

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

71-14

PAPER TRADE JOURNAL

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

ESTABLISHED IN 1872

Vol. LXXI. No. 14

NEW YORK AND CHICAGO, SEPTEMBER 30, 1920

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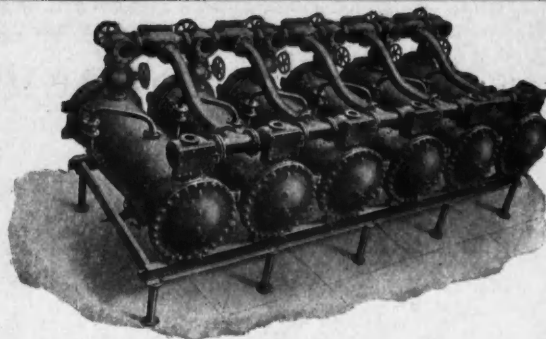
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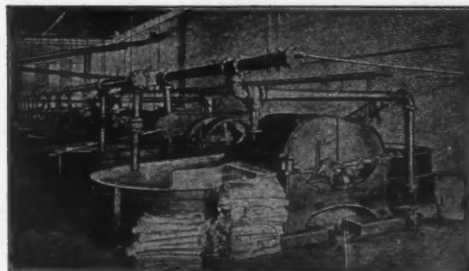
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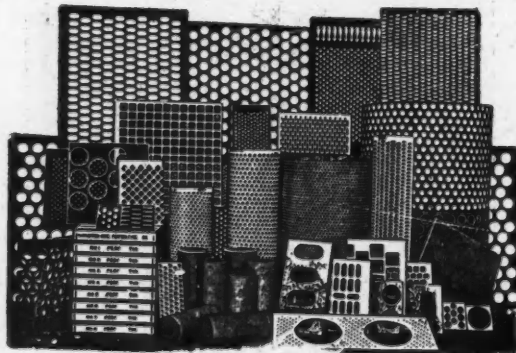
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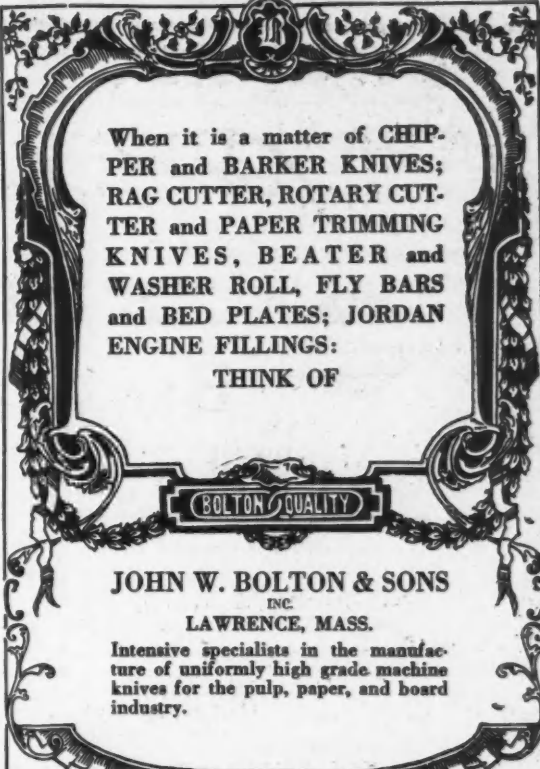
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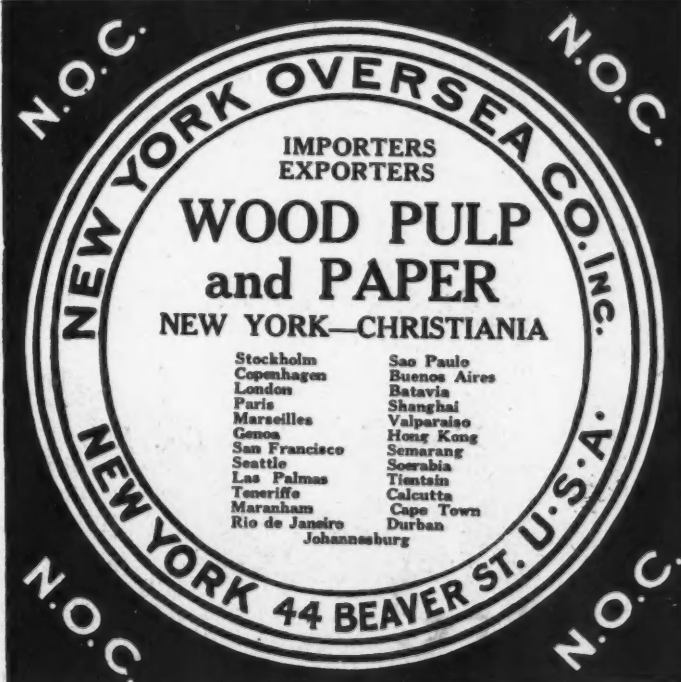
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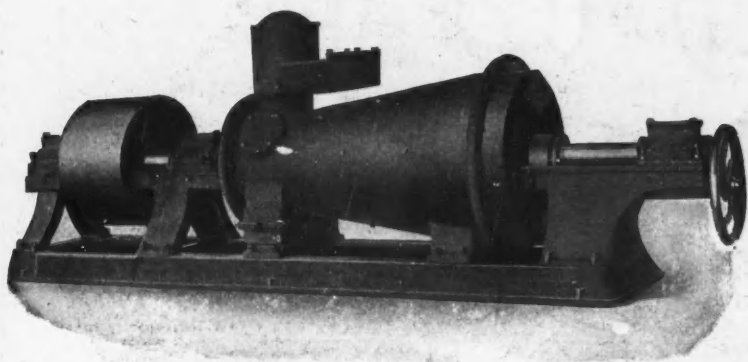
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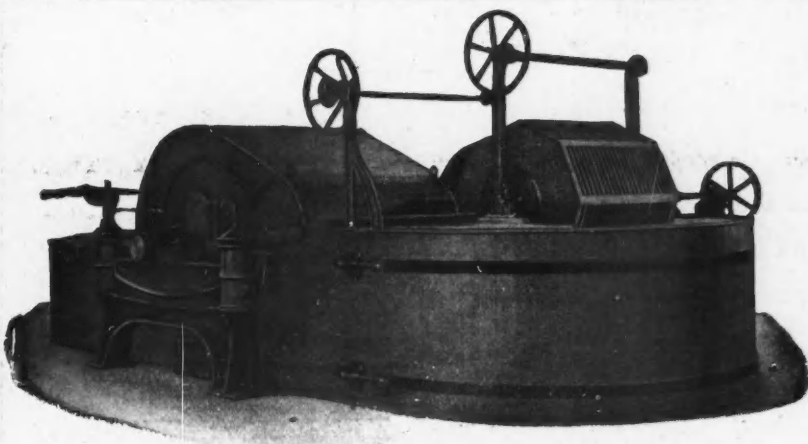
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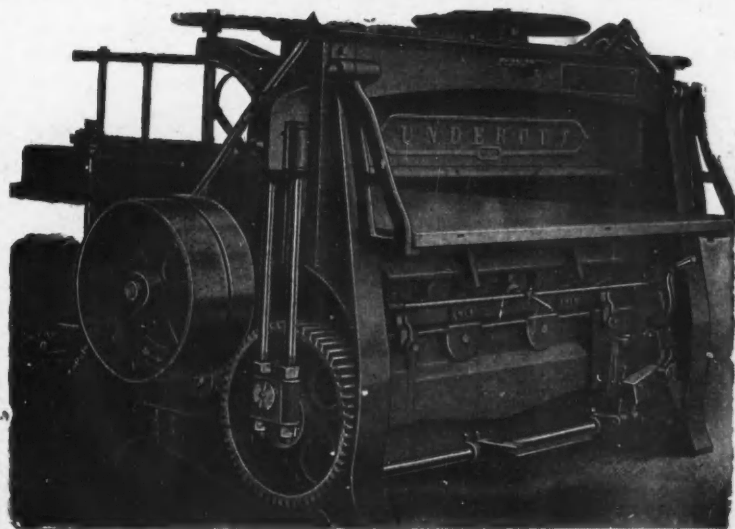
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Vol. LXXI. No. 14

NEW YORK AND CHICAGO

Thursday, September 30, 1920

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PICTURE TAKEN AT THE DINNER OF THE COST ASSOCIATION OF THE PAPER INDUSTRY AT THE WALDORF-ASTORIA, NEW YORK, MONDAY EVENING, SEPTEMBER 27.

COST ASSOCIATION MEETS IN NEW YORK

Fifth Annual Convention at the Waldorf Astoria, Monday and Tuesday of This Week Is Largely Attended and Is the Most Successful of the Kind Ever Held in the Industry—Seth L. Bush, of the Chemical Paper Mfg. Co., Holyoke, Mass., Is Elected to Head the Association for the Ensuing Year—Interesting and Helpful Papers Read

The fifth convention of the Cost Association of the Paper Industry which was held in the Astor Gallery of the Waldorf-Astoria, September 27 and 28, proved to be one of the most successful gatherings of its kind ever held. It was exceedingly well attended, there being something over 150 present, about 100 of whom were at the banquet on Monday night. The whole problem of cost accounting was gone over in a most comprehensive and enlightening way including particularly the relationship of the cost department to the executive, to the mill hand and to the fixing of the selling price.

D. E. Burchell Presides

The convention was formally opened by President D. E. Burchell, whose address is published elsewhere in this issue.

J. R. Young, of the New York Merchants' Association, spoke for a few minutes, cordially welcoming those who had come from distant points to attend the meeting. He then brought out the cooperative spirit which is becoming more and more prevalent throughout every branch of American industry and cited as an instance of this the great work which was done by the Citizens' Transportation Committee during the recent Longshoremen's strike, which threatened to tie up completely the entire port of New York, but which failed to do so largely through the efforts of this committee. In closing, Mr. Young remarked, "You are all welcome in this city and we should be mighty glad to see any of you in our workshop in the Woolworth Building. And if I can't show you anything interesting in the offices, I'll take you up on the roof."

President Burchell then introduced L. R. Clapp, of Thompson and Black, Financial Accountants and Engineers, New York, who gave an interesting address on Production Managers' Need of Cost Accounting. He called attention to the fact that there is more in Cost Accounting than is able to be superficially observed. The figures and tables are rather formidable, he said, but you cannot judge by externals.

