton Brothers, 6 months, 9.43c.; 1 year, 0.34c.  
Old Dominion Paper Company, 6 months, 10.847c.  
R. P. Andrews Paper Company, 6 months, 8.73c.  
The Whitaker Paper Company, 6 months, 9.27c.

#### Coated Cover, Colored

No. 94—75,000 lbs., india tint, light green, and primrose, 26½x41, 104 flat.

Allied Paper Mills, 6 months, 13c.

#### Cloth-Lined Cover

No. 95—5,000 sheet, brown, quaker drab, russet, and white, 20x26 65, (a) cut 20x25 ins., flat; (b) cut 21x32 ins., flat; (c) cut 24x36 ins., flat.

Cut 20x25, Dobler & Mudge, 6 months, 7.8c.  
R. P. Andrews Paper Company, 6 months, 8.03c.  
Cut 21x32, Dobler & Mudge, 6 months, 12.5c.  
R. P. Andrews Paper Company, 6 months, 12.54c.  
Cut 24x36, Dobler & Mudge, 6 months, 14c.  
R. P. Andrews Paper Company, 6 months, 14.4c.

#### Kraft Wrapping

No. 96—40,000 lbs., 24x36—50 to 80; cut any size flat, in wrapped bundles, with projecting colored-paper marker between reams.

Maurice O'Meara Company, 6 months, 7.45c.  
Graham Paper Company, St. Louis, Mo., 6 months, 7.48c.; quantity to include wrapping, twine, and cord.  
Old Dominion Paper Company, 6 months, 7.999c.  
The Whitaker Paper Company, 6 months, 7.11c.

**Wood Manila Wrapping**

No. 97—120,000 lbs., 24x36—38 to 60; cut 21x32 and 25x38 flat, in wrapped bundles, with projecting colored-paper marker between reams.

Samuel S. Alcorn, Philadelphia, 6 months, 5.95c.  
Maurice O'Meara, 1 year, 5.74c.  
Graham Paper Company, 6 months, 5.77c. on 60,000 pounds.  
Old Dominion Paper Company, 6 months, 5.789c.; 1 year, 6.189c.  
R. P. Andrews Paper Company, 6 months, 5.74c.  
Whiting-Paterson Company, Inc., 6 months, 5.75c.; 1 year, 5.75c.

No. 98—700,000 lbs., 24x36—38 to 60; rolls, min. width 6 ins., max. width 48 ins.

Samuel S. Alcorn, 6 months, 5.70c.  
Maurice O'Meara, 1 year, 5.74c.  
Graham Paper Company, 6 months, 5.52c. on 350,000 pounds.  
Old Dominion Paper Company, 6 months, 5.549c.; 1 year, 5.949c.  
R. P. Andrews Paper Company, 6 months, 5.46c.  
Whiting-Paterson Company, Inc., 6 months, 5.25c.; 1 year, 5.25c.

**Sulphite Manila Wrapping**

No. 99—40,000 lbs., 24x36—50 to 80; cut any size flat, in wrapped bundles, with projecting colored-paper marker between reams.

Samuel S. Alcorn, 6 months, 7.25c.  
Maurice O'Meara, 1 year, 6.24c.  
Old Dominion Paper Company, 6 months, 8.49c.  
R. P. Andrews Paper Company, 6 months, 7.67c.; 1 year, 7.67c.

**Rope Manila Wrapping**

No. 100—10,000 lbs., 24x36—60; cut 24x38, 27x38, and 40x42 ins. flat, in wrapped bundles, with projecting colored-paper marker between reams.

No bids.

No. 101—15,000 lbs., 24x36—70; cut 24x38 ins. flat, in wrapped bundles, with projecting colored-paper marker between reams.

No bids.

No. 102—25,000 lbs., 24x36—80; cut 27x38, 33x33, and 38x38 ins. flat, in wrapped bundles, with projecting colored-paper marker between reams.

The Whitaker Paper Company, 6 months, 12.43c.

No. 103—50,000 lbs., 24x36—140; cut 24x38 ins. flat, in wrapped bundles, with projecting colored-paper marker between reams.

The Whitaker Paper Company, 6 months, 12.43c.

No. 104—12,000 lbs., 24x36—70; rolls, min. width 6 ins., max. width 36 ins.

No bids.

**Oiled Manila Tympan**

No. 105—15,000 lbs., 24x36—86; rolls, 19, 38, 48, and 55 ins. wide, max. weight 150 lbs.

No bids.

**Manila Board**

No. 106—40,000 lbs., 22½x28½—75; rolls, 21¾ ins. wide.

Samuel S. Alcorn, 6 months, 5.95c.  
Maurice O'Meara, 1 year, 5.25c.

**Manila Cardboard**

No. 107—20,000 lbs., 22½x28½—200; cut 17x28, 21x32, and 22½x28½ ins. flat, in wrapped bundles, with projecting colored-paper marker between each 100 sheets.

Samuel S. Alcorn, 6 months, 6.25c.

**Sulphite Manila, High Finish**

No. 108—200,000 lbs., 24x36—133; cut any size flat, in wrapped bundles, with projecting colored-paper marker between reams.

Samuel S. Alcorn, 6 months, 6.70c.  
Maurice O'Meara, 1 year, 6.95c.  
Old Dominion Paper Company, 6 months, 8.89c.  
R. P. Andrews Paper Company, 6 months, 7.67c.; 1 year, 7.67c.

No. 109—80,000 lbs., 24x36—80; rolls, 18 ins. wide.

Samuel S. Alcorn, 6 months, 7.0c.  
Maurice O'Meara, 1 year, 6.95c.  
Old Dominion Paper Company, 6 months, 8.84c.  
R. P. Andrews Paper Company, 6 months, 7.54c.; 1 year, 7.54c.

**Manila Tag Board, Calendered**

No. 110—80,000 lbs., 22½x28½—75; rolls, 24 and 26¼ ins. wide.

Maurice O'Meara, 1 year, 6.24c.  
Old Dominion Paper Company, 6 months, 8.89c.  
R. P. Andrews Paper Company, 6 months, 7.74c.; 1 year, 7.74c.

**Colored Cardboard**

No. 111—10,000 lbs., ash gray, blue, buff, green, lemon, and orange, 22x28—196 flat, in wrapped bundles, with projecting colored-paper marker between each 100 sheets; min. order 2,000 lbs.

Old Dominion Paper Company, 6 months, 10.99c.

**White China Board**

No. 112—20,000 lbs., 22x28—196 flat, in wrapped bundles, with projecting colored-paper marker between each 100 sheets; min. order, 4,000 lbs.

Old Dominion Paper Company, 6 months, 9.99c.

**Colored Bristol Board**

No. 113—220,000 lbs., buff, blue, gray, green, melon, pink, quaker drab, and yellow, 21x31—102 flat, in wrapped bundles with projecting colored-paper marker between each 100 sheets.

Old Dominion Paper Company, 6 months, 7.99c.

No. 114—300,000 lbs., blue, brown, gray, green, melon, pink, and yellow, 22½x28½—100; rolls, 20 ins. wide.

Old Dominion Paper Company, 6 months, 7.99c.

No. 115—300,000 lbs., blue, brown, gray, green, melon, pink, and yellow, 22½x28½—100; rolls, 20 ins. wide.

Old Dominion Paper Company, 6 months, 7.99c.

**White and Colored Bristol Board, No. 1**

No. 116—50,000 lbs., 22½x28½—120; cut 21x32 and 22½x28½ ins. flat, in wrapped bundles, with projecting colored-paper marker between each 100 sheets.

Dobler & Mudge, 6 months, 13.5c.; 1 year, 13.5c.  
Old Dominion Paper Company, 6 months, 13.99c.; 1 year, 13.99c.  
R. P. Andrews Paper Company, 6 months, 12c.; 1 year, 12c.  
The Whitaker Paper Company, 6 months, 12.18c.

No. 117—5,000 lbs., blue, brown, gray, green, melon, pink, and yellow, 22½x28½—100 flat, in wrapped bundles, with projecting colored-paper marker between each 100 sheets.

No bids.

**U. S. Postal Card Cream Bristol**

No. 118—7,000,000 lbs., 22½x28½—104; rolls, 44½ ins. wide.

The Champion Fiber Company, 6 months, 8.25c.; 1 year, 8.25c.  
Old Dominion Paper Company, 6 months, 8.649c.; 1 year, 8.649c.  
American Writing Paper Company, Holyoke, Mass., 6 months, 8.25c.; 1 year, 8.25c.  
The Whitaker Paper Company, 6 months, 8.35c.

**White and Colored Index Bristol Board**

No. 119—2,000 lbs., 22½x28½—181 flat.

Old Dominion Paper Company, 6 months, 27.89c.

No. 120—10,000 lbs., blue, buff, fawn, green, pink, salmon, and yellow, 22½x28½—181 flat.

Old Dominion Paper Company, 6 months, 29.99c.

**White Paraffin**

No. 121—1,500 lbs., 24x38—16 flat, min. order, 500 lbs.

No bids.

**White and Colored Noncurling Gunned**

No. 122—4,000 lbs., White, 17x22—23, and 20x24—30 flat, min. order, 1,000 lbs.

Dennison Manufacturing Company, Framingham, Mass., 6 months, 174 reams, 17x22, 23 pounds, \$4.87 per ream, net; 129 reams, 20x25, 37 pounds, \$6.04 per ream; 167 reams, 17x22, 24 pounds, \$3.97 per ream, net; 121 reams, 20x25, 33 pounds, \$5.01 per ream, net, on 6 months.

Dobler & Mudge, 6 months, 17c.  
Old Dominion Paper Company, 6 months, 17.49c.  
R. P. Andrews Paper Company, 6 months, 15.3c.; 1 year, 15.3c.

No. 123—250 lbs., blue and pink, 17x22—23, and 20x24 ins. 30 flat, min. order, 250 lbs.

Dennison Manufacturing Company, 6 months, \$9.10 on sample.  
Old Dominion Paper Company, 6 months, 20.49c.



**Blotting**

- No. 124—3,000 lbs., white, blue, and pink, 19x24—80 flat, in wrapped bundles, with projecting colored-paper marker between reams, min. order, 500 lbs.

Dobler & Mudge, 6 months, 9.5c; 1 year, 9.5c.  
Old Dominion Paper Company, 6 months, 8.89c.; 1 year, 8.89c.  
R. P. Andrews Paper Company, 6 months, 8.86c.; 1 year, 8.86c.  
The Whitaker Paper Company, 6 months, 9.21c.

**Stereotype Molding, White**

- No. 125—3,000 lbs., White Stereotype Molding Paper for paper process, 19x24—50 lbs. flat, in wrapped bundles, with projecting colored-paper marker between reams, min. order 1,000 lbs.

Dobler & Mudge, 6 months and 1 year, 11c.  
Old Dominion Paper Company, 6 months, 10.49c.; 1 year, 10.49c.  
R. P. Andrews Paper Company, 6 months, 10.4c.; 1 year, 10.4c.  
The Whitaker Paper Company, 6 months, 12c.

**Stereotype Molding, Red**

- No. 126—2,500 lbs., 19x24—20 flat, in wrapped bundles, with projecting colored-paper marker between reams, min. order, 1,000 lbs.

The Whitaker Paper Company, 6 months, 14.60c.

**Offset, for Web Presses**

- No. 127—15,000 lbs., 24x36—30; rolls, 39 ins. wide, min. order, 2,000 lbs.

Old Dominion Paper Company, 6 months, 9.74c.  
R. P. Andrews Paper Company, 6 months, 8.14c.; 1 year, 8.14c.

**Plate Wiping, for Embossing Presses**

- No. 128—2,500 lbs., 24x36—60; rolls, without breaks or scraps, wound solid at an even tension, 4, 5, 6, 7, and 8 ins. wide, max. diameter 12 ins. with 1 $\frac{3}{4}$ -inch hole in the center.

R. P. Andrews Paper Company, 6 months, 8.9c.

**Back Lining, for Case-Making Machine**

- No. 129—3,000 lbs., 24x36—90; rolls, 24 ins. wide, min. order 1,000 lbs.

No bids.

**Lining, for Headband, Lining, and Crashing Machine**

- No. 130—2,000 lbs., 24x36—80; rolls, 24 ins. wide, min. order, 2,000 lbs.

The Whitaker Paper Company, 6 months, 7.11c.

**Tablet Stripping**

- No. 131—1,000 lbs., 24x36—40; rolls, 24 ins. wide, min. order, 500 lbs.

The Whitaker Paper Company, 6 months, 7.11c.

**Pressboard**

- No. 132—1,000 lbs., 24x32 ins., weight 80 lbs. to 144 sheets flat, min. order, 1,000 lbs.

Dobler & Mudge, 6 months, 18.5c.  
R. P. Andrews Paper Company, 6 months, 11.34c.

**Binder's Boards**

- No. 133—500 lbs., News Board, 26x38—Nos. 100 and 120. (To be trimmed square on four sides.) Min. order, 500 lbs.

No bids.

- No. 134—500,000 lbs., Chip Board, 26x38—No. 50.

R. P. Andrews Paper Company, 6 months, 3.57c.; 1 year, 3.57c., c. l.  
R. P. Andrews Paper Company, 6 months, 3.67c.; 1 year, 3.67c., l. c. l.

- No. 135—40,000 lbs., Strawboard, 26x38—No. 50.

R. P. Andrews Paper Company, 6 months, 2.625c.; 1 year, 2.625c.

- No. 136—10,000 lbs., Strawboard, lined, 26x38—No. 50.

No bids.

- No. 137—40,000 lbs., Box Board, lined one side, rolled, flat, nonwarping, of even thickness, approximately, .06 inch, and free from lumps, irregularities, and defects; size, 24 $\frac{1}{2}$ x34—35 sheets to the bundle of 50 lbs.

R. P. Andrews Paper Company, 6 months, 4.068c.; 1 year, 4.068c.

- No. 138—600,000 lbs., Binder's Board, No. 2 quality, rolled, flat, nonwarping, of even thickness, and free from lumps, irregularities, and defects. Boards must be springy and corners should not break readily when bent sharply. Nos. 16 to 40, 25x30 ins.

R. P. Andrews Paper Company, 6 months, 4.812c., c. l.; 6 months, 5.112c., l. c. l.

- No. 139—40,000 lbs., Binder's Board, No. 1 quality, medium hard-rolled, flat, nonwarping, of even thickness and free from lumps, irregularities, and defects. Boards must be decidedly springy and corners should not break readily when bent sharply. Nos. 12 to 30, 25x30 ins.

R. P. Andrews Paper Company, 6 months, 5.637c., l. c. l.

- No. 140—120,000 lbs., Binder's Board, best quality, hard-rolled, flat, nonwarping, of even thickness and free from lumps, irregularities, and defects. Boards must be decidedly springy and corners should not break readily when bent sharply. Nos. 18 to 45, 19x30 ins.; Nos. 16 to 90, 22x26 ins.

R. P. Andrews Paper Company, 6 months, 5.6c., c. l.; 6 months, 5.9c., l. c. l.

- No. 141—20,000 lbs., Trunk Board, medium hard-rolled, flat, nonwarping, of even thickness and free from lumps, irregularities, and defects. Boards must be decidedly springy and corners should not break readily when bent sharply. Size 34x44 ins., Nos. 6 to 10.

R. P. Andrews Paper Company, 6 months, 5.375c.

**Bids and Awards for Government Paper**

WASHINGTON, D. C., January 31, 1923.—The Government Printing Office will open bids on February 7 for 14,400 pounds (400 reams) of 21 x 32—36 No. 20 high m. f. yellow writing paper.

The purchasing officer of the Government Printing Office will open bids on February 5 for 19,500 pounds (300 reams) 32 x 48—65 and 26,500 pounds (500 reams) 29 x 43—53 white rag machine finish printing paper.

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

1,000 sheets Executive Cover Paper, 22 $\frac{1}{2}$  x 28 $\frac{1}{2}$ , ripple finish: R. P. Andrews Paper Company, \$7.25 per hundred sheets; D. L. Ward Company, \$7.40.

10,000 pounds 25 x 38—50 White Antique Printing Paper: Bryant Paper Company, \$.0775; R. P. Andrews Paper Company, \$.0709; Dobler & Mudge, \$.075; Old Dominion Paper Company, \$.07568; Garrett Buchanan Company, \$.08; International Paper Company, \$.0745; The Broderick Paper Company, \$.075.

5,000 9 x 14 $\frac{1}{4}$  Manila Filing Jackets: R. P. Andrews Paper Company, \$24.90 per M; U. S. Envelope Company, \$33.60; Keystone Envelope Company, at \$47.00.

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

50,000 pounds 28 x 38—No. 50 Chip Board: The C. L. La Boiteaux Company, at \$62.00 per ton; Mathers-Lamm Paper Company, \$59.90; R. P. Andrews Paper Company, \$78.40; The Whitaker Paper Co., \$67.50; Dobler & Mudge, \$68.75; Denison-Pratt Paper Company, \$71.15; The Ohio Boxboard Company, \$60.00; Philip Rudolph & Son, Inc., \$70.00.

1,000 White Cardboard Shipping Tags, 2 $\frac{3}{8}$  x 4 $\frac{7}{8}$ —Denney Tag Company, Inc., at \$1.78 per M; The Whitaker Paper Company, \$1.43; Old Dominion Paper Company, \$2.49; International Tag Company, \$2.76; Gimbel Brothers, \$1.60.

Bids will be opened at the Government Printing Office on February 5 for 39,050 pounds (400 reams) of various sizes Sulphite Manila Paper.

The P. H. Glatfelter Company has been awarded the contract for furnishing the Government Printing Office with 38,000 pounds (500 reams) of No. 1 38 x 48—76 white m. f. printing paper at \$.0675, bids for which were opened on January 17.

## H. F. E. KENT HEADS CANADIAN PULP & PAPER ASSOCIATION

**Annual Meeting at Montreal Last Week Is Most Successful in Point of Attendance and General Interest Held in the Ten Years of the Organization's Existence—Proposal For Establishment of Plant For Scientific and Industrial Research Is Postponed for Year—Secretary Edward Beck Presents Interesting Survey of Conditions in the Pulp and Paper Industry.**

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., January 26, 1923.—The annual meeting of the Canadian Pulp and Paper Association, held here today, was, in point of attendance and general outlook, the most successful which has been held in the ten years of the organization's existence. The



H. F. E. KENT

delegates present included representatives from practically every pulp and paper concern in Canada, and the utmost optimism was shown as to the future of the industry in this country.

### Research Bureau Delayed a Year

One of the most important proposals which came before the meeting was the report of the Committee on Industrial Research, on the proposal to establish a plant for scientific and industrial research in connection with the industry. The committee reported favorably on the project, and recommended the appropriation of the sum of \$30,000 for the installation of the necessary plant at Montreal to carry on the work. A long discussion took place on the proposal, a number of the members stating that they had not received sufficient information to warrant them in voting so large a sum of money for the association to embark on so ambitious and far-reaching a project. Other members enthusiastically endorsed the proposal. Ultimately it was evident that those who refused to commit themselves at present were in the majority, and as it was considered that there should be unanimous endorsement of the project, it was decided to postpone consideration of the proposal for another year. The committee was continued, under the chairmanship of Col. C. D. L. Jones, of Sault Ste. Marie, and it was asked meantime to collect and disseminate all possible information, so as to bring the matter to a final decision at next year's meeting.

### Great Progress of the Industry

The members were much interested in a review of the progress of the industry in Canada during the ten years of the association's existence. This review was presented by Edward Beck, the secretary, in the absence of George McKee, who retired from the presidency recently, on leaving the Donnacona Paper Company to take up a position in the United States. Mr. Beck showed that during the ten years the production of paper in Canada had increased from 350,000 tons per annum to 1,090,000 tons, about 60 per cent of which was produced in Quebec Province. The total production, he said, now comprised 15 per cent of all Canada's exports and 25 per cent of her exports of manufactured goods. While the immediate outlook favored optimism, there was danger, particularly in the output of news print, of overrunning the permanent demand of the market. To prevent this, he recommended that efforts be made to explore the markets of the world, so as to open up new fields for the Canadian product.

### Hostility in Australia

In a discussion on the report, some members complained that Canadian news print was being discriminated against in Australia in favor of the British product. In regard to this Mr. Beck mentioned that the Hon. James Robb, Minister of Trade and Commerce for Canada, had this week returned from Australia, and although, owing possibly to the general elections there, he had not been able to negotiate a trade agreement, no one yet knew just what assurances he had brought back, or what might develop from his visit. But it was evident that a propaganda hostile to Canadian news print had been carried on, with the result of present discrimination against Canada, in favor of British news print. This was either through a misunderstanding of Canadian conditions, or through deliberate intent. It was decided to approach the Government asking it not to relax its efforts to get Canadian products admitted on as favorable terms as the British product.

### The New President

The election of officers resulted in two Toronto men being chosen for office, H. F. E. Kent, of the Kinleith Paper Mills, as president, and George Carruthers as first vice-president.

### Speeches at Luncheon

At the annual luncheon of the association, held at the Ritz-Carlton Hotel, the principal speaker was Sir Edmund Walker, of Toronto, president of the Canadian Bank of Commerce. He pointed out that the pulp and paper industry in Canada had made a more rapid recovery than any other business, and its importance to the country was manifest to all. He spoke of the need of economy, saying that never had so much money been spent on expensive amusement as now. As an instance of economy he mentioned that the Canadian Bank of Commerce saved and sold all its waste paper, to be re-manufactured, to the extent of \$7,000 a year. It might seem petty for a bank manager to consider such a thing, but it was true economy. While the pulp and paper men were deeply interested in forest conservation and scientific research, little interest had been shown in this saving of material, such as had been practised by Japan and Italy, which produced splendid and artistic paper from rubbish. This was real conservation, as much so as in the chemical and engineering problems of the industry. He regretted that the Dominion Government had not yet done anything towards the establishment of a Bureau of National Research, which was tremendously needed in Canada, but he hoped that it would do something along that line before very long. Referring to the need of lower costs and lower freight charges in Canada, he said: "We cannot get these without lower prices for labor, but the labor unions object to an immigration which will ease the labor situation. No one likes to talk lower wages, but high wages are the insuperable barrier to the recovery of things here, and someone should have the courage to say it. And I would say the same thing to the labor

(Continued on page 24)

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## CANADIAN PULP & PAPER ASSOCIATION MEETS

(Continued from page 22)

unions in meeting, because we can only get steady employment and cheaper costs by reducing labor costs. That would cheapen everything, and, while improving business, would give workmen more comfort in return for their work, if less money, and the comfort they get from their work is the true criterion. Our salvation depends on a free supply of unskilled labor, and we must get it."

S. E. Thompson, vice-president of the American Newspaper Publishers' Association, and general manager of the Chicago *Tribune*, followed with an analysis of the relations between the pulp and paper men, as the producers, and the newspaper publishers as the consumers. He argued that instead of trying to make cut-throat profits out of each other, as the market went up or down, they should come together for mutual understanding, so as to stabilize the market, get a steadier and better supply of news print, and so enable the publishers to get better, and in the end cheaper, paper, to the good of the industry as a whole.

### The Annual Banquet

The annual banquet, held the same evening, was so largely attended that the ballroom of the Ritz-Carlton Hotel proved inadequate to accommodate all the guests. The new president, H. F. E. Kent, took the chair, and the guests at the head table included Sir Edmund Walker, Prof. Stephen Leacock, Albert Halstead (Consul-General for the United States), M. Clarholm (Consul-General for Sweden), S. Steckmest (Vice-Consul for Norway), A. E. Clark (president of the Canadian Lumber Association), Fred. J. Campbell, Murray Williams, James Bothwell, Charles A. Gordon, S. E. Thomason (Chicago), P. D. Wilson, and others. There was no formal program of speeches, and after the toast of "The King" had been honored, the program was given up to a vaudeville entertainment, admirably carried out under the direction of Professor Leacock.

### Reports Presented at Annual Meeting

In addition to the matters mentioned above, many subjects of interest and importance were brought before the members at the business meeting, in the form of the annual reports from the chairmen of the different sections of the association.

### Survey of Conditions In the Industry

Edward Beck, secretary of the association, in the absence of the retiring president, gave an interesting survey of conditions in the pulp and paper industry. He said:

At the opening of this, the tenth annual meeting of our association, a brief retrospective survey may perhaps be in order. The decade of which this meeting marks the termination has witnessed the evolution of our industry from a position of minor importance to one of the first magnitude, if, indeed, it cannot now be said to dominate in most respects Canada's manufacturing industries. Its growth has been at once so extensive and so rapid that only when we stand aside, as on occasions such as this, and give consideration to its progress can we begin to appreciate it at its fullest extent.

Mere figures are at best uninspiring but it is worthy of note that ten years ago the paper industry was so little regarded by the Dominion Bureau of Statistics that no records were made of its activities. Attempts were made by another government department to compile annual returns showing the amount of pulpwood consumed in Canada, but little adequate official information as to the industry as a whole is available for any year prior to 1917 when the present system of compiling an annual census was inaugurated.

### Some Interesting Comparisons

The lack of official records for the year 1913 makes it difficult to draw comparisons between that year and those given in the census of 1921, the latest available. However, there are some fig-

ures which can be used. For instance, in 1913 there were 64 mills in operation, while the 1921 figures show 100 mills operating, an increase of 56 per cent. In 1913 the consumption of pulpwood by Canadian mills was 1,109,034 cords compared with 2,180,578 cords in 1921, an increase in 1921 of nearly 100 per cent. Our production of news print in 1913 amounted to 350,000 tons; in 1921 the production was 805,114 tons or 130 per cent greater, while in 1922 it exceeded 1,090,000, or an increase of 300 per cent in the ten-year period. Total wood pulp of all kinds produced in 1913 amounted to 854,624 tons; in 1921 it amounted to 1,544,027 tons, an increase of 80 per cent.

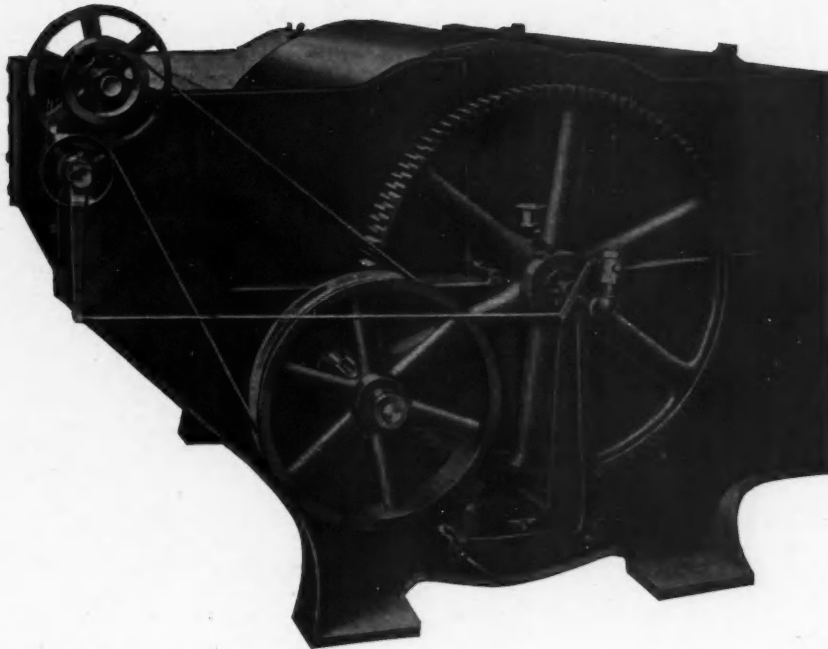
The government records start with the year 1917 and the latest compiled are those covering 1921. Taking these two records for comparison, covering a period merely four out of the ten years, it is shown that the total number of establishments increased from 83 to 100 or 20 per cent; the invested capital from \$186,787,405 to \$379,812,751, or 117 per cent; the amount paid in wages and salaries from \$20,358,019 to \$34,199,090, or 68 per cent, and the total value of the output from \$96,340,327 to \$151,603,165, or 56 per cent; the total paper tonnage from 853,689 to 1,021,941, or 20 per cent; and the total pulp tonnage from 1,464,154 to 1,544,027, or 5 per cent. In considering these figures it must taken into account that 1921 was not a normal year for the industry. When the figures for 1922 are available the contrast will be found to be much more pronounced.

Our pulp and paper exports, which offer a better criterion for judging the growth of the industry during the ten-year period rose in value from a total of \$11,850,632 in the fiscal year ending March 31, 1913, to \$163,655,344 for the year ending March 31, 1921, an increase of 28 per cent.

### Part the Association Has Played

What has been the history of the association during this period of extraordinary expansion and what part has it played in helping to bring about this great development? The association, as many of the members can recall, had its inception in the desire of a number of progressive leaders in the industry for some organized co-operative effort to further its interests. The first and preliminary meeting was held in Toronto on March 8, 1913. It was attended by the representatives of some twelve different concerns. This meeting adopted a resolution setting forth that "in the opinion of those present it is advisable and highly desirable that we should form a Canadian Pulp and Paper Association." A committee on organization was appointed. The committee reported at a subsequent meeting held in Montreal on March 18 of the same year and on the following day the association was formally launched at a luncheon held at the Windsor Hotel. The guest of honor was Arthur C. Hastings, the then president of the American Paper and Pulp Association, who brought to the occasion the blessing and good wishes of our United States prototype. It is pleasing here to note that the friendly relations then inaugurated between the two corresponding bodies have since been maintained and intensified. Carl Riordon was the first president and to his enthusiasm and activity the association owes a great deal of its initial success. The first Executive Council was composed of Carl Riordon, T. J. Stevenson, A. F. Cayford, I. H. Weldon, D. Robertson and C. Howard Smith, all of whom, with one exception, are still actively interested in the association's affairs. Some of the activities which engaged the early days and which still enlist our interest had to do with the gathering and dissemination of trade statistics, the establishment of trade customs, the encouragement of the consumption of home products as opposed to unnecessary importations, the tariff, trans-

(Continued on page 26)



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## CANADIAN PULP & PAPER ASSOCIATION MEETS

(Continued from page 24)

portation, the betterment of labor conditions, the regulation of credit, technical research and industrial efficiency and similar matters.

For a time the organization met with hard sledding. The value and usefulness of a trade association was not so generally appreciated in the early days as they are today. The first year closed with a financial deficit, but the succeeding year brought about a reorganization on a more substantial basis and from that time the course has been upwards.

### Technical Section Taken in in 1915

In 1915 the Technical Section was accorded recognition and taken into the association as an associate body. Two years later the Woodlands Section was organized and accorded a similar status. Both of these auxiliary associations are, as is shown by their reports submitted at today's meeting, fully alive and engaged in work of great benefit to the industry.