His whole talk was a very careful analysis of his particular subject and a full account is given elsewhere in these pages.

John Clyde Oswald Speaks

Following this John Clyde Oswald, publisher of the *American Printer* and a member of the Committee on Education of the United Typothetæ of America, spoke on the possibilities of Cost Accounting in the Paper Trade.

He said that when he first entered the printing trade there was no such thing as a cost accounting system and the result was that the mortality among printing establishments was very high. The chief characteristic of the printer was lack of system. In 1909, at Chicago, came the first Cost Convention to remedy this serious situation. The men who met there were pioneers. They had nothing to work on and had to go at it blindly. The first step was the sending out of a questionnaire to all members of the trade to ascertain what kind of cost accounting, if any, was already in existence. They expected few answers, but they got even fewer than they had anticipated, but the committee set to work and held conventions, kept records and formed a nucleus for the very efficient system which is now working and which is being improved all the time.

Mr. Oswald then gave a few interesting facts about their system as it is now in operation. He said that they discovered that it was unwise to allow the men to keep their own time so that it has become the custom to compute this by some automatic machine. Another change has been the devising of an estimate blank. One of the great dangers is the man who thinks he has the system and hasn't. The system has the advantage of being able to show little leaks in some of the minor departments of an organization which would otherwise escape notice. Another very gratifying thing about the system is that it illuminates every nook and cranny of the business. It is by no means perfect. Nothing can attain

Announcement

The Committee on Bibliography of the Technical Association of the Pulp and Paper Industry wishes to announce that through the generous cooperation of the Paper Trade Journal arrangements have been made whereby the bibliographies which have accumulated during the past few months will be published in future issues of this Journal. The Committee feels that the wide circulation of the Paper Trade Journal will give the paper industry easy access to its contributions.

It is hoped that the industry, both individually and as a whole, will assist the Committee in this work by sending its Chairman additions and corrections to the published bibliographies, and by suggesting future contributions to be worked up by the Committee.

The following list of completed bibliographies will be published as rapidly as possible:

1. *Filter paper.*
2. *The sizing of paper with special reference to the chemistry of the process.*
3. *The history of paper-making in the United States.*
4. *Dumercy's bibliography of paper-making.*
5. *Paper research literature—Contributions from the Royal Testing Laboratory, Berlin.*
6. *Paper research literature—Contributions of the Bureau of Standards.*
7. *A bibliography of the sulphate process and of Kraft paper.*
8. *References on the paper industry and trade.*
9. *References on the paper box industry.*
10. *References on the paper industry in the Southern States.*
11. *References on paper, especially as regards the Paper Trust.*
12. *Paper-making materials other than wood.*
13. *A list of woods used in paper-making.*
14. *The dyeing of paper.*
15. *An ideal library for the paper industry.*
16. *Bleaching of paper.*

CLARENCE J. WEST, Chairman,
Committee on Bibliography.

perfection into which the human equation enters, but it is gradually growing and expanding until some day it may come very close to this ideal.

Cost System and the Executive

Colonel B. A. Franklin, vice-president of the Strathmore Paper Company and the organizer and first president of the association, then gave a talk on Cost System and the Executive at the opening of the afternoon session of the convention. He said that the executive is often so close to his business and so ill informed as to the results that he is often unable to appreciate and use to the fullest extent the results of the work of the cost men. The executive is rising to a position in industry of equal importance with the labor and the capital class and in another quarter of a century he will come even more into his own and as he progresses he is going to discover more and more the importance of cost system work.

One important feature of the cost problem is the fact that the groups in an industry are becoming so much larger that the personal touch is completely lost and the old time "one man" business is rapidly passing. Colonel Franklin then discussed efficiency saying that he thought that there were very few of those present who were more than fifty per cent efficient and although one is quite capable of noticing inefficiency in others it is another matter when it comes to the realization of such a condition in one's self. We are more efficient in our factory life than anywhere else because here there is a profit involved and even the best factories are seldom more than 75 per cent efficient if they are as much as that. Under the conditions which prevail under a poor cost system or none it is impossible for the executive to put his hand on the trouble in a factory and speed up production or increase the general efficiency. The first step is the building of a cost organization and many managers are too short-sighted to be able to see beyond the initial expense of maintaining such a staff. One of the great disadvantages of any cost system is that no matter how interesting it may seem to the introducer it must seem dull to the man who has to carry the work along and has no special training in work of this sort. The trouble has been in the past that the executive has been too little in touch with his cost department. In conclusion Colonel Franklin remarked, "It is beyond my belief that the executive can do without a cost system. It is absolutely inevitable."

The next two speakers were Henry D. Schmidt, vice-president of the Schmidt and Ault Paper Company, who gave an address on Cost Accounting from the Executive's Standpoint, and B. E. Hutchinson, treasurer of the American Writing Paper Company, who spoke on Practical Application of Cost Work to Management. Both of these speeches are printed at greater

length elsewhere in this issue. After this the meeting was adjourned until the evening.

J. P. Jordan Speaks After Dinner

Over 100 of the delegates gathered together at 7 p. m. for a most interesting and well appointed dinner at the Waldorf-Astoria. After a very satisfactory meal they were entertained by Pendleton Beckley, of the Banker's Trust Company, who gave a witty and epigrammatic talk bringing out the romance of the paper business in an inimitable manner. Following him J. P. Jordan, of C. E. Knoepfel & Co., Inc., gave a searching analysis of the history and aims of the cost accounting movement during the last twenty years. He remarked that cost in relation to selling price was only a small part of the problem, although no selling price can be made up of course without taking cost into due consideration. And no cost can be made up without an assembly of tremendous amount of detail. One of the principal duties of the cost man should be to see that all figures that come in are properly collected and that they properly represent the various operations of the plant.

This is a tremendous problem and the general manager in almost all cases has no realization of the effort which has to be expended to get the cost figures on the general manager's desk. The cost man has it in him to become one of the most powerful factors that can exist in a manufacturing institution providing that he makes a careful psychological study of his own work. Instead of merely placing his cost sheets once a month on the manager's desk he should request and obtain an interview and present his figures and go over them carefully with the executive pointing out the various weak spots.

Mr. Jordan then went into the cost problem from the standpoint of the manager, saying that some of them did not use the cost sheets at all while others did not use them properly. If used in the right manner he seemed to think that all the mystery could be removed from that elusive thing called overhead and he related several interesting examples of how overhead had been greatly overcome by a good system of cost accounting.

Cost Finding and Volume Production

The Tuesday morning session opened with an illustrated talk by John B. Hipwell, of the Dill & Collins Co., on the development of the cost system in the company with which he is connected and which is known to be a very excellent one. This address will be found practically in full further along in these columns. After this G. A. Ware, of the News Print Service Bureau, spoke on the Value of Cost Finding in Volume Production. He opened by remarking that this subject applied to all paper cost was entirely too large to be handled within the small compass of his speech, he therefore spoke more particularly of news print mills, but only

(Continued on page 20)



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COST ASSOCIATION MEETS IN NEW YORK

(Continued from page 18)

inasmuch as their problems applied generally throughout the paper trade. The value of cost finding he said was obvious to all, it is also true that it promotes healthy competition. If we know what the cost of our product is we can tell what the sales prices ought to be. He said the cost accounting was very like a navigator's chart rather than a mere compass that is always pointing in one direction.

Two Principles of Cost Accounting

According to Mr. Ware there are two principles of cost accounting: it shows the way in which we should go; and we can mark the cost out, so to speak, on a chart as we follow the directions given. Necessarily we must not depend upon our snap judgment in this matter. Sales prices have to depend upon intelligent information. Another advantage of cost accounting is that it makes for improved efficiency and therefore makes it possible to increase production with greater facility. It can keep accurate tabs on the profits. If executives are going to use the information contained in the cost reports they should be in such a handy form that they can readily be grasped and utilized. Mr. Ware then gave an example of a factory in which there is a meeting every month of the cost man with the heads of the various departments together with an executive and all of them thrash over that monthly cost report as though it were the most vital thing in the business. The result has been demonstrated in greatly improved all around efficiency and better understanding between the various departments. He then turned to the opposite and spoke of an old and well established firm which put out the highest grade product in its field, but which had no cost system and did business entirely by guess work. This policy led to dire consequences for the company went bankrupt and is now completely off the map.

He then spoke for a brief time upon the advantages and dangers of uniform cost accounting. He thought that it was an excellent thing for a number of mills to be in touch with each other regularly concerning costs, but he cautioned against the use of selling prices based upon a cost comparison of several mills which he said could rightfully be considered by the courts as restraint of trade. In closing he remarked that no matter how simple the operations of a manufacturing plant be and how few the variety of products it turned out a sound cost system is an absolute necessity.

The afternoon meeting opened with a discussion of the business

affairs of the association and the election of officers. The following men are the officers for the ensuing year: Seth L. Bush, of the Chemical Pulp and Paper Company, Holyoke, Mass., was elected president; B. E. Hutchinson, treasurer of the American Writing Paper Company, Henry W. Stokes, president of the York Haven Paper Company, and Charles H. Coye, secretary of C. H. Dexter and Sons, are the three new vice-presidents of the association; the members of the executive committee are Seth L. Bush, D. E. Burchell, B. A. Franklin, and H. A. Wingate.

In accepting the chair as president, Mr. Bush said in part: "The acceptance of the presidency of the Cost Association is a double honor. In the first place it is an honor in itself to be at the head of such an organization as this and it is also an honor to follow such a predecessor as I have had. I feel that a great deal of the success of the association work so far has been due to the untiring and enthusiastic effort of our former president.

"We have heard at this convention some very fine things in regard to the relationship of the manager to the mill and the customer to the mill and all of them to the costwork. A cost system cannot become perfected in a short time. I am sure that we shall all agree that there are different stages in the progress of cost work. And there are similar stages in the development of such an association as this. We have now covered the first stage and we have, in a sense, been finding ourselves. But now we must put our minds on something finer and bigger than this. We must devote ourselves to selling this association and its aims to concerns that are not yet members. If the Cost Association is going to accomplish great things we must devote ourselves not to what we can get out of it as individuals, but to furnishing the very best we have for our mutual welfare and that of the industry as a whole."

Mr. Bush then gave a brief sketch of what he hoped to make the policies of the Cost Association in the year before it, mentioning a number of changes in the conduct of the conventions and he again emphasized the fact that to justify its existence the association must be aiming for the disinterested development of the paper industry and the altruistic service which it should give to the entire trade.

After an informal discussion by the delegates of their particular problems the convention was adjourned.

ANNUAL REPORT OF PRESIDENT BURCHELL

As you know the Cost Association is less than two years old, yet it has a great deal worth while to its credit. The best thing is that it has a good wholesome bank balance to its credit. The Cost Association has always lived within its means, and always had a bank balance. It could do a great deal more if it had more money to do with, but our policy has always been to use to best advantage the funds and service at our disposal. In this connection it must be borne in mind that those who have been most active in the Cost Association work have been directly connected with member concerns who have willingly and gladly paid all the expenses of their own men, and made other contributions for the promotion of the gospel of good cost accounting.

Anyone who attended the meeting of the Cost Section of the American Paper and Pulp Association at Hotel Astor in 1917, only three years ago will recall the inertia and lack of understanding of everything pertaining to cost accounting, its value and its possibilities. At that meeting Mr. Franklin called for a vote on cost accounting systems in use, and there were only four concerns represented who had cost systems built upon sound and dependable basis. Today it is quite different. The secretary-treasurer of the

Cost Association sent out a questionnaire a short time ago with the following results:

Classified Record of Replies to Questionnaire—July, 1920

Principal product	Replies received	Have cost systems	No cost systems	Cost systems tied into books	Cost systems not tied into books
Writing	29	27	2	16	11
Board	22	20	2	14	6
Tissue	13	9	4	7	2
Wrapping	12	12	..	8	4
News	8	8	..	8	..
Book	7	7	..	5	2
Coated	6	4	2	3	1
Fibre	5	4	1	4	..
Converters	4	3	1	3	..
Bag	4	4	..	3	1
Felt	3	3	..	3	..
Pulp	3	3	..	2	1
Cover	2	2	..	1	1
Wall	2	2	..	1	1
Wax	1	1	..	1	..
Roof	1	1	..	..	1
Parchment	1	1	1
Foundation stock	1	1	1
Total	124	112	12	80	32

(Continued on page 22)

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The Shuttleworth, Holly Company
Stamford, Conn.

The Shuttleworth, Dumouchel Company
Waterbury, Conn.

The Shuttleworth, Holly Company
Danbury, Conn.

Geo. A. Fink Company
343 West 104th Street, New York City

W. E. Shuttleworth & Co.
248 Greenwich Street, New York, N. Y.

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Congress & Houston Streets, New York, N. Y.

The Kolb Carton Company, Inc.
146 Thompson Street, New York, N. Y.

Doscher-Tetamore Company, Inc.
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Hudson Falls Paper Company, Inc.
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L. B. STEWARD, General Sales Mgr.

COST ASSOCIATION MEETS IN NEW YORK

(Continued from page 20)

The following report on membership proves that we have secured the one hundred members which was our goal two years ago:

Membership—August 6, 1920	
By Location	
Canada	3
Connecticut	2
District of Columbia.....	1
Illinois	2
Indiana	1
Maine	1
Massachusetts	23
Michigan	9
New Hampshire	2
New Jersey	1
New York	23
Ohio	5
Pennsylvania	11
Wisconsin	17

111

The above classified report demonstrates that the Association is representative of the Industry, not only of the United States but Canada as well.

By Class of Memberships Now in Force

Date	Full members	Half members	Courtesy members
March, 1919	21	..	1
April, 1919	8	2	..
May, 1919	7	..	..
June, 1919	8	..	..
July, 1919	12	2	2
August, 1919	9	..	1
September, 1919	2	..	1
October, 1919	1	..	..
November, 1919	7	..	..
December, 1919	5	..	2
January, 1920	2	..	..
February, 1920	2	..	..
March, 1920	2	..	..
April, 1920	1	..	..
May, 1920	1	2	..
June, 1920	2	2	..
July, 1920	6	..	..
	96	8	7

Total membership, 100.

Mills Which Have Discontinued Membership (Not included in above membership reports)

- Joined March, 1919—1
- Joined Sept., 1919—1
- Joined Nov., 1919—1

A part of the cause of this marked growth of Cost Accounting within the industry is due to the growing necessity and popularity of Cost Accounting in all industries, but so far as I know, no other industry has made any such progress in Cost Accounting at any time. On the other hand we do know of several industries which are unsuccessful in all attempts to develop Cost Accounting in the industry.

We believe the Cost Association is very fortunate in its plan of organization, built upon co-operation as a basis, and that the Cost Association membership is paper mills rather than Cost Accountants. We believe, also, that the plan of handling the work of the Cost Association by men directly connected with Cost Accounting work within the industry is one of the principal reasons why such good and direct results have rewarded our efforts. Associations of this kind usually go to pieces because someone uses them for personal gain; so far as I know, the Cost Association has been free from any selfish motives except the general good of the industry and that good Cost Accounting is good business.

The co-operative plan of the Cost Association has been worked out, as you know, along several different lines. There are the

local Coast Association divisions in the several sections of the country where the paper industry is centered. Some of these "Locals" are extremely active and productive of good work, not only for the mills in the locality, but for the industry as a whole. Probably no one part of our work has been more productive of genuine good for the industry than the several local associations in their individual efforts and general help of the national association.

Another form of co-operative activity has been the Classified Groups. In the beginning we thought this would afford the greatest possibility for developing actual dependable cost accounting systems in mills which had none. So far this particular part of our work has been very disappointing. On our Committee on Cooperation we have had the pick of cost accountants in each of the classified groups, such as writing, cover, tissue, book, wrapping, board, and the like. For two years these men have individually been ready and willing to cooperate and definitely and directly assist any organization in his particular group.

The difficulty, I believe, has been with the classified groups themselves, because they have not taken active part or made any active response to the cost work as a group. They have preferred to deal with the subject individually, and members of the Committee on Cooperation have been called upon frequently and taken active part in developing cost accounting in several of our paper mills, some who are members and some who are not. Some members of the Committee on Cooperation have traveled over the country, visiting mills, giving suggestions and other help, and in future we expect the secretary-treasurer of the cost association will be active in visiting paper mills and giving direct assistance on any problems of cost accounting.

As a result of work which has been developed in the past two years, the department of industrial management at the graduate school of business administration at Harvard will make the paper industry its principal subject for work this year, and will offer to do anything possible, using from one to two hundred students two afternoons a week each doing this work.

Any paper or pulp manufacturer may take advantage of this service, which is a direct outside development of the Cost Association, either by addressing the Secretary-Treasurer of the Cost Association, or the Professor of Industrial Accounting, Graduate School of Business Administration, Harvard University, Cambridge, Mass.

The semi-annual conventions of the Cost Association must have been successful or the attendance would have dropped off instead of increasing. Each convention has been attended by an increased number, many of whom have attended one or more of the previous conventions. These conventions have been instrumental, not only in presenting the Cost Association's work, the value and development of Cost Accounting in the industry, but a great deal more in developing the cooperative spirit between paper mills, the cornerstone upon which the Association was built.

Conferences held by the Committee on Cooperation and the Executive Committee have been attended more or less by representatives of member mills, and others; at these conferences cost problems have been discussed, and as you know, several concerns who have developed and installed Cost Accounting during the past year have come to the committees of the Cost Association for suggestions, directions and general information.

At our last convention in Cleveland you were told how one member mill went about this, and has since developed and installed a cost system. Those interested in Cost Accounting in the industry are always welcome at any of the meetings in New York or elsewhere, and arrangements can be made by appointment for

(Continued on page 24)

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COST ASSOCIATION MEETS IN NEW YORK

(Continued from page 22)

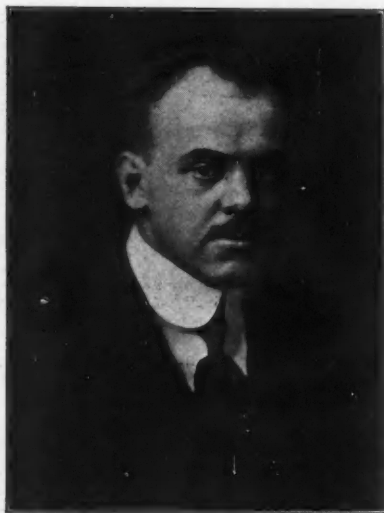
special meetings which will be attended by members of the Executive and Cooperative committees.

As a result of the Connecticut Valley Local's meetings, there has been active work done on uniform weight of pulp. They made a report of progress at our two last conventions and are still working. This problem is in progress of solution but it will take time to bring about direct results and uniformity.

One of the most important jobs on our hands at the present time is the study of ways and means of measuring everything that is "furnished" to the beaters, and in any and all conditions in which it is furnished, from dry pulp to "slushed" pulp, from shavings to colors. This report promises to be a most interesting and valuable report of all the different practices, the necessary equipment, labor and cost, and the relative value and cost under

joint committees can secure better results than independent efforts and we appreciate the splendid spirit in which the Technical Association has joined with us in this particular investigation and report which means so much for better cost accounting.

The *Bulletin* has undertaken to carry the gospel of good Cost Accounting where others were not invited. It has undertaken to slip in through the mail box some of the things we could not "put over" either by personal tactics, telephone or otherwise. The *Bulletin* is at your service, and we issue it when we think there is enough good material and news to justify the effort and expense. One of the things we expect to do with the *Bulletin* this year is to devote issues of it to special subjects and special problems; for example, one number may deal with problems pertaining to Stores, another, pertaining to Executives' Reports, and



B. E. HUTCHINSON, VICE-PRESIDENT



J. M. ALLEN, SECRETARY-TREASURER

different conditions. This report will be valuable to every mill in the industry and will be one of the greatest steps toward accurate and standard costs.

The work will be in charge of a joint committee of the Technical and Cost Associations of the Paper Industry.

Although this movement was started at our convention here a year ago, the Technical Association did not concur in the plan until at their Saratoga Convention the first week of this month. But both associations have now appointed their joint chairmen and the plan "bids fair" to move with speed and precision from now on. We believe this is only one of several ways in which

so on. We shall continue to call upon you to tell us how we can serve you best, by conventions, conferences, direct personal service, graduate student service, individual and independent problems, the *Bulletin*. The Cost Association is yours and it is yours to use in any way which will promote better Cost Accounting for you and the Industry.