It was in 1917, also, during the administration of C. Howard Smith as chief executive, that A. L. Dawe was engaged as the association's permanent secretary, from which time the growth and progress of the organization has been both rapid and healthful. To Mr. Dawe's energy and enterprise it owes not a little of its present gratifying standing. It is no idle boast to say that the association today enjoys a reputation second to none among the trade organizations of the Dominion, while it is also not infrequently cited by authorities in other countries as an example of what an active and helpful trade organization ought to be.

So much for past history. What about the year 1922 just closed? In considering the immediate condition of the industry we must remember that the year 1921 was one of depression and difficulty; it was also a year of reorganization and reconstruction. Towards the end of that year, however, the situation began to look a little clearer and we entered upon 1922 with a more optimistic outlook, prepared for twelve months of steady, if slow, progress. The year which has just closed fulfilled our expectations and although we had no sudden return to peak prosperity we have experienced a steady growth and development and we feel confident that our industry is now on a solid and sound basis so that we can look forward with cheerful optimism.

### Large Increase in Production

During the past year there has been a large increase in the production of practically all grades of pulp and paper over the previous year. Our production of news print was well over one million tons, compared with 812,000 tons in 1921. Production of wrapping paper, book and writings have also increased considerably and the production of the various grades of pulp showed increases ranging from 35 to 100 per cent.

This increased activity has naturally been reflected in our export figures, which show a great advance over the figures for 1921 and in some cases over those for 1920, which was the previous record year.

Exports of mechanical pulp increased from 185,954 tons in 1921 to 280,266 tons in 1922; bleached sulphite from 61,420 tons to 138,446 tons; unbleached sulphite from 107,738 tons to 192,344 tons and sulphate from 87,498 tons to 137,187 tons.

Exports of news print amounted to 874,008 tons compared with 636,487 tons in 1921, kraft wrapping 17,061 tons compared with 5,940 tons and while the fine papers did not show increases there was a steady growth in the second half of the year which augurs well for the coming year.

In spite of the decline in prices which has taken place, the total value of the exports of pulp and paper in 1922 amounted to \$105,624,324 compared with a total of \$98,319,087 in 1921.

During the year there have been extensive additions to existing plants and several new mills have been brought into operation. The news print capacity in 1922 was 3,825 tons per day and additions in the near future will raise this figure to about 4,200 tons daily. There have also been additions to the production of our pulp and fine paper mills and further additions are planned during the coming year. All of which indicates confidence in the situation and gives ground for the expectation that the year 1923 will be a record year in the history of the industry.

Insofar as the affairs of the association are concerned, the past year has been marked by no especially outstanding event. The several sections have functioned as usual. Their individual records will be found in their annual reports submitted at this meeting.

### Statistical Department

Early in the year the Executive Council made provision for increasing the usefulness of the Statistical Department by the addition of an expert statistician to the staff. Experience has taught the value of authentic and seasonable reports as to the extent of the output of the various branches of the industry and other information from both at home and abroad. The usual weekly and monthly reports on production, shipments, etc., have been issued at regular intervals during the year and together with the charts sent out each month have served to keep the members informed on the general situation. The interchange of information with the Scandinavian Cellulose Association has also been maintained and has proven of value to the members of the Chemical Pulp Section. Efforts are under way by which it is hoped to initiate a similar exchange of information covering mechanical pulp. An exchange of information covering news print production has been carried on with the Scandinavian countries, Finland and Germany and regular reports have been sent to the members interested. A considerable number of new reports have been issued since the spring, some at regular intervals, others as special occasions have directed. Assurances have been received that these reports have proved of interest and value to the members. As the value of trade statistics depends largely upon their timeliness, the co-operation of the members is essential to the usefulness of this service, a fact which the members should all bear in mind.

### Transportation Department

The Transportation Department has continued to operate in connection with the Montreal headquarters of the Canadian Manufacturers' Association and has rendered useful service. In several instances adjustments of freight charges have been obtained from the railways to the advantage of our members.

Notable advancement has been made in connection with the spread of technical education. A correspondence course in papermaking, based upon the series of textbooks published by the Joint Educational Committee, has been established with the sanction of the council. It promises to perform a very useful service. A committee composed of F. J. Campbell, George Carruthers and O. F. Bryant represents the association in the carrying on of this work.

Summer employment in the mills was found for some 33 college undergraduates through the agency of the association's headquarters. This is not so many as in former years, trade conditions in the early part of the year militating against this activity.

### Tariff Matters

Tariff matters have, as usual, engaged the attention of the executive from time to time, necessitating the employment of legal counsel as well as the appearance of our representatives before the various authorities.

The membership stands numerically unchanged although four

(Continued on page 28)



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Running time .....	8.25 Hrs.
Total Cords .....	118.29
Cords per hour .....	14.37
B. D. wt. of wood .....	293,702
B. D. wt. of sawdust .....	2,000
Lbs. sawdust cord B. D. ....	16.9
Per cent Sawdust .....	0.68

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## CANADIAN PULP & PAPER ASSOCIATION MEETS

(Continued from page 26)

concerns have withdrawn during the year. These withdrawals were due to changes in ownership, to financial considerations or other valid causes. Four new members were admitted and a Waxed Paper Section was added to the list of sections.

The Quebec and Ontario committee appointed at the last annual meeting to confer and advise with their respective provincial governments have carried out the instructions accompanying their appointment with more or less satisfactory results.

An important conference between the Joint Committee on Technical Research and Sir Arthur Currie, the principal of McGill University and members of his faculty, was held in November at which the future of the Paper Division of the Forest Products Laboratories and the proposed establishment of a chair of Chemistry in the university were discussed. The way was paved, it is believed, for important developments in the near future.

The Text Book Committee has made progress during the year and will give an account of their stewardship at this meeting.

### Loses Active Service of Mr. McKee

The association had the misfortune, towards the close of the year, to lose the active services of George M. McKee, who was elected president at last year's annual meeting, Mr. McKee having transferred his business interests across the border into the United States. Despite the unanimously expressed desire of the members of the Executive Council that Mr. McKee continue in office to the end of his term, he felt it incumbent upon him not to do so. During the eleven months he held office Mr. McKee was zealously active in promoting the welfare of the association and earned the gratitude and goodwill of his associates in office as well as those of the membership at large. The regret universally entertained over his departure from our immediate midst is mitigated to some extent by the knowledge that he has merely stepped across the imaginary boundary line that divides the two countries and that, since he continues his association with the industry, we may still regard him as one of us in everything that pertains to mutual interest, friendliness and goodwill.

It is gratifying to be able to report that the finances of the association are in a sound condition, as may be seen from an examination of the financial statement. The balance to the credit of the funds is the largest in the association's history.

### Possibilities of the Future

Satisfaction over past achievements should not lead us to underestimate the possibilities of the future. There is no reason why our industry should not continue to expand and to keep pace with the growth of the country and with the natural increase in the universal demand for its products. Possibly, however, we may be going ahead a little too rapidly. Overconfidence as to an unabated continuance of the present demand for our products may lead us into undue or too rapid development. There are already danger signs in one or two directions that the saturation point is in sight. We should guard against unnecessary and excessive production, which is apt to prove as unprofitable and undesirable for the consumer as it is for the producer.

When it is considered that the news print mills of Canada, now in operation, or under construction, or for whose construction provisions have been made, are committed to a program which will give them a combined output capacity of 4,315 tons a day, or practically 1,300,000 tons a year by the end of next year; that production in the United States is also due for an increase, attributable to new machines now in process of installation; that the total demand for this class of paper on this continent, practically our only assured market, at its maximum had never exceeded 2,500,000 tons a year, that United States production has never failed to equal at least 58 per cent of this demand, and that the tonnage due from

Canada by the end of 1924 will equal 57 per cent of the greatest volume of consumption in any one year, the figures may naturally invite a question as to whether expansion has not reached or is it approaching the danger line?

Similar conditions may be said to apply in lesser degree to the production of groundwood, sulphite and the finer grades of paper. If expansion is to go on at its present rate it is inevitable that new markets must be explored. Where are they to be found? How can we best meet the competition that we shall be faced with when we find them?

These problems and others the members will find are intelligently dealt with by the chairmen of the several sections in their annual reports submitted to this meeting, reports which this year are of more than ordinary interest and will well repay the study of the members. Upon their resolution depends in a large measure the future of our industry and, incidentally, the welfare of this association.

The association exists for the purpose of helping the industry to solve first problems such as these and the measure of its success in so doing will be the measure of its usefulness to the members. But the association cannot function as it should unless it has the united and loyal support of its entire membership. The year now opening may prove a critical one for the organization—one to test the ability and ingenuity of the incoming executive as well as the steadfastness of the members. Proposals are to be brought before this meeting marking out an entirely new and broad line of departure from past policies. They should be considered on their merits and dealt with as may best accord with the interests of all the members.

### Larger Membership

One of the activities that should be enjoined upon the incoming executive is that of adding to the membership so that it may be said to represent as nearly as may be 100 per cent of the industry. Special efforts should be made to enlist the new concerns which have recently come into being. Some field work is essential. The newly-elected chairmen of the sections should be requested to assist in this effort. The association is not a closed corporation. Its work is directed towards the general good of the industry and for that reason it is entitled to and should be accorded the united support of all. What has been said of trade associations in general applies particularly to our own organization. It is built upon a fundamental principle and is the result of economic evolution. It comprises a partnership in all legitimate and lawful undertakings—a partnership which embodies the democratic doctrine of the greatest good to the greatest number. It provides a means for applying the democratic idea in business that can be found nowhere else in no other way. With a continuance of the support given to it in the past, it must and will go on to greater things and enlarged usefulness in the future, and during the ensuing ten years discount the achievements of the past, however noteworthy and substantial these may now appear to us to have been.

### \$651,500 for Chicoutimi Pulp Fire

MONTREAL, Que., January 30, 1923.—The Board of Arbitrators named to determine the value of 28,130 tons of pulp belonging to Chicoutimi Pulp Company destroyed by fire at Port Alfred on July 8, made their award Saturday.

The Chicoutimi Pulp Company filed a claim against thirty-one insurance companies for \$1,020,800 basing the value of the destroyed pulp at \$37.00 a ton, but the Board of Arbitrators found that there was 27,227 tons of pulp destroyed and that it had an average value of \$23.93 per ton and awarded the insured \$651,500 in full of its claim.

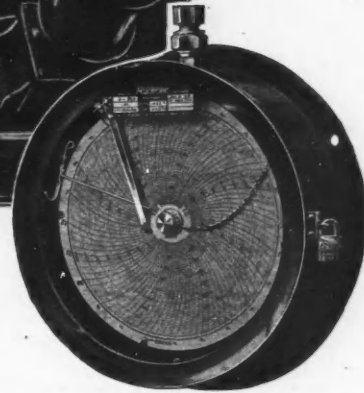




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- White Water Tanks
- Bleach Tanks
- Digestors
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- Boiling Kettles
- Acid Recovery Still
- Incinerators; and for the Power Plant

Pulp of uniform quality requires close control of grinding speed and pressure. For close control of grinding speed, connect a Foxboro Tachograph to the grinder shaft. This instrument furnishes a permanent and continuous record of grinder speeds.

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Operating standards can be developed and maintained with the aid of these dependable instruments which will result in the improvement of your ground wood and in a reduction in your cost of operation.

Every Foxboro instrument is designed, built and tested in a way that makes certain it is worthy of its reputation as "The Compass of Industry."

We shall be glad to furnish you complete information on either the application or the instruments described above. Write to Dept. B. H.

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# FOXBORO

TRADE-MARK

THE COMPASS OF INDUSTRY

## GEORGE M. MCKEE NEW HEAD OF NEWS PRINT SERVICE BUREAU

Elected President at Annual Meeting Held Last Week in Montreal—Other Bureau Officers Remain Unchanged—R. S. Kellogg Lauds Financial Conditions of Organization and Presents Charts Showing Relative Production of News Print in Canada and the U. S.—Mr. Kellogg Reads Interesting Paper on "News Print Production in 1922."—2,600,000 Tons Is Total.

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., January 26, 1923.—At the annual meeting of the News Print Service Bureau, held here today, George M. McKee, of the Algonquin Paper Corporation, Ogdensburg, N. Y., was elected president. The other officers of the Bureau remain as follows: Vice-president, Louis Bloch, of the Crown-Willamette Paper Company, San Francisco, Cal.; secretary-treasurer, R. S. Kellogg, New York; executive committee, P. B. Wilson, of the Spanish River Pulp and Paper Mills, Sault Ste. Marie, Ontario, Canada; W. E. Haskell, of the International Paper Company, 30 Broad street, New York; and J. L. Apedaile, of Price Brothers & Co., Quebec, P. Q., Canada.

"The Bureau is in the best financial shape it has ever been," said R. S. Kellogg, secretary-treasurer, in addressing the meeting. Members dues were lowered to four cents per ton of paper manufactured. In 1921 dues were as high as 5½ cents per ton, being subsequently reduced to 5 cents in January, 1922 and 4½ cents last July. They have never been below the present rate of four cents."

In the course of the brief business meeting, lasting but an hour, Mr. Kellogg presented two charts showing both total and comparative production of news print in the United States and Canada from 1904 to 1922 and from 1913 to 1922 respectively. An abstract of his report to Bureau members follows:

"The production of news print paper in North America hung up a new record in 1922, the total for the United States and Canada surpassing by some 140,000 tons the previous high mark of nearly 2,400,000 tons in 1920.

"Of this total the United States produced 1,448,000 tons or 223,000 tons more than in 1921 when the output was reduced by prolonged strikes and also more than any previous year except 1920 when the total was 1,512,000 tons. In 1920, however, the product of the regular news print mills in the United States was supplemented by perhaps 80,000 tons from the so-called marginal mills, which did not contribute so heavily to the news print supply in 1922.

"The rapid development of news print manufacture in Canada is strikingly shown by the fact that the output last year was 1,082,000 tons or over 200,000 tons more than the 1920 record of 876,000 tons and 34 per cent more than in 1921.

"In addition to these totals for the United States and Canada, 60,000 tons of news print was produced in Newfoundland and probably about 10,000 tons in the one mill in Mexico which makes news print, thus giving a production of 2,600,000 tons for the North American Continent.

"Shipments from the mills during 1922 more than kept pace with the increased output, and while mill stocks are never large, the total at the end of the year was 11,000 tons less than at the beginning and equivalent to only about three days' production.

"The compilation of import figures has been so greatly delayed since the new tariff law went into effect on September 22, that it will be sometime before the total imports of news print from Europe into the United States during 1922 will be known. Ap-

parently, however, the final figure will not exceed 100,000 tons, a decrease of 26 per cent from the 135,000 tons brought in from overseas during 1921. The heaviest importation of European news print was from August, 1921, to February, 1922, when the average was 14,500 tons per month. Since that date the monthly average has been materially less and it does not appear likely that the previous maximum will again be reached.

"As the production figures suggest, the consumption of news print paper in the United States reached a new high record in 1922. In round numbers it was 16 per cent more than in 1921 and 12 per cent more than during the previous record breaking year of 1920. Publishers who report their monthly tonnage to the Federal Trade Commission and who use a large proportion of the total output exceeded their 1920 consumption by 14 per cent, the 1919 consumption by 22 per cent, and the 1918 consumption by 55 per cent. Publishers stocks of white paper at the end of 1922 were equivalent to 36 days' supply at the current rate of consumption.

"Adding imports to domestic production and deducting exports there was not less than 44 lbs. per capita of news print paper available for consumption in the United States in 1922 compared with 15 lbs. in 1900.

"Advertising was an important factor in determining the quantity of news print used in 1922, but still more influential was the large sizes of the daily and Sunday issues and the growth in circulation. There are between 60 and 70 newspapers in the United States, each having a circulation in excess of 100,000 copies. During 1920 and 1921 these dailies averaged 23 pages each, and during 1922 they rose to 25 pages. For the same year the Sunday issues of these papers averaged 79, 80 and 89 pages respectively.

"There are more than 22,000 newspapers in the United States and Canada of which some 18,000 are monthlies and country weeklies while the circulation of the English language dailies is approximately 30,000,000 for the week-day issues and 20,000,000 for the Sunday issues.

"The total volume of newspaper advertising in the leading cities in the United States showed a substantial increase in 1922 over 1921 but about 5 per cent decrease from the 1920 record figure. The newspapers fared much better than the magazines in the advertising field, since the volume of advertising in the National periodicals was only 4 per cent more in 1922 than in 1921 and was still 34 per cent behind the 1920 total.

"The total value of newspaper and periodical advertising in the United States in 1922 was probably \$800,000,000 with \$700,000,000 of it in the newspapers. The large volume of advertising, both periodical and newspaper, planned for and to be expected during 1923 is a matter of common knowledge. It looks as if the time were not far distant when the total yearly expenditure for advertising by means of the printed page in North America would be one-billion dollars.

"Paper manufacturing in North America is also a billion-dollar industry with the production of news print making up a very respectable proportion of the total investment and further notable developments under way. The new machines to come into news print production during the first six or eight months of 1923 will have a capacity of 600 tons of paper daily, carrying the total capacity of the industry beyond 9,000 tons daily, of which some 5,000 tons is in the United States and more than 4,000 tons in Canada. Still further extensions are under consideration, so that the newspaper publisher wherever he may be in North America during 1923 should be able to get all the paper he needs without going overseas for any portion of his supply."

### National Biscuit Co. Buys Crescent Paper Co.

MARSEILLES, Ill., January 30, 1923.—Crescent Paper Company has been purchased by National Biscuit Company. No change is to be made in the personnel of the management for the present.

*Established 1886*

## **Establishment**

*Year after year, you will find that the organizations that accomplish the big, substantial, worth-while things in every industry are the old-established ones with the new vision—those that are venerable in age and yet are endowed with the rare wisdom of keeping not only abreast of the times, but ahead of them.*

*This organization is old enough to be "safe, sane and sound." It is young enough to be continually alert, progressive and forward-looking. It was founded in 1886, but it still faces the rising sun.*

## **M. GOTTESMAN & COMPANY**

—INCORPORATED—

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**New York, N. Y.**

**U. S. A.**

## ALEX. G. GILMAN NEW HEAD OF THE ALLIED PAPER MILLS

**Succeeds Arthur L. Pratt Who Is Made Chairman of the Board of Directors—Numerous Michigan Paper Mill Concerns Hold Annual Meetings and Elect Officers for the Ensuing Year—Foremen of the Bryant Paper Co. Organize Club—Stockholders of the Kalamazoo Vegetable Parchment Authorize Bond Issue of \$3,000,000—Paper Mill Improvements.**

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., January 29, 1923.—Alex G. Gilman was elected president of the Allied Paper Mills, at the annual meeting of the concern, held Wednesday morning in the Chamber of Commerce rooms. He succeeds Arthur L. Pratt, for the past twenty-two years head of the King Paper Company and the Allied Paper Mills.

Mr. Pratt retires from active duties at his own request, being in poor health. He plans to take an extended western trip and will spend several months on the open ranges of Montana. As recognition of past services, Mr. Pratt was retained as chairman of the board of directors and will preside at the meetings of that body when in Kalamazoo.

Mr. Gilman has resided in Kalamazoo for seventeen years. He got his first paper mill experience in the East and then moved to Ypsilanti, where he was employed by the Peninsular Paper Company. When George Comfort was elected president of the Monarch Paper Company, Mr. Gilman came to Kalamazoo as stenographer and bookkeeper. Very shortly after that he was advanced to the position of secretary and remained with the Monarch until that concern was merged into the Allied Paper Mills, when he was elevated to the post of first vice-president. He is extremely popular with the trade, also in his home town. A genial, courteous nature has endeared him to everybody.

Other officers elected for the ensuing year are: First vice-president, George H. Gerphide; second vice-president, John A. Pyl; secretary, George S. Davis; treasurer, S. B. Monroe.

The board of directors includes: Alex. G. Gilman, A. B. Connable, C. A. Dewing, J. H. Dewing, George Hanselman, A. E. Kettle, A. L. Pratt, George S. Davis, W. E. Kidder, S. B. Monroe, John A. Pyl, Charles A. Peck, E. S. Rankin, G. W. Ritchie, H. L. Vanderhorst, George H. Gerphide, Kalamazoo; E. G. Read, Richard; J. W. Thompson, E. J. Dayton, Detroit; G. E. Bardeen, Mrs. Florence G. Bardeen, Otsego; George D. Cobb, Schoolcraft.

### President Gilman's Annual Report

In his annual report to the stockholders and directors, President Gilman outlined the betterments that have been made during the initial year of the Allied Paper Mills' existence, also named various improvements that are recommended for the immediate future.

The retirement of Mr. Pratt as head of one of the five largest paper concerns in the Kalamazoo Valley district is an interesting event in local annals. He was one of the prime movers in the organization of the King Paper Company, when it was formed back in 1901 with a capital of \$150,000 and erected a one machine mill. That concern's capitalization was later increased to \$2,000,000 and when it became a division of the Allied Paper Mills, the plant had four machines and a complete coating mill.

A few years ago he erected just south of the city a delightful suburban home, one of the finest estates in this section of Michigan. It has been reported this place is now on the market, in fact it has been quite widely advertised as being for sale. In addition to a palatial residence, it boasts spacious grounds, comfortable quarters

for servants, a lodge house and its own hydraulic electric power plant. This establishment represents an outlay of over \$250,000.

### Paper Mill Improvements

The Kalamazoo Sheet Metal Manufacturing Company has just started work on a heavy contract job at the plant of the Hopper Paper Company, at Taylorville, Ill. According to Jacob Temple, president and secretary of the concern, it will require three or four months to complete the work undertaken.

Six beaters are to be completely relined with copper, making them available for the production of writing paper. Copper stock spouts are also to be installed, feeding from the beaters to the stuff chests. Sheet copper to the amount of 18,000 pounds has been ordered for this job.

The Kalamazoo Sheet Metal Manufacturing Company has just completed extensive improvements at the King division of the Allied Paper Mills. This is an installation in the machine room designed to take care of condensation of steam above the machines, and prevent serious damage to the roof. By means of fans and heater coils, air at a temperature of 90 to 95 degrees is diffused throughout the regions just under the roof, thus eliminating steam condensation and consequent dampness and rotting. Several years ago a series of huge monitors were built for that purpose, but proved ineffective and have been discarded.

### Bryant Paper Co. Reduces Directorate

The board of directors of the Bryant Paper Company was reduced from ten to nine in number, at the annual meeting, held Saturday afternoon in the company's administration building. No effort was made to fill the vacancy on the board due to the death of the late Noah Bryant. In the case of the passing of Hale P. Kauffer, his place on the board was filled by the appointment of V. T. Barker, president of the Home Savings Bank. Mr. Barker was duly elected a member of the board at Saturday's meeting.

The result of the election follows: President, Felix Pagenstecher; vice-president, W. B. Milham, to succeed Noah Bryant; secretary-treasurer, C. A. Fox; directors, Felix Pagenstecher, C. A. Fox, W. B. Milham, Jos. E. Brown, V. T. Barker, Charles Clarage, E. M. Irish, S. G. Allen, Kalamazoo, and E. L. Brooks, Cleveland.

### MacSimBar Paper Co. Prospers

An excellent run of business for 1922 was reported at the annual meeting of the MacSimBar Paper Company, held Thursday, at the company's offices, Otsego. The outlook for 1923 is also favorable.

During the past twelve months this concern has completed its new power plant, which is now in use, guaranteeing adequate power to turn the wheels of the big mill at a capacity production.

All officers and directors were re-elected as follows: President, Charles E. Nelson; vice-president, S. W. Simpson; secretary, S. B. Monroe; treasurer, George E. Bardeen; directors, George D. Cobb, S. W. Simpson, W. E. Kidder, S. B. Monroe, S. G. Earl, Kalamazoo; E. W. Stone, Allegan; J. W. Thompson, Detroit; F. C. Hall, Grand Rapids; J. A. Vanderveen, Holland; C. E. Nelson, G. E. Bardeen, Otsego.

### Foreman's Club at Bryant Paper Co.

A Foreman's Club has been organized at the Bryant Paper Company with the following officers: President, George McGuire; vice-president, Richard Swartz; secretary, Irwin J. Starrett; treasurer, John Ross.

The initial meeting was held in the company's administration building and following the business session, Felix Pagenstecher, president of the company, gave an interesting and instructive talk. Other entertainment features were offered and hot coffee and doughnuts served.

### H. V. P. Authorizes \$3,000,000 Bond Issue

A bond issue of \$3,000,000, to be sold when needed, was authorized

(Continued on page 34)

FOR QUALITY PAPERS  
USE

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MANUFACTURED BY

Kellner-Partington Paper Pulp Co., Ltd.  
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# 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 fo*

CANADIAN KRAFT, Ltd.

Three Rivers, CANADA

## SPANISH RIVER MILLS HOLD THEIR BIG ANNUAL BANQUET

George H. Mead, President and Other Officers of the Company Make Inspiring Addresses—Great Lakes Pulp & Paper Co., Ltd., Seems Likely to Be Successful in Arranging 15,000 Horsepower Contract With Hydro Electric Power Commission—Justice Middleton in Toronto Dismisses \$40,000 Action for Timber Trespass Against J. R. Booth—Other News of the Toronto Trade.

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ont., January 29, 1923.—At the seventh annual banquet of the Spanish River Pulp and Paper Mills, Limited in Sault Ste. Marie on January 21, the recent timber probe was touched upon by a number of officials, who all expressed satisfaction that the company had emerged from the investigation in a considerably stronger position than when it was drawn into it. A splendid address was delivered by President George Mead of Dayton, Ohio, dealing with the past operations of the concern, its bright future and the very satisfactory relations existing between the company and its employees. Addresses were also given by Colonel Thomas Gibson, Col. C. H. L. Jones, the latter general manager; George R. Gray, manager of the wood operations; Hon. Dr. R. J. Manion M. P. for Fort William; and P. B. Wilson, vice-president. Brief speeches were also given by plant representatives from the Sault, Espanola and Sturgeon Falls, all dealing with plant operations and the close and satisfactory connection between the company and the men. The financial condition of the concern, after several years of world depression, was a theme that predominated most of the addresses.

### Great Lakes Paper Co. Arranges for Power

The independent negotiators trying to arrange a 15,000 horsepower contract between the Hydro Electric Power Commission and the Great Lakes Pulp and Paper Company, Limited, have about come to terms after frequent conferences in Toronto with L. A. Allstead representing the company and it is likely a contract will be submitted to the Hydro within a few days. It is understood that Messrs. Haney and Ross, members of the Gregory Commission, assisted by Lloyd Harris, are the independent parties who have been working on the proposition with the approval of the Drury Government. The contract has to do with the Nipigon power system, which is running behind \$300,000 per year at present. This fact may have made the company feel that it could exact favorable terms. On the other hand the company will not be taking power for two years, and will be unable to get power from any other source. One of the hardest matters to adjust was the mutual enforceability of contract. The company claimed that if it were compelled to take a block of power whether or not a strike was on at the plant, or other mishap occurred, then the Hydro should be under an obligation to furnish power, no matter what its difficulties.

### General News of the Trade

Mr. Justice Middleton in Toronto last week dismissed the action for \$40,000 instituted by the Attorney-General of Ontario on behalf of the King & Golden Lake Lumber Company, Limited against J. R. Booth, of Ottawa. The Attorney-General alleged that Mr. Booth had trespassed on limit 122 and had cut 200,000 feet of pine timber and logs valued at \$40,000. The question resolved itself into one of disputed boundaries.

Sir William Price, millionaire paper and power magnate of the province of Quebec, spent a few days in Toronto last week, in company with his wife. Sir William, in an interview said that he was out of touch with politics but declared that fully nine-

tenths of the people of Quebec were in sympathy with the liquor policy of the present Government.

The Fort William Paper Company, Limited, is now shipping paper from its new book paper mill in Fort William. No. 1 machine is just going through the tuning up process and is only running at about half its capacity. The second machine is being installed and will soon be in operation.

It was stated at the head offices in Toronto of the Provincial Paper Mills, Limited, that they had booked up a considerable tonnage of book paper for their new mill at Port Arthur and that the outlook for big business for the new plant was bright. Good progress is being made with the equipping of the new mill which is expected to be in full operation very shortly.

At the annual meeting of the Ratcliffe Paper Company, Limited, held in Toronto a few days ago the annual statement showed a satisfactory year's business and prospects for future business were reported to be bright. F. L. Ratcliffe was elected president; T. E. Gain, vice-president, and M. J. Ratcliffe, secretary.

F. L. Ratcliffe, head of the Ratcliffe Paper Company, Limited, York street, Toronto, was elected a member of the board to represent the Toronto Board of Trade on the board of the Canadian National Exhibition.

Additions to the plant of the Dryden Paper Company, Limited, at Dryden, Ont., including a water power development of 1,400 horsepower, a specialty paper machine and a new ground wood unit, are expected to be in operation within the next three months. These additions should add materially to the earning power of the company, particularly in view of the improving conditions in Dryden products such as kraft and kraft pulp.

## HEADS ALLIED PAPER MILLS

(Continued from page 32)

by the stockholders of the Kalamazoo Vegetable Parchment Company, at the annual meeting, held Tuesday afternoon in the Community House.

Reports for the past year showed that business has been generally satisfactory, while good progress is being made on the concern's vast building and expansion program.

The following board of directors was re-elected for the ensuing year: Jacob Kindleberger, W. J. Lawrence, C. S. Campbell, A. B. Connable, W. M. Loveland, Austin B. Read, Charles A. Peck, C. H. Stearns, William O. Jones.

The officers are: President, Jacob Kindleberger; first vice-president, Frank Mosteller; second vice-president, James Greenlee, Chicago; secretary, S. Ward Kennedy; treasurer, C. S. Campbell.

### General News of the Trade

B. C. Dickinson, president of the Standard Paper Company; C. S. Campbell, treasurer of the Kalamazoo Vegetable Parchment Paper Company, and Bertrand Hopper, secretary and general manager of the Kalamazoo Stationery Company, have been re-elected directors of the Kalamazoo Country Club. They are inveterate golf enthusiasts.

A. H. Dwight, president of the Hawthorne Paper Company, accompanied by Mrs. Dwight left this week for Florida, where they will remain until early in May.

S. B. Monroe, treasurer of the Allied Paper Mills, has been in New York City this week on business. Clarence A. Bradford, vice-president and sales manager of the Rex Paper Company, spent the past week in Chicago calling on the trade.

A loss which will run into many thousands of dollars occurred when the Bardeen division of the Allied Paper Mills was the scene of a conflagration, Friday, January 19. Fire broke out in the coal elevator of mill No. 1 and extended to the stock room. While the loss from the flames was severe, the water damage to stock and pulp was far greater. A check is now being made and an accurate report will soon be available for the insurance companies.



# The Beloit Flat Screen

One that is in demand by a large  
number of Particular

## MILLS

who realize its rigid construction,  
large suction area and  
dependability



**BELOIT IRON WORKS**  
BELOIT, WISCONSIN



## PAPER DEMAND IN CHICAGO GROWING MORE SATISFACTORY

**Recent Advances Have Had Beneficial Effect on the Market—Additional Price Increases Are Expected and This in Connection With the Bullish Reports Made by Paper Salesmen Is Said to Be Forcing Buyers Into the Market—Demand for Book Papers Is the Best That Has Been Experienced in Some Time—Demand for Waste Paper Is Active and Higher Prices Are Offered.**

[FROM OUR REGULAR CORRESPONDENT.]