In retiring as your president, I take this opportunity of thanking the members, officers and committees for the splendid cooperation and help they have given me; but mostly for the excellent work each has done for the good of the Association and the Industry.

THOSE PRESENT AT THE CONVENTION

Among those present were: B. F. Agan, cost accountant, Walloomsac Paper Company, Walloomsac, N. Y.; A. W. Astley, cost accountant Chemical Paper Manufacturing Company, Holyoke, Mass.; F. R. Andrews, cost accountant, Esleek Manufacturing Company, Turners Falls, Mass.

A. L. Bull, assistant plant manager, Fitchburg Paper Company, Fitchburg, Mass.; E. S. Bliss, president, Worthy Paper Company, Association, Mittineague, Mass.; D. E. Burchell, comptroller, Eastern Manufacturing Company, Bangor, Maine; D. W. Bond,

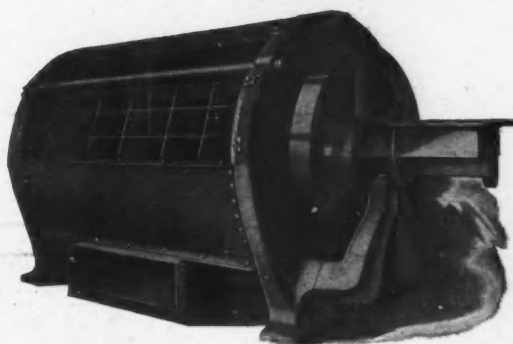
treasurer, Dill & Collins Company, Philadelphia, Pa.; S. L. Bush, manager of research, Crocker McElwain Company and Chemical Paper Manufacturing Company, Holyoke, Mass.; R. T. Bontillier, cost accountant, Knowlton Bros., Watertown, N. Y.; P. R. Browne, comptroller, American Writing Paper Company, Holyoke, Mass.; B. H. Briggs, cost clerk, Penn Fibre Board Corporation, York, Pa.; F. A. Brown, accountant, Hampshire Paper Company, So. Hadley Falls, Mass.; J. E. Barrett, Holyoke, Mass.

(Continued on page 26)

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PASSAIC, N. J.

COST ASSOCIATION MEETS IN NEW YORK

(Continued from page 24)

C. H. Coyle, secretary, C. H. Dexter & Sons, Inc., Windsor Locks, Conn.; C. H. Cashmore, auditor, Paterson Parchment Paper Company, Passaic, N. J.; B. H. Cooper, office manager, Bemis Brothers Bag Company, Peoria, Ill.; Geo. W. Carr, accountant, Hammermill Paper Co., Erie, Pa.; H. L. Cassidy, Statistical Department, American Writing Paper Company, Holyoke, Mass.; L. J. Catheron, manufacturing accountant, Eastern Manufacturing Company; H. G. Cook, cost accountant, Arrowhead Mills, Fulton, N. Y.; L. R. Clapp, engineer, Thompson & Black, New York; R. K. Cox, assistant manager, S. George Co., Wellsburg, W. Va.

W. R. Davis, assistant office manager, Chester Paper Co., Chester, Pa.; J. D. Davis, credit manager, Flower City Tissue Mills, Rochester, N. Y.; J. T. Daly, cost and inventory department, American Writing Paper Company, Holyoke, Mass.; G. W. Dingley, office manager, Newton Paper Company, Holyoke, Mass.; R. F. Dutcher, cost accountant, Strathmore Paper Company, Mittineague, Mass.

H. Q. Eldredge, treasurer, Walloomsac Paper Company, Walloomsac, N. Y.; B. T. Eichelberger, accountant, Dill & Collins Company, Philadelphia; Wm. L. Fink, cost supervisor, The Barrett Company, New York; E. B. Fritz, publisher, The Paper Industry, Chicago; A. L. Fluno, office manager, Interlake Pulp and Paper Company, Appleton, Wis.; G. K. Ferguson, cost accountant, Watervliet Paper Company, Watervliet, Mich.; E. J. Fitzgerald, office manager and accountant, Scott Paper Company, Chester, Pa.; F. W. Fraser, secretary, The Ironsides Board Corporation, Norwich, Conn.; B. A. Franklin, vice-president, The Strathmore Paper Company, Mittineague, Mass.

Chas. H. Gardner, assistant treasurer, Taylor-Logan Company, Holyoke, Mass.; J. Platt Glezen, cost accountant, Monarch Paper Company, Kalamazoo, Mich.; Chas. W. Gould, Jr., cost accountant, L. L. Brown Paper Company, Adams, Mass.

B. E. Hutchinson, American Writing Paper Company, Holyoke, Mass.; John E. Hyde, S. D. Warren Company, Cumberland Mills, Me.; Morton W. Hopkins, accountant, Dill & Collins Company, Philadelphia; Wm. W. Howe, cost clerk, Z. & W. M. Crane, Dalton, Mass.; J. J. Hain, assistant treasurer, Chemical Paper Manufacturing Company, Holyoke, Mass.; S. A. Hummer, cost clerk, York Haven Paper Company, York Haven, Pa.; J. B. Hipwell, accountant, Dill & Collins Company, Philadelphia, Pa.

E. A. Jones, cost accountant, American Writing Paper Company, Holyoke, Mass.; Geo. T. Jubb, auditor, Kalamazoo Paper Company, Kalamazoo, Mich.; Howard E. Jackson, public accountant, 25 Elm St., Gloucester, Mass.; R. E. Kimball, cost accounting department, Eaton, Crane & Pike Company, Pittsfield, Mass.; T. J. Keenan, secretary, Technical Association of the Pulp and Paper Industry, New York; J. H. Kline, chief clerk, York Haven Paper Co., York Haven, Pa.; Jos. E. Kunle, United States Env. Co., Springfield, Mass.; J. H. Karges, cost accountant, G. H. Dexter & Sons, Windsor Locks, Conn.

J. S. Leonhard, cost accountant, Paterson Parchment Paper Company, Passaic, N. J., E. R. Leonhard, cost accountant, Paterson Parchment Paper Co., Passaic, N. J.; Wm. C. Ludwig, cost accountant, Mead Pulp and Paper Company, Chillicothe, Ohio; M. D. Lupton, assistant secretary, The Beveridge Paper Company, Indianapolis, Ind.; Alvah C. Locke, traveling auditor, American Writing Paper Company, Holyoke, Mass.; H. Lufft, cost accountant, Hammersly Manufacturing Company, Garfield, N. J.; W. R. Lusignea, general manager, Samuel Jones & Company, Newark, N. J.

H. F. Mahaley, cost department manager, P. H. Glatfelter Company, Spring Grove, Pa.; J. E. Marshall, cost accountant, Baeder Adamson Company, Philadelphia, Pa.; P. L. Broesamle, auditor, Monarch Paper Company, Kalamazoo, Mich.; Chas. H. Martin, auditor, Kalamazoo Vegetable Parchment Company, Kalamazoo, Mich.; C. L. McCalla, assistant treasurer, The Jessup & Moore Paper

Company, Philadelphia; L. B. McDermott, auditor, Munising Paper Company, Munising, Mich.; J. C. McCormick, assistant treasurer, Knowlton Bros., Watertown, N. Y.; Henry F. Miller, cost accountant, American Writing Paper Company, Holyoke, Mass.; G. Stanley Morse, vice-president, Valley Paper Company, Holyoke, Mass.

Ro. H. Morrill, accountant, Crocker-McEiwin Company, Holyoke, Mass.; R. M. Mudgett, cost accountant, Strathmore Paper Company, Mittineague, Mass.; E. G. Moseley, manager property and maintenance, American Writing Paper Company, Holyoke, Mass.; J. F. Miller, cost accountant, Bridgeport, Conn.; C. F. Moriarty, office manager, Nashua Gummed and Coated Paper Company, Nashua, N. H.; M. E. Marcuse, president, Belford Pulp and Paper Company, Richmond, Va.

C. J. Neumeister, cost clerk, Z. & W. M. Crane, Dalton, Mass.; M. O. McNeil, chief clerk, Bedford Pulp and Paper Company, Big Island, Va.; L. E. Oliver, manager, Tolland Leather Board Company, Hop River, Conn.

H. L. Price, auditor, W. C. Hamilton & Sons, Wm. Penn P. O., Montgomery County, Pa.; W. J. Parks, accountant, Interlake Tissue Mills Company, Merrittton, Ontario, Canada; Frank M. Preston, cost accountant, Robert Gair Company, Brooklyn; T. W. Powell, assistant to the editor, Paper Trade Journal, New York; M. F. Peterson, accountant, United States Envelope Company, Springfield, Mass.

H. M. Ritchie, B. D. Rising Paper Company, Housatonic, Mass.; S. R. Royce, assistant secretary, Arrowhead Mills, Inc., Fulton, N. Y.; James A. Reilly, manager cost and inventory department, American Writing Paper Company, Holyoke, Mass.; M. H. Roth, cost accountant, Schmidt & Ault Paper Company, York, Pa.; F. B. Snyder, president and treasurer, W. C. Hamilton & Sons, Wm. Penn P. O., Montgomery County, Pa.

Henry D. Schmidt, vice-president, Schmidt & Ault Paper Company, York, Pa.; D. C. Shaw, Jr., accountant, Tarentum Paper Mills, Pittsburgh, Pa.; J. W. Scoville, statistician, American Writing Paper Company, Holyoke, Mass.; J. B. Shepherd, manager sales, Peninsular Paper Company, Ypsilanti, Mich.; C. W. Stevens, accountant, Stevens & Thompson, No. Hoosick, N. Y.; B. E. Sugden, secretary, Stevens & Thompson, North Hoosick, N. Y.; H. R. Serf, assistant treasurer, Schmidt & Ault Paper Company, York, Pa.

A. S. Thomson, cost accountant, Taylor-Logan Company, Holyoke, Mass.; Harry B. Whitney, office manager, Fitchburg Paper Company, Fitchburg, Mass.; G. A. Ware, Newsprint Service Bureau, New York City; W. A. Whitney, office manager, Edwin Crabtree & Sons, Wendell, N. H.; C. Oliver Wellington, partner, Scovell Wellington & Company Boston, Mass.; E. M. Walker, manufacturing accountant, American Writing Paper Company, Holyoke, Mass.; H. A. Wingate, assistant secretary, C. H. Dexter & Sons, Windsor Locks, Conn.; F. H. Webster, chief accountant, Carew Manufacturing Company, Hadley Falls, Mass.; George Webster, assistant treasurer, Whitmore Manufacture Company, Holyoke, Mass.; R. E. Winfree, auditor, Bedford Pulp and Paper Company, Richmond, Va.; J. Wohnsiedler, assistant treasurer, Union Bag and Paper Corporation, New York City; O. V. Yates, secretary, Eaton Dikeman Company, Lee, Mass.

Oregon Paper Co. Starts New Plant

SALEM, Ore., September 18, 1920.—The Oregon Pulp and Paper Company, which recently completed its plant here, yesterday turned out its first product. A crowd of Salem residents was on hand to witness the machine perform, and the initial output of the plant was eagerly sought as souvenirs. The plant will be in full operation within the next two or three weeks.



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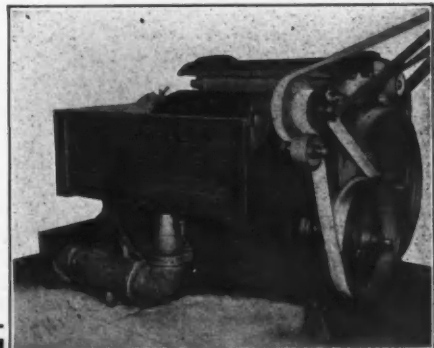
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88-131



PRODUCTION MANAGER'S NEED OF COST SYSTEM*

BY L. R. CLAPP AND D. S. DAVIS OF THOMPSON & WORLEY, ACCOUNTANTS AND ENGINEERS

What is cost accounting? Is it simply a resorting of the items of manufacturing cost into subdivisions of labor, material and expense for the convenience in the bookkeeping? Is it, as I heard one man ingeniously describe it, the separating out of the groups of items that are alike to help the auditor when he comes to examine the books; a sort of cross-index of the accounts of the plant.

More Than Superficially Show

If it were simply that it would deserve the hard names and the scorn with which it is greeted by those whose judgment is formed by external impressions. I will admit that the process as viewed by a layman seems to consist of a solemn game of solitaire, in which the cost accountant carefully takes the items out of each separate account pigeon-hole, shuffles them and carefully deals them around into other pigeon-holes, this process being repeated until it is time to make up the annual balance sheet, when all the little pigeon-holes are emptied together into a waste basket, which they call the profit and loss account, and the game is over. It looks complicated. So do some of the operations of paper making. I think to an outsider, the complicated course of the paper through the calender rolls, or the practice of carefully rolling the paper up on one spool only to immediately rewind it through a dizzying labyrinth onto another exactly similar spool, would constitute fairly good grounds for the assumption that the paper man was slightly addled. You cannot judge entirely by externals.

The Charge of Complication

The only real objection to a proper cost system that I have heard, was voiced by a friend, the superintendent of a medium-sized steel plant that had been going through the rehabilitation process. He complained bitterly that since its installation he had had no time for anything but the correction of the troubles that the cost system turned up. He said it made things too complicated. He was right; you are much better able to sleep at night before a cost system comes to perch on your bed-post and drop hard cold facts down your neck. I think that same thought is at the root of most of the opposition to cost accounts. They complicate the work, not so much in themselves, as in the incredible number of matters demanding attention, that they bring to your notice. Cost systems are not popular with the man who likes to let things run themselves.

Factory Cooperation

But there is compensation in this same action. When you can assure your foreman and operatives that their efforts at improvement by means of cost accounts will have an exact measure on the records of the plant, that their savings in time and material will be indicated on the books, you have enlisted a surprisingly effective ally in your struggle for economy. When your men realize that supplies mean dollars, and spoiled stock is money thrown away, you will get unexpected cooperation. During the war the Fuel Administration waged a most successful campaign for fuel economy in power plants, solely on the basis of persuading plants to keep a record of coal consumption in their power houses. As soon as these records began to be made, the manager who never before had considered his power plant seriously, immediately became interested in finding out the causes of the variations in his reports and in reducing his consumption. The Fuel Administration put him in touch with such information as he found he wanted and the net

result was almost a 5 per cent reduction in the total industrial coal consumption in the country without loss of effectiveness. The psychological effect of simply keeping records is too important not to be considered.

The "One-Man" Plant

Let me try to give you a true conception of cost accounting. I think all business executives realize that probably the most efficient organization is the "one-man" plant, where the manager is able to keep his costs, his purchases, his sales, his payroll, all the details of his business, in his own head; he knows the job of every man working for him, and the personal attributes of everyone with whom he does business; he knows what stock of materials he has on hand and where he will sell his next batch of product, whenever a question comes up he has always with him all the necessary information for a decision. The success of the plant is a direct reflection of his own personal capabilities.

The Sub-division of Management

Now as the demand for the products of that industry grows, the industry expands by the multiplication of the "one-man" plants, or more commonly, by the expansion of the original organization. In the expansion, the duties and requirements of the management increase and the manager must increase his capacity correspondingly. And so, he delegates his various duties and functions to various assistants, he creates a purchasing department that handles all his supplies, a sales force that disposes of his product, foremen that direct his men, bookkeepers that keep his accounts in order, time-keepers, store-keepers, engineers, chemists, all doing a part of the work he once did and his own time is taken up with the directing of these agencies. He no longer knows the details of what these men do, all he sees are the condensed result of their efforts in the yearly income account. He no longer has in his head the facts necessary to make prompt decisions in matters of the factory, or sales, or purchases. He has sub-divided himself into several men each doing a separate thing, with little or no knowledge of the efforts and operations of the others. He must have some method of gauging the progress of affairs, something upon which to base the direction of his efforts.

Economic Efficiency

The obvious aim of all business is to bring in more money than is expended. The utility of any decision, any action, is its ultimate effect on the balance sheet. The statement of profit and loss is the proving point for whatever has been done. But when twenty important changes in the mill have taken place since the time of the last statement, which of them if any, shall receive the credit, or blame for variation in the income account. If a new man has taken charge of the beater room and introduced a lot of new ways of doing things there, how can we know how much his work has affected the showing of the profits for the period. The income account is not enough. There must be something else whereby the economic effect of changes may be known.

Can we find a better measure for the performance of each department than the cost of the individual units of product that department has handled? Is there anything that will show more conclusively the effect of individual changes than to weigh them directly in terms of the costs of the operations to which those changes contribute before and after they were made? Is there any better way for a manager to encourage real help from his subordinates than to let them see the effect of their work in dollars?

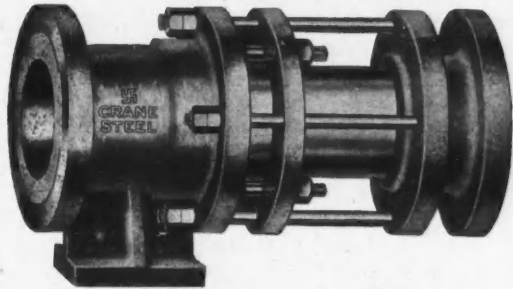
(Continued on page 30)

*Read at Fall Convention of the Cost Association of the Paper Industry, New York, September 27-28, 1920.

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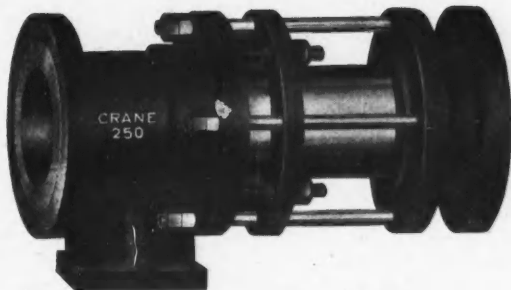
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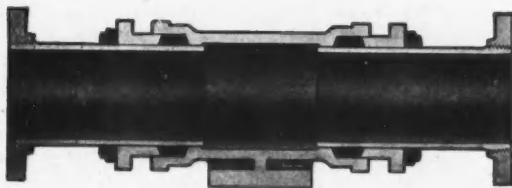
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PRODUCTION MANAGER'S NEED OF COST SYSTEM

(Continued from page 28)

And so, engineers developed cost accounting systems as a means of measuring factory and mill performance, an indicator to be hung in the manager's office, by the variations in its needle to register in terms of money all the variable happenings on the floor of the plant. The process is simply the mechanical determination of the expenditures and their resorting into groups that will correspond to the operations performed on the product, charging each operation with its proportion of all the items of mill and office expenditure that have in any way contributed to its work.

It is the machinery which we set up to take the place of those faculties of observation and valuation which the manager of the "one-man" plant exercises within himself, but which must be provided for externally when he begins to subdivide his functions among a number of assistants.

Human Body as Model Factory Organization

The form and operation of a factory organization is growing more and more like that of a man. We argue and think and work, experiment and discard, building and rebuilding our schemes of plant control and when we have come to some detail that seems to have been worked out to the best possible solution, behold, the scheme is the same that governs the operation of that function in the human body. The Almighty has been experimenting for thousands of years in the control of organizations, with the knowledge, the wisdom and the patience that we have not. The result of all His efforts is gathered together in His latest creation, man. We can never hope to duplicate the smoothly efficient operation of the human organism.

But, gentlemen, if in doubt as to the best manner of dividing responsibility among subordinates, or of setting up the machinery of routine, study the anatomy of the human body, particularly that of the nerves and the brain.

Cost System the Sensory Nerves of the Plant

The present case is one in point. Cost accounting is the collection and recording of information as to the state of the plant and the measure of the cost of the various activities. In the human body, this function is handled by the sensory nerve system, that network of telegraph wires running out into every part of the body structure over which all sensations are registered. These nerves transmit constantly to the central brain office reports as to the state of the body and the cost in effort expended in various exertions. But note that these reports go, not to the conscious brain, the cerebrum, but to the sub-conscious cerebellum which relays on to the thinking part of the brain office only those happenings which are extraordinary. Routine matters the cerebellum simply acknowledges and files, or takes such action as can be classed as instinctive, but when called upon by the cerebrum it can always compile and furnish complete costs of all work done. The cerebrum is not troubled with the necessity for gathering its own records. That is attended to without its effort. Its desk is cleared for planning, study, business.