CHICAGO, January 29, 1923.—Conditions in every branch of the Chicago paper trade continue to improve and indications point to even greater progress in the very near future. Inquiries are numerous and orders are being received in a satisfactory manner. Mill representatives and paper merchants in this city state that since the middle of the month they have closed a number of contracts for immediate delivery that have been pending for some time and that now they are working on prospective business that should develop in the next few weeks. The recent advance in the price of coated paper has had a healthy effect on market conditions. Other advances are expected and the bullish reports emanating from paper salesmen are without doubt forcing buyers into the market. Prices generally are firm.

During the inventory period of December 10 to January 15, the local market was a little dull, but inventories have been taken and publishers, printers and other paper consumers are buying much more freely than had been hoped, although some reports are to the effect that purchases are for small quantities.

Book papers are receiving the greatest attention at present. The improved conditions of general business and the almost universal employment of labor has given an impetus to business that has not been noticeable in the last few years. Manufacturers and sales organizations are putting out large quantities of advertising matter. It is noticeable that the better grades of paper are being used to illustrate these leaflets, catalogues and price lists.

There is an active demand for sulphite bonds and ledger stock. A. N. Forsythe, of the Forsythe Paper Company, which handles the products of the Martin Cantiane Company of Saugerties, N. Y., and the Chillicothe Paper Company, Chillicothe, Ohio, says that business in this line was a little slow up to January 15, but that the improvement since that date has been most encouraging. He states further that the two companies mentioned have plenty of orders on their books and are running their plants to capacity. While the orders received have been all that could be expected, Mr. Forsythe believes that business soon to be placed will be of more substantial tonnage. He finds that prices are firm, with a tendency to stiffening. He also reports an active demand for coated papers.

Others in this market record similar views. The future is expected to produce a permanent improvement that will result in an evenness of business activity and a volume of business that has been foreign to this market for some time past.

### Labor for Logging Is Scarce

Northern mills are reported by their representatives in this city to be running to capacity. While woodsmen are still scarce in certain sections of the log-gathering territory, labor conditions are said to be greatly improved. When road work was discontinued in Wisconsin last season, it was hoped that some of the labor would find its way into the woods and help to fell trees this winter. Evidently the high wages that these men received during the summer and fall had a great deal to do with an almost universal desire on their part to spend the winter in the larger cities. There has been

plenty of snow in the neighborhood of the logging camps and conditions have been ideal for the harvesting of logs. In view of this and the fact that there exists such a great demand for products of the forest, it is deeply regretted by lumbermen and pulpwood producers that there is so much difficulty involved in the procurement of labor.

### Active Demand for Paper Stock

Strenuous efforts are being made by the small dealers to gather stocks of old paper. The higher prices that are now being offered by the mills and the scarcity existing at present has given an activity to this market that is noticeable right straight down the line to the housewife, who is now paying more attention to the value of old newspapers and wrapping papers than she has been doing. While the low production of paper last year will naturally be reflected in a shortage of old paper stock this year, there is now more of an incentive to save this much needed commodity and it is believed that less of it will go up in smoke.

### February Conventions in Chicago

No less than four conventions of interest to the paper trade will be held in Chicago during February.

On February 6 the Writing Paper Manufacturers' Association will meet at the Drake Hotel.

The Service Bureau of the Wrapping Paper Manufacturers' Association will meet at the Congress Hotel on February 7.

The second meeting of the Western Board Division of the American Pulp and Paper Mills Superintendents' Association will be held at the Congress Hotel on February 10. The first meeting of this division was held in Chicago on November 25, last, at which time it was practically decided to meet quarterly. Claude Nicely, of the La Salle Paper Company, South Bend, Ind., is chairman of this division.

### Chicago Trade Notes

The School Stationers Corporation, 343 South Dearborn street, has been granted a charter by the Illinois Secretary of State to manufacture and deal in paper and paper products. The corporation is capitalized at \$15,000. Its incorporators are: E. E. Cook, M. D. Goodman, S. J. Hachtman, H. J. Heart and Louis J. Kuhn. M. D. Goodman, 111 West Monroe street, is correspondent.

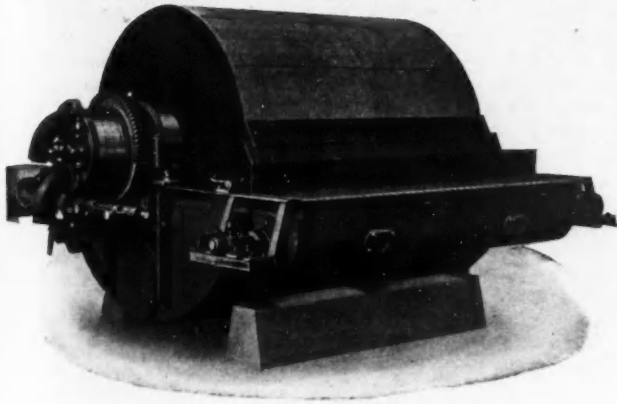
The annual report of the Creamery Package Company for the fiscal year ending November 30, 1922, just made public, contains no income account, but a comparison of the balance sheet indicates that after dividend payments there was a deficit for the year of \$55,774. Net worth of the 145,000 shares of common stock is shown to be \$5,970,943, compared with \$6,026,717 at the close of the preceding year. Following is the balance sheet as of November 30 last: Cash, \$756,266; bills and accounts receivable, net, \$1,389,988; inventories, \$2,299,778; investments, \$823,897; sundry prepaid and accrued items, \$18,404; land, buildings, etc., less reserve for depreciation, \$1,976,060; patents, \$750,164; total assets, \$7,976,060. Accounts payable, \$175,290; accrued commissions, \$127; sundry reserves, \$1,554,700; preferred stock, \$275,000; common stock equity, \$5,970,943; total liabilities, \$7,976,060.

The Chicago paper trade is taking a keen interest in reports of progress of the Paper Industries Exposition, to be held at the Grand Central Palace, New York City, during the week of April 9 to 14.

W. E. Dwight, president of the Dwight Brothers Paper Company, who has been spending the past month in Florida, is reported to be leaving the South for a tour of several European countries.

The Import Paper Company, with offices and salesrooms at 620 South Wabash avenue, has just issued a special catalogue and price list for "multigraph users," in which attention is called to the adaptability of certain papers for multigraph work. Leon Witkowsky, secretary and treasurer of the company, states that for this class of work bond papers are recommended, because of their ability to "take" the printing and are easily "fed" through the machine.





### OTHER OLIVER PRODUCTS

Oliver Vacuum Pumps  
 Oliver Air Compressors  
 Oliver Centrifugal Pumps  
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 Centrifugal Pumps

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## Washing Pit

Oliver Filters are supplanting other systems for washing Soda or Kraft pulp because they wash more efficiently, and effect important economies which quickly pay the cost of Oliver installation.

Pulp is washed in a thin sheet instead of in a mass several feet thick, thus insuring direct contact of the wash water with every particle of fibre. A thorough and uniform displacement of cook liquid is secured, automatically insuring a non-variable output at a uniform rate.

The following economies soon pay the entire cost of an installation of Oliver's:

1. Wash room labor decreased 60%.
2. Soda losses decreased 75%.
3. Pulp loss entirely eliminated.
4. Floor space reduced 75%.
5. Pulp washed with 1/3 less hot water.
6. Black liquor returned to evaporators with 1/3 less dilution.
7. Amount of pulp in process greatly reduced.
8. Time of pulp in process is enormously decreased.

Installation costs for Oliver Filters are lower than for either diffusers or pan stations. A filter with 100 sq. ft. of cloth area handles 25 to 30 tons in 24 hours. Our extensive experience is at your disposal without obligation. Let us help you reduce your wash room costs.

# Oliver *Continuous* Filter Co.

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503 Market St.

New York  
33 W. 42nd St.

London  
11-13 Southampton Row, W. C.

## ACTIVE DEMAND FOR PAPER IN THE PHILADELPHIA MARKET

Trade During January, According to Well Qualified Authorities, Has Surpassed All Precedent—Some Lull in the Demand for Wrappings Is Experienced During the Closing Days of the Month But This, It Is Believed, Is Only a Temporary Condition—Garrett-Buchanan Co. Starts Construction Work on New Warehouse—Dill & Collins Distributors Hold Largely Attended Conference.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, Pa., January 30, 1923.—It beat all precedent, in the opinion of so well qualified an authority as President Joseph B. Mitchell, of the Quaker City Paper Company, whose continuous years of service in paper distribution now give him the honor of being the oldest in point of active service of any thus engaged in Philadelphia, how January business began and how it is continuing. Commenting on conditions generally, and not only with respect to his own enterprise, Mr. Mitchell said during the week that in his long business career, he had never known business so consistently steady and active as it was during the first half of this month; and the record of the last half did not fall far short of the promise of the earlier period. There were changes, however, as between the coarse paper and the fine paper activity. Last week the coarse paper market which had been having a little the advantage of the fine paper with regard both to number and average size of orders, fell a little behind in city business, although out-of-town sales kept up with entire satisfaction. The local lull in the wrapping paper business is variously explained by many of those engaged in it, but all are of opinion that it is of but a temporary character. Meanwhile, values in the coarse paper market, despite the slowness of city trade, are firm, advances are believed to be imminent and rather drastic increases are expected by some. At least two important factors, one a nearby and the other a New England producer, sent out notices to the trade during the week of the withdrawal of all prices on their specialties, candy box board of various grades, as well as the general line of krafts, manillas and the better grades of coarse paper. The very lively feature of this market, however, is the continued activity shown by all grades of paper board used in box manufacture, and the almost daily increases in prices. Increased cost of raw materials and the higher wage scale is regarded as the contributing cause for these advances.

### January Sales Excellent

In the fine paper field, there were no outstanding features during the week—merely a steady continuance of the sound, wholesome and slowly increasing business. The Paper House of Pennsylvania, to point merely to one example which, however, is typical rather than isolated, on several days of the past week booked more orders than on any other days during the last six months, and while quite a number were not of large size, a growing percentage of them involved rather large amounts.

The paper stock market reflects the condition existing among the board producers of a heavy output to take advantage of the present situation of large buying, and all mixed and commons, old news and container manilla are being snapped up by the mills wherever offered at outside ruling quotations. While activity in the better grades of stock was not so great, all are moving along satisfactorily and the tide is running millward quite as fast as it is bringing stock into the warehouse of the packers from the smaller dealers and collectors.

### Garrett-Buchanan Warehouse to Start

Actual construction work on the new combined garage and warehouse of the Garrett-Buchanan Company, which long has been under

consideration, but which was held in abeyance pending changes in the plans, is to begin in the very near future; a permit for the construction having been taken out during the week. There is involved an outlay of approximately \$60,000 for the construction of a steel and reinforced concrete building, occupying the double front of 3 and 4 South Marshall street, 4½ feet broad, and extending towards Sixth street 65 feet. The site was the original home of the Garrett-Buchanan Company a quarter century ago, when its present active manager, Vice-president Morgan H. Thomas, began his association with it. The plans call for a seven-story building, with basement, the first floor to consist of an enclosed loading platform and shipping room, which will also be utilized at night as a garage for the company's fleet of six Auto cars and one Packard. The upper floors will be supported on great girders from heavy steel columns, which will give the first floor a complete clearance for its entire width. This will enable the unimpeded entrance and exit of the firm's horse-drawn trucks, as well as its automobiles, and will give splendid facilities for shipment. The basement beneath will be lowered three feet to conform with that under the Sixth street headquarters of the Garrett-Buchanan Company, and the six floors above will be given over to the storage of both coarse and fine papers. Because of the modern type of construction and the greater carrying powers of these floors, as well as of the additional stories, the storage capacity almost will be tripled. There are on the site now two three-and-a-half-story converted dwellings, and these, of course, are to be razed. When the Megargee-Hare Company was in possession of the Sixth street properties on which the two at 3 and 5 South Marshall street abut, there was constructed a modern five-ton elevator, built so large in anticipation of the construction now to be pushed forward, and this will be utilized to reach the upper floors of both the new structure and of the present main building of the Garrett-Buchanan Company. It is expected that the new structure will be ready for occupancy by the middle or end of September.

### Goldman Company to Expand

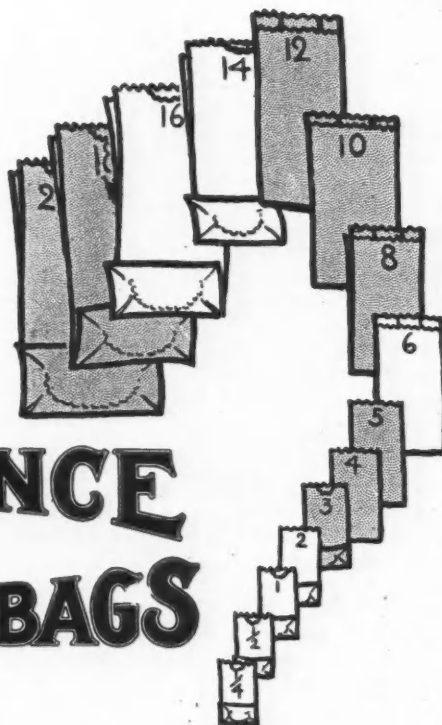
Behind the application for charter made during the week for the incorporation of the Goldman Paper and Paper Stock Company, there lies a story in which there is some romance of business and which gives another illustration of possibilities in America if there is push and persistence behind the effort. The new incorporation will take over the business established twenty-eight years ago by Charles Goldman and since conducted merely as an individual firm. Mr. Goldman came to this country but four years before he entered the paper stock business, a penniless Russian immigrant with a family, all of whose members combined to advance their common interest. Now, as a result of more than a score of years' application to the stock business, and subsequently of real estate ventures, to which he is giving almost his entire time, he is the owner of properties with values running into six figures. The new incorporation will have as its president and treasurer Harry Goldman, a brother of Charles, but who has been associated with him in the paper stock business for the last twenty years, and as secretary, George D. Goldman, son of Charles, who likewise for several years has been associated in the business and who recently returned from an extensive trip through Europe, during the course of which he established connection with pulp mills in Sweden, Norway, France, England and Finland, the new enterprise proposing to devote much of its business attention to pulp importation and sales. The financial interest in the concern is also held by Emil Rosenthal, a brother-in-law of Charles Goldman, and whose connections with the old enterprise dates back a little more than a decade. The Goldman business was principally carried on in the warehouse owned by Mr. Goldman at 333 North American street, although his executive offices and from which he conducted his extensive real estate operations are located in the building owned by him at 725 Walnut street. These two establishments will be maintained under the new or-

(Continued on page 40)



*It—*

there's a question in your mind as to quality, uniformity, dependability or salability—that question will be answered satisfactorily by



# LAWRENCE GROCCERS' BAGS

An established line of undisputed excellence—absolutely complete, so that it's unnecessary for you to clutter up your warehouse with "this, that and the other" brand. Will make both friends and profits for you—and we can prove it.

*James Lawrence, President*

**THE LAWRENCE BAG COMPANY**  
MIAMISBURG, OHIO

## ACTIVE DEMAND FOR PAPER IN PHILADELPHIA MARKET

(Continued from page 38)

ganization and, in addition, there will be occupied, in part, an immense warehouse, recently purchased by the Goldman interests at 414-416 South Front street, containing thirty thousand square feet on its four floors and valued at \$700,000. This building is being completely modernized and is being equipped with electrical elevators and other requirements for the enlarged business which will concern itself not only with paper stock but as well with pulp and with coarse paper. Some converting of these is to be done and machinery for slipping and sheeting is to be installed. A general stock of krafts, manillas and similar papers will be carried. Although Mr. Goldman will not abandon his very profitable real estate business, he will devote much of his time to the buying and selling of imported paper stock.

### Dill & Collins Sales Conference

A two day's business conference, in the course of which there was an equally interesting banquet, was given last week by the Dill & Collins Company to representatives of the twenty-five distributing points it now maintains throughout the United States, either as branch offices or as distributors engaged in the fine paper trade. The attainments of 1922 were reviewed and the aspirations of 1923 as a banner year in the firm's history were defined. Business sessions began on Wednesday morning of last week in the Philadelphia offices and were continued in the afternoon. In the evening a banquet was spread in the rooms of the Down Town Club in the Bourse at which there was an attendance of one hundred and thirty, the principal address being made by John Lee Mahin, of the Federal Advertising Agency, Incorporated, of New York. It was an inspiring boost talk on salesmanship. President Grellet Collins, of the Dill & Collins Company, welcomed all to the feast, and Sales Manager W. H. Lloyd presided. Sales talks and conferences were continued on Thursday morning and in the afternoon many of those in attendance visited the Dill & Collins Company's mills in Port Richmond and in Manayunk. Among others who made addresses during the course of the several meetings were Mr. Lloyd, who gave a resumé of sales results in 1922 and prospects for 1923; H. P. Collins, secretary of the Virginia-Carolina Tie and Wood Company, who spoke particularly of its pulp production; G. N. Collins, assistant general manager, who told the story of the D. & C. Mills; M. Gibbons-Neff, advertising manager, who summarized the work of his department; G. W. Fennebresque, whose theme was "All in the Day's Work," and President Collins, who spoke on the firm's business policy. Included among those in attendance were representatives of the two Philadelphia distributors of the Dill & Collins Company, the Thomas W. Price Company, which has had the account for years, and the Willcox, Walter Furlong Paper Company, recently appointed distributor, and several others which have just taken on the Dill & Collins line, among them the Minneapolis Paper Company and the E. T. Stillwell Company, of St. Paul; the Carpenter Paper Company, of Omaha and Des Moines; the Acme Paper Company, of St. Louis; the Miller & Wright Paper Company of New York, and the Union Paper and Twine Company, of Cleveland and Detroit. Those who attended the sales conferences and the banquet are as follows:

**PHILADELPHIA OFFICE**—Grellet Collins, D. W. Bond, W. H. Lloyd, M. F. Roberts, W. F. Fassnacht, Harold B. Collins, W. C. Scott, W. R. Ingersoll, Harry Beckman, E. B. D. Neuhauser, R. B. Thomas, C. J. McIntyre, G. W. Fennebresque, E. A. S. Hunter, P. C. Weidner, M. E. McCann, R. L. McCall, J. S. Brown, H. L. Coffman, Malcolm McQuade, Jesse MacIntire, R. J. Ross, M. Gibbons-Neff.

**NEW YORK OFFICE**—O. F. Marquardt, C. J. Brown, W. J. Robinson, G. C. Robinson, T. H. Hogan, H. Levie, J. Shuttleworth.

**BOSTON OFFICE**—J. C. Calabro, W. H. Cowles, E. E. Howie, F. P. O'Neil.

**BALTIMORE OFFICE**—N. A. Byers, W. A. Kammerer.

**ROCHESTER OFFICE**—Morse Gordon.

**CHICAGO OFFICE**—C. H. Reeves.

**DELAWARE MILLS**—M. W. Hopkins, F. H. Mitchell, Ralph Mair, J. R. Kessler, George Oechsle, J. B. Hipwell, J. I. Curley, W. R. Maull, J. Bingham, E. Bingham, W. Fischer, A. Shearer, C. Lynch, Charles Shubert, J. Melroy, G. E. Jeffrey, H. W. Taylor, G. N. Collins, Walter Dill, Otto Quante, Elmer Allen, John Hand, Charles-Cheleden, W. J. McClenaghan, J. Willi, Henry Oechsle.

**FLAT ROCK MILL**—J. Wilde, L. Birkmire, J. Van Fossen, A. Van Fossen, A. Hooper, I. Hanson, Jim Pusey, J. McClenaghan, J. G. Ramsey, W. T. Webster, C. Lowery, George Castor, Jos. Auman.

**FEDERAL ADVERTISING AGENCY, INC.**—John Lee Mahin.

**PENN NATIONAL BANK**—M. G. Baker.

**BLAKE, MOFFITT & TOWNE**—F. W. Wilson.

**ACME PAPER COMPANY**—F. J. Wright, J. W. Reilly.

**THE PAPER MILLS COMPANY**—G. F. Baker, D. R. Kimbark, H. K. Zimmerman, F. C. Bonell, J. F. Lee, Jr., Forest Hopkins.

**WILCOX-WALTER-FURLONG PAPER COMPANY**—T. S. Furlong, W. S. Wilcox.

**CHATFIELD & WOODS COMPANY**—H. S. Frazier, Cincinnati; C. M. McGrath, Pittsburgh.

**MINNEAPOLIS PAPER COMPANY**—J. G. Ashley.

**MILLER & WRIGHT PAPER COMPANY**—F. P. Appleton, G. S. Buzzard, A. Q. Brinkerhoff, A. M. Day, G. R. Daniel, P. H. Dinsmore, James Glassey, W. B. Hadden, C. D. Husson, Sidney Martin, W. P. Maxwell, J. M. O'Connell, Harry Remick, E. F. Sherwood, W. H. Schwartz, Robert Schmidt, R. W. Wilbur Thomas, E. B. Vanderveer, W. B. Vanderbeek, M. W. West, E. L. Walter, J. B. Whiton.

**THOMAS W. PRICE COMPANY**—J. B. Tuttle, H. J. Smith, Ruben Levick, J. F. Levick, J. M. Hood, W. J. Boyd, J. P. Schmidt, D. W. Hess, W. A. Watts, Chas. Megrignole, Elmer Watson, D. H. Thomas, Jos. Lonabaugh, N. W. Fort, Willis Benner, T. R. Fort, Jr.

**UNION PAPER & TWINE COMPANY**—C. A. Bicknell, Cleveland; W. B. Holliday, Cleveland; W. C. McLaughlin, Detroit.

### Ruhr Developments Interest

French occupation of the valley of the Ruhr has a very direct business interest for the Philadelphia trade importing news print and kraft, because of the location therein of important German paper mills. How important will be the effect, however, on paper importation remains to be seen. Most of the news print coming into this port comes from Finland and Denmark, and represents to an extent overproduction because of the very much decreased purchase by Great Britain of these products. German importations have not been very large. Whether continental supplies now looked after by Germany will be cut down because of the French occupation and thus indirectly will decrease the amount available for this market, remains to be determined. The situation, however, is being watched with close interest.

### General Trade News

There was added yesterday to the delivery service of the Paper House of Pennsylvania a speedy three-quarter-ton auto truck for rush deliveries in city limits. The Paper House supplied the news print used in the production of miniature editions of the *Record* newspaper, which were gotten out first as a souvenir for the Poor Richard Day banquet of the club of that name and afterwards on the occasion of a testimonial dinner to John B. Dwyer, the newspaper's managing editor. Concurrent deliveries during the week

(Continued on page 42)

*The certainty of long life for  
the sales manual you print*

WITH its rag base and long strong fibres, Foldwell offers durability of the business character for sales manuals. It offers protection against fading, tearing and cracked pages. And even under the stress of hard use day after day, it insures the preservation of all the business material in the manual. It is important for a printer to consider this. For sales materials, remember, are distributed among salesmen—critics who do not hesitate to express their opinions to the company. And when a sales manager receives compliments from the men to whom he sends beautiful and durable manuals, you may be sure that he is going to remember his printer.

A Bulletin for Printers

Chicago Paper Company, Manufacturers  
801 South Wells Street, Chicago

**Foldwell**

FOR ALL KINDS OF FINE PRINTING

**Foldwell**  
TRADE MARK  
ESTD 1840

Coated Book  
Coated Cover  
Coated Writing

HERE is the Foldwell advertisement that will appear in the February issues of magazines reaching printers, advertising managers, sales managers and executives throughout the country. This particular advertisement will run in printers' publications only—the appeal being changed to fit the other magazines on the list. ¶ This is the second advertisement of the new Foldwell series—a series designed to show the advantages and applications of the Foldwell superiorities proven in the famous travel test. ¶ With this publication series and the comprehensive direct-by-mail phase, Foldwell advertising for 1923 will be more intensive than ever.

**CHICAGO PAPER COMPANY**  
Manufacturers  
801 South Wells Street, Chicago

## Recent Incorporations

**PRACTICAL PAPER BOX COMPANY**, Brooklyn, New York. Capital, \$20,000. Incorporators: M. Kessler, J. L. Gross, M. Hecht. Attorney, J. Bogart, 63 Park Row, New York.

**E. & K. PAPER BOX MANUFACTURING COMPANY**, Manhattan, New York. Capital, \$10,000. Incorporators: C. Eisen, J. Perlman, M. Bookspan. Attorney, L. Bernstein, 305 Broadway, New York.

**UNITED STATES FIBRE BOX CORPORATION**, Manhattan, New York. Capital, \$30,000; Incorporators: M. Jacobs, C. Arnow, S. Flaumenhaft. Attorney, M. G. Holstein, 165 Broadway.

**STEVENS PAPER MILL, INC.**, Windsor, Connecticut. Manufacture paper. Capital \$200,000.

**UNCAS PAPERBOARD COMPANY**, Norwich, Connecticut. To manufacture paperboard. Capital, \$1,500,000. Incorporators: James E. Smith, Frank W. Browning and Joseph H. Ellers.

**SAXEN PAPER MILLS**, Skaneateles Falls, New York. Capital \$200,000. Incorporators: L. A. Saxer, A. E. Hoffman, G. B. Hiscock. Attorney, A. A. Costello, Syracuse.

**MERRIAM PAPER COMPANY**, Phoenicia, New York. \$20,000 to \$101,000.

## ACTIVE DEMAND IN PHILADELPHIA

(Continued from page 40)

of foreign news print delayed in transportation brought to the Paper House four cargoes of this paper, and it is now in possession of upwards of 120 tons of sheet news.

H. C. Davis, formerly of the Whiting-Patterson Company and in charge of its coarse paper business, sent out during the week formal announcement of the establishment of his own business, with headquarters in the Drexel building, as told some time ago in these columns. He will deal largely with the distributing trade.

There being in the strong box of the Paper Stock Dealers' Association of Philadelphia quite a tidy little sum from dues, and there is existing a strong conviction on the part of its members that that money should not be kept out of circulation, it is proposed in the not distant future to hold another of the banquets, which, since the decline of regular business meetings, have been the outstanding events in association annals.

The Charles Beck Company sends out this week a broadside on Warren's Standard Printing papers, the firm being one of the few Philadelphia distributors for the S. D. Warren Company. The publication illustrates effective uses which have been made of Warren papers in catalogues, letterheads and other advertising pieces, gives a complete list of all the Warren grades, together with succinct suggestions for their most effective use. It is printed on library text white, 32 x 44—104.

M. H. Lipsky, of the Rochester Wax Paper Company, Rochester, N. Y., was one of the few visitors who called on the trade during the week.

Application has been made to the Foreign Trade Bureau of the Commercial Museum for the names of manufacturers of paper and allied stationery lines by a merchant in Kyoto, Japan, who is seeking to represent firms in the Orient.

## To Investigate Reforestation Problems

WASHINGTON, D. C., January 30, 1923.—A resolution has been introduced in the Upper House by Senator Harrison of Mississippi, calling for the appointment of a committee of five to investigate "problems relating to reforestation." In presenting his resolution, Senator Harrison said:

"The question of reforestation is one of the most important, I think, with which we might deal. There are millions of acres of land where the forests have been cut, and nothing has been done toward reforesting them. I know that applies to my section, and it applies to the western section. I venture to say that this coun-

try has done less toward reforestation than any other civilized country on the globe."

The resolution (S. Res. 398), which was referred to the committee to audit and control the contingent expenses of the Senate, is as follows:

"Resolved, That the President of the Senate appoint a committee to consist of five members of the Senate, three from the majority party and two from the minority party, to investigate problems relating to reforestation, with a view to establishing a comprehensive national policy for lands chiefly suited for timber production in order to insure a perpetual supply of timber for the use and necessities of citizens of the United States. The committee shall make a final report of its investigations with recommendations to the Senate not later than December 2, 1924. For the purpose of this resolution, the committee is authorized to sit and act at such times during the sessions or recesses of the Sixty-seventh and Sixty-eighth Congresses and in such places within the United States, to hold such hearings, and to employ such clerical and stenographic assistants as it deems necessary. The cost of stenographic service to report such hearings shall not be in excess of 25 cents per folio. The committee is further authorized to send for persons, books, and papers, to administer oaths, and to take testimony. The expenses of the committee shall be paid from the contingent fund of the Senate."

The Vice-president has named the following special committee to make a study of reforestation under the Harrison resolution: Senators Moses of New Hampshire, McNary of Oregon and Couzens of Michigan (Republicans), and Harrison of Mississippi and Fletcher of Florida (Democrats).

## 15,000 Workers Strike in Sweden

According to cable despatches received Tuesday and Wednesday of this week, practically every Swedish pulp mill is down as a result of a failure on the part of mill owners and employees to arbitrate a wage agreement. A potential annual production of approximately one million tons of pulp is thus tied up and 15,000 workmen are idle. Workers are still holding out for a 10 to 20 per cent increase in pay, while mill owners are seeking to reduce wages 20 per cent. A successful arbitration in the near future appears doubtful in the estimation of New York pulp authorities.

## Michigan Paper and Allied Firms Increase Stock

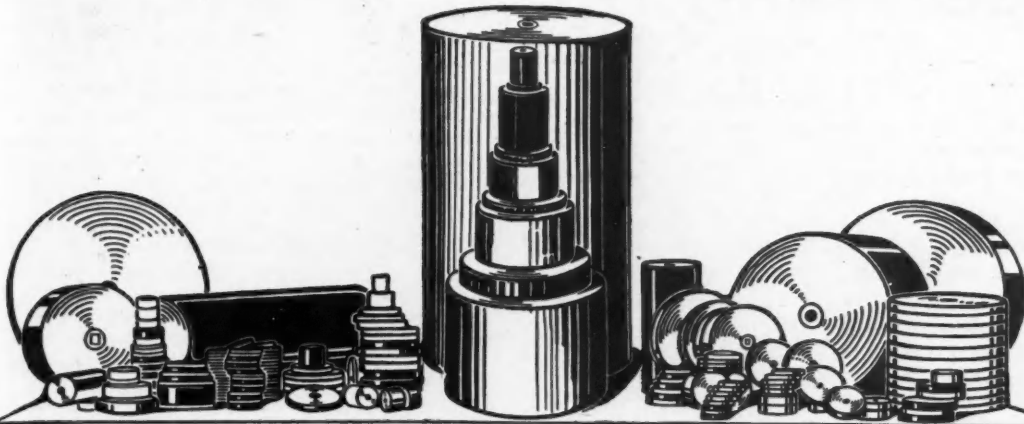
KALAMAZOO, Mich., January 29, 1923.—The Michigan Securities Commission has passed favorably on increases in capital of the following concerns, directly connected with the paper industry: Seaman-Patrick Paper Company, Detroit, \$65,000 and 9,750 shares non par to \$200,000 and 10,400 shares non par; Gregory, Mayer & Thom Company, Detroit, \$350,000 to \$600,000; Franklin Press, Detroit, \$42,000 to \$420,000; Weis Manufacturing Company, Monroe, \$500,000 to \$1,000,000.