Every plant has some method of gathering cost data, whether it is simply the records of labor, material and expense in totals, reinforced by periodical inspections, or the most complex and delicate machinery that will record the psychological effect of a change in the color of the foreman's necktie. The elaborateness of the process is proportionate to the kind and size of the business but simply because there is no cost machinery, does not by any means show that no cost work is done.

Without cost machinery, it simply means that more of the manager's time and attention is taken up in speculating on the effects of changes and in groping for a basis of real comparison of operations. The factory cerebrum is taken up with matters which

should be relegated to the cerebellum. The sensory nerve system has not been provided, but the need for it is there.

Cost Accounting Machines

Cost accounting systems are complicated machines. Sensory nerves are not simple to construct. They must provide for the accurate determination of such misfit factors as rent, cost of power, machinery depreciation, wages, supplies, repairs, wastage, all the heterogeneous charges that go to make up the cost of operating the plant, and the unprejudiced distribution of every one of them over the various processes and products in such a way that each process, each product shall pay in proportion to the benefit it has received. Their construction is a matter for experts. Even when the cost methods have, like Topsy, just grown, their ramifications extend into and are intertwined with the routine of manufacture, and with the personality of the executives to such an extent that their repair or replacement is a matter requiring the greatest skill.

Distrust from Unfamiliarity

The unfortunate experiences with factory and accounting systems that we hear about are usually the result of lack of appreciation on the part of the management as to what systems are and what is required for their construction and operation. Every plant has some system, whether it is spelled with a capital "S" or a small one. Every plant has some means of gauging its performance and of predicting the results of its future operations. But a busy executive has no time to examine the details. If he is competent, he knows what the general relative proportions of his reports should be. When he continually receives statements that he feels are out of line, or receives them too late for proper use, it is to be expected that he should become skeptical of the system under which those reports were compiled. He cannot afford to accept information concerning which he has doubts. Distrust accumulates and inevitably there comes something that upsets the apple cart and results in a condemnation of the system and a consultation with an outside accountant. If the organization has been in the habit of engaging a certain firm of accountants for a periodical audit of the financial books, it is usually the same firm that is consulted on system difficulties.

Auditor as a Cost System Constructor

Unless this firm specializes in industrial management as well as in the widely divergent field of financial auditing, it is questionable how much value such advice has. An auditor is primarily a historian, whose training is largely in financial analysis and the handling of money records. He has little contact with manufacturing processes, and little appreciation of the kind of information needed for the intelligent conduct of manufacturing operations. His interest lies in the proper representation of the financial outcome rather than in the processes by which that outcome is obtained. Intelligent system work requires not only a thorough and varied experience in accounting, but what is equally as important, a point of view which appreciates the problems of operation and management, and a knowledge of manufacturing processes and the practical limitations of the factory as a clerical department. A competent systematizer is not only an accountant, he is also an industrial engineer and a business executive.

The failure to realize this distinction is responsible for much of the ill-advised system work that is done. The auditor will not admit his limitations. He can and usually does construct an accounting system that is historically correct and elaborately complete from a point of view of subdivision of accounts and the basis for the distribution of overhead, but he fails to realize the ultimate use to which the information will be put, and his marvelously



(Continued on page 32)

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INQUIRIES SOLICITED

PRODUCTION MANAGERS' NEED OF COST SYSTEM

(Continued from page 30)

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Difficulties of Cost Machinery Construction

The construction, or reconstruction of a satisfactory accounting system is a difficult and delicate task. A proper balance must be struck between extreme accuracy and promptness in reports, the systematizer must know almost intuitively what information will be useful to the management and in what form it will best suit the personal manner of thought of the executives, he must be able to adapt the sound principles of accounting to the individual peculiarities of the factory. Two competing enterprises may require an entirely different arrangement of their factory systems. Even in the same enterprise, individual departments may need altogether different methods of collecting similar information. It is a task that cannot be left to the superficial adviser, or the salesman of a cure-all.

Errors in Fundamental Information

In the reconstruction it will not do to condemn current methods without careful investigation. Few systems are bad enough to discard entirely. All too frequently good, safe and economically operated cost machines are revised, or completely discarded, because reports are not usable in the form presented, or are too late to be of immediate value, or because some fundamental information is inaccurate. For example, in factory operations the production reports are often incorrect, sometimes through a misplaced desire of the operating force to "make a showing," or, more frequently, through the poor choice of the point where the weighing, or the counting, is to be done. If they are incorrect, no system of cost accounting, however elaborate or excellent, will produce results that are anything but grotesque. There will be an erroneous expression of inventory under various classifications, an alarming discrepancy in undistributed labor and expense, and a profit and loss expression out of line with the facts.

The Tendency to Discard Entire System

Even with the majority of otherwise competent industrial engineers, or cost accountants, the tendency to condemn all the methods of their clients is too prevalent. The idea seems to be to change as much as possible in order to create an impression of great accomplishment. And this tendency is increased by the factory executives themselves. When a manager reaches the point of calling in an outside consultant, he is usually in a frame of mind favorable to throwing things out the window. Imagine the reactions of an executive, who has become convinced of the complete uselessness of his present system which has perhaps served him well for years previously, when he is told that all he need to do to restore the accuracy to his reports is to change the point of the weighing of his final product. He would not believe it. And so it comes about that many changes are made that are neither necessary, nor constructive. What is needed in most cases is a more careful examination and fewer recommendations. In those extremes where corrections are more complicated than a new machine and system construction is imperative, let the new installation be designed and built by a specialist and not by the first auditor that can be found. It is only in this way that there can be any assurance there will be a minimum of expense and inconvenience and, what is far more important, a result that will be an improvement as well as a change.

The Internal Review

Many companies endeavor to conduct a review by members of their own staffs, but these are not handled from a fresh or disinterested point of view and do not have a great deal of value. New methods that are developed by others remain unknown, and

bad habits and tendencies are overlooked. Then, too, the correction of faults that may be uncovered are best left to a specialist. Even a physician does not attempt to prescribe for himself.

Like an Audit of Accounts

In principle the Periodic Review is not unlike the periodical audit of the financial books by a public accountant. That is now accepted almost universally as good business practice. It serves a check upon the work of the company's own office and corrects the inevitable tendency to wander away from sound principles. If an audit of accounts is desirable, is not a system review still more advantageous? The audit may result in the redistribution of expense and the uncovering of earned profits, but it cannot itself create them; the review can effect economies of operation that will actually make profits. It is a direct investment upon which dividends can accrue.

Let every factory system be examined periodically in order to keep it abreast of changing requirements and conditions and to utilize the new ideas that are developed elsewhere. Only in this way can the unpleasant experiences of system reconstruction be avoided intelligently.

Gentlemen, the past years have been profitable ones for the paper industry, but there are signs of a tightening up on every hand. Prices are beginning to fall, the law of supply and demand is reasserting itself. The stage is passing where production and delivery are the only consideration. Economy of operation will again become one of the strongest fundamentals of manufacturing success.

Before you can act intelligently in the elimination of waste, you must know where that waste occurs. Cost accounts will tell you.

Value of Cost Association

Before I close, I hope I may be pardoned if I turn this into an experience meeting and testify.

We had a client, a paper mill for whom we were doing a number of things in an accounting and engineering way. Among them was the establishment of proper and sufficient depreciation reserves. Before deciding on the rates to use, we thought it wise to gather as much information as possible as to the practice with other companies in the same line of endeavor. We consulted all the learned authorities from the Treasury Department and the Federal Trade Commission down to Tiffany's Digest of Depreciations, and collected a miscellaneous assortment of figures that did not appear to have much reason in them. Our client was not a member of your association but I thought that there was perhaps some published transactions that would be of assistance and I came to see Mr. Allen, your secretary, and told him my troubles. Mr. Allen immediately put the machinery of your association in motion and in a few days was able to give me averages, maxima and minima of the depreciation rates used in the industry. There was no hesitation whatever on Mr. Allen's part, his attitude was that he was there to serve the cost needs of the industry, irrespective of the question of membership, and that there were no strings whatever on the service of the Association, to the paper trade. As a result we were able to establish intelligent depreciation rates for our client, and he could be confident that these rates were sound and in harmony with the current practices of the trade.

I wonder if you gentlemen realize what a force for the elimination of blind competition this association is. You have here under the leadership of men of a broad and practical point of view, all the information for the establishment of sane business control, the common sense answer to many of the detail problems of accounting practice, the means of eliminating guess work from prices, a clearing house for the economic management of the paper industry. It is a technical library of current accounting thought. Use it yourselves and carry the message to the barbarians.

DEMAND THIS BRAND

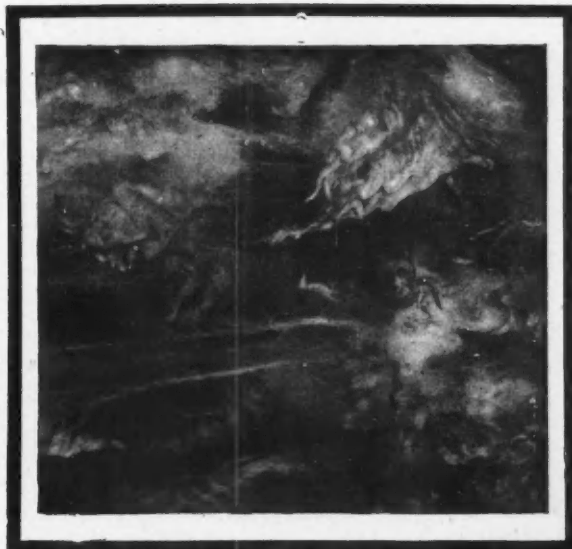
HOWARD BOND

WATERMARKED

World's Greatest Bond Paper

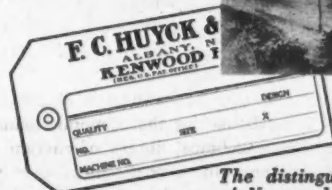
Renowned Where Quality Rules

Produced by
THE HOWARD MILLS, Urbana, Ohio



A portion of raw fleece showing the tangled fibres.

EACH individual wool fibre must be straightened and laid unbroken and parallel with the others if its maximum strength is to be given the fabric into which it is woven. The accompanying photograph shows the fibres twisted and tangled as they grow in the fleece. The strength and service of Kenwood Felts and Jackets demonstrates the efficiency with which the great carding machines in the Kenwood mill untangle and straighten these matted fibres.