## Ertle Paper Co. to Build at Zanesville

ZANESVILLE, Ohio, January 29, 1923.—The Ertle Paper Company has been incorporated under the laws of Ohio and will begin building a writing paper mill at this place. The mill will be equipped with two Fourdriniers trimming 178 inches. The plant will be electrically driven throughout and it will be one of the most modern paper mills of its kind in the country. It is expected that building operations will be begun about March 1. J. A. Ertle, of Middletown, Ohio, heads the new venture.

## Urges Government Owned Paper Mill

WASHINGTON, D. C., January 31, 1923.—In one of the most exhaustive reports ever sent to Congress by a Public Printer, George H. Carter, in his annual report to that body Monday, of this week, strongly advocated Government ownership of a paper mill to supply the needs of the Government Printing Office, as well as other branches of the Government service, as an economical measure.



**“THE BIG ONES MAKE THE LITTLE ONES”  
SAY THE PAPER MERCHANTS  
WHO “ROLL THEIR OWN”**

**A CAMERON ROLL-WINDER MAKES  
A SMALL STOCK OF LARGE ROLLS  
COVER MORE MARKET REQUIRE-  
MENTS THAN A LARGE STOCK OF  
SMALL ROLLS**

**CAMERON MACHINE COMPANY**  
Builders of slitting and roll-winding machines exclusively  
61 POPLAR STREET •• BROOKLYN, N. Y.

## New York Trade Jottings

Irven Joseph, former New York paper stock merchant, has allied himself with the Marquardt-Hewitt Corporation, of 250 Front street, New York.

\* \* \*

Herbert P. Brock has rejoined the sales staff of the Waste Material Trading Corporation, of 135 Broadway, New York. His attention will be devoted especially to the sale of papermaking rags.

\* \* \*

Dr. Hugh P. Baker, executive-secretary of the American Paper and Pulp Association, has returned from Washington after a conference of the Hoover Committee, held last Thursday and Friday.

\* \* \*

A combined luncheon and meeting of the members of the Association of American Woodpulp Importers was held at noon today, Thursday, February 1, in the Uptown Club, 42nd street and Madison avenue, New York.

\* \* \*

M. Steinberg & Son, Inc., dealers in new cotton cuttings and other paper mill supplies, of 34 Howard street, New York, will be located in their new warehouse at 163 Mercer street, New York, on and after Thursday of this week.

\* \* \*

The New England Envelope Company of Worcester, Mass., has recently established a New York office at 125 White street where a complete stock is carried, particular stress being laid upon the company's "Neeco" window cut envelopes.

\* \* \*

Henry S. Bragdon, envelope dealer of 487 Broadway, New York, yesterday filed a petition in bankruptcy, listing liabilities of \$8,095 and no assets. The principal creditors listed are: Sherman Envelope Company, \$1,382; Sheppard Envelope Company, \$1,191, and C. & M. Envelope Company, \$1,061.

\* \* \*

O. M. Porter, secretary of the Woodlands section of the American Paper and Pulp Association, returned to New York Tuesday of this week after attending the sessions of the Committee on Pulp and Paper at the meeting of the Canadian Technical Association and the Canadian Woodlands Section, held in Montreal last week.

\* \* \*

Paul E. Vernon of 22 Reade street, New York, is scheduled to deliver his lecture, "A Day Off in Japan," at the Brooklyn Museum Auditorium, Eastern Parkway, on Saturday afternoon, February 10 at 3:30. Anyone interested is welcome. This lecture was delivered before the Brooklyn Institute of the Academy of Music in December.

\* \* \*

R. S. Kellogg, secretary of the News Print Service Bureau, of 342 Madison avenue, New York, has returned to the city following his trip to Montreal, where he was re-elected secretary-treasurer of the Bureau and spoke before the annual meeting held last week. Mr. Kellogg also attended the convention of the Canadian Technical Association.

\* \* \*

Blake & Decker, Inc., of 50 East Eleventh street, New York, have been appointed Metropolitan distributors for the announcements, wedding and visiting cards manufactured by the White & Wyckoff Manufacturing Company, of Holyoke, Mass. F. S. Warner, formerly of the Paper Mills Company, of Chicago, Ill., will have charge of the new department.

\* \* \*

J. E. A. Hussey, vice-president of the Salesmen's Association for the New England District, was in New York Monday of this week. Mr. Hussey held a conference with Dr. Hugh P. Baker,

executive-secretary of the American Paper and Pulp Association on the program for the annual convention of the Salesmen's Association to be held in April.

\* \* \*

A petition in bankruptcy was filed last week against the Norman Paper and Twine Company, Inc., of 371 Seventh avenue, New York, the liabilities being estimated at \$10,000 and assets at \$2,000. The creditors petitioning were: Sylvia Miller, \$225; Marie Kunkel, \$200; and Ethel Eardley, \$143. Bertha Rembaugh was appointed receiver under \$1,000 bond by Judge Knox.

\* \* \*

L. Glickman & Co., manufacturers of paper bags and dishes and jobbers in paper and twine, heretofore located at 133-35 Green street, New York, announce that they are now located in their new quarters at 505-15 Johnson avenue, Brooklyn, where they are equipped with 40,000 feet of floor space with railroad siding adjoining their building. Their new telephone numbers are Stagg 4261-62.

\* \* \*

James P. Heffernan Paper Company, Inc., paper exporter, of 25 Walter street, New York, announces the appointment of Frank W. Poyntz as Export Sales Manager. Mr. Poyntz had more than seven years' experience as manager of several departments for Parsons & Whittemore, Inc., and has traveled in a selling capacity through various Latin-American countries as well as France and Spain. He will devote a large portion of his time to the development of the fine paper business of the company not only in Spanish-speaking countries, but in other parts of the world.

### Crystal Waxed Paper Co. Incorporates

[FROM OUR REGULAR CORRESPONDENT.]

DAYTON, Ohio, January 29, 1923.—The Crystal Waxed Paper Company, of Middletown has been incorporated, the papers having just been issued. This is the company which recently was formed, to effect a merger between the Shelby Wax Paper Company of Shelby, Ohio, and the waxing department of the Crystal Tissue Company of Amanda, near Middletown.

The new company is capitalized at \$100,000, 7 per cent preferred stock and has 3,000 shares of common stock of no par value, the value being set nominally at \$5 per share.

Z. W. Ranck, C. O. Sellant and W. H. Muchmore are the incorporators of the Crystal Waxed Paper Company.

The new concern purchased the entire equipment of the old Shelby Company and the waxing equipment of the mills at Amanda.

It is understood the new plant soon will be in operation under the management of W. H. Muchmore who with Mr. Sellen has come to the Miami Valley from Shelby.

It is stated that all of the products of the new 140 inch tissue machine soon to be installed in the mills of the Crystal Tissue Company, will be utilized by the Crystal Waxing Company.

### Largest U. S. Book Machine Commemorated

Celebrating the installation of the largest machine in the United States producing high grade book paper, the P. H. Glatfelter Company, of Spring Grove, Pa., distributed this week to the trade a souvenir edition of its house organ, the "Papermakers' Barker." This attractively compiled and handsomely bound pamphlet contains more than fifty pages, fully describing the new 170-inch machine and listing the various concerns involved in its manufacture and installation.

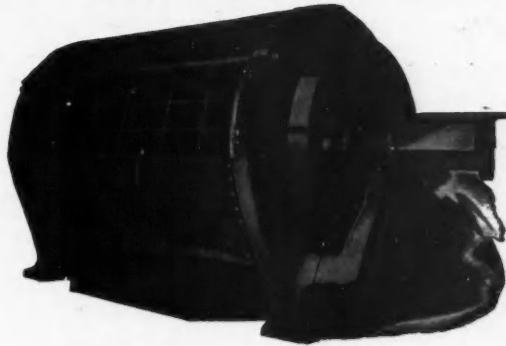
The booklet is profusely illustrated, containing views of the Spring Grove Paper Mills from their inception in 1874 to aeroplane photos of the P. H. Glatfelter plant as it stands today. The publication as a whole is a highly creditable achievement.



# "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



# Better Paper— More Profit



*Cluster filling is manufactured to fit any style bar filled roll.*



With a brushing surface over 400 per cent greater than has the bar filled roll you can produce a stronger and better formed paper.

Filling in your beater engine rolls.

Dowd Cluster Filling is being used in some of the Most Noted Mills in the country and giving excellent results.

An installation will convince you of the advantages to be obtained in using this filling. result when using the Dowd Patent Cluster

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# Editorial

Vol. LXXVI New York, February 1, 1923 No. 5  
FIFTY-FIRST YEAR

## The Paper Bids

As may be observed from the report printed elsewhere in this issue only a comparatively small number of paper concerns were represented in the bids to furnish Government paper which were opened by the Joint Congressional Committee on Printing at Washington on Monday of this week. This is perhaps accounted for by the action of the committee in the past year or two in numerously rejecting bids at prices which seemed obviously fair and reasonable to paper men.

On the whole, however, considerable interest attaches to the bidding as it shows as usual the price trend of the paper market. That this has been considerably upward since the most recent bids were opened in July and January of last year may be seen from a comparison of the prices on some of the more representative items which follow:

In the present bidding the lowest bid on white news print was made by the Maurice O'Meara Company at 4.03 cents for six months. In the bidding six months ago Dobler & Mudge were low on this item at 4.3 cents for six months, but all bids were rejected. In the bidding a year ago this item was awarded to Dobler & Mudge at 3.79 cents.

The lowest bidder in the current bidding on No. 1 machine finish printing was the International Paper Company at 7.37 cents for six months. This item six months ago went to Dobler & Mudge at 6.47 cents for six months, and a year ago to the International Paper Company at 6.63 cents.

On rag machine finished printing 25 x 38—40, cut 32 x 48 flat, the Old Dominion Paper Company in the current bids was low at 9.99 cents for six months. No bids at all were submitted on this variety six months ago and the award went to the Bryant Paper Company at 7.54 cents a year ago.

On sized and supercalendered printing 25 x 38—45, cut 24 x 32 and 32 x 48, the Bryant Paper Company bid low in the current bidding at 7.69 cents. All bids on this variety were rejected six months ago and the Kalamazoo Paper Company was the successful bidder a year ago at 6.58 cents for six months.

On half tone printing paper 25 x 38—70, cut 24 x 38 and 38 x 48, the International Paper Company bid low in the current bidding at 7.47 cents for six months. Dobler & Mudge bid low on this item six months ago at 6.22 cents, but all the bids were rejected. This item was awarded to Dobler & Mudge a year ago at 5.97 cents.

On single coated both side book 25 x 38—70 cut any size flat, maximum width 42 inches, the Allied Paper Mills were low in the current bids at 9.09 cents for six months. This item was bid low six months ago by Dobler & Mudge at 8.49 cents but all bids were rejected. The successful bidders a year ago were the Allied Paper Mills at 8.09 cents for six months.

On white writing paper No. 20, 17 x 28 and 21 x 33, the low bidder in the current bidding was the R. P. Andrews Paper Company

at 7.39 cents for six months and this item was awarded to the same concern six months ago at 6.79 cents. This item was awarded to the Kalamazoo Paper Company at 6.84 cents a year ago.

On stationery bond the Aetna Paper Company bid low in the present bidding at 10.72 cents for both the six month and the yearly period, and the same concern was awarded the contract six months ago at 11.16 cents. This concern bid low a year ago at 10.31 cents for both six months and a year, but all bids were rejected.

On commercial ledger the Aetna Paper Company in the current bidding was low at 13.82 cents for both six months and a year. Six months ago this item was awarded to Dobler & Mudge at 14.2 cents and the Aetna Paper Company was the successful bidder a year ago at 14.31 cents for both six months and a year.

On smooth colored cover paper the R. P. Andrews Paper Company was the low bidder in the current bids at 8.43 cents for six months. This item was awarded to the same concern six months ago at 8.48 cents. The low bidders a year ago were Knowlton Bros. at 8.89 cents, but all bids were rejected.

On kraft wrapping paper the low bidder in the current bidding was the Whitaker Paper Company at 7.11 cents. This item was awarded six months ago to the R. P. Andrews Paper Company at 6.6 cents. Six months ago the low bidders were Dobler & Mudge at 7.3 cents, but all bids were rejected.

On manila board in the current bidding the Maurice O'Meara Company was the low bidder at 5.25 cents. This item was awarded to Samuel Alcorn six months ago at 4.95 cents and to the same concern a year ago at 4.75 cents.

## Seeking Paper Knowledge

Eighteen hundred years ago, nearly fourteen centuries before America had been discovered, a certain Chinese sorcerer named Ts'ai-Lun knelt before his ruler, the mighty Ho-Ti, Emperor of China. With Oriental pomp two court-attendants received the offering of the wizard and carried it up to the throne of the All-Highest for his approval. Nor was the offering one of gold or rare spices or precious stones, such as China's monarch was accustomed to receive. An odd-looking gift it was, to be sure, the courtiers must have thought. But to Ho-Ti it was more valuable even than rubies or silks or jade. It was something that would bring fame and glory to the great Empire of the East long after his reign had faded into obscurity. As Ho-Ti looked upon the offering and fondled it with his hands there came to him a vision of the significance of this gift and great honor was conferred upon the humble Ts'ai-Lun.

The sorcerer's offering was a sheet of paper—the first sheet of paper in the world's history. The far-seeing old emperor bade the inventor to exert all the forces of his magic to the concocting of more of the mysterious substance and the resources of the Empire were placed at Ts'ai-Lun's disposal. Thus did paper first come to be known in China early in the second century, and not long after the beginning of the Christian era.

Even then Ts'ai-Lun jealously kept to himself the miracle by which this mysterious substance, paper, was made. Other magicians there were who envied the renown he had attained in the eyes of the great Ho-Ti and who cooked all manner of magic herbs to

gether and invoked the aid of all the demons of the Orient in a vain attempt to do what Ts'ai-Lun had done. Not until the latter was on the brink of death did he impart the secret of his wizardry—and then, to his only son, pledging him to guard it with his life.

For centuries China's paper industry was enshrouded in this cloak of necromancy. Its development was hereditary. Hundreds of years passed during which time paper was a rare and expensive luxury, enjoyed only by the Powers That Be. Meanwhile China's millions waited—waited for lack of knowledge—waited because in the first place, there was no way of disseminating the information to others who would have been interested and besides it would have been in violation of the traditions set by their forefathers to have done so.

Last week Joseph Bailie, Dean of the College of Forestry and Agriculture, of the University of Nanking, Nanking, China, was visiting prominent paper executives of the United States. He has come here from China to place in American paper mills intelligent young Chinamen in order that they may absorb the most modern methods of papermaking to be found in the world today and carry their knowledge back with them to the manufacturers of the Orient. It is a tribute to the United States and to its paper industry. When the East, with all of its centuries of wisdom, and proud aloofness deigns to cast aside the conjury and crystal-gazing which have cloaked its history for centuries, and turn to a relatively "new-hatched" country, such as our own, for knowledge, then, surely, we have reason to feel proud of our achievements.

But this pride will not be of the kind that Ts'ai-Lun bore toward the industry he founded for his Emperor. Americans know that what progress has been made in their paper industry has been a result of co-operation and of working together for a common end. They are not satisfied with the limited knowledge the individual is capable of possessing. They realize that the only progress lies in team work—in an intelligent exchange of information and methods. In their trade journals and in their various associations they are afforded a common meeting ground—a forum where trial-by-error experiments may be brought to light for the benefit of all.

American paper manufacturers will be only too glad to co-operate with Dr. Bailie in the placing of young Chinamen in their mills. What subtle flattery to the technical ingenuity of America's paper men is embodied in such a step on the part of China, a country steeped in wisdom and science that antedates all historical record!

### Production of Cellulose in Sweden in 1922

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., January 31, 1923.—Assistant Trade Commissioner Sorensen at Copenhagen reports to the Department of Commerce that Swedish production of cellulose during 1922 is estimated at 745,000 tons, or about 68 per cent of the normal production. The output of sulphate cellulose during this period amounted to approximately 240,000 tons, or 86 per cent of normal capacity of the mills.

Production of mechanical wood pulp last year was at the rate of 96 per cent, reaching approximately 334,000 tons; stocks of wood pulp at the present time are very small.

### T. J. Keenan Tells About Paper Exposition

Thomas J. Keenan of New York was requested by Chairman Bryant at the meeting of the Technical Section of the Canadian Pulp and Paper Association at Montreal on Thursday to speak of the progress made in the organization of the Paper Industries Exposition which is to be held at the Grand Central Palace, New York, during paper trade convention week, April 9-14.

Mr. Keenan said he had been originally appointed a member of the Advisory Committee of the Paper Industries Exposition, but on becoming acquainted with the ambitious character of the project, he had decided to give his whole time and attention to the work of arranging for exhibits that would show the extent and importance of the industry in its national aspects. The exposition was receiving the enthusiastic support of leaders in the industry and a well rounded and comprehensive exhibition of paper and paper products was assured. Paper machinery manufacturers were also intensely interested in the exposition, and types of machinery, apparatus and equipment would be abundantly displayed. Spaces had already been reserved for paper converters as well as for the larger paper merchants and dealers in mill supplies and raw materials, so that it appeared certain that a complete exposition of paper manufacture in all its branches would be assembled.

Mr. Keenan asked for the interest and co-operation of the members of the Technical Section of the Canadian Pulp and Paper Association and extended an invitation to them to attend, saying that the managers of the exposition would accord the privilege of free admission at all times during the week of the exposition to members of the Canadian Pulp and Paper Association.

He stated that the Technical Association of the Pulp and Paper Industry was expected to hold sessions on one day at the exposition and at the close of the sitting the members would be conducted on a tour of the exhibits. The same course would likely be followed by others of the service associations of the American Paper and Pulp Association and the National Paper Trade Association which would be in session at their annual convention during the entire week of the exposition, Monday, April 9 to Saturday, April 14.

The exposition was being conducted, he said, in close co-operation with the officers of the national associations, many of whom were serving on its Advisory Committee.

In closing he thanked the chairman and officers of the Technical Section for the interest in the exposition which they had manifested by calling on him to address the meeting and again extended a hearty invitation for the section to be represented at some of the functions to be held in connection with the exposition.

During his stay in Montreal, Mr. Keenan has talked with a large number of manufacturers and the representatives of educational institutions and has received many assurances of support and co-operation.

### Revised Classification of Paper

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., January 31, 1923.—The revised classification and tentative definitions of some two hundred kinds of types of paper have been submitted to a large number of organizations and individuals, who are co-operating with the Paper Division of the Bureau of Standards in this work, for criticism. This classification is so arranged that each type of paper may be given a code number and thus permit of mechanical devices for tabulating statistics. Some of the definitions have already been changed to meet the suggestions which have been received but it is hoped that additional criticisms will be received. This work is part of the progress on standardization of paper and it is hoped that definitions of terms will assist in eliminating misunderstandings in commercial transactions with paper. Some eight hundred supplementary definitions are also being prepared.

## PRODUCTION OF WOOD PULP FOR THE MONTH OF DECEMBER

According to Figures Just Issued by the Federal Trade Commission at Washington the Mill Stocks at the End of the Month of Ground Wood Equaled Fourteen Days' Average Output, of News Grade Sulphite and Bleached Sulphite Eight Days' Average Output, of Easy Bleaching Sulphite Six Days' Average Output and of Mitscherlich Sulphite Five Days' Average Output.

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., January 31, 1923.—In connection with the Federal Trade Commission's 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 December, 1922. 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 time reported by all companies 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 December, 1922, compared with December, 1921, for the reporting mills. The average production is based upon the reports covering the years 1917 to 1921, inclusive, and the average stocks are based upon the stocks carried for the years 1919, 1920, and 1921.

	Number of mills	On hand first of month Net tons	Production for month Net tons	Used during month Net tons	Shipped during month Net tons	On hand end of month Net tons
<b>Ground Wood Pulp:</b>						
December, 1922..	153	80,212	107,301	111,742	9,378	66,393
December, 1921..	163	115,363	121,804	104,150	9,937	123,080
December, 1920..	163	108,529	146,718	115,914	9,707	129,626
December, 1919..	172	140,129	132,795	119,616	13,347	139,961
Average .....		115,150				147,073
<b>Sulphite, News Grade:</b>						
December, 1922..	59	19,668	56,536	52,817	4,423	18,984
December, 1921..	64	21,643	59,939	53,799	6,543	21,240
December, 1920..	64	17,034	62,357	52,674	8,733	17,984
December, 1919..	66	21,249	66,782	57,283	10,375	20,373
Average .....		60,125				20,685
<b>Sulphite, Bleached:</b>						
December, 1922..	30	9,225	42,901	28,649	11,472	12,005
December, 1921..	33	5,150	34,154	19,872	12,684	6,748
December, 1920..	32	4,381	41,911	22,848	16,783	6,661
December, 1919..	32	8,636	47,844	25,583	24,087	6,810
Average .....		39,806				9,507

	Number of mills	On hand first of month Net tons	Production for month Net tons	Used during month Net tons	Shipped during month Net tons	On hand end of month Net tons
<b>Sulphite, Easy Bleaching:</b>						
December, 1922..	7	1,535	3,822	3,756	46	1,555
December, 1921..	8	841	4,992	4,110	855	868
December, 1920..	6	1,192	4,369	3,215	1,212	1,134
December, 1919..	8	1,572	5,126	3,539	1,850	1,314
Average .....			6,000			1,346
<b>Sulphite, Mitscherlich:</b>						
December, 1922..	7	1,518	5,698	2,396	3,512	1,308
December, 1921..	6	1,065	5,961	3,824	2,074	1,128
December, 1920..	7	1,627	6,549	3,643	1,765	2,768
December, 1919..	7	1,974	6,670	4,163	2,672	1,809
Average .....			6,125			1,831
<b>Sulphate Pulp:</b>						
December, 1922..	23	5,205	21,808	15,165	7,204	4,644
December, 1921..	21	7,979	15,531	13,018	2,835	7,657
December, 1920..	20	7,075	9,800	8,071	958	7,850
December, 1919..	22	7,771	15,356	9,408	6,072	7,647
Average .....			13,050			6,499
<b>Soda Pulp:</b>						
December, 1922..	27	6,895	37,864	22,175	14,883	7,701
December, 1921..	27	6,306	29,825	14,185	12,922	9,024
December, 1920..	26	6,938	30,179	18,053	12,557	6,507
December, 1919..	28	7,248	31,232	17,198	15,610	5,672
Average .....			29,800			6,931
<b>Other Than Wood Pulp:</b>						
December, 1922..	7	585	1,121	867	128	711
December, 1921..	5	208	629	613	46	178
December, 1920..	4	192	640	713	0	119
December, 1919..	6	280	812	747	105	240
Average .....			800			154
<b>Total—for all grades:</b>						
December, 1922..		124,843	277,071	237,567	51,046	113,301
December, 1921..		158,555	272,835	213,571	47,896	169,923
December, 1920..		146,968	302,527	225,131	51,715	172,649
December, 1919..		188,864	306,617	237,537	74,118	183,826
Average .....			270,850			194,026

Total stocks of all grades of pulp in the mills on December 31 amounted to 113,301 tons. Mill stocks of ground wood pulp, sulphite, news grade, Mitscherlich, and sulphate pulp decreased during the month; stocks of all the 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 1917-1921, inclusive, the figures show that:

- Ground wood pulp stocks equal 14 days' average output.
- News grade sulphite mill stocks equal 8 days' average output.
- Bleached sulphite mill stocks equal 8 days' average output.
- Easy bleaching sulphite mill stocks equal 6 days' average output.
- Mitscherlich sulphite mill stocks equal 5 days' average output.
- Sulphate mill stocks equal 9 days' average output.
- Soda pulp mill stocks equal 6 days' average output.

(Continued on page 50)

### MONTH OF DECEMBER, 1922 (WITH DECEMBER, 1921, FOR COMPARISON)

Grade	Lack of Orders		Repairs		Other Reasons		Total	
	1922	1921	1922	1921	1922	1921	1922	1921
<b>Ground Wood Pulp:</b>								
Number of grinders.....	14	49	126	243	581	705	721	997
Total hours idle.....	7,728	13,189	7,386	16,754	*145,560	156,319	160,674	186,262
<b>Sulphite, News Grade:</b>								
Number of digesters.....	3	17	16	27	19	64	38	108
Total hours idle.....	428	4,776	348	1,520	3,853	3,644	4,629	9,940
<b>Sulphite, Bleached:</b>								
Number of digesters.....	26	60	30	30	58	34	114	124
Total hours idle.....	3,258	13,105	1,207	915	2,300	2,952	6,765	16,972
<b>Sulphite, Easy Bleaching:</b>								
Number of digesters.....	6	7	0	0	9	7	15	14
Total hours idle.....	756	2,136	0	0	1,140	1,013	1,896	3,149
<b>Sulphite, Mitscherlich:</b>								
Number of digesters.....	0	0	17	17	10	9	27	26
Total hours idle.....	0	0	237	959	230	1,728	467	2,687
<b>Sulphate Pulp:</b>								
Number of digesters.....	1	5	3	22	28	24	32	51
Total hours idle.....	202	1,448	459	1,446	1,230	1,190	1,891	4,084
<b>Soda Pulp:</b>								
Number of digesters.....	0	90	8	9	21	78	29	177
Total hours idle.....	0	18,480	370	24	4,550	5,985	4,920	24,489
<b>Other Grades:</b>								
Number of digesters.....	0	9	0	2	6	2	6	13
Total hours idle.....	0	2,196	0	128	1,560	648	1,560	2,972
Total number of machines.....	50	237	200	350	732	923	982	1,510
Total hours idle.....	12,372	55,330	10,007	21,746	160,423	173,479	182,802	250,555

\*Includes 142,835 hours due to water power conditions.

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### Canadian Subsidiary of Charles Walmsley Co.

[BY OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., January 29, 1923.—A company has been formed here to take over all the Canadian business of Charles Walmsley & Co., of Bury, England, the well-known manufacturers of paper making machinery, and other engineering work. It will be known as Charles Walmsley & Co., Canada, Limited, and the directors include Sir William Price, of Price Bros. & Co., Quebec; F. H. Anson, of the Abitibi Power and Paper Company; Hon. C. G. Foster, and H. B. Walker. The plant of the Armstrong Whitworth Company of Canada, situated at Longueuil, a suburb of Montreal, has been taken over. The company will be entirely managed by the Canadian board and it has acquired all the Canadian rights of the parent company, and will manufacture all the machinery here for Canadian business. The Walmsley Company has for years been doing a big business with Canadian pulp and paper mills, and has manufactured the biggest paper machines at present in use in this country, including the 232 inch machine in the Abitibi Company's mill. At present it is making paper machines for the Belgo Paper Company, the Bathurst Lumber Mills, Price Bros. & Co., and the Donnocana Pulp and Paper Company.

### To Build New Paper Mill on Racquette River

POTSDAM, N. Y., January 30, 1923.—A new paper mill manufacturing light weight papers will be built during the coming summer at a point on the Racquette river about two miles from Norwood below Potsdam, directly opposite the stream from the present Sisson lumber mills at Sissonville, it has been learned authoritatively here.

Contracts for the erection of the new mill have already been let, it is understood, and work will be started in the immediate future. Thus far the name of only one promoter of the enterprise has been disclosed, Hollis Martin, a son of the late O. E. Martin, who with the late Charles H. Remington was formerly active in the paper business in this section, building the mills at Norfolk and Raymondville now owned by the Hanna Paper Corporation.

The capacity of the new paper mill will be about ten or twelve tons a day, it is said, and power for the operations will be taken from the Racquette at a site owned by those interested in the project.

A ground wood mill is already built near the site of the proposed mill, with a 25-ton capacity. The production of this mill has hitherto been sold to tissue paper mills.

### Albert F. Hagar Leaves Estate to Sister

DAYTON, Ohio, January 29, 1923.—Miss Sarah B. Hagar, who is the owner of the Hagar Strawboard and Paper Company's plant at Cedarville, and who resides in Xenia, has received word that she has fallen heir to the estate of her late brother, Albert Francis Hagar, New York attorney, who died recently.

Miss Hagar will receive \$180,000 under the terms of the will and she also falls heir to a similar amount, under the will, which was bequeathed to another sister, Miss Mary Hagar, who died last July at the Hagar residence in Xenia.

Miss Sarah Hagar was quite wealthy in her own name before the bequests of \$360,000 were received. She is conducting the Cedarville mills in a modern way, a number of improvements made by her late brother just before he died, having been greatly to the benefit of the company.

### Thomas Beckett Talks to Employees

[FROM OUR REGULAR CORRESPONDENT.]

HAMILTON, Ohio, January 29, 1923.—Employees of the Beckett Paper Company, enjoyed their third annual banquet and entertainment the past week at the Y. M. C. A. More than 250 were in attendance. The dinner was excellent and was followed by a

heart-to-heart talk by Thomas Beckett president of the company who gave a history of the 75-year-old manufactory. He assured the men and women that their welfare was the very foundation of the company's success.

Mr. Beckett explained how the company started in a small way in 1845 and how, year by year, it grew larger and larger until today it occupies an important place in the manufacturing establishments of Ohio.

The Association's annual report was submitted by Frank Becker, treasurer. The election of directors of the Association resulted as follows: Thomas Beckett, Quincy Adams, Homer Latimer, Frank Glaumand, Frank Becker.

### Buys Essex Pad & Paper Co.

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., January 22, 1923.—James F. Cleary, Jr., has purchase the interests of all the stockholders in the Essex Pad and Paper Company. The consideration was not made public. The shop, which has been closed since last July, will soon resume operations. Pads and tablets are manufactured by this company. Alexander Coderre is superintendent of the concern, which position he has held for the past 18 years. It is not unlikely that the name may be changed to the Essex Pad and Tablet Company.

### Advance Bag Co. Sales Managers Meet

[FROM OUR REGULAR CORRESPONDENT.]

DAYTON, Ohio, January 29, 1923.—District sales managers of the Advance Bag Company, Middletown, assembled in the Paper City last week in annual sales convention at the local office.

Eight districts in the United States were represented at the meeting. The visitors were registered at the Hotel Manchester, Middletown, newest hostelry which is rapidly becoming a center for paper mill men and their friends.

### Pettebone-Cataract Co. Repairing Fire Damage

[FROM OUR REGULAR CORRESPONDENT.]

NIAGARA FALLS, N. Y., January 30, 1923.—While the fire which occurred at the plant of the Pettebone-Cataract Paper Company recently caused no great financial loss, it did affect the power plant seriously and caused the closing down of the entire plant. Reconstruction work is progressing as rapidly as possible, and while it is not possible to say how long the shutdown will continue, it is hoped that it will not be many weeks longer.

### DECEMBER WOOD PULP PRODUCTION

(Continued from page 48)

Mill stocks of "other than wood pulp" equal 22 days' average output.

Total mill stocks of all grades equal 10 days' average output.

#### Loss of Production

The idle machine time of grinders and digesters reported to the Commission for the month of December, 1922, is shown in the attached tabulation. The number of grinders and digesters include only those for which idle time was reported during the month. The total number of machines may include duplications because the report may count the same machine twice if idle for different reasons during the different parts of the month. The reasons tabulated for lost time are "lack of orders" and "repairs." "Other reasons" include water conditions, etc. The time lost in December, 1921, is shown by grades and reasons, for purposes of comparison. Neither the number of machines nor hours idle include idle machines and the time lost in 13 mills not in operation during the month.

Section of the

**Technical Association of the Pulp and Paper Industry**



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



Conducted by **W.G. Mac NAUGHTON, Secretary**

**THE PROPERTIES OF WOOD IN PAPER MAKING\***

The Effect of Physical and Chemical Properties of the Wood on Economy and Quality, Particularly in the Sulphite Process

By **BJARNE JOHNSEN AND H. N. LEE**

The suitability of any kind of wood for papermaking is determined by its physical and chemical characteristics. Very resinous woods, like the pines, are not suitable for the sulphite process, but make an excellent raw material for the sulphate or kraft process. Soda pulp from poplar is used in certain papers such as book papers on account of the short, bulky fiber but cannot be used for papers where strength is required. It is not the intention of this paper to discuss the value of the various species of wood for all different pulping processes and for the different grades of paper. This discussion will deal chiefly with the most important pulpwoods, spruce and balsam, and their use in the sulphite process, which is by far the most important chemical process. However, much of the data given may be equally well applied to other woods and the other processes.

In discussing the properties of wood for papermaking there are two chief considerations, economy and quality. Wood is ordinarily purchased on the cord basis and the consumption of wood is recorded on the cord basis. It is customary to express the yield of pulp in terms of cords used per ton of pulp, but while the enormous variations in this figure in different mills may, to a great extent, be accounted for in the different methods used in the manufacturing process, it is not possible to so explain the great variations which are experienced in any one mill. These variations can

Number of logs, per cord.....	67
Average diameter inches, per cord.....	7.31
Cubic feet solid material per cord.....	88.58

be explained only when the actual value of the cord based on the physical and chemical properties of the wood are known.

**Measurement of Cord Wood**

Considering first the physical properties, it is known that a very large variation can exist in the amount of solid wood in the cord. According to Sterns (1), the theoretical solid content of the cord is (1) always the same provided the logs are all of the same diameter. In this case the theoretical solid content is 90.69 per cent

(116.1 cu. ft.). (2) If the logs differ in diameter the solid content will be greater and will increase as the ratio of the largest diameter to the smallest increases. However, in actual measurements he found no cords contained over 80 per cent (102.4 cu. ft.) solid wood.

Graves (2) and Winslow and Thalen (3) give the following figures:

Length	Cubic Feet Per Cord					
	Graves Over 5.5 inch dia. at small end	2.5 to 5.5 inch dia. at small end	Winslow and Thalen			
			Mixed	Straight	Crooked	Knotty
30 inch	90.5	83.9	87.2	..	..	..
4 feet	88.9	82.4	85.7	92	82	74
8 feet	83.8	77.2	80.5	82	75	50

Sterns (1) found the average solid volume per cord of 32 inch wood, based on careful volumetric measurement of 34 cords, logs from 4 inch to 16 inch diameter to be, before barking 93.97 cu. ft., after barking 83.36 cu. ft.

Our own measurements on two very different kinds of wood, one coming from northeastern Quebec and the other from Minnesota, based on 32 cords of each class of wood, show the following:

Average		Maximum		Minimum	
Que.	Minn.	Que.	Minn.	Que.	Minn.
67	115	102	156	36	86
7.31	5.67	10.56	6.50	5.96	4.95
88.58	85.68	99.52	91.72	69.79	77.82

The Quebec wood was peeled, the Minnesota wood not peeled; therefore the actual wood in the latter was about 12.5 per cent less or an average of about 75 cu. ft. per cord. The greatest variation in the amount of solid wood was due to poor packing which in turn was frequently due to crooked or poorly trimmed logs. The figures appear to show conclusively that wood of larger average diameter, which means mixture of small, medium and large diameters, results in more actual solid wood per cord than wood of small average diameter.

In most cases investigators have found that the larger the average diameter the greater the solid content, but Sterns found just the

\*Read at the annual meeting of the Technical Section of the Canadian Pulp & Paper Association, Montreal, Jan. 24-25, 1923.

reverse. He believes the discrepancy may be explained by the fact that he measured 32 inch wood while the others, in general, measured 4 foot or 8 foot wood. It is certainly true that the effect of crookedness of logs is greater in long logs than in short ones, and it is possible that in very short logs the effect of crookedness might be comparatively small. Moreover, large diameter logs are more likely to be straight than are those of small diameter.

It has been shown in the foregoing that the actual value of a cord of wood for production of pulp, or in other words, the solid wood in a cord, may be influenced by several factors and may vary very considerably. To secure reliable figures from which to determine yield, as well as to handle the purchase of wood in the most efficient manner, it is quite apparent that accurate measurement of the wood is necessary.

#### Density and Rate of Growth

The value of a given volume of solid wood for pulp is determined by the dry weight of the wood. This is dependent on the density of the wood. This varies, not only with the species but also within the same species, according to the conditions of growth.

Our investigations show in balsam as well as in spruce, and the same may probably be applied to other coniferous woods, that slow growth wood is more dense than rapid growth wood. The following are figures for logs 6 inches in diameter:

	Rings per Inch	Weight cubic foot green wood when absolutely dried
Quebec spruce .....	18.5	27.6
	4.5	20.2
Minnesota spruce .....	17.4	28.0
	5.7	22.4
Quebec balsam .....	19.7	27.2
	4.3	18.7
Minnesota balsam .....	10.3	22.6
	6.4	17.8

Moreover, as is shown in the following table by Kress, Wells and Edwards (4), there is considerable variation in the average density of different species of wood.

	Ave. weight of 1 cu. ft. of green wood when dried
Black spruce ( <i>Picea mariana</i> ).....	23
White spruce ( <i>Picea canadensis</i> ).....	24
Balsam fir ( <i>Abies balsamea</i> ).....	21
Hemlock ( <i>Tsuga canadensis</i> ).....	24
Jack pine ( <i>Pinus divaricata</i> ).....	24
Aspen ( <i>Populus tremuloides</i> ).....	23

Our own tests show:

	Ave. weight of 1 cu. ft. of green wood when dried	Ave. rings per in.
N. E. Quebec spruce.....	25.2	12.8
S. W. Ontario spruce.....	25.6	11.5
N. E. Quebec balsam.....	20.8	9.1
S. W. Ontario balsam.....	20.4	8.2

From this data it is apparent that spruce has, on the average, 15 to 20 per cent greater density than balsam fir. Here again, as in the case of cord wood measure, are opportunities for large variations in the possible yields from cords of wood composed of more than one species, or even composed of the same species of different rates of growths.

#### Chemical Composition (Cellulose Content)

Another factor which influences the possible yield, even when the foregoing factors are eliminated, is the chemical composition of the wood. The most important characteristic is the cellulose content. The data on this subject from different sources are not al-

ways comparable because the various investigators have not used the same methods in making their determinations. The relative cellulose content of certain kinds of wood, based on a comparatively small number of tests, is given by Johnsen and Hovey (5).

Cellulose calculated as per cent of oven dry wood:

White spruce .....	56.48
Black spruce .....	50.64
Red spruce .....	52.95
Balsam fir .....	51.60
Jack pine .....	49.24
Hemlock .....	48.70
Aspen .....	57.25

Even within the same species it has been shown that the cellulose content varies. Johnsen and Hovey (5) found in balsam fir that rapid growth (low density) wood contained 50.35 per cent cellulose, while slow growth (high density) wood contained 52.85 per cent cellulose. Thorbjornson (6) gives the following figures for Swedish spruce, determined from different parts of the same log:

Specific Gravity	Per Cent Cellulose
.382	53.4
.425	57.3
.446	58.5

As far as the two most important pulpwoods, spruce and balsam fir, are concerned, it is safe to say that spruce has a slightly higher cellulose content than balsam fir. According to this data the yield which may be expected from a given volume of solid wood will be greater with woods of high density, for two reasons: (1), the greater actual weight of wood substance; (2), the somewhat greater cellulose content by weight.

#### Decay

The influence of the cellulose content on yield is much more marked when wood of different degrees of soundness are compared. It has been found by Acree (7) that the cellulose content may be decreased by as much as 28 per cent. Similar results have been obtained by J. L. Parsons (8) (unpublished data). While, in general, decay decreases the cellulose content, Parsons found that decay caused by *Trametes pini Brot.* resulted in an increase in cellulose content of 15 per cent, with a decrease in lignin of 30 per cent.

Another serious result of decay is a decrease in the density of the wood. Sutermeister (9) found spruce wood which was thoroughly affected by rot, but which was still quite hard and firm, weighed less than 18 pounds per cubic foot of dry wood, while sound spruce weighed more than 22 pounds.

#### Relation to the Manufacturing Process

So far, factors which have a bearing upon the value of the cord, particularly with regard to economy, have been considered. In the following the importance which knowledge of these factors and other factors have in the manufacturing process and on the final product will be discussed.

It is obvious that the variations in the solid content of the cord, due to the conditions of piling of wood, dimensions of logs, crookedness, and trimming, have a very great effect on the cost of production. However, these variations are eliminated as soon as the wood is in form of chips and, therefore, do not directly affect the capacity of the mill or the quality of the product.

Knowledge of the density of the wood is of much greater importance because it directly affects the yield and, as a result, the economy in several ways.

(1) Dense wood gives a greater weight of wood per cord.

(2) Dense wood gives a slightly higher cellulose content per unit of weight.

(3) Dense wood, consequently, increases the digester capacity, which allows (a) a longer cooking time at lower temperature, which results in (b) increased yield and a better quality of product.



These points are illustrated by the results obtained by experimental cooks on a semi-commercial scale, as follows:

	Balsam	Spruce
Wt. of absolutely dry chips from cord of peeled wood, pounds .....	2,036	2,580
Wt. of chips in digester, absolutely dry, pounds..	268	323
Bleach consumption, per cent.....	17.2	15.5
Yield of bleached pulp, per cent dry wood used..	42.79	43.65
Yield bleached pulp for equal volume digester charges, pounds .....	115	141
Absolutely dry pulp per cord peeled wood, pounds.	871	1,126

Actual mill data, using two different classes of wood (average figures per month), show the following:

	Month A	Month B
Wt. cu. ft. wet chips when absolutely dried, pounds	8.15	8.64
Absolutely dry pulp, per cu. ft. digester space, pounds .....	3.56	3.91
Yield absolutely dry pulp, per cent of dry wood..	43.7	45.2
Screenings (dry) per cent of total pulp.....	3.00	2.03
Cooking time, hours .....	12	12.5
Bleach consumption, per cent.....	12.7	12.0
Slowness of unbleached pulp.....	31.0	27.1
Strength of unbleached pulp.....	92	93

These experimental and mill data show how the density of the wood affects the value of a cord and the capacity of the cooking equipment.

Another factor which affects the digester capacity is the moisture content of the chips. The higher the moisture content of the chips, the heavier the chips will be, and consequently the better will the chips pack in the digester. Thorbjornson (6) has shown that by using chips with an average moisture content of about 20 per cent in place of chips, with a moisture content of about 40 per cent, the capacity of the digester is reduced 9.5 per cent.

It has already been stated that the variation in cellulose content with sound wood is not great, but when rotten wood is used the cellulose content becomes a very important factor. The yield by weight, based on a number of experimental cooks, with the soda process, is shown by Sutermeister (10) to be about 30 per cent for rotten poplar wood, as compared with about 41 per cent for sound poplar. For birch an even greater reduction in yield was found. Sutermeister (9) using the sulphite process with spruce wood shows that the yield by weight is higher with rotten wood than with sound wood, but his conclusions do not seem entirely justified when it is considered that the two resulting pulps were not cooked down to anywhere near the same degree of purity; the sound wood yielding a pulp with only 0.6 per cent screenings and requiring only 17 per cent bleach, while the pulp resulting from the rotten wood had 6.6 per cent screenings and required over 30 per cent bleach. There is no reason to believe that decayed wood should give a higher yield by weight than sound wood, except in cases where the fungus has caused an increase in the cellulose content, as referred to in the case of *Trametes pini Brot.*, mentioned previously. This shows how necessary it is in investigations of this kind to specify the kind of fungus which has caused the decay of the wood, and also to compare resulting pulps on the basis of the same degree of purity. All of our experimental and mill data have shown a decided decrease in yield by weight when rotten wood is used. Also Bates (11) found a reduction in yield by weight in large scale experiments.

Large mechanical losses will occur if wood is decayed. Kress (12) gives the following figures for loss in chipping:

	% Loss in Screening 3/4" Chips
Nearly sound white spruce.....	5.62
Infected white spruce.....	13.22
Infected white spruce.....	15.60
Badly rotted white spruce.....	17.02

If wood is decayed, and especially if it is saprotten, a considerable loss also occurs in barking.

The effect of decayed wood upon the quality of the pulp is not clearly evident in Sutermeister's and Bates' reports. According to Bates (11) there is no reduction in the strength of the pulp, but his tests were made on unbeaten pulp, and the difference would hardly show up at this stage, particularly when the wood is only partially decayed. Sutermeister (9) found a decided decrease in strength of pulp in the case of the rotten wood cooked by the sulphite process. With the soda process he found an increase in the strength of pulp from partly decayed birch wood, after beating in pebble mill, while he found it impossible to make sheets of beaten soda pulp obtained from very rotten wood. Our own tests show that decayed wood has a decided influence on the beating quality, as well as on the strength of the resulting pulp. Pulp obtained from rotten wood hydrates more rapidly when beaten, and with the hydration the strength increases. However, the maximum strength of the pulp is reached at an earlier stage in the beating process, after which point the strength decreases rapidly.

Such has been found to be the case, not only in experimental tests but also in ordinary mill experience. Monthly figures from mill operation show that when a large percentage of wood was used which had been stored for two or three years, and therefore was more or less affected by fungus, the strength of the pulp was considerably lower and the slowness considerably higher than when comparatively new, sound wood which came from the same locality was used. This was the case in spite of the fact that the cooking process was adjusted so as to protect the fiber of the more or less decayed wood as much as possible.

The deleterious effect of decayed wood used in the ground wood process has been thoroughly investigated and described by Kress, Humphrey and Richards (13) and Bates (14).

### Seasoning

With a raw material which may be stored for a long period before it is used in the manufacturing process, it is of interest to know what effect seasoning has upon its value. It is evident that if wood is stored so that it will deteriorate from decay, its value will gradually decrease. If, however, wood is stored under proper conditions, unfavorable for the growth of fungi and so that the wood may dry out, its value for pulp will increase. As Schwalbe (15) has stated green wood, because it is less resistant to the cooking process, gives a lower yield than seasoned wood, but he has found it possible to materially increase the yield from green wood by giving it a milder treatment. It has also been found in mill operation that seasoned wood gives a higher yield and a stronger fiber than green wood. During the period of storage the moisture content of the wood decreases, which is an advantage, since the moisture in the chips results in a direct dilution of the cooking liquor. However, if the wood is too dry, the penetration of the acid is much slower and more time is required to bring the digester up to the desired temperature and pressure, necessitating either a longer total cooking time or a higher temperature. Schwalbe (15) found that the penetration period of very dry wood could be materially decreased by pretreating the chips with steam or with waste liquor.

Another objection to the use of green wood is the difficulty which is experienced in the manufacturing process due to pitch. It is generally known that the troublesome pitch-forming substances in the wood decrease during storage.

In the diagram on the following page are shown the principal factors which influence the consumption of wood per ton of pulp or the yield of pulp per cord. The most important of these factors, density and soundness, are also the factors which influence the quality the most. In most cases the low density wood and the infected wood are cooked in mixture with sound wood of high density and the cooking process is adjusted to the sound wood. All the undesirable effects of low density wood and decayed wood are therefore experienced; low yield, low strength, and high slowness. If, however, the wood

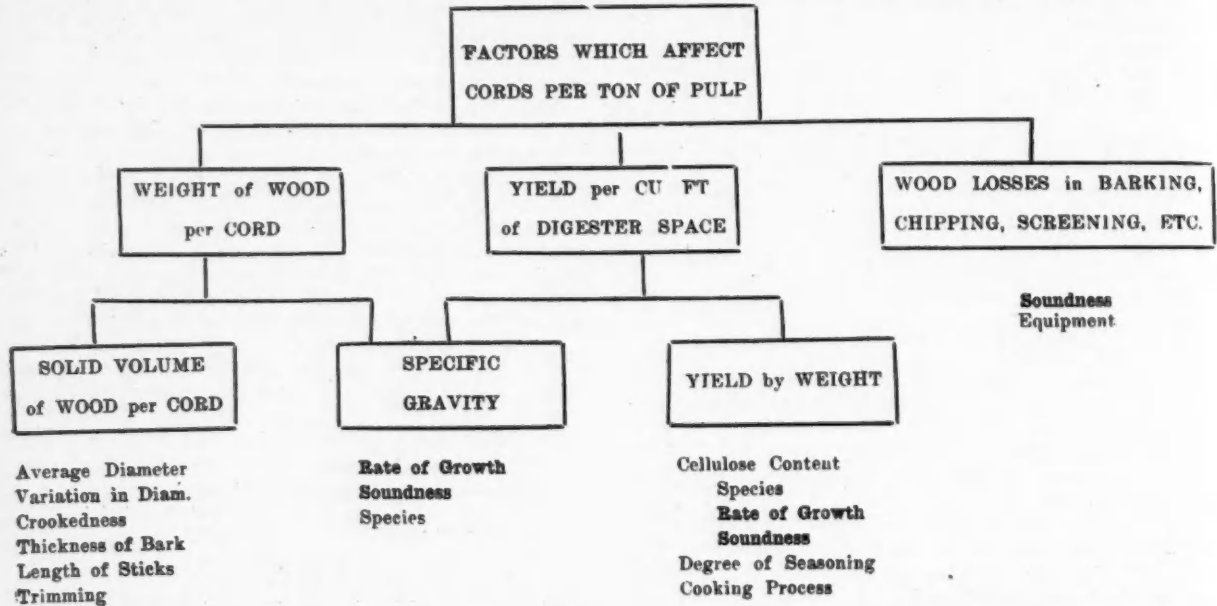
could be sorted according to its qualities, soundness, density, seasoning, etc., it would be possible to adjust the cooking process to some extent for the various grades. In order to maintain the production of the mill with low density wood and with decayed wood, it is necessary to shorten the cooking time by using a higher temperature. But especially with this kind of wood, high temperatures should be avoided.

It is, in many cases, possible to do so by shortening the penetration period of the cooking process, because wood of low density

ing and testing wood which will be of great value in the intelligent purchase and handing of wood and which will explain variations in yield and quality that, up to the present time, have not been fully accounted for.

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and decayed wood are more rapidly penetrated by the acid. A few experiments were made in order to determine how the penetration is affected by these factors. The results, which were obtained by placing discs of wood in a small digester with cooking acid of 6.18 per cent total SO<sub>2</sub> and 1.03 per cent combined SO<sub>2</sub>, and bringing the temperature gradually up to 100 degrees C. in 2½ hours, keeping the temperature at this point for ½ hour, give an indication of the comparative penetrability.

Penetration Ratio Based on Slow Growth Spruce Equal to 100

	Rings per Inch	Wt. Per Cu. Ft.	Penetration Ratio
Slow spruce .....	28	28.6	100
Rapid spruce .....	9	23.2	180
Slow balsam .....	38	22.2	215
Rapid balsam .....	7	18.6	350
Spruce partly decayed.....	..	22.0	900
<i>Lensites sepiaria</i>			
Spruce badly decayed.....	..	14.0	1,500
<i>Trametes pini</i>			

The question of proper methods of storing pulpwood has often been discussed. It will only be mentioned here that best seasoning conditions allowing a minimum amount of decay are secured when logs are peeled or barked and then stored in such a way that good circulation of air is always maintained throughout the piles.

It has been attempted in this discussion to point out some of the important factors which influence the economy and quality in the production of pulp and paper from wood, with the object of drawing more attention to this most important raw material. It is hoped that the pointing out of the factors which so greatly influence yield and quality will result in the establishment of methods of measur-

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## STOCK SAVING—WITH AND WITHOUT SAVE-ALLS\*

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Among the stock losses of a paper mill is the good fiber which escapes in the so-called "white water." In extreme cases this may amount to ten per cent, or more, of the total production, and unlike the losses from the barkers or from screenings, it is more or less disguised and hidden, and due to its dilution and to the fact that it generally finds its way to the river through covered drains or sewers, the extent of the losses from this source is many times unsuspected by the owners.

It is easy to say that valuable raw material should not be wasted and at the same time it would seem unnecessary to urge that steps should be taken to reduce losses to the lowest practical point, but many times it has been difficult to convince the owners that these losses existed or could be reduced at small expense. When approached on this subject, an elderly president once told the writer: "Young man! I was making paper before you were born! How can you come into my mill and show ME how to save stock?"

Mrs. Brown may admit that Willie Jones is a bad boy, but she knows that her Johnny has none of his bad habits. In the same way, any superintendent will admit that there are white water losses in the industry as a whole, and he's certain that his friends up the river are wasting tons of good stock,—he knows this because it plugs up his filters. He probably doesn't know what comes to the filters of the mills downstream, and with deepest sincerity will assure you that nothing of that sort occurs in HIS mill, he knows what to do, and besides he is fully equipped with Save-alls,—and lulled into false security by the name he does not check up their operation or make a survey of the sewers to find out how much good fiber is going through them into the river. Had these machines been called "Save-Forty-Per-Centers" rather than "Save-ALLS," more attention might be given to the richness of the white water going to them. Then, too, as is so often the case, Save-alls once installed are more or less forgotten by the mill owners. The logical location for a Save-all from the standpoint of power consumption is in the basement, where its supply can come by gravity, and the old adage, "Out of sight, out of mind," applies to Save-alls as well as to persons. While their continuous and efficient operation is necessary for the economical operation of the mill, it is not necessary for the running of the paper machine; if it was, and if when the belt ran off or the wire facing tore off, the paper machine should stop, they would receive more careful attention than they generally do.

### Save-Alls Are Watch Dogs

We do not wish to criticize Save-alls or their use, for they have their place and a very important one in the economical operation of every pulp and paper mill; but there are other and better ways of meeting the "white water" problem than by the indiscriminate use of Save-alls. They should be considered as watch-dogs guarding against the loss of stock, and when the Save-all is rolling off a thick sheet of pulp, instead of regarding this as an indicator of efficient mill operation, it should be taken as a signal that somewhere back in the stock handling system leakage and loss are occurring; for, as a rule, high efficiency of the Save-alls means low efficiency of the white water and stock handling systems in the mill.

In most mills water costs nothing except for pumping or comes from a gravity supply. Plenty of fresh water is needed, but generally more than a plenty is used. A stock handling system is after all like a pint cup, it holds so much and no more. The tanks are larger than pint cups to be sure, but sooner or later they become full and then, for every gallon of fresh water that is added to the system, a gallon of water must leave the system,

and in leaving takes its toll in the form of filler or fibers.

No wire covered Save-all and no settling tank removes all the stock from the water coming to it, especially in the case of the larger news print mills, where the volume of water to be handled is so great and where the pulp supply is largely, if not entirely, in the form of "soft stock," requiring practically no thinning before going to the machine chest.

### Keep in Good Repair

One way to attack the problem of reducing the white water losses is to take the mill as you find it, accept the volume and richness of the excess water as a necessary evil, choose a good type of Save-all, and install enough of them to handle the entire flow; but do not stop with the installation. See that they are all kept in repair, that the deckle straps are kept in place, the facings are changed when torn or worn out, and by frequent comparisons of the richness of their supply and their discharge, keep them at their best efficiency; it will be low enough at best, and you can never hope to eliminate the loss entirely as long as you find need for Save-alls. As long as water goes through the cylinder, or out the settling tank overflow, you may be assured it will take its toll of fiber and filler along with it.

Another way is to begin at the beginning, and use the proverbial "ounce of prevention." Go through the mill and reduce the use of fresh water to a minimum. Do not cripple operations by trying to carry this too far at first, simply shut off the unnecessary use of fresh water. It may seem easier to stick the end of the hose into the pit then to shut off the valve, but let us see what that hose stream will cost you in fiber loss in one year. The 50 gallons per minute which it adds means that an additional 72,000 gallons per day leaves the Save-alls, and a conservative estimate of the average amount of stock in this water leaving the Save-alls is 2 pounds per 1,000 gallons, or 144 pounds per day, worth about \$500 per year at \$25 per ton.

Isn't it worth while to shut off hose streams at \$500 per year each? This looks too good to be true, but don't call it the harmless ravings of a man who never saw a Save-all or a white water sewer, try it for yourself; stick a healthy one-inch hose stream into a barrel and see if it doesn't fill it in about a minute; then filter an average sample of the water leaving your Save-alls and don't be surprised if instead 2 pounds per 1,000 gallons it tests 4 or even 6.

### Eliminate Unnecessary Stock

When you have reduced your fresh water to a minimum, the next step is to keep all unnecessary stock out of your white water system. For example,—go through the pulp mill and test the discharge water from EACH thickener. This does not necessarily mean a chemical analysis of each sample. Have a supply of 2-oz. bottles numbered to correspond to the numbers of the thickeners; fill each with the white water from its thickener and set them aside for an hour to settle. If the deckles or packing straps on any have slipped out of place at the bottom, if a wire facing is cracked, or if for any other cause stock is leaking into the white water compartment, it is at once shown up by the increased amount of stock in the water from that particular machine, which can be shut down and repaired. Without this simple test it might have gone on unnoticed for several days, as even very rich white water from one thickener would hardly be noticeable when mixed with a dozen or more which were all right. To be sure, the Save-alls, if kept in good repair would have caught part of it, but by stopping the leak at its source you have made a 100 per cent saving on that particular item and besides have relieved the stock handling system of recirculating that amount of stock.

\* Read at the annual meeting of the Technical Section of the Canadian Pulp & Paper Association, Montreal, Jan. 24-25, 1923.

Generally the white water from ground wood presses is much thinner than from thickeners; don't mix the two, but use all of the richer water you can back in the system and send the thinner water to the Save-alls.

On the paper machines, don't mix the tray water or water from the wire with that from the suction boxes. You'll find the latter only about 30 per cent as rich as the former. You can't use all of both, and the tray or wire water alone is not enough (unless you are running without trays and are using an excessive amount of shower water), so arrange to use all the richer water, make up the deficiency with suction water and send the balance of the suction water to the Save-alls.

#### Guard Against Leaks

Watch out for leaks of stock into your white water system, or for leaks of stock or rich white water into your Save-alls supply system. For example, if you have a bad edge on the sheet, set the "squirt" just far enough to trim this and give a good edge; don't set it in to cut off an inch of the sheet to follow around beneath the couch into the white water pit. If you wash felts "on the fly" without shutting the stock off the wire, see that this thick stock is dumped back to the chest and not allowed to lie in the pit to be gradually broken up by the shower water and carried to the Save-alls; they may recover 40 per cent to 60 per cent of it for you, but every pound that you put back into the chest means 100 per cent recovery.

A Measuring System for white water losses is of the greatest value. By placing a weir in the white water sewer leaving the Save-alls, a record of the flow can be obtained by the use of a Liquid Level Recorder, and either by means of an automatic Sampler or samples dipped at hourly intervals by the Save-all attendant, a cleaner or some other employee in that part of the mill, and stored in a container, a sample can be secured which will represent an average for the 24 hours. This sample is filtered and weighed by the Laboratory, and together with the volume gives a measure of the total loss for the day. Plotting this loss from day to day gives an incentive to reduce it, and if leaks occur and the losses begin to mount higher, an investigation can be made at once to determine the cause.

#### Computing Day-to-Day Loss

Such a measuring system gives the only means of knowing what this loss amounts to from day to day, as no dependence can be placed on the book-figures showing the pounds of pulp used per ton of paper made. No one knows how much pulp is used where it is handled as soft stock. A "cord" may be a "cord," but the yield of pulp from it at different mills, or in the same mill at different times, remains one of the unknown quantities of papermaking, and not until all the stock used is metered can we hope to have even approximate figures.

The sewer loss figures are positive. If you are measuring all the sewers and find this loss has increased by 1 per cent, you know that it is an actual and not a fictitious loss, and search out the cause for it. Without such a measuring system many a heavy loss has been hidden by "large" cords of wood which made the book-figures show a low percentage of stock used per pound of paper made.

As we said before, Save-alls are needed; but don't depend entirely upon their use.

Eliminate all unnecessary fresh water from the entire stock handling system by shutting off hose, removing unnecessary showers and using white water in place of fresh water wherever possible.

Where you are now using white water, look into the matter and see if you are using the richest supply available.

Check over your stock handling and white water systems point by point to find the leaks, and do this frequently.

Keep all unnecessary stock or rich white water out of the white water system.

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When you have reduced both the volume and the fiber content of the excess white water to a minimum, then, and not until then, rely upon your Save-alls to reclaim as much more as possible, by having enough to handle the flow, run them slowly, keep them in good repair and by all means install a white water loss measuring system to give you a record of the losses from day to day.

### Hoover Paper Committee Meets

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., January 31, 1923.—The Department of Commerce Committee of the American Paper and Pulp Association spent two days in Washington last week conferring with various government officials in an effort to find out in what way the paper industry could co-operate closer with the government for the benefit of the industry. As a result of the conference held, the paper manufacturers feel that their visit accomplished considerable.

On last Thursday the manufacturers met at nine o'clock at the Willard Hotel, following which the full committee went to the Department of Commerce. There they were addressed by Secretary of Commerce Hoover; Dr. Julius Klein, chief of the Bureau of Foreign and Domestic Commerce; John Matthews, chief of the Paper Division, and several other officials of the department. Secretary Hoover spoke on trade associations and also closer co-operation between the government and industry. The committee then took up with Mr. Matthews ways in which the Paper Division could be more helpful to the industry generally.

After spending the morning at the Department of Commerce, the committee held a luncheon at the Cosmos Club, when they were addressed by General Lord, director of the budget. The committee had as guests Dr. Brown, acting director of the Bureau of Standards; F. C. Curtis, chief of the paper laboratory of the Bureau, and others.

In the afternoon the committee conferred with several of the tariff commissioners in connection with a Paper Division. On Friday the committee met with the Paper Specifications Committee of the Bureau of the Budget in connection with government paper standardization.