The distinguishing mark of Kenwood Felts.

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

DEVELOPMENT OF SYSTEM OF DILL & COLLINS CO.*

By JOHN B. HIPWELL, of DILL & COLLINS Co.

In presenting the Cost System of the Delaware Mills of the Dill & Collins Company I will endeavor to give facts and conditions as they were when I started a little over a year ago to submit costs on various orders and grades, and the facts as they are at present.

From interviews and from personal observation I find the conditions rather the rule than the exception, and I will try to outline the changes as the system progressed because I believe the systems which I have helped install are applicable in general outline and technic to almost any paper mill of our size and condition.

General Outline of Presentation

I will first give a general outline of our system, its evolution and the various points we created in other departments and why. The Accounting System will then be given, followed by the order and grade cost work. Consideration will then be given to the organization and routine, and finally all will be brought together in order to obtain final results by tying in against operating expenses. Last—a few forms will be shown on the screen and explained in detail.

Evolution and Conditions Encountered

In April, 1919, a concern was engaged to install a new cost and accounting system. Its first step was the making of a chart showing the relationship of each department, the materials used therein, and the product turned out, with its bearing on the next and every other department. At the same time an inspection was made of the accounting and the records of the various departments. Finally, a plan was laid out whereby they would rearrange the accounting system and install an order cost system.

I might say at this time that the accounting system had been in use for many years, and while it was accurate, seldom being more than a few hundred dollars out in several million, it was not adaptable for order costs.

In general the plan involved a new basis of distributing general expense, the depreciation or fixed charges and expense materials. It was an endeavor to place against each department its proper charges and to produce a machine hour, a burden hour or a cost per 100 pounds rate, based on any month's work against a normal.

The first results shown by them was in September, when they took the old cost account for July and rearranged it, but the results were not quite correct.

The real difficulties were encountered in July when I tried to check up what was used in the beaters against the inventory usage and the total hours accounted for in the various departments against the available time. Needless to say the results were anything but satisfactory, but they showed where the faults were.

I saw then that there was great need of checking every record that came through, and in order to find the faults we started to chart the various departments. Although it was supposed to be a cost department it was at that time a record and chart department, and it still stands for record compilation, as you will see later, for the chart system was separated in May of this year.

As I said, the beaters was the first stumbling block and a form was placed in the beater room, on which the boss beaterman of each group was to enter everything going into each individual order. As no weight could be determined for each individual box or skid, we decided to make the adjustment on the cost rather than the weight. For this purpose the material cost record was designed, and, although it gave us some trouble, most of the weak spots have been eliminated. New records were similarly placed in several departments and then the fun began, for when we started

to check the records we had reports showing a machine worked 27 or 28 hours in a possible 24.

During September the accountants tried to apply the accounting costs to the orders, but were not successful, although the principle was correct.

In November the accountants left us and I was told to change over to the new system the first of the new year. In December I went to our other mill (Flat Rock), made a rearrangement of the work based on their October figures and after giving instructions, both written and verbal, all was ready to operate in our Flat Rock mills. The same procedure was gone through at Delaware Mills, and, except for a few minor changes, everything was working well.

Shortly after this Mr. Burchell, our president, came to assist in bringing our work to a successful conclusion and from that time we have under way order and grade costs, many comparative statements and the beginning of an analysis book pointing toward plant control.

The Accounting System

Now, taking up the accounting system, the first part is consideration of the fixed charges. These are depreciation, taxes, interest and insurance, and are handled as follows: The depreciation of machinery is distributed departmentally according to the last appraisal value and additions from that time. The depreciation of buildings is divided departmentally on the basis of floor space. Taxes are considered as real estate taxes and distributed according to the building values. Interest on bonds, on the basis of machinery value, while insurance is divided according to the sum of the total building and total machinery values. The fixed charge schedule was then made up, totaled departmentally and divided by 12 to obtain the monthly rate of depreciation. In bringing up this old subject "depreciation," it is not meant as an effort to start something but is given for what it is worth.

A purchase journal is used to carry all bills entering into manufacturing costs, such as miscellaneous expenses, charges for repairs, all supplies, cost of expense, direct and processed materials, improvements, etc. From this journal all entries are posted direct, either to an expense ledger or materials ledger.

An expense ledger is used to carry into detail all expense to buildings, machinery, miscellaneous charges, etc. Each department being numbered has its own sheet and the totals of these sheets are the direct charges of each department.

Into a materials ledger are carried all raw materials and supplies carried on inventory. Here also each material has its individual sheet and the total usage each month is, of course, the difference between the month-end inventory and the sum of the purchases and the 1st of the month inventory.

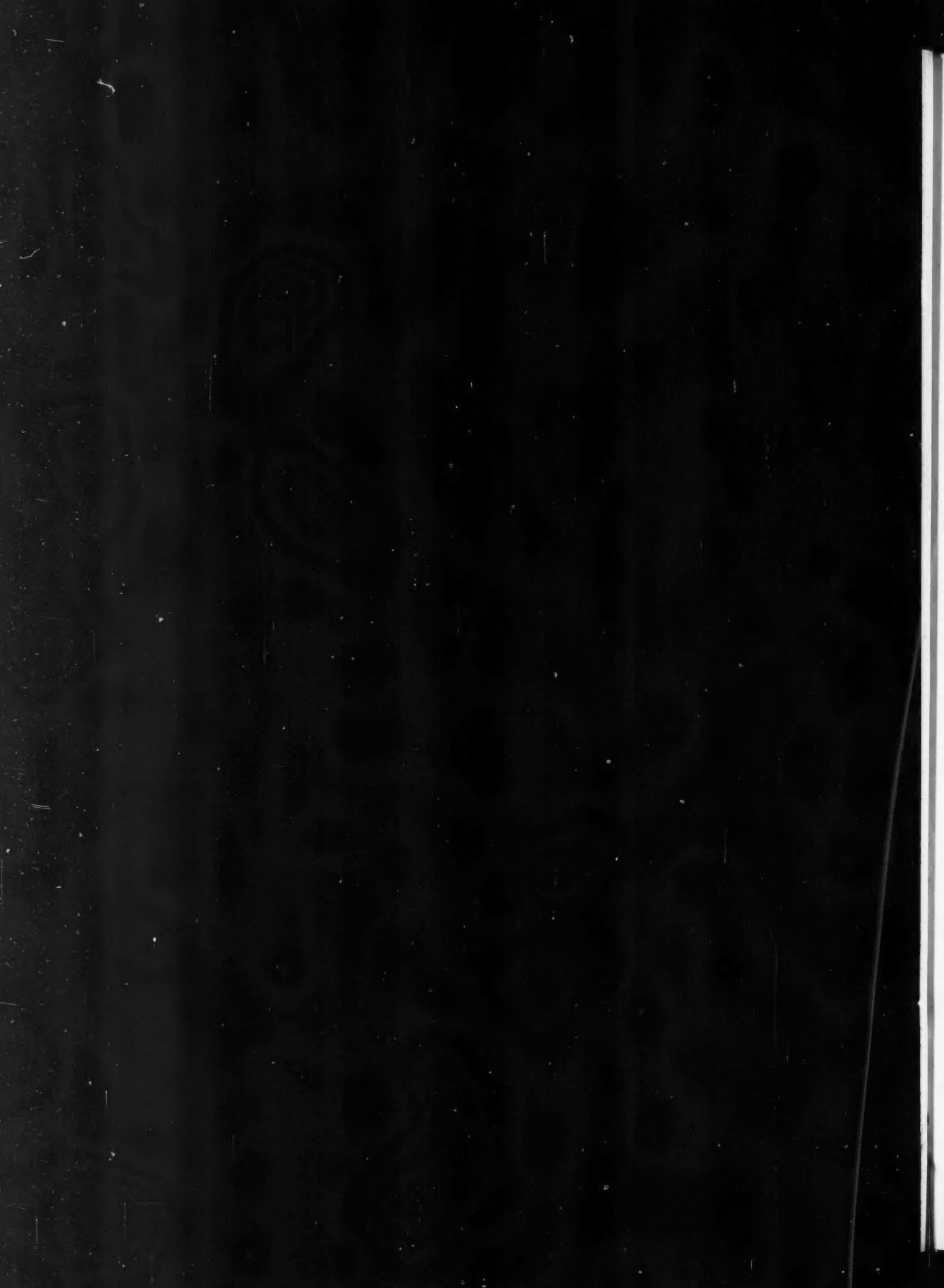
Each plant has its own methods of handling pay rolls so I won't go into it at this time except to say that it is divided departmentally the same as the fixed charges and the expense account.

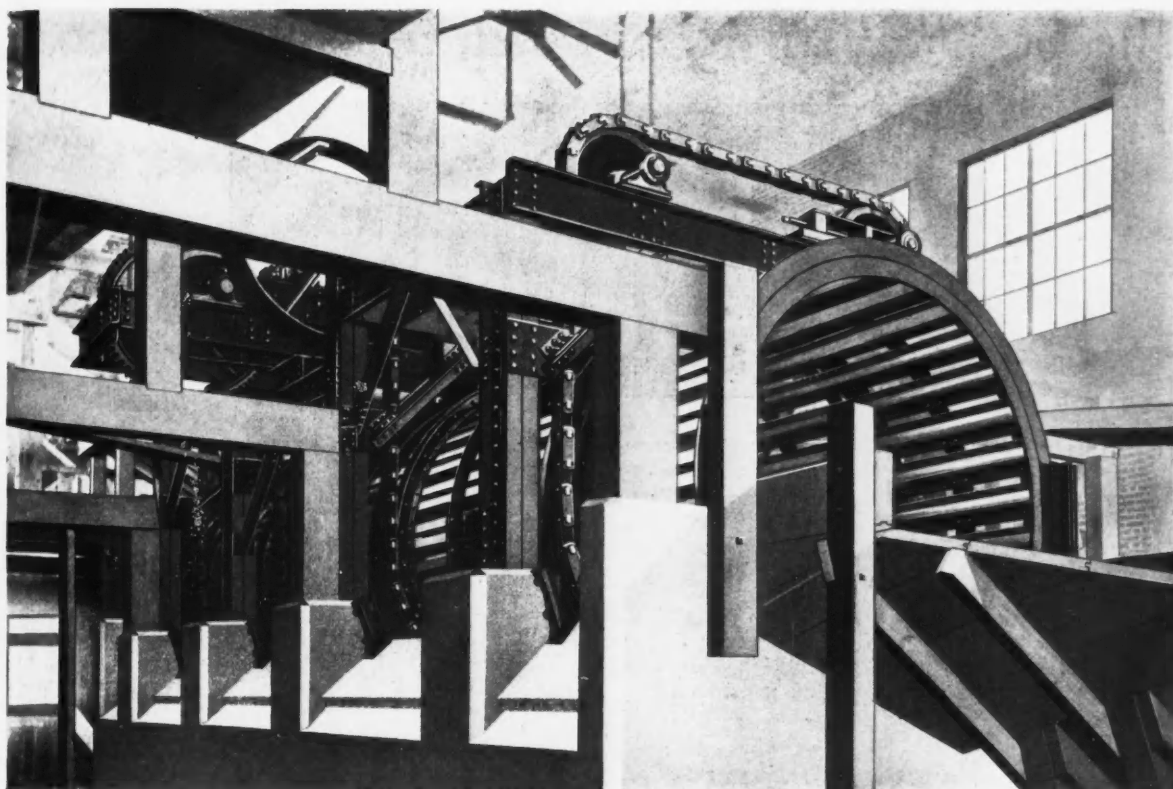
The four items we have considered, fixed charges, expense and material ledgers and the pay roll, constitute the basis figures of our accounting and we now have a complete control of all expense.