Among the paper men in Washington were the following: Phillips Kimball, Liberty Paper Company, New York; L. T. Stevenson, Mountain Mill Paper Company, New York; W. F. Brunner, Paterson Parchment Paper Company, Passaic, N. J.; Norman W. Wilson, Hammermill Paper Company, Erie, Pa.; James Logan, United States Envelope Company, Springfield, Mass.; W. J. Raybold, B. D. Rising Paper Company, Housatonic, Mass.; R. Frank McElwain, Crocker-McElwain Company, Holyoke, Mass.; Hugh P. Baker, American Paper and Pulp Association, New York; Milton E. Marcuse, Bedford Pulp and Paper Company, Richmond, Va., and W. H. Savery, Shenandoah Pulp Corporation, Harpers Ferry, Va.

### May Reject Most Paper Bids

By Telegraph to the PAPER TRADE JOURNAL

WASHINGTON, D. C., January 30, 1923.—Indications are that the Joint Committee on Printing on next Monday will make only a few paper awards for a period of six months and that the remainder of the paper needed by the Government Printing Office will be purchased on the open market.

### Technical Section Index

The Index to the Technical Section of Volume 75 which was prepared by Clarence Jay West and published in January 18th issue, is available separately at ten cents per copy. Many readers will desire the index for binding and also for filing as a ready reference to the articles and abstracts published during the last half of 1922.

## CURRENT PAPER TRADE LITERATURE

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

### Raw Materials

**Cellulose Content of Pulpwood.**—H. E. Wahlberg. *Svensk Pappers Tid.*, 25, 84-85 (1922); *Papierfabr.*, 20, 1216-1218 (1922). A sample of wood from the annual rings 53 to 50 gave 47.8 per cent cellulose at 120 degs. digestion temperature (with bisulphite liquor) and 48.8 per cent at 125 degs. The cellulose number (in kilos per solid cubic meter) for two different spruces and one pine was found to be 175, 263 and 220, respectively. The discrepancies may be due to fat and resins rendered insoluble during storage, uneven distribution of lignin substances or differences in the cell structure; the author is unable to determine which has the greatest influence. A marked variation was found in the apparent specific gravity of the wood. This is important since pulpwood is always bought and sold in terms of volume rather than weight. Because of variations in different woods each pulp manufacturer should determine the cellulose content of his own wood.—A. P.-C.

**Chemical Investigation of Swedish Pines and Spruces.**—H. E. Wahlberg. *Svensk Pappers Tid.*, 25, 8-12, 25-29, 45-49, 83-87; *Zellstoff u. Papier*, 2, 129-134, 155-164, 202-212; *Papierfabr.*, 20, 1097-1100, 1133-1137, 1178-1181 (1922). G. Kinnman in 1919 instituted an investigation to furnish a basis for judging the suitability of different kinds of woods for paper making. These changes have been studied: Annual rings, spring and fall wood; for each disk, different quarters and circumferences; for each trunk the height above ground and influence of injuries and abnormalities. Samples were taken as thin disks at different heights of the trunks, but consisted in part of sawdust and coarse shavings. Various physical properties of the woods are recorded. In the determination of cellulose, oxidation with bromine seemed to be the best method but the author did not find any method of hastening this reaction. He finally selected the method Counciler and that of Klason of first dissolving the bulk of the incrustations with bisulphite and then freeing the cellulose content from the rest of the lignin by the bromine method. The cellulose content from twenty determinations varied from 40.3 to 49.2 per cent, while another series of determinations varied from 45.2 to 52.7 per cent. Wahlberg suggests calculating the cellulose content in grams per 100 cm.<sup>3</sup> instead of in grams per 100 grams. Full abstract in *Chemical Abstracts*, 16, 4337-8.—I. G.

**Recovering Waste Paper.**—T. Jespersen. *U. S. Patent* 1,424,411. Jan. 8, 1922. A solution of sodium silicate is used to treat the paper stock so as to remove therefrom the printer's ink containing a mineral oil vehicle.—I. G.

**Removing Ink from Paper.**—H. R. Eyrich and J. A. Schreiber. *Brit. Patent* 186,372. May 17, 1921. In removing ink from paper, colloidal material, such as bentonite, having over 50 per cent of its particles of diameters less than 0.0015 mm., or more than 70 per cent colloidal, is used. A mixture of cut or beaten paper, alkaline material such as sodium carbonate and bentonite or the like, is agitated in running water. The paper material is held by a screen while the water carries off the bentonite and the ink. The material is then neutralized with an acid or an acid salt, such as acid sodium sulphate or aluminum sulphate and thus brightened.—C. A.

### Sulphite Process

**Highly Pressed Sulphite Pulp.**—*Svensk Pappers Tid.* 25, 100-101 (1922); *Chem. Abstr.*, 16, 4342. The water content of pulp reaching the drying cylinder with 64 to 65 per cent of water can be lowered to 45 to 50 per cent by rotary presses with consequent steam saving of 29 to 41 per cent, but the pressed pulp from some mills is said to be less easily bleached, not so easily separated in

the beater, of poorer color and lower strength. A comparison of ordinary with highly pressed sulphite pulps and of papers made therefrom has been made by Bergman and the results may be obtained at V. Henriksgatan 16, Helsingfors, Finland.—A. P.-C.

**Influence of Bleaching on Pulp Consistency** (Degree of disintegration) of sulphite pulp. I. Ekholm. *Svensk Pappers Tid.*, 25, 179 (1922); *Chem. Abstr.*, 16, 4345. Pulp was treated with 1 to 9 per cent of chlorine. The pulp was bleached with about 4.5 per cent of chlorine. The degree of disintegration rose rapidly: 14.1 with 1 per cent of chlorine; 15.1 with 2 per cent; 16.1 with 3 per cent; 16.55 with 4 per cent, and 18.45 with 5 per cent. From unbleached to fully bleached sulphite cellulose the percentage of disintegration was about 25 per cent. The author suggests that when the incrustations are dissolved out, the lignin, on separating, allows the bunches of cellulose to drop apart into separate fibers.—A. P.-C.

**Reddening of Sulphite Pulp and Its Prevention.**—Emil Heuser and Sigurd Samuelsen. *Papierfabr.*, 20, 1249-1254, 1285-1288, 1321-1326; abridged translation in *PAPER TRADE JOURNAL*, 75, no. 18, 51-53 (Nov. 2, 1922). A review of the literature leads to the view that the red coloration of pulps occurs in easy as well as in hard bleaching pulps and that it is associated with a certain degree of moisture content and the action of light and air. Thus the process is one of oxidation. Other stronger oxidation agents, such as hydrogen peroxide, potassium chlorate, etc., also cause the same reddening. Of the two possible sources of this colored material, the tannins and the lignins, the latter are shown to be the more probable. All preparations when treated with oxidizing agents have the same color effects as the unbleached pulp or the waste liquor. Further proof of this is seen in the fact that protocathechuic and vanillic acids, decomposition products of lignin, likewise give these color reactions. The red color is discharged by mineral acids and does not return as long as acid is present. Upon being washed acid-free the color returns. 0.5 per cent alkali causes a yellow coloration of the red pulp or paper but does not prevent return of the red color. Reducing agents destroy the color but later oxidation causes its return. Oxidizing agents, such as bleaching powder, hydrogen peroxide, potassium permanganate, etc., will destroy the color and prevent its return only if used in such quantities as to produce complete bleaching of the pulp. A small amount only intensifies the color. On the other hand, 0.5 per cent potassium persulphate in the presence of dilute sulphuric acid or aluminum sulphate completely destroys the color and prevents its return. The time of treatment is about 9 hours. The pulp does not need to be washed after this treatment if aluminum sulphate is used. The treated pulp is practically unbleached, contains the same amount of lignin as before and apparently the total lignin has been changed in some unknown manner so as to render it unsusceptible to further oxidation.—A. P.-C.

**Preparation of Sulphite Liquor.**—D. B. Davis and E. P. Strong. *U. S. Patent* 1,424,883. Sept. 8, 1922. The sulphite liquor which is kept in a storage tank, is circulated continuously through a system of pipes. During this process, sulphur dioxide is introduced into the stream by suitable means. The liquor is subsequently returned to the storage tank at or near the bottom and is thus ready for re-use.—I. G.

**Treatment of Sulphite Waste Liquors.**—F. Goessel. *German Patent* 354,624. Apr. 15, 1920. The neutralized and clarified liquors is evaporated under reduced pressure with simultaneous oxidation. In this manner the objectionable constituents of the lye are rendered harmless. The process may be applied to the residue obtained after

treatment of the lye for the production of alcohol and the product is suitable for use as fodder.—I. G.

#### Paper Testing

**Determination of Groundwood in Printing Papers.**—H. Krull and B. Mandelkow. *Papierfabr.*, 20, 1213-1216 (Sept. 3, 1922); *PAPER TRADE JOURNAL*, 75, no. 18, 49-51 (Nov. 2, 1922). The determination of the phloroglucinol value, carried out exactly according to the method of Cross, Bevan and Briggs, affords a convenient and accurate measure of the percentage of ground wood in news and similar printing papers. In calculating the results, however, the original factors of 8 for ground wood and 1 for sulphite cannot be accepted as sufficiently accurate. The true average values for these factors are: 7.84 and 1.34 for unbleached strong sulphite. The error involved by using the original factors is negligible for papers containing 65 to 75 per cent of ground wood, but considerable in the case of papers containing low percentages of that constituent. The corrected formula for calculating the results, expressed in terms of the dry substance, is

$$H = \frac{100(P - 1.34)}{7.84 - 1.34}$$

where H is the percentage of ground wood and P is the phloroglucinol absorption value of the paper.—A. P.-C.

**Moisture Influence on Tests of Container Board.**—Sidney D. Wells, *PAPER TRADE JOURNAL*, 75, no. 23, 47-49 (Dec. 7, 1922); *Paper Ind.*, 4, 1245-1247 (Dec., 1922); *Paper*, 31, no. 7, 7-9 (Dec. 6, 1922); *Fiber Container*, 8, no. 1, 10-12 (Jan., 1923). Curves are given showing the relation of relative humidity of the air to Mullen test, tensile strength, folding endurance and tearing strength of boards and of papers made from typical stocks which find their way into board manufacture.—A. P.-C.

**Paper Testing Methods.**—Committee on Paper Testing, Tappi. *PAPER TRADE JOURNAL*, 75, no. 1, 48-55; no. 2, 43-48; no. 3, 45-48; no. 4, 43-48; no. 5, 47-50; no. 6, 43-48; no. 7, 46-48 (July 6-Aug. 17, 1922). A detailed description of microscopical, chemical and physical methods used in paper testing and of the apparatus employed. A fairly complete bibliography is appended. This is also available as a separate from the Secretary of Tappi, at \$2.00.—A. P.-C.

**Work of the Paper Laboratory of the Bureau of Standards.**—F. A. Curtis. *PAPER TRADE JOURNAL*, 75, no. 8, 30, 32, 34, 36 (Aug. 24, 1922). An outline of the work carried out by the Bureau of Standards.—A. P.-C.

**Improvements in Methods of Making Herzberg Stain Used in Fibre Analysis.**—Muriel F. Merritt. *PAPER TRADE J.*, 75, No. 8, 43-44 (Aug. 24, 1922). As a result of a careful investigation of the best method of preparation of the Herzberg stain, the author recommends the following procedure: Solution A—Dissolve 50 g. dry zinc chloride (fused sticks) in 25 cc. distilled water and, if necessary, add water until the specific gravity is exactly 1.8 at 28 degs. C. Solution B—Take part of 12.5 cc. of distilled water to rinse the thermometer, the hydrometer and the original zinc chloride container and add to solution A. Dissolve 5.25 g. of potassium iodide and 0.25 g. of iodine in the balance of the water. Add B to A, stir well, let stand overnight in the dark, pipette off the clear portion into a black bottle, leaving 3-4 cc. of the solution above the sediment and add a leaf of crystal iodine.—A. P.-C.

**The Bursting Strength of Paper; Variations in Results Under the Same Condition.**—E. O. Reed and F. P. Veitch. *PAPER TRADE JOURNAL*, 75, no. 3, 49-52 (July 20, 1922). Results of Mullen tests on 32 samples of paper representative of the chief classes of commercial papers are tabulated and discussed, and the authors draw the following conclusions: Provided the instruments are properly equipped and adjusted, the differences between averages on several testers are negligibly greater than those between averages on the same tester. The differences between averages of 5 and 10 breaks are sufficiently great to show that at least 10 breaks

should always be made. Approximately 90 per cent of all comparable averages differed less than 3 points. Expressed as percentages, the maximum differences between averages of 10 breaks on different machines are from 3 to 20 per cent and the percentage differences are usually decidedly greater on papers of low bursting strength. The difference between breaks at different points in a sheet is much greater than the difference between readings on different gauges on the same break. The normal differences between individual breaks on the same sample and on the same tester may reach 40 per cent of the minimum result on paper of practically any class; usually this difference is much less, being nearly 20 per cent; on wrapping it may reach 100 per cent. In important work at least 10 tests (1 test on each sheet) should be made; two testers or two gauges on the same tester should be used.—A. P.-C.

**Testing the Degree of Digestion of Wood Pulp.**—H. Roschier. *Papiers och Travarutidskrift*, 1922, no. 7, 108-112 (Apr. 15); *Zellstoff u. Papier*, 2, 184-186 (1922). The rate of reduction of permanganate under standard conditions is proposed as a rapid approximation of the degree of digestion of wood pulp; it is claimed to be particularly applicable for factory control. A tenth normal solution of potassium permanganate is most suitable. About 2 g. of finely rasped wood pulp or 6 g. of moist pulp squeezed out in the hand, is weighed out and formed into a loose ball. 80 cc. of tenth normal permanganate in a glass bottle is acidified with about 1.6 cc. of normal sulphuric acid. The pulp is dropped into the bottle, the stopper inserted and a stop-watch started. The bottle is shaken slowly and uniformly by hand and the liquid constantly observed to note the time of disappearance of the red color. During the operation the temperature is maintained at 25 degs. C.; this should not vary greatly, as the rate of the disappearance of the color is markedly influenced by the temperature. The following grades of pulp have been established: Easy bleaching pulp, 70 sec.; slowly bleaching pulp, 50 to 70 sec.; medium strong, 35 to 50 sec.; ordinary strong, 25 to 35 sec.; very strong and hard, 25 sec.—I. G.

**The Testing of Paper.**—Raymond Fournier. *Papier*, 25, 437-440 (Oct., 1922); *PAPER TRADE JOURNAL*, 75, no. 23, 50-51 (Dec. 7, 1922). See this *Journal*, 75, no. 25, 58 (Dec. 21, 1922).—A. P.-C.

#### A New Chemical Society

The American Institute of Chemistry was organized at a meeting of local New York chemists at 381 Fourth avenue, January 22. This new society aims to include only chemically trained men who measure up by education and experience to the qualifications set for membership.

It will function along the same lines as the Institute of Chemistry of Great Britain and the Canadian Institute of Chemistry, which have been successful in giving to the vocation of chemistry a professional status by recognizing only those as entitled to be called chemists who satisfy certain standards of capacity.

The American Institute of Chemistry will seek to perform for the qualified chemist the same service as that of the Bar Association for the lawyer and of the Medical Society for the physician.

Dr. H. G. Byers, in charge of the department of chemistry of Cooper Union, and Dr. Lloyd Van Doren, a chemical patent lawyer, both John Hopkins graduates, are respectively president and vice-president. C. K. Simon, president, Dye Products and Chemical Company, 200 Fifth avenue, New York, is treasurer. The secretary is Lloyd Lamborn, editor of *Chemical Age*.

#### To Go With Uehling Instrument Co.

PATERSON, N. J., January 29, 1923.—Royal E. Terhune has been placed in charge of the Northern New Jersey sales territory of the Uehling Instrument Company, manufacturer of CO<sub>2</sub> recorders and other power plant equipment. Mr. Terhune was formerly associated with the Uehling Laboratories and is, therefore, well qualified to co-operate with power plant operators.

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## BUDGETS—THEIR CONSTRUCTION AND USE\*

BY HOMER N. SWEET, LYBRAND, ROSS BROS. AND MONTGOMERY, BOSTON, MASS.

The use of budgets in the administration of industrial enterprises is an appropriate subject for discussion at a convention of cost accountants. The reasons for this will become evident as we proceed to consider what a budget is and why a manufacturing concern should have a budget.

What is a budget? I will give general definitions first because the idea and purpose of the budget are far more important than its form and mechanism. A budget is a device for co-ordinating the activities of all departments of the business. It aims to regulate the policies affecting sales, production, expense burden and finance; to regulate every policy according as each is estimated, in combination with the other to have the most favorable effect on the future income and standing of the enterprise. A concern operating under a budget views critically each project of any magnitude not as an isolated issue, but in the light of the financial program for the business as a whole. One illustration will bring out this point. Contracts for the purchase of large quantities of material, however low the prices might be, would not be entered into without reference to the complete budget of all the transactions of the business for a commensurate period of time; and if the materials must be paid for months in advance of sales collections, in sums so large as to deplete working capital temporarily, then borrowings would be pre-arranged to cover the deficiency.

### Assembles Intelligent Estimates

The budget assembles the most intelligent estimates for a definite period of all the factors that influence profits and financial health. These estimates are expressed in dollars and cents and projected on a statement which all can interpret and criticize. The management then has a barometer of the possibilities of success or failure for all proposed actions and developments during the coming period. A comprehensive budget is an advanced idea in business administration. The experience of the few concerns which have adopted it, and constantly relied upon it, is that it will serve as a surer guide to the soundest conclusion than judgment unaided by such a statement can possibly be, given in either case the same degree of sagacity of mind. The reason for this statement is that a complete schedule of estimates seldom fails to reveal conditions and tendencies, the full significance of which would not otherwise be perceived. But note that the estimates must be comprehensive; that they must cover all the anticipated transactions of the business. A budget founded on this principle may seem to fill a need

of the largest industrial corporations; but it is none the less effective in the moderate-sized and smaller concerns.

The budget is a look into the future. It is a forecast of sales, production costs, selling and administrative expenses, and costs of plant extensions and replacements for a definite period; also of cash collections and payments and inventory changes. It is a composite of the approved estimates of the heads of departments responsible, respectively for sales, production, purchases, expense control, plant construction and collections. The estimates are based upon past experience and upon prospective influences as predicted and calculated.

The budget is not a guessing game. It does not seek to find who in the organization are the prophets. Basically, it rests on the principle of administration that the policies of any one division should be discussed, agreed to and regulated with ample consideration of all the transactions of all the divisions, as projected for a future period. If this idea is not clearly understood and heartily endorsed, the budget machinery will not perform the functions for which it is designed.

### A Few Typical Problems

Consider a few typical problems involving broad policies that confront the executive committee or president or general manager. Questions such as these are constantly arising:

Shall we go into the market and buy materials in quantity for stock or shall we buy from hand to mouth as stocks run out?

Shall we manufacture standard lines for stock in anticipation of customers' orders? If so, to what extent?

Shall we enlarge the plant? Shall we install more machines in this department or that?

Shall we increase wages? If so, how much?

Shall we borrow money from the banks or issue stocks or bonds? Often the question takes this form: If we borrow up to the limit of our credit, shall we have enough working capital to finance increased business expected to follow from aggressive sales promotion?

These questions may be answered day by day as they are forced upon the attention of the executives; but if they are treated as isolated problems, there will be lack of co-ordination. The greatest achievement that can be accomplished in vast organizations is the timing of production with sales, the timing of purchases with production, the control of the variable overhead expenses in keeping with the fluctuating volume of business, the regulating of costs in proportion to selling prices, the anticipation of financial require-

\* Published in the 1922 Year Book issued by the National Association of Cost Accountants.

ments as they may expand or contract. Administrative capacity is taxed to the utmost to maintain a uniform and well balanced execution of policy. If some departments outrace the others, if vital financial influences are overlooked or miscalculated, there is bound to be loss, loss which may materially affect the earnings and financial stability of the company.

#### The Aim of the Cost Accountant

It should be the aim of the cost accountant to assist the executives in co-ordinating the activities of the various branches of the business. This is a real problem of organization, which cost accountants are qualified to help solve, because of their experience in building cost plans into the structure of the factory organization. They realize that no cost accounting plan can be successful in a practical way unless it is constructed around the operating requirements of the particular business and unless (this is just as important) there is an effective organization at the main office and throughout the plant. The ascertainment of unit costs is not an end in itself; it is useful only as it singles out the possibilities for savings and reveals where adjustments can be made to augment profits. Cost accountants look upon accounting, therefore, as an instrument of factory management; their aim is to make the cost system serve the production manager, the sales manager, and the chief executive. It is this point of view which is essential in any effort to introduce budgetary control into an industrial concern and to establish it permanently in the administrative scheme.

I have described the budget in general terms and emphasized its main purpose as a means of assisting executives to co-ordinate all departments. Many cases could be cited to show how a contemplated project was discovered to be undesirable or impracticable, or even how financial disaster was averted by the warnings revealed upon an unprejudiced examination of the budget. In such cases the restraints upon zealous activity fully justified the utility of the budget. The budget, however, is not merely a brake to arrest unprofitable policies. It can flash starting signals as well for expansion of facilities and increase of production, provided budgetary supervision is paralleled by a study of the business cycle.

That is what the budget may be expected to accomplish, despite the obvious limitation that it is based to a considerable extent upon estimates. A business, however, has to be conducted on estimates; there is no substitute. I wish I were at liberty to tell you how much some of the largest organizations in the country expend annually in compiling budgetary data. That would emphasize the importance that some companies attach to the value of budgetary data.

#### Significant Phases of the Subject

With the idea of the budget firmly fixed in our minds we may turn our attention to the mechanism of the budget. As the time at our disposal is limited, let us confine our discussion to the most significant phases of the subject.

In a manufacturing concern there are four main groups of estimates to be compiled, namely:

1. Estimates of extensions, installations, renewal and replacements of plant and equipment.
2. Estimates of manufacturing, selling and administrative expenses.
3. Estimates of sales.
4. Estimates of costs of production.

These estimates may be for three months, six months or twelve months, depending on the nature of the business. The budgetary period, whatever its length, should usually be subdivided into months and the estimates should be made at a specified date each month. For example, if a concern is operating its budget under the three months' plan, it would estimate, say on September 15, the budgets for September, October and November; on October 15, it would revise the estimates for October and November and make estimates for December; and so on. The object of monthly

estimates is to afford comparisons with the actual figures as they become known, month by month.

The estimates should be made by the heads of the responsible departments, and not by a bookkeeper or office man. This requirement is essential to fix responsibility. There must be a classification of accounts corresponding with the divisions of responsibility. In other words, the accounts must match the organization. If responsibilities are not distinctly defined or if there is an overlapping of responsibilities, then the budget will not operate smoothly until the defects in organization are removed.

The estimates are subject to revision before final acceptance by the executive committee. There may be two or more preliminary sets of estimates. The budget as adopted is based on the approved estimates.

Estimates should be expressed both on the accrual basis and on the cash basis to supply all the data needed for the three statements which together exhibit the budgetary forecast, namely:

1. Statement of estimated cash receipts and payments.
2. Estimated income or profit and loss statement.
3. Estimated balance sheets.

That is the mechanism of the budget in outline.

Let us discuss further the four groups of estimates; plant extensions and replacements, expense, sales and costs of production.

#### Plant Extensions and Replacements

Plant extensions and replacements should not be undertaken except upon the authorization of the directors or the executive committee. Authorizations should not be perfunctorily granted. Dependable, detailed estimates of all the direct and indirect costs should be submitted by engineers. These should be critically examined. The estimates should be projected into the complete budget, which consists also of forecasts of expenses, sales and production costs. If a proposed extension or replacement is desirable from all points of view and resources can be made available to defray the cost without weakening the financial structure of the company, then the outlay may be formally authorized. A production manager, eager to expand facilities so as to increase output, may, if unrestricted, commit the concern to obligations which it cannot meet. Blame should not be saddled on the production manager for such action, however, for he cannot be expected to have the broad view of the business as a whole that would enable him to discern that a contemplated project should be rejected for financial or other considerations outside the province of production. Even when it is understood that extensions and replacements are not to be undertaken without authorization, energetic production managers will often proceed with construction or alterations in the expectation that authorization will be granted when subsequently requested. The control over expenditures that tie up funds in fixed capital cannot be too rigid. Concerns that have not been strict in the administration of plant expenditures should not ignore the sad experience of certain companies that have in recent years suffered reverses from which they cannot recover, mainly because of ill-considered commitments for plant additions.

#### Expenses

The second class of estimates mentioned has to do with expenses. Much can be accomplished towards minimizing expenses by resolutely adhering to the plan of budgeting them in advance and regulating the items of outgo, month by month, with an eye to the limits set. Cost accountants institute this plan in predetermining overhead or burden rates.

I will remark upon certain important phases of expense control, which are frequently lost sight of. No matter how closely you may concentrate your critical attention on individual expense accounts, you may sanction too heavy an overhead load if you do not weigh the question of whether the total expense is in proportion to the entire budget: That is, whether the business is able to carry the burden. You may hear plausible reasons recited to justify



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every item on an expense budget—apparently no item could be dispensed with or curtailed without serious disadvantages—and yet when you turn aside from the details of the expense budget and give consideration to the earning power and financial situation you may discover that expenses are certainly too large in total. Necessity of curtailment, if clearly recognized and frankly acknowledged, will often point the way to the means of effecting economy.

A word of caution should be interposed concerning the administration of the expense budget. An inflexible expense budget may defeat its own end. It is not always sound to predetermine expense limitations for a period of twelve months and to regard them as fixed, not to be modified under any circumstances. New developments, occurring within the period, may warrant greater expenses than were contemplated in the original budget. There should be reasonable latitude in the control of expenses. The scheme of control should not be so iron-clad that meritorious services, not anticipated at the beginning of the year, cannot be promptly rewarded, merely because the advances are not provided for in the budget. If changes are authorized, the budget should be amended for the balance of the year.

#### Estimates of Sales

Estimates of sales involves the quota idea with which you are familiar. The sales estimate is dependent in part upon the capacity of the production department. The estimate of production, conversely, is dependent in part upon the volume that can be distributed by

the sales department. There should be the closest co-operation between the departments of sales and production in setting their respective estimates. Out of their joint conferences is evolved the production schedule, subject to the approval of the executive committee.

#### Estimates of Costs of Production

Estimates of the costs of production are based on the production schedule. In order that all the probable changes in inventories and liabilities for purchased materials may be forecasted, the estimates of production costs must be subdivided to segregate those pertaining to payroll earnings, purchases to be received and to be paid for, materials to be drawn from stores, products to be worked on, products to be finished and products to be shipped from stock. This is the most complicated section of the budget. Here the production manager is at the mercy of the cost accountant. If there is no adequate scheme of cost accounting, the production costs and the segregations cannot be estimated with confidence.

One more thought and I shall conclude. A budget cannot be abandoned and resurrected at will. It must be kept in constant use. During the recent depression many concerns attempted for the first time to install budgets in a frantic endeavor to save the situation. Some of them have since discontinued the regular compilation of budgets because money rates have become easy. To be of the greatest worth, the budget must be on continuous session. It should not go on a vacation.

## WHAT INDUSTRIAL ACCOUNTING SHOULD MEAN TO THE EXECUTIVE

The Journal of Accountancy for January contains an article entitled "What Industrial Accounting Should Mean to the Executive," by Stanley G. H. Fitch, being an address which he delivered at the 7th Annual Meeting of the Associated Industries of Massachusetts in Boston in October last.

This address is divided into the following headings:

1. Scope of industrial accounting.
2. Co-ordination of cost accounting with control of inventories and production.
3. Fundamental knowledge of cost factors essential to interpretation of results.
4. Cost accounting necessary to business success.
5. Budgetary control of business operations.
6. The executive and the accountant—the personal relation.
7. The solution of daily problems in industrial accounting.

The Journal of Accountancy is the official organ of the American Institute of Accountants to which most of the best accountants in the country belong. The fact that the official organ of this Institute publishes this article proves conclusively the increasing importance which industrial or cost accounting is assuming in the minds of what have been called the old conservative school of accountants.

#### Best Barometer of Business

Under No. 1 Mr. Fitch says: A well-rounded system of industrial accounts furnishes the best barometer of business and should embrace records which may be generally classified under three main divisions, viz.:

(1) General books of account from which condensed financial statements may be prepared periodically, showing the financial condition and operating results. The balance-sheet, which sets forth the status of the company's financial condition at stated dates, and the profit-and-loss statement, which accounts for the changes in financial condition between two balance sheet dates, are the standard financial statements which do not require extended comment at this time.

(2) Cost accounts under the control of the general books, together with relative production records. The cost accounts should

be designed to make available comparisons (such as by units of product), in such detail as may be necessary to disclose the causes for variations upward or downward. Standard costs in comparison with actual costs frequently give more significant information than a mere examination of actual costs which may have been incurred under abnormal conditions.

(3) Subsidiary books and records co-ordinated with the general books and under their control, from which statements containing analytical and comparative information in support of the major statements may be prepared. The analytical statements should be designed to show such information as may be required to set forth in detail the essential and significant facts of the business operations. For example, a comparative analysis of sales classified according to lines of product by territories, or by salesmen, reflects the trend of the business as affected by local or national conditions, seasons, variations in energy or efficiency of the sales force, etc. A similar analysis of selling expenses in conjunction with the sales analysis indicates whether or not variations in such expenses follow the variations in business done and permit the necessary investigations in case the results appear to be doubtful or illogical. Statistics of production should also be developed upon similar lines.

#### Industrial Accounting Co-ordination

In every branch of industrial accounting co-ordination should be the watchword. This is particularly true of cost accounting. Mere statistics, which are not reconcilable with nor controlled by the financial books, are unreliable and frequently lead to erroneous conclusions which inevitably result in disappointment or disaster. The value of a cost accounting system may be measured directly in terms of the quality of information furnished, the clarity with which it is presented and the speed with which it is made available. The study of ancient history may be of some interest to posterity, but in relation to present results of business operations it is of little value to an inquiring executive.

Under No. 2 Mr. Fitch emphasized the fact that the executives should know the basis upon which materials have been included and whether labor charges have been put in at current rates or anticipated rates payable at date when product is to be manufac-

## From an Acorn To an Oak In 105 Days

In that time we designed, fabricated and supervised the erection of

### Fourdrinier News Machine

192 inch wire—800 feet speed—80 ton production—

for the

Fort William Paper Company

*Ask Us*

**THE PUSEY AND JONES COMPANY**

WILMINGTON, DELAWARE

## ROGERS WET MACHINE

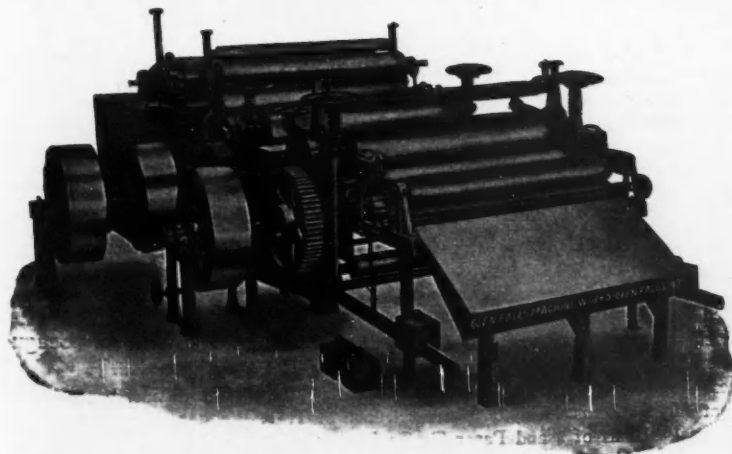


Illustration Shows Rogers Double Press Wet Machine

FOR CHEMICAL PULP—including Sulphite, Sulphate, Soda, also Cotton and Waste Paper fiber.

TYPES—Single and Double Press 72" wide.

CAPACITY—either type 25-30 tons air dry stock per 24 hours.

SHEETS produced by the Double Press Machine uniformly 48% dry. By the Single Press Machine uniformly 40% dry. There is no fold to contain excessive moisture. Sheets are handy size, 33"x36", and are folded once into most convenient bundles for storage, for the beater or for shipping. By this great capacity, high dry test, small amount of floor space per ton pulp produced, exceedingly low cost for labor and maintenance, users are assured that the machine will completely pay for itself within one year, and are promised a handsome return on their investment.

**WORKMANSHIP AND MATERIAL GUARANTEED**

**GLENS FALLS MACHINE WORKS      Glens Falls, N. Y.**

*Try Our Split Cams for Your Flat Screens*

tured. In respect to overhead expenses he points out that the executive should understand whether such overhead represents an abnormal overhead under abnormal conditions.

#### Perpetual Inventory and Store Control

Under No. 3 he refers to the booklet published by the Fabricated Production Dept. of the U. S. Chamber of Commerce "Perpetual Inventory and Stores Control." Copies of this booklet have been distributed by this association but a few more copies are available for anybody who cares to write for one. He also refers to what he calls "the dominance of the sales manager in certain organizations" stating that sometimes these managers adopt a policy involving the manufacture and sale of an excessive variety of goods, failing to remember that quantity production in a few lines spells profits, while production widely diversified in many lines may result in small profits, or even losses.

Under No. 4 he draws attention to the fact that executives should have a fundamental understanding of the factors of cost, especially of "overhead expense."

#### Necessary to Business Success

Under No. 5, namely, "Cost Accounting Necessary to Business Success," he says, "Successful executives have long realized that cost keeping or cost finding is essential to business success" and also gives the following extract from a recent Government survey:

"It is the belief of the commission that the small margin of profit existing in so many of our industries is due to the ignorance on the part of manufacturers of what their goods actually cost to produce. This ignorance causes them to make unprofitable prices, which the manufacturer who does know his cost is forced to meet to a large extent.

"Formerly the necessity for the determination of true manufacturing costs was not as imperative as it is today. Margins between cost and selling price in most lines were larger. Costs could be ignored except in a general way and a good return still be made on the investment; but, today, margins of profit in most lines of trade are very much more narrowed than formerly, and the necessity for the most efficient management and closest analysis is felt as never before.

"It is necessary today for the business man's success, that he know on what articles he is making a profit, and on what articles he is incurring a loss. Competitive conditions are seriously disturbed where losses on one or more articles are recovered by profits on other articles. It is obvious that a manufacturer should not only know the cost of each article he manufactures but that he should see that every article manufactured bears its proper share of factory and general overhead.

"Most manufacturing plants have grown to a size which renders personal supervision impossible. The only reliable way, therefore, by which an executive can judge the efficiency of an organization is through a system of periodical statistical reports. These reports can be accurately obtained only when a good cost system is in operation.

"New methods are being introduced and improved machinery installed in the factory every day with a view of reducing costs either by the elimination of waste or by increasing efficiency. It is impossible to know whether the introduction of these improvements will reduce costs unless the manufacturer knows not only what his total cost is but exactly what items make up the total. Items of cost are frequently lost track of when the total only is considered, while if these items were properly segregated so as to show what they were, they could be materially reduced and in some instances eliminated altogether."

#### Manufacturers May Have Copy

If any manufacturer cares to have a copy of this article he may obtain it by writing to the secretary of the Cost Association of the Paper Industry.

COST SECTION

#### Canadian Exports of Paper for December

A special report from the Canadian Pulp and Paper Association gives details of the exports of pulp and paper for December. The total value of the pulp and paper exports for the month was \$10,249,418 which was a decline of \$1,176,580 from the previous month and a slight decline from December, 1922.

Details for the month were as follows:

	December, 1921		December, 1922	
	Cwts.	Value	Cwts.	Value
<b>Paper:</b>				
News print.....	1,453,195	\$5,708,178	1,710,110	\$6,127,921
Book Paper .....	1,307	12,561	1,650	10,880
Other Paper and M'n'fr's..	.....	395,411	.....	483,586
		\$6,116,150		\$6,622,387
<b>Pulp:</b>				
Sulphate (Kraft).....	240,833	744,774	222,966	714,533
Sulphite Bleached .....	307,428	1,260,028	252,039	1,094,469
Sulphite Unbleached .....	392,990	1,092,464	322,023	820,317
Mechanical .....	750,793	1,112,117	602,985	997,712
	1,692,044	\$4,209,383	1,400,013	\$3,627,031

The principal countries of destination of these exports in December are shown in the following table:

	Paper	Pulp	Total
United States .....	\$6,068,934	\$3,147,055	\$9,215,989
United Kingdom .....	158,610	302,038	460,648
Other Countries .....	394,843	177,938	572,781
	\$6,622,387	\$3,627,031	\$10,249,418

Pulpwood exports for the month were 85,744 cords valued at \$836,396 compared with 46,379 cords valued at \$480,160 in December, 1921.

The figures for the nine months ending December 31, show considerable increases over those for the corresponding nine months of 1921. Wood pulp exports were nearly 50 per cent greater than last year and news print exports were over 40 per cent greater. The total value for the period was \$88,320,722 compared with a total of \$77,935,275 in 1921.

The details are as follows:

	9 Months, 1921		9 Months, 1922	
	Cwts.	Value	Cwts.	Value
<b>Paper:</b>				
News Print .....	10,465,807	\$47,835,903	14,517,771	\$51,563,093
Book Paper .....	16,046	190,016	30,379	313,962
Other Paper & M'n'fr's..	.....	3,070,416	.....	4,611,755
		\$51,096,335		\$56,388,810
<b>Pulp:</b>				
Sulphate .....	1,664,357	5,703,918	2,253,521	6,963,864
Sulphite Bleached .....	1,238,941	5,576,279	2,313,526	9,243,864
Sulphite Unbleached .....	2,136,412	7,181,308	3,443,866	9,422,758
Mechanical .....	4,109,593	8,347,435	5,068,087	7,301,426
	9,149,303	\$26,808,940	13,079,000	\$31,931,912

These figures show an increase in our exports of news print of 4,051,964, cwts., exports of book paper have almost doubled and pulp exports increased by 3,929,697 cwts.

Pulpwood exports for these nine months amounted to 749,811 cords valued at \$7,710,205 compared with 564,446 cords valued at \$7,229,593 in the nine months of 1921.

#### T. T. Webster Heads Paper Traffic League

[FROM OUR REGULAR CORRESPONDENT]

DAYTON, Ohio, January 29, 1923.—A distinct honor has come to Dayton in the selection of T. T. Webster, as president of the Pulp and Paper Traffic League of the United States. This League has a membership of forty, representing 123 companies throughout the United States operating 208 mills.

The combined capacity of these mills is stated to be 6,356,308 tons of paper annually.

Mr. Webster is widely known in the paper trade both here and throughout the country. He is the general traffic manager of the G. H. Mead Company of this city and the president of the Miami Valley Traffic Club, an organization composed of traffic directors of paper and allied companies.

## FINANCING for the Pulp and Paper Industry

¶ Our long experience in industrial financing includes the successful marketing of eighteen issues of the securities of American and Canadian Pulp and Paper companies having net assets of nearly \$150,000,000.

¶ If you desire cash for extension, refunding or additional working capital, let us assist you. Our organization, backed by large resources, is equipped for prompt and intelligent service.

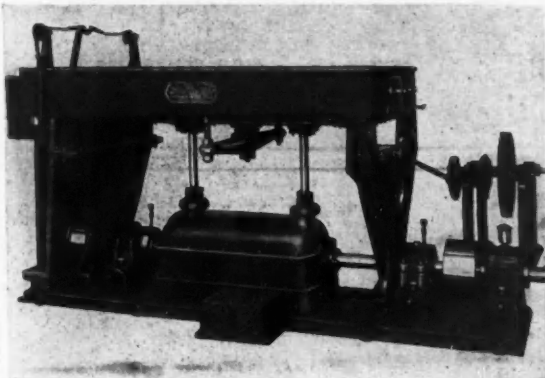
## Peabody, Houghteling & Co.

Established 1865

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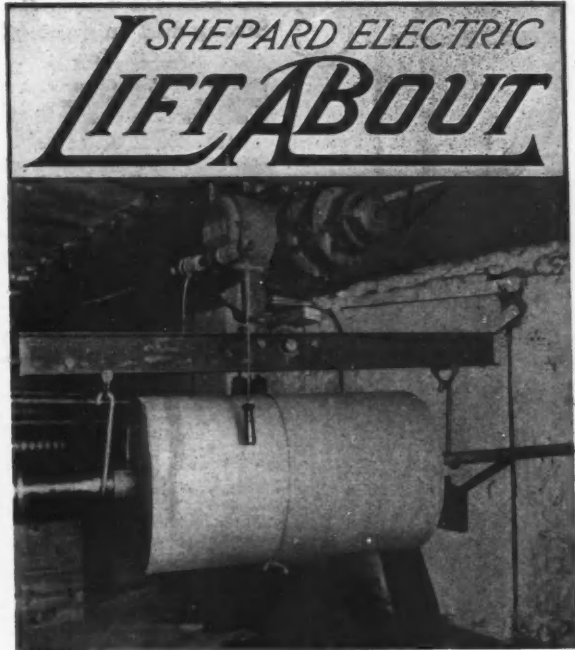
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NEW YORK

## DAY by DAY WHITE'S OSCILLATING SCREEN



is proving its efficiency and economy in the production of clean paper. Its durability is unsurpassed.

**J. & W. JOLLY, INC.**  
HOLYOKE, MASS.



## 80% Increase in Production and \$1,144 Saving

F. A. O'NEILL, President of the Paper Manufacturing Co., Inc., Philadelphia, says:

"Our Shepard *LiftAbout* saves us time and money, and increased the production of our sheeting machine. This machine cuts sheets from rolls of paper, which are lowered to the basement in an elevator. The rolls vary in length, 72 in. being the maximum and 28 to 48 in. the usual length. They weigh from 500 to 1,500 lbs.

"When we want to put a roll into the sheeting machine we run a bar through the center of the roll and fasten a hook on each end of the bar. The *LiftAbout* raises the roll, carries it to the machine, and lowers it into place. Although the hoist has a rated capacity of only 1,000 lbs., it can easily lift the 1,500 lb. rolls.

"It handles 25 to 30 rolls a day, saving at least one man's labor, which is worth \$1,144 a year. It also saves over 2 hours' time a day on the sheeting machine, increasing its capacity from 6 tons to 10 tons a day. This is due to the fact that the machine has to be stopped when being loaded.

"The *LiftAbout* gives no mechanical trouble and effects just what we bought it for—increased production. A little later we expect to use the hoist even more effectively at our new warehouse, where we shall run more extensive overhead tracks."

### EQUAL ECONOMIES FOR YOU

Send for descriptive folder—the *LiftAbout* can save for you as it does for others in your industry.

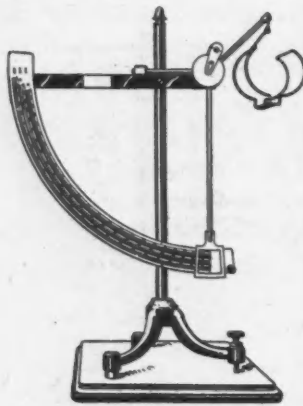
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378 Schuyler Ave., Montour Falls, N. Y.

Branches in Principal Cities  
Member Electric Hoist Mfrs' Assn.

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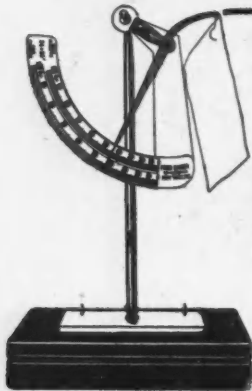


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**Strong and guaranteed accurate**

used by the U. S. Government and by paper mills and paper houses in all parts of the world.

**TABLE PAPER SCALE No. 29**  
 About 22" high. One sheet indicates automatically the weight of a ream of 480, 500 and 516 sheets in the size of the sheet weighed. Ready for immediate shipment.

**FRED BAKER**  
 34 West 28th Street  
 New York City  
 Phone: Chelsea 9135-9136



**MADE IN U. S. A.**  
**The Baker Universal Paper Scale**

Collapsible, for Desk or Pocket. Set up stands 8 inches high, folded it measures 4x6 inches (coat pocket size). A small piece of paper indicates automatically ream weights per 480 and 500 sheets in sizes 24x36, 20x30, 17x22, 25x38, or any size desired. A scale for every purpose.

**FRED BAKER**  
 Manufacturer of Precision Paper Scales  
 34 West 28th St., New York City  
 Established 1912  
 Phone: Chelsea 9135-9136

**News of the Boston Trade**

[FROM OUR REGULAR CORRESPONDENT.]

BOSTON, Mass., January 29, 1923.—At the Army Base, South Boston, because of the congestion of freight from foreign steamships, it was reported this week that 30,000 bundles of Swedish wood pulp were in storage, consigned to a Massachusetts papermaking concern, which was unable to move it because of the snow difficulties. Big motor trucks have been useless because of the heavy snowfall for the long hauls. But they have successfully taken the place of the railroads, demoralized by the winter forces, in the short hauls.

The appointment of Chester L. Whittemore as traffic manager of the New England Paper and Pulp Association is being received with enthusiasm by the Boston paper men. Whittemore, who succeeds Charles H. Tiffany, has been secretary of the organization for nearly nine years, as well as traffic manager for the S. D. Warren Paper Company, and is thoroughly conversant with New England paper rate matters. A. A. Rapheal, assistant to Mr. Tiffany, will continue as assistant to Mr. Whittemore.

The Shawmut Paper Box Company, of which Lyle A. Brown and George B. Roy are president and vice-president, respectively, has taken over the building on Landsdowne street, Cambridge, formerly used by the Rice & Hutchins Shoe Company as a factory. Box-making machinery is now being installed, and upon the completion of the work paper boxes will be manufactured by the Shawmut company.

A sharp rise of five dollars or more a ton in boards is reported by the dealers in box boards in Boston, thus bringing the prices up to the highest that they have been for months. Difficulties in getting materials, embargoes on the railroads, and labor trouble, with increase of wages, are the factors blamed for the new increase. In spite of the increase in prices, the Hub dealers still report that the orders are coming in. This is due undoubtedly to the increase in practically every line of business, many of which use box boards in some manner in their daily business.



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**“The Paper of Many Uses”**

*Manufactured by*  
**THE HOWARD PAPER COMPANY**

MILLS  
Urbana, Ohio

**West Virginia Pulp  
and Paper Company**

*Manufacturers of*

**Supercalendered and Machine  
Finished Book and  
Lithographic Papers**

Offset, Envelope and Music  
Paper, High Grade Coated  
Book and Label Papers

— also —

**Bleached Spruce Sulphite and Soda Pulp**

200 Fifth Avenue  
New York

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Chicago



**M**

**MAJESTIC**, steel-ribbed, rock rooted, the 285 ft. K. V. P. smoke stack symbolizes the superior product of the big plant over which it presides.

If you are not acquainted with this organization whose two-fold ideal is “To excel in Paper product and just be good folks to do business with,” the latch string is out. Come in!

**KALAMAZOO**  
Vegetable Parchment Co.  
KALAMAZOO  
MICHIGAN

**GREASEPROOF PARCHMENT PAPERS**

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OF STANDARD QUALITY

<u>Purity</u>	<u>Ashmere</u>	<u>Berkshire</u>
Quality Plus	Equally Fine	Stands the Test

OUR PAPERS ARE EXCELLENT FOR MEAT MARKETS, GROCERS AND GENERAL PACKING HOUSE REQUIREMENTS

  
**Mountain Mill Paper Co.**

(Write for Samples and Quotations)  
SALES OFFICE  
110 E. 42nd Street  
NEW YORK

## New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,  
WEDNESDAY, JANUARY 31, 1923.

New York's paper markets registered distinct advances in tone during the past week, and in some cases price increases attended this hardening movement. The unusual activity in nearly every market may best be ascribed to constantly mounting raw material costs, as the situation which now prevails is an unusual one when the season of the year is taken into consideration. From all appearances mechanical wood pulp has reached the peak of its climb for some time to come, having advanced some 70 per cent in the past three months. Pulp men are inclined to believe that the advances made in this market are out of proportion with those in the chemical pulp field and, in spite of the continued scarcity of water in grinding regions, they feel it will not be long before prices will ease off until the proper equilibrium between these two raw materials is attained.

Persistent advances in waste paper prices corresponding with the pulp increases give manufacturers but little in the way of an alternative between these raw material sources. So in advancing the price of finished paper the producer is resorting to the only possible expedient which will enable him to continue operating upon a competitive basis. Beside the scarcity and high cost of the crude materials entering into the making of paper, the exceptional demand for all grades of the finished product gives the industry an exceptionally active aspect, the probabilities being that this condition will obtain well into the spring and summer of the current year.

The past week has been an active one in news print circles, although many manufacturers are still greatly handicapped by the shortage of empty freight cars. One prominent New York producer stated that his company now has ready for overdue contract delivery hundreds of tons of finished paper, but transportation congestion is such that available cars are far too inadequate. Prices remained firm and the feeling was current that they would seek higher levels if groundwood continues to advance and no settlement is reached in the Swedish pulp strike in the near future.

Book paper continued to improve in demand and exports picked up materially in the course of the week. Prices held steady and it is generally believed they will advance in keeping with the augmented demand from consumers.

Fine paper enjoyed a satisfactory week's business throughout the Metropolitan district, several large houses reporting that buying was conducted on a broader scale than in any previous week this year. Salesmen find orders freer and state that their customers are gradually relinquishing the "hand-to-mouth" buying tendency which prevailed during the greater part of 1922.

Tissues accelerated both in price and demand during the week's transactions, advances in the former being traced to the high cost of mechanical pulp and in the latter to the strides which are being made in the textile, shoe, and other industries using large quantities of the finished commodity. Mills are severely harassed in consequence of the pulp shortage and orders are sold contingent upon their ability to ship at the time stated.

Wrapping paper has held its own during the past week, the volume of sales increasing almost daily, according to several large producers and importers of the commodity. Prices are regarded as quite firm and any revision is expected to be in an upward direction. Kraft pulp appears to be on the verge of a quotational advance and reports from Sweden as to the extent of the pulp strike give this market a bullish aspect.

Boards held the drastic price advances of the past two weeks and a lively business was reported in all quarters. Paper stock advances have played an important role in jacking up board prices to their present position, as have the scarcity and high cost of ground wood. Boxboard has been exceptionally active.

### Mechanical Pulp

Pulp men differ widely in their views on the exact status of the groundwood situation. Whereas one executive will insist that at present water conditions are so aggravated in grinding regions that pulps will not stop this side of the \$60 mark, another will point to the inevitable February thaws and maintain that at its present \$50 level mechanical pulp is at its peak. It is generally agreed in the trade that in spite of the tremendous demand from board and tissue mills as well as other large consumers, to say nothing of the news print industry, ground wood is relatively higher priced than chemical pulp. The market is still very firm and practically no spot supplies are available at any price, but fundamental conditions do not appear to warrant a protraction of the present values for a very long period of time.

### Chemical Pulp

The market for chemical pulps, on the contrary, is essentially strong in its undertone. The quotational advances which have taken effect since January 1 have been, in the main, a result of the substantial demand from the consuming trade. The effect of the Swedish pulp strike can hardly be said to have molested domestic market conditions as yet, but steady advances are in line for the next six weeks if some arbitration is not evolved in the Scandinavian tie-up. Both imported and domestic grades of bleached sulphite are being quoted at 4.50 to 5.00 cents a pound, while soda pulp holds at 4.25 to 4.50.

### Old Rope and Bagging

Rope paper manufacturers continued to use sizeable quantities of No. 1 domestic Manila rope throughout the past week and the demand on other grades substantiated the firm position this market has come to hold.

Bagging has advanced in the roofing grades, while scrap has held its own, moving to tissue mills in medium-sized quantities. Demand has been steady on the whole and stronger prices are believed to be imminent.

### Waste Paper

Still further price increases added to the bullish attitude of the waste paper market in the course of the week, the lower grades being most conspicuous in the upward markings. The market is very sensitive at present, having eased off slightly in these grades at the beginning of the week as a combined result of temporarily decreased demand from the West and railroad embargoes. Common paper is now hovering around the dollar mark, while mixed paper has advanced to a maximum of \$1.50 per cwt.

### Rags

The papermaking grades of rags have held in consistently good demand during the week, especial emphasis being laid upon the repacked gradings, street soiled whites, thirds and blues and miscellaneous white stock, 5.00 to 5.25 cents a pound being quoted on No. 1 quality of the latter. Prices continue to hold quite firm.

### Twine

A fairly steady volume of business characterized the light activity in the twine market during the course of the week and although no concrete evidences of the long looked for price boosts were brought forth, dealers feel that these will come in early February in consequence of the advanced jute and sisal costs.

### E. P. Wood Promoted in India

[FROM OUR REGULAR CORRESPONDENT.]

CANTON, N. C., January 30, 1923.—Edward P. Wood, son of A. D. Wood, of the Champion Fibre Company, who went to Rajamundry, India, last summer as chemical engineer of the Carnatic Paper Mills, Ltd., has been promoted to the position of general superintendent. Bamboo papers are made at this mill.



# Market Quotations

## Paper Company Securities

New York Stock Exchange closing quotations January 30, 1923:

	BID	ASKED
American Writing Paper Company pref.....	24	26
International Paper Company, com.....	50 3/4	51
International Paper Company, pref., stamped.....	70	71
Union Bag & Paper Corporation.....	64 3/4	65

## Paper

<b>Ledgers</b> F. o. b. Mill @38.00	
Bonds @55.00	
<b>Writings—</b>	
Extra Superfine 16.00 @35.00	
Superfine @30.00	
Tub Sized @15.00	
Engine Sized @8.50 @11.00	
<b>News—f. o. b. Mill—</b>	
Rolls, contract @3.80 @3.95	
Rolls, transit @4.00 @4.25	
Sheets @4.25 @4.50	
Side Run @3.50 @4.15	
<b>Book, Casd—f. o. b. Mill</b>	
S. & S. @7.50 @14.00	
M. F. @7.00 @10.00	
<b>Coated and Enamel</b>	
@9.00 @14.00	
Lithograph @9.00 @14.00	
<b>Tissues—f. o. b. Mill</b>	
White, No. 1 @.95 @1.10	
Colored @1.25 @2.50	
Anti-Tarnish @1.90 @2.40	
Silver Tissue @ @	
Manila @.90 @1.00	
<b>Kraft—f. o. b. Mill—</b>	
No. 1 Domestic @7.00 @7.50	
No. 2 Domestic @7.00 @7.00	
Imported @6.50 @7.00	
Screenings @3.25 @3.50	
<b>Manila</b>	
No. 1 Jute @8.50 @9.00	
No. 2 Jute @7.75 @8.50	
No. 1 Wood @4.50 @5.50	
No. 2 Wood @4.00 @4.50	
Butchers @4.25 @4.75	
<b>Fiber Papers—</b>	
No. 1 Fiber @6.00 @6.25	
No. 2 Fiber @5.25 @5.50	
Common Bogus @3.50 @	
Card Middies @4.00 @5.00	
<b>Boards—per ton—</b>	
News @75.00 @	
Straw @80.00 @	
Chip @70.00 @	
Binders Board @87.50 @	
Sgl. Mia. Ll. Chip @87.50 @	
Wood Pulp @85.00 @	
Container @90.00 @	
<b>Wax Paper—</b>	
Self Sealing White	
28 and 30 lb.	
basis @11.00 @12.00	
Waxed Tissue @1.60 @1.80	
<b>Glassine—</b>	
Bleached, basis 25 @15.00 @16.00	
lbs. @17.00 @18.00	
<b>Papermakers' Felts, per ton—</b>	
Dry @75.00 @85.00	
Saturated @65.00 @75.00	
<b>Sheathing Paper, per ton—</b>	
Rosin Sized (red and gray, 30 lbs. per 50 sq. ft.) @55.00 @65.00	
<b>Mechanical Pulp</b>	
(Ex-Dock)	
No. 1 Imported @44.00 @48.00	
(F. o. b. Mill)	
No. 1 Domestic @46.00 @50.00	
For immediate shipment @50.00 @	
<b>Chemical Pulp</b>	
(Ex-Dock, Atlantic Ports.)	
<b>Sulphite (Imported)—</b>	
Bleached @4.50 @5.00	
Easy Bleaching @3.25 @3.50	
No. 1 strong unbleached @3.00 @3.25	
No. 2 Strong unbleached @2.85 @3.10	
No. 1 Kraft @3.00 @3.20	
<b>Sulphate—</b>	
Bleached @4.00 @4.25	
(F. o. b. Pulp Mill.)	
<b>Sulphite (Domestic)—</b>	
Bleached @4.50 @5.00	
Strong unbleached @3.00 @3.25	
<b>Easy Bleaching</b>	
Sulphite @3.00 @3.50	
News Sulphite @2.75 @3.00	
Mitscherlich @3.10 @3.40	

Kraft (Domestic) 3.00 @3.25
Soda Bleached @4.25 @4.50

## Domestic Rags

<b>Prices to Mill, f. o. b. N. Y.</b>	
<b>Shirt Cuttings—</b>	
New White, No. 1 11.50 @12.00	
New White, No. 2 6.50 @7.00	
Silesias, No. 1 7.50 @8.00	
New Unbleached 9.50 @10.00	
Washables @4.50 @5.00	
Fancy @6.25 @6.75	
<b>Cotton—according to Grades—</b>	
Blue Overall @6.50 @7.00	
New Blue @4.95 @5.20	
New Black Soft 5.00 @5.50	
<b>New Light Seconds</b> @2.90 @3.15	
<b>O. D. Khaki Cuttings</b>	
@4.25 @4.75	
Men's Corduroy 3.15 @3.40	
New Canvas @6.75 @7.10	
New Black Mixed 2.50 @2.75	
<b>Old</b>	
White, No. 1—	
Repacked @6.00 @6.50	
Miscellaneous @5.25 @5.50	
White, No. 2—	
Repacked @3.25 @3.50	
Miscellaneous @2.85 @3.10	
St. Soiled White 1.90 @2.00	
<b>Thirds and Blues—</b>	
Repacked @1.90 @2.10	
Miscellaneous @1.50 @1.60	
Black stockings @2.90 @3.25	
<b>Roofing Rags—</b>	
Cloth Strippings @1.20 @1.30	
No. 1 @1.20 @1.30	
No. 2 @1.10 @1.20	
No. 3 @.85 @.95	
No. 4 @.85 @.95	
No. 5A @1.05 @1.15	

## Foreign Rags

New Light Silesias 6.00 nominal
Light Flannels @6.75 nominal
Unbleached Cottons @7.50 nominal
<b>New White Cuttings</b> @9.50 nominal
New Light Oxfords 6.00 nominal
New Light Prints @4.50 nominal
<b>New Mixed Cuttings</b>
@2.00 @2.50
<b>New Dark Cuttings</b> @1.90 @2.10
No. 1 White Linens 9.00 @11.00
No. 2 White Linens 6.50 nominal
No. 3 White Linens 5.00 nominal
No. 4 White Linens 3.50 nominal
<b>Old Extra Light Prints</b> @2.00 nominal
Ord. Light Prints @1.75 nominal
Med. Light Prints @1.50 nominal
Dutch Blue Cottons @1.85 nominal
<b>German Blue Cottons</b> @1.60 @1.70
Ger. Blue Linens @3.50 nominal
Checks and Blues @1.50 nominal
Dark Cottons @1.30 @1.35
Shoppery @1.00 @1.05
French Blues @1.75 @2.00

## Bagging

<b>Prices to Mill f. o. b. N. Y.</b>	
<b>Gunny No. 1—</b>	
Foreign @1.00 @1.10	
Domestic @1.00 @1.10	
Wool, Tares, light @1.45 @1.55	
Wool, Tares, heavy @1.40 @1.50	
Bright Bagging @1.05 @1.20	
No. 1 Scrap @1.05 @1.20	
Sound Bagging @.85 @.95	
<b>Manila Rope—</b>	
Foreign @5.75 @6.00	
Domestic @6.00 @6.25	
New Bu. Cut @2.25 @2.45	
<b>Heavy Jute Threads—</b>	
Foreign @2.25 @2.50	
Domestic @2.20 @2.40	
Mixed Strings @.90 @1.00	

## Twines

<b>Cotton—(F. o. b. Mill)</b>	
No. 1 @.35 @.37	
No. 2 @.33 @.35	
No. 3 @.37 @.39	

India, No. 6 basis—	
Light @.20 @.21	
Dark @.19 @.20	
B. C., 18 Basis @.41 @.42	
A. B., Italian, 18	
Basis @.51 @.61	
Finished—	
Dark, 18 basis @.29 @.30	
Light, 18 basis @.26 @.27	
<b>Jute Wrapping, 3-6 Ply—</b>	
No. 1 @.23 @.24	
No. 2 @.21 @.22	
<b>Tube Rope—</b>	
4-ply and larger @.15 @.17	
<b>Fine Tube Yarn—</b>	
5-ply and larger @.19 @.21	
3-ply @.20 @.22	
4-ply @.20 @.22	
Unfinished India—	
Basis @.16 @.17	
<b>Paper Makers Twine</b>	
Balls @.13 @.15	
Box Twine, 2-3 ply @.18 @.19	
Jute Rope @.17 @.20	
Amer. Hemp, 6 @.33 @.35	
<b>Sisal Hay Rope—</b>	
No. 1 Basis @.15 @.17	
No. 2 Basis @.13 @.15	
<b>Sisal Lath Yarn—</b>	
No. 1 @.14 @.15	
No. 2 @.11 @.13	
Manila Rope @.18 @.19	

## Old Waste Papers

(F. o. b. New York)

<b>Shavings—</b>	
Hard, White, No. 1 4.20 @4.40	
Hard, White, No. 2 3.75 @4.15	
Soft, White, No. 1 3.60 @3.80	
<b>Flat Stock—</b>	
Stitchless @2.65 @2.70	
Over Issue Mag. @2.75 @2.85	
Solid Flat Book @2.45 @2.50	
Crumpled No. 1 @2.20 @2.35	
Solid Book Ledger @3.00 @3.25	
Ledger Stock @2.70 @2.80	
New B. B. Chips @1.00 @1.10	
<b>Manilas—</b>	
New Env. Cut @2.80 @3.10	
New Cut No. 1 @2.05 @2.30	
Extra No. 1 Old @1.80 @1.90	
Print @1.65 @1.75	
Container Board @1.50 @1.65	
Bogus Wrapper @1.25 @1.40	
<b>Old Krafts, machine compressed</b>	
Bales @2.15 @2.30	
<b>News—</b>	
No. 1 White News @2.25 @2.40	
Strictly Overissue @1.60 @1.70	
Strictly Folded @1.40 @1.55	
No. 1 Mixed Paper @1.35 @1.50	
Common Paper @.90 @1.05	

## CHICAGO

(FROM OUR REGULAR CORRESPONDENT)

## Paper

<b>F. o. b. Mill</b>	
All Rag Bond @35 @40	
No. 1 Rag Bond @30 @35	
No. 2 Rag Bond @18 @25	
Water Marked Sulphite @10 @14	
Sulphite Bond @9 @12	
Sulphite Ledger @11 @14	
Superfine Writing @18 @24	
No. 1 Fine Writing @14 @22	
No. 2 Fine Writing @12 @20	
No. 3 Fine Writing @9 @17	
No. 1 M. F. Book @6 1/2 @7	
No. 1 S. & S. C. Book @7 @7 1/2	
Coated Book @9 @10 1/4	
Coated Label @9 @10	
News—Rolls mill @4 @4 1/2	
News—Sheets, mill @4 1/4 @4 1/2	
No. 1 Manila @4 1/4 @5 1/4	
No. 2 Manila @4 1/2 @5	
Butchers' Manila @4 @4 1/2	
No. 1 Kraft @7 @7 1/2	
No. 2 Kraft @6 1/2 @7	
Wood Tag Boards @4 1/2 @5	
Screenings @3 @4	
<b>Boards, per ton—</b>	
Plain Chip @26.00 @	
Solid News @26.00 @	
Manila Lined @26.00 @	
Chip @24.00 @	
Container Line @22.00 @	
85 Test @22.00 @	
100 Test @22.00 @	

All quotations withdrawn

## PHILADELPHIA

(FROM OUR REGULAR CORRESPONDENT)

## Paper

Bonds @.10 @.60
Ledgers @.15 @.40
<b>Writings—</b>
Superfine @.15 @.20
Extra fine @.12 @.22
Fine @.20 @.30
Fine, No. 2 @.20 @.25
Fine, No. 3 @.15 @.20
Book, M. F. @.06 @.11
Book, S. S. & C. @.08 @.15
Book, Coated @.08 @.15
Coated Lithograph @.10 @.15
Label @.08 @.15
News @.05 @.07
No. 1 Jute Manila @.12 @.13
Manila Sul, No. 1 @.08 @.10
Manila No. 2 @.07 1/2 @.08
No. 2 Kraft @.10 @.11
No. 1 Kraft @.10 @.11
Common Bogus @.02 1/4 @.03
Straw Board @75.00 @85.00
News Board @65.00 @70.00
Chip Board @62.50 @67.00
Wood Pulp Board @1.25 @1.50
<b>(Carload Lots)</b>
Binder Boards @75.00 @80.00
Per ton @75.00 @80.00
Carload lots @75.00 @80.00
<b>Tarred Felts—</b>
Regular @48.00 @50.00
Slaters @54.00 @56.00

(Continued on page 74)

<b>Best Tarred, 1-ply (per roll) @1.35 @1.90</b>
<b>Best Tarred, 2-ply (per roll) @1.00 @1.15</b>
<b>Best Tarred, 3-ply 1.50 @1.65</b>

## Bagging

<b>F. o. b. Phila.</b>	
<b>Gunny No. 1—</b>	
Foreign @1.25 @	
Domestic @1.20 @1.25	
Manila Rope @5.00 @6.25	
Sisal Rope @.75 @.80	
Mixed Rope @.75 @.80	
Scrap Burlaps @1.00 @1.25	
Wool Tares, heavy @2.50 @2.75	
Mixed Strings @.75 @.80	
No. 1, New Lt. Burlap @1.75 @2.00	
<b>New Burlap Cuttings</b> @1.75 @2.10	

## Old Papers

<b>F. o. b. Phila.</b>	
<b>Shavings—</b>	
No. 1, Hard @4.00 @4.25	
No. 2, Hard @3.75 @3.95	
No. 1 Soft White @3.60 @3.75	
No. 2 Soft White @2.00 @2.25	
No. 1 Mixed @1.60 @1.75	
No. 2 Mixed @1.25 @1.50	

# Imports and Exports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

## NEW YORK IMPORTS

WEEK ENDING JANUARY 27, 1923

### SUMMARY

News print	2,607 rolls.
Wrapping paper	41 ca.
Parchment paper	7 ca.
Photo Paper	28cs.
Packing paper	2,843 rolls, 1,056 bdls., 22 bis, 459 cs.
Surface coated paper	273 ca.
Wall paper	26 bis., 16 cs., 1,809 rolls.
Hangings	55 bis., 10 ca.
Cigarette paper	142 ca.
Writing paper	58 ca.
Straw paper	221 rolls.
Tissue paper	2 ca.
Printing paper	39 ca.
Drawing paper	42 ca.
Filter paper	8 ca.
Blue print paper	11cs., 37 rolls.
Miscellaneous paper	11,529 rolls, 4,410 bis., 311 ca.

### CIGARETTE PAPER

Rose & Frank. Pipestone County, Havre, 30 ca.  
P. J. Schmeitzer, Syria, Marseilles, 112 ca.  
**PAPER HANGINGS**  
A. C. Dodman, Jr., Inc., Liverpool, 10 bis.  
W. H. S. Lloyd & Co., Dakarian, London, 45 bis.

W. H. S. Lloyd & Co., by same, 10 ca.

### WALL PAPER

A. Murphy & Co., Celtic, Liverpool, 2 bis.  
A. Murphy & Co., Berengaria, Liverpool 4 bis.  
A. C. Dodman, Jr., Inc., by same, 9 bis.  
A. C. Dodman, Jr., Inc., by same, 9 ca.  
F. C. Prager Co., Kroonland, Antwerp, 1,809 rolls.

A. C. Dodman, Jr., Inc., by same, 11 bis.  
A. C. Dodman, Jr., Inc., by same, 7 ca.

### SURFACE COATED PAPER

P. C. Zuhlke, Kroonland, Antwerp, 194 ca.  
Defender Photo Supply Co., York, Bremen, 79 ca.

### PACKING PAPER

Republic Bag & Paper Co., York, Bremen, 46 rolls.  
Republic Bag & Paper Co., Gaasterdyk, Rotterdam, 597 rolls.

C. K. MacAlpine & Co., by same, 600 bdls.  
C. K. MacAlpine & Co., Rotterdam, 456 bdls.  
Irving Nat'l Bank, Caucasier, Antwerp, 22 bis.  
Birn & Machenheim, Edgehill, Rotterdam, 450 ca.  
Republic Bag & Paper Co., by same, 2,200 rolls.  
F. B. Vandergrift & Co., Kroonland, Antwerp, 9 ca.

### PHOTO PAPER

Gevaert Co., of America, Kroonland, Antwerp, 28 ca.

### PARCHMENT PAPER

Irving Nat'l Bank, Kroonland, Antwerp, 7 ca.

### WRAPPING PAPER

Wilkinson Bros. & Co., Inc., Independence Hall, Rotterdam, 41 ca.

### NEWS PRINT

Wilkinson Bros. & Co., Inc., Galileo, Hull, 300 rolls.

Chemical Nat'l Bank, Orbita, Hamburg, 855 rolls.  
News Print Paper Corp., Malmén, Gefle, 201 rolls.

M. Gottesman & Co., Inc., by same, 733 rolls.  
Chemical Nat'l Bank, Gaasterdyk, Rotterdam, 439 rolls.

Chemical Nat'l Bank, King City, Hamburg, 79 rolls.

### FILTER PAPER

E. Dietzgen, Syria, Marseilles, 56 ca.

F. C. Strype, by same, 2 ca.

### STRAW PAPER

A. Vuyck, Rotterdam, Rotterdam, 221 rolls.

### TISSUE PAPER

Meadows, Wye & Co., Celtic, Liverpool, 2 ca.

### PRINTING PAPER

B. F. Drakenfeld & Co., Celtic, Liverpool, 37 ca.  
Oxford University Press, by same, 2 ca.

Keuffel & Esser, Mt. Clay, Hamburg, 39 ca.

H. Reeve Angel & Co., Dakarian, London, 3 ca.

### FILTER PAPER

H. Reeve Angel & Co., Dakarian, London, 8 ca.

### BLUE PRINT PAPER

Keuffel & Esser, Mt. Clay, Hamburg, 11 ca.

Keuffel & Esser, by same, 37 rolls.

### PAPER

Chemical Nat'l Bank, Mt. Clay, Hamburg, 2,113 rolls.

Chemical Nat'l Bank, by same, 171 bis.

Wilkinson Bros. & Co., Inc., Oscar II, Trondhjem, 1,330 rolls.

Wilkinson Bros. & Co., Inc., by same, 403 bis.

M. Winter, Inc., by same, 230 bis.

M. Winter, Inc., by same, 255 rolls.

Melby, Kuttroff & Co., by same, 1,207 rolls.

Melby, Kuttroff & Co., by same, 159 bis.

J. P. Heffernan Paper Co., by same, 549 bis.

Melby Kuttroff & Co., Oscar II, Christiania, 47 bis.

Melby, Kuttroff & Co., by same, 107 rolls.  
Fernstrom Paper Co., Orbita, Hamburg, 22 bis.  
Bendix Paper Co., by same, 232 rolls.  
Republic Bag & Paper Co., by same, 880 bis.  
Blauvelt, Wiley Paper Mfg. Co., Assyria, Glasgow, 2 bis.

W. F. Etherington & Sons, by same, 30 ca.  
F. L. Kraemer & Co., President Garfield, London, 3 bis.

Birn & Machenheim, Chicago, Havre, 29 bis.

Japan Paper Co., Chicago, Havre, 4 ca.

J. W. Lyon & Co., by same, 5 bis.

Whiting & Patterson, by same, 3 ca.

De Manduit Paper Corp., by same, 144 ca.

Fernstrom Paper Co., King City, Hamburg, 2,717 rolls.

Fernstrom Paper Co., by same, Hamburg, 12 bis.

Republic Bag & Paper Co., by same, 974 bis.

Ladenburg, Thalman & Co., by same, 328 bis.

Chase Nat'l Bank, by same, 687 rolls.

Chase Nat'l Bank, by same, 102 bis.

D. S. Walton & Co., by same, 57 rolls.

Irving Nat'l Bank, by same, 162 rolls.

Irving Nat'l Bank, by same, 205 bis.

American Exchange Nat'l Bank, by same, 89 bis.

Parsons & Whittemore, President Roosevelt, Bremen, 826 rolls.

Irving Nat'l Bank, by same, 789 rolls.

Wilkinson Bros. & Co., Inc., by same, 1,279 rolls.

Japan Paper Co., Rotterdam, Rotterdam, 78 ca.

Japan Paper Co., Kroonland, Antwerp, 20 ca.

### RAGS, BAGGING, ETC.

E. J. Keller Co., Inc., Caucasier, Antwerp, 248 bis. flax waste.

Irving Nat'l Bank, by same, 764 bis. flax waste.

Bank of America, by same, 105 bis. cotton waste.

Guaranty Trust Co., Ansaldo VIII, Genoa, 46 bis. cotton waste.

Railway Supply Mfg. Co., by same, 167 bis. cotton waste.

Royal Manufacturing Co., by same, 98 bis. cotton waste.

Ayres, Oddy & Co., Sartaria, Bombay, 558 bis. cotton waste.

Equitable Trust Co., Galileo, Newcastle, 84 bis. waste paper.

Castle & Overton, Gaasterdyk, Rotterdam, 14 bis. rags.

State Bank, by same, 94 bis. rags.

M. O'Meara Co., by same, 102 bis. picker waste.

Equitable Trust Co., London Mariner, London, 71 bis. waste paper.

Castle & Overton, Archimedes, Manchester, 28 bis. flax waste.

Everett Heaney & Co., by same, 8 bis. rags.

Katzenstein & Keene, Inc., by same, 19 bis. new cuttings.

Katzenstein & Keene, Inc., by same, 133 bis. bagging.

Katzenstein & Keene, Inc., Virgilia, London, 195 bis. bagging.

Katzenstein & Keene, Inc., Edgehill, Rotterdam, 138 bis. bagging.

Katzenstein & Keene, Inc., by same, 241 bis. rags.

State Bank, by same, 28 bis. cotton waste.

Royal Manufacturing Co., by same, 14 bis. cotton waste.

Reis & Co., Inc., by same, 100 bis. cotton waste.

S. Silberman, by same, 53 bis. paper stock.

E. Butterworth & Co., by same, 131 bis. bagging.

Castle & Overton, by same, 144 bis. bagging.

Guaranty Trust Co., Assyria, Glasgow, 22 bis. paper stock.

E. J. Keller Co., Inc., Chicago, Havre, 148 bis. rags.

E. J. Keller Co., Inc., by same, 235 bis. bagging.

Mechanics & Metals Nat'l Bank, by same, 102 bis. bagging.

Mechanics & Metals Nat'l Bank, by same, 351 bis. rags.

Equitable Trust Co., by same, 135 bis. rags.

American Exchange Nat'l Bank, by same, 204 bis. bagging.

Davies, Turner & Co., by same, 278 bis. rags.

Columbia Bank, by same, 64 bis. rags.

W. Schall & Co., by same, 85 bis. rags.

Nat'l Shawmut Bank, by same, 6 bis. rags.

Castle & Overton, King City, Hamburg, 37 bis. rags.

Irving Nat'l Bank, by same, 41 bis. rags.

State Bank, President Roosevelt, Bremen, 171 bis. rags.

Katzenstein & Keene, Inc., Reijo Maru, Marseilles, 220 bis. rags.

M. O'Meara Co., Rotterdam, Rotterdam, 121 bis. cotton waste.

Irving Nat'l Bank, Kroonland, Antwerp, 132 bis. flax waste.

E. J. Keller Co., Inc., F. Tausig, Kobe, 10 bis. rags.

### OLD ROPE

E. J. Keller Co., Inc., Galileo, Newcastle, 302 bales.

Brown Bros. & Co., Galileo, Hull, 141 coils.  
Brown Bros. & Co., Gaasterdyk, Rotterdam, 66 coils.  
Brown Bros. & Co., Boston City, Bristol, 77 coils.  
N. Y. Trust Co., President Roosevelt, Bremen, 107 coils.

### WOOD PULP

M. Gottesman & Co., Inc., Teresa, Lebenico, 4,000 bis.

Johannesson, Wales & Sparre, Inc., Oscar II, Copenhagen, 3,078 bis.

Papel, Horton & Co., Inc., Malmén, Gefle, 11,250 bis.

Wood Pulp Trading Co., Ltd., Yorck, Bremen, 2,720 bis.

Wood Pulp Trading Co., Ltd., Kongshavn, Norway, 546 bis.

M. Gottesman & Co., Inc., King City, Hamburg, 4,924 bis, 827 tons.

Nilsen, Lyon & Co., Inc., by same, 402 bis., 68 tons.

Nat'l City Bank, by same, 3,200 bis., 406 tons.

Nat'l City Bank, President Roosevelt, Bremen, 2,185 bis., 364 tons.

Castle & Overton, Edgehill, Rotterdam, 262 bis., 58 tons.

### WOODFLOUR

The Hansa Co., King City, Hamburg, 391 bags, 10,000 kilos.

A. Klipstein & Co., Orbita, Hamburg, 432 bags.

### CASEIN

A. Klipstein & Co., King City, Hamburg, 83 bags, 4,947 kilos.

A. Klipstein & Co., Pan America, Buenos Aires, 417 bags.

Kalbfleisch Corp., by same, 2,500 bags.

T. M. Duche & Sons, by same, 417 bags.

Atterbury Bros., Inc., by same, 1,087 bags.

A. Klipstein & Co., Sartaria, Bombay, 400 bags.

### CHINA CLAY

U. S. Stamping Co., Boston City, Bristol, 243 bags.

C. B. Richard & Co., by same, Bristol, 25 casks.

## PHILADELPHIA IMPORTS

WEEK ENDING JANUARY 27, 1923

A. L. Diamant Co., Kroonland, Antwerp, 2 ca. wall paper.

E. J. Keller Co., Inc., Ansaldo VIII, Genoa, 32 bis. cotton waste.

D. D. Murphy, Pipestone County, Havre, 665 bis. rags.

D. M. Hicks, Edgehill, Rotterdam, 56 bis. rags.

S. Birkenstein & Sons, by same, 263 bis. rags.

E. Butterworth & Co., by same, 78 bis. rags.

Reis & Co., Inc., by same, 78 bis. cotton waste.

Castle & Overton, by same, 99 bis. rags.

Castle & Overton, Birmendyk, Rotterdam, 527 bis. waste paper.

E. J. Keller Co., Inc., by same, 292 bis. rags.

E. J. Keller Co., Inc., West Isleta, Newcastle, 69 bis. rags.

E. J. Keller Co., Inc., Eastern Dawn, Rotterdam, 79 bis. rags.

Castle & Overton, Edgehill, Rotterdam, 112 bis. wood pulp.

## BOSTON IMPORTS

WEEK ENDING JANUARY 27, 1923

E. C. Melby, Malmén, Gefle, 319 bis. wrapping paper.

E. J. Keller, Inc., Eglantine, Havre, 207 bis. rags.

Papel, Horton & Co., Inc., Malmén, Gefle, 9,500 bis. wood pulp.

Bulkley, Duntun & Co., by same, 3,250 bis. wood pulp.

M. Gottesman & Co., Inc., Ringborg, Christiania, 1,500 bis. wood pulp.

Wood Pulp Trading Co., Ltd., by same, 600 bis. wood pulp.

## NEW ORLEANS IMPORTS

WEEK ENDING JANUARY 27, 1923

E. J. Keller Co., Inc., Carplaka, Antwerp, 178 bis. bagging.

## BALTIMORE IMPORTS

WEEK ENDING JANUARY 27, 1923

Wood Pulp Trading Co., Ltd., Ringborg, Christiania, 2,800 bis. wood pulp.

R. F. Hammond, Inc., King City, Hamburg, 2,400 bis., 300 tons wood pulp.

## Felt Test—Lowest Cost per Ton

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

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

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

## TAYLOR, BATES & CO.

Members New York Stock Exchange  
Members New York Cotton Exchange

100 Broadway, New York  
Tel. Rector 1140



<b>BONDS</b>	<b>Bought and Sold on Commission</b>
<b>STOCKS</b>	
<b>COTTON</b>	

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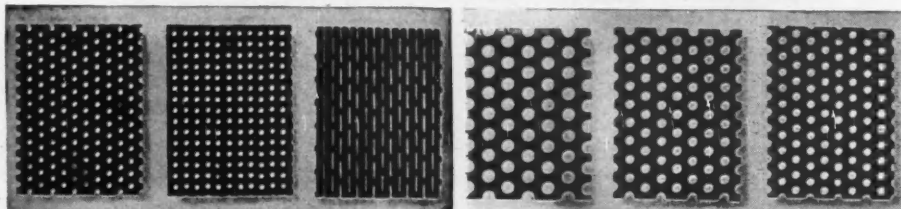
**S**eamless felts for fast running.  
atin Style felts for finish.  
pecial felts to meet every condition.  
end us your felt problems.

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## PERFORATED METALS

All sizes  
and  
shapes  
of Holes



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

## The Harrington & King Perforating Company

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New York Office, 114 Liberty St.

### Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,  
TUESDAY, JANUARY 30, 1923.

**BLEACHING POWDER.**—Chemical dealers of New York report bleach very firm, in keeping with the general trend of other markets supplying the paper manufacturing trade with raw materials. Quoted at 1.90 to 2.00 cents a pound, works, bleaching powder has held in excellent demand, the lower price only applying to one and two thousand ton quantities.

**BLANC FIXE.**—No changes of note have occurred in the blanc fixe market in the past week, quotations remaining in the neighborhood of \$85 to \$90 per ton on the dry product and \$45 to \$50 on the pulp.

**CAUSTIC SODA.**—Holding to its schedule quotation of 2.50 cents a pound, caustic has retained its firm position. Snow blockades are reported to have hampered New England shipments to some extent, but in general transportation conditions have improved.

**CHINA CLAY.**—Dealers state that all grades of clays are moving well as a result of the enlivenment which has occurred in the paper industry during the present month. Good grades of coating clay are listed from \$14 to \$19, unwashed domestic holding at \$9.50 to \$12.50, washed at \$12.50 to \$15.50 and imported at \$16 to \$22.50.

**CASEIN.**—Due to the fact that all importers and domestic producers are oversold on casein, practically none of the commodity may be had for spot shipment. For small tonnages dealers are quoting prices ranging from 22 to 25 cents a pound, while on larger contract orders the price averages 21 and 22 cents.

**LIQUID CHLORINE.**—Demand for chlorine in 100-pound and ton containers has increased materially in the past month, current quotations averaging 6.00 cents a pound, f. o. b. producer's plant.

**PAPERMAKERS' GLUE.**—Glue has enjoyed a considerable activity in recent weeks, the consistencies of hide glue used for tub sizing in the paper industry being quoted at 13 to 20 cents a pound, depending upon the grade.

**ROSIN.**—Rosin dealers report a hardening tendency in the market for grades E, F and G of the naval store, with quoted prices hovering in the vicinity of 5.80 to 5.90 cents a pound, ex-dock, New York, in barrels of 280 pounds. Prices at Savannah, Ga., are approximately \$1 per cwt. less.

**SALTCAKE.**—Due to the current activity in various chemical pulp markets, saltcake has been in exceptional demand during recent weeks and prices are holding very firm. Acid cake is listed at \$26 to \$28 per ton, while chrome cake is in a strong position at \$24.

**SODA ASH.**—No variations from the schedule listing of 1.20 cents a pound has made itself evident in the soda ash branch of the chemical industry, and from the continuance of steady demand from the paper manufacturing trade it is felt that this price will not be revised in any other than an upward direction.

**STARCH.**—Considerable increases in starch sales have been recorded by producers of the corn product since the first of the year. Paper mills are buying freely and prices have held steady to firm throughout the past week's trading. Powdered starch in barrel quantities is quoted at 3 cents a pound, works, while bag lots of this grade list at 2.72 cents. The papermakers' grade of starch still holds at 3.10 cents and 2.82 cents for these respective packings.

**SULPHATE OF ALUMINA.**—Alum has reacted to the general enlivenment in the paper industry, prices hardening to correspond with the increased demand. Commercial sulphate of alumina is now quoted at 1.50 to 1.75 cents a pound, works, and iron free at 2.55 to 2.80 cents.

**SULPHUR.**—The January buying season has not served to alter brimstone quotations from their fixed level of \$18 to \$20 per ton, but producers report an appreciable enhancement in activity since the start of the new year. Quoted prices are exceedingly firm.

### Market Quotations

(Continued from page 71)

Solid Ledger Stock.....	2.75	@	3.00	New Black Soft.....	.06 1/2	@	.06 1/2
Writing Paper.....	2.50	@	2.75	New Light Sec-			
No. 1 Books, heavy.....	2.25	@	2.50	onds.....	.02 1/2	@	.02 1/2
No. 2 Books, light.....	1.40	@	1.50	Khaki Cuttings.....	.11	@	.04 1/2
No. 1 New Manila.....	2.75	@	3.00	Corduroy.....	.03 1/2	@	.04
No. 1 Old Manila.....	1.50	@	1.75	New Canvass.....	.08 1/2	@	.08 1/2
Container Manila.....	1.35	@	1.50	New Black Mixed	.04	@	
Old Kraft.....	2.25	@	2.50	Old			
Overissue News.....	1.50	@	1.60	White, No. 1—			
Old Newspaper.....	1.20	@	1.25	Repacked.....	.06	@	.06 1/2
No. 1 Mixed Paper.....	1.10	@	1.15	Miscellaneous.....	.04 1/2	@	.04 1/2
Common Paper.....	1.00	@	1.10	White, No. 2—			
Straw Board, Chip.....	1.00	@	1.10	Repacked.....	.03 1/2	@	.04
Binders Bd., Chip.....	1.00	@	1.10	Miscellaneous.....	.03	@	.03 1/2
Domestic Rags—New				Thirds and Blues—			
Price to Mill, f. o. b. Phila.				Repacked.....			
Shirt Cuttings.....				Miscellaneous.....	200	@	2.25
New White, No. 1.....	.12	@	.12 1/2	Black Stockings.....	1.85	@	1.90
New White, No. 2.....	.07	@	.07	Roofing Stock.....	2.75	@	3.00
Silicias, No. 1.....	.07 1/2	@	.07 1/2	No. 1.....	1.35	@	1.40
New unbleached.....	.10	@	.11	No. 2.....	1.25	@	1.30
Washables.....	.04 1/2	@		No. 3.....	1.15	@	1.20
Fancy.....	.05 1/2	@	.05 1/2	No. 4.....	1.15	@	1.20
Cottons—according to grades—				No. 5A.....			
Blue Overall.....	.05 1/2	@	.05 1/2	B.....			nominal
New Blue.....	.02 1/2	@	.02 1/2	C.....			nominal

### BOSTON

[FROM OUR REGULAR CORRESPONDENT]

Paper		Wood, Vat Lined.....	\$90.00	@	—
Bonds.....	.08	Filled News Board.....	75.00	@	—
Ledgers.....	.08 1/2	Solid News Board.....	80.00	@	—
Writings.....	.08	S. Manila Chip.....	75.00	@	80.00
Superfine.....	.16	Pat. Coated.....	90.00	@	95.00
Fine.....	.15				
Books, S. & S. C.....	.07 1/2				
Books, M. F.....	.06 1/2				
Books, coated.....	.09				
Label.....	.08 1/2				
News, sheets.....	4.75				
News, rolls.....	4.50				
Manilas—					
No. 1 Manila.....	\$6.00				
No. 1 Fiber.....	.06 1/2				
No. 1 Jute.....	9.00				
Kraft Wrapping.....	.07				
Common Bogus.....	3.50				
Boards					
(Per Ton Destination)					
Chip.....	\$70.00				
News, Vat Lined.....	72.50				

### Old Papers

Shavings—					
No. 1 Hard White.....	4.25	@	4.50		
No. 1 Soft White.....	3.00	@	3.50		
No. 1 Mixed.....	\$1.50	@	1.75		
Ledgers & Writings.....	2.25	@	2.50		
Solid Books.....	2.25	@	2.50		
Blanks.....	1.70	@	1.80		
No. 2 Light Books.....	1.75	@	1.90		
Folded News, over-					
issues.....	26.00	@	28.00		
Gunny Bagging.....	.85	@	.90		
Manila Rope.....	5.75	@	6.00		
Common Paper.....	1.20	@	1.25		
Old News.....	1.30	@	1.40		
Old Kraft.....	2.00	@	2.10		

### TORONTO

[FROM OUR REGULAR CORRESPONDENT]

Paper		Sulphite, bleached.....	100.00	@	105.00
(Mill Prices to Jobbers f. o. b. Mill)		Sulphate.....	70.00	@	—
Bond.....					
Sulphite.....	.11	@	.12 1/2		
Light tinted.....	.12	@	.13 1/2		
Dark tinted.....	.13 1/2	@	.15		
Ledgers (sulphite).....	—	@	.13		
Writing.....	.09 1/2	@	.12		
News, f. o. b. Mills—					
Rolls (carloads).....	3.75	@	—		
Sheets (carloads).....	—	@	4.50		
Sheets (2 tons or over).....	—	@	4.75		
Books—					
No. 1 M. F. (car-	9.00	@	—		
loads).....					
No. 2 M. F. (car-	8.00	@	—		
loads).....					
No. 3 M. F. (car-	7.50	@	—		
loads).....					
No. 1 S. C. (car-	9.50	@	—		
loads).....					
No. 2 S. C. (car-	8.50	@	—		
loads).....					
No. 1 Coated and	14.00	@	—		
litho.....					
No. 2 Coated and	13.00	@	—		
litho.....					
No. 3 Coated and	12.25	@	—		
litho.....					
Coated and litho,	14.25	@	—		
colored.....					
Wrapping—					
Grey.....	5.00	@	—		
White Wrap.....	5.75	@	—		
"B" Manila.....	6.00	@	—		
No. 1 Manila.....	7.25	@	—		
Fiber.....	7.25	@	—		
Kraft, M. F.....	8.00	@	—		
M. G.....	8.15	@	—		
Pulp					
(F. o. b. Mill)					
Ground wood.....	\$40.00	@	50.00		
Sulphite easy bleach-		@	70.00		
ing.....	60.00	@	60.00		
Sulphite news grade.....	55.00	@	60.00		

### Old Waste Papers

(In carload lots, f. o. b. Toronto)					
Shavings—					
White Eav. Cut.....	3.85	@	—		
Soft White Book					
Shavings.....	3.50	@	—		
White Blk News.....	2.15	@	—		
Book and Ledger—					
Flat Magazine and					
Book Stock (old).....	2.30	@	—		
Light and Crum-					
pled Book Stock.....	2.15	@	—		
Ledgers and Writ-					
ings.....	2.50	@	—		
Solid Ledgers.....	2.50	@	—		
Manilas—					
New Manila Cut.....	2.15	@	—		
Printed Manilas.....	1.75	@	—		
Kraft.....	2.50	@	—		
News and Scrap—					
Strictly Overissue.....	1.60	@	—		
Folded News.....	1.60	@	—		
No. 1 Mixed Pa-					
pers.....	1.35	@	—		
Domestic Rags—					
Price to mills, f. o. b. Toronto.					
Per lb.					
No. 1 White shirt					
cuttings.....	.11 1/2	@	.12		
No. 2 White shirt					
cuttings.....	.06 1/2	@	.07		
Fancy shirt cut-					
tings.....	.06 1/2	@	.06 1/2		
No. 1 Old whites.....	.04 1/2	@	—		
Thirds and blues.....	2.50	@	2.65		
Black stockings.....					
Per cwt.					
Black stockings.....	2.55	@	—		
Roofing stock:					
No. 1.....	1.30	@	—		
No. 2.....	1.05	@	—		
Roofing stock:					
Manila rope.....	6.15	@	—		
No. 2.....	1.55	@	—		
Gunny bagging.....	1.05	@	—		