In order to develop an hour cost or cost per 100 pounds' manipulation, we bring together the expense materials from the materials ledger, direct charges from the expense ledger, the pay roll and the fixed charges into one book arranged departmentally, called an expense analysis. Each sheet of the expense analysis is arranged in three parts:

(Continued on page 43)

*Read at Fall Convention of the Cost Association of the Paper Industry, New York, September 28, 1920.

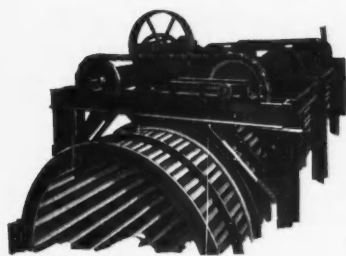




The cheapest barking drum you can buy on any calculation of the final cost

WHEN have you ever regretted buying the *best of anything?*

Your entire satisfaction with the barking drum of our manufacture is assured by the production records of a hundred mills, extending over a number of years.



Go through the list of representative users of our equipment. Note how many of them have re-ordered drums of our make. In as many more

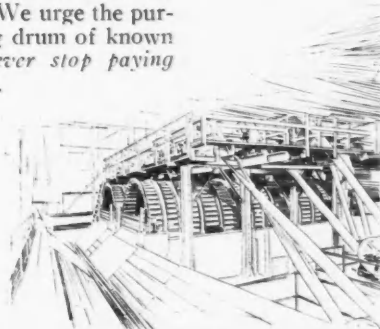
mills, our drums have supplanted other kinds.

Read what purchasers have to say about our drums. If you can still believe drums of cheaper construction can do as much work, do it as well, do it as long—you are indeed optimistic.

Nor is highest first cost a safe guide. One mill has found that our 10' x 30' drum barks within five per cent as much wood as can be handled with a drum of other make in 12' x 45' size.

Our drum is the product of years of development—and leadership—in this field. It earns back its initial cost the quickest of any. We urge the purchase of a barking drum of known capacity. *You never stop paying for the other kind.*

FIBRE MAKING PROCESSES, INC.
TOWER BUILDING
CHICAGO



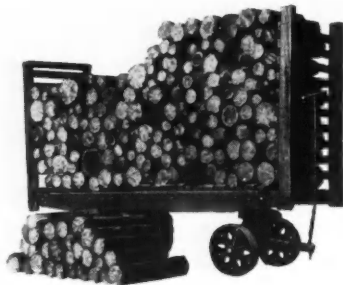
The best way to bark wood, regardless of cost



PULP manufacturers have long recognized the economies of drum barking. It is, perhaps, the *saving* in this method which has first attracted most mills to its adoption. We would emphasize the fact that drum barking is also the *very best* method, irrespective of costs.

In the very much reduced view above, from a photo of logs just as they emerged from one of our drums, you may still see the absolute cleanness of barking. You can see that crooked, knotty wood has fared no different from the rest.

No method of barking except *tumbling* could produce such result. And tumbling is done most thoroughly with our drums, as we can conclusively show.



The view of a log which was removed from our drum before it had progressed far in the process, shows how *naturally* the bark is removed by this frictional process. There is no evidence of bruising—nor would there be had the log gone several times through our U-bar drum of any length. Nor do you find any loss of good wood—only the bark can come off.

Your bark, similarly, is *all bark*, when our equipment is used. It is easily handled with our bark press (described further on) and suitable for fuel.

Our drum handles wood in slabs as well as logs.



The most economical method, by far

IT is to be regretted that figures are not available as to net money-savings annually by all the mills using barking drums. Also, actual figures to show what savings are possible through use of our equipment compared with the next most efficient drums.

Drum barking saves about one-sixth of the wood itself, over the most efficient of all other methods. All of the wood goes into pulp, because *none* is taken off with the bark. So, about one-sixth of your annual wood bill is to be calculated in the saving from use of a barking drum.

With our drum, we repeatedly accomplish barking which requires fourteen men to bark by hand—and but two men are needed to operate our drum. The labor-saving is thus large enough to offset every expense incident to installation of a barking drum in a very few months.

There is, in addition to the direct-money-saving of a single man in place of seven men engaged in knife-barking, the advantage of *known capacity*. Other departments, dependent for production on a certain volume of barked logs, are assured that volume when the barking operation is one easily handled by a few men, of no special aptitude.



Our drum is also used for washing the wood which has already been peeled in the woods.

On receipt of information as to your average production, quantity of wood handled, kind, etc., we can give you reliable estimates of savings our drums could effect in your mill.



An obviously superior principle of operation

BRIEFLY described, the operation of barking in our drum is as follows:

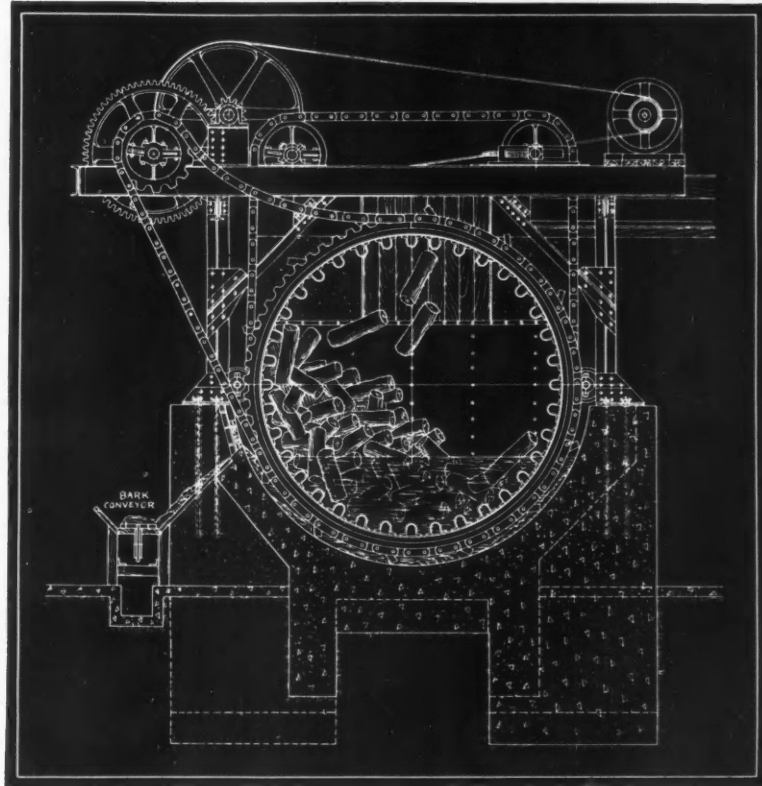
The drum is suspended perfectly level, the wood discharging at the same rate as fed into front end. The wood that is fed, crowds the contents along. The feeding is automatic, because the pile tends toward taking a horizontal position.

Our U-bars are so spaced as to present the right surface for "picking up" and tumbling the wood. The bark removed drops between these longitudinal bars into a cylindrical tank. Scrapers—or paddles—outside of drum take the bark to a conveyor.

Perfect tumbling without bruising

You have but to stand at the discharge end of one of our drums to see that the wood is barked clean—and without any bruising. The U-bars present the needed irregularity of surface, with no sharp projections which mutilate.

The diameter, length, rotating speed accomplish an easy, natural barking, just as when logs are run down the river. Drum is open at both ends, partly submerged in water, regulated by a dam at the end of the vat—usually of concrete.



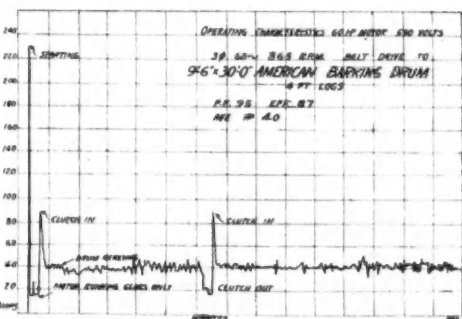
Because our drums do such rapid and perfect barking of both slabs and logs, we prefer that those interested in such equipment see them in actual operation.

Minimum power requirement

An interesting power diagram is offered to the left. It is the actual record from the instrument measuring the power load in a mill where our drum is operated.

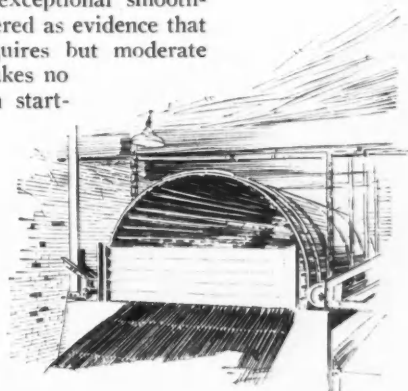
You will observe the exceptional smoothness of load. This is offered as evidence that our drum not alone requires but moderate power under way, but makes no violent power demand in starting, or in gaining momentum.

The first running of our drum—particularly in a mill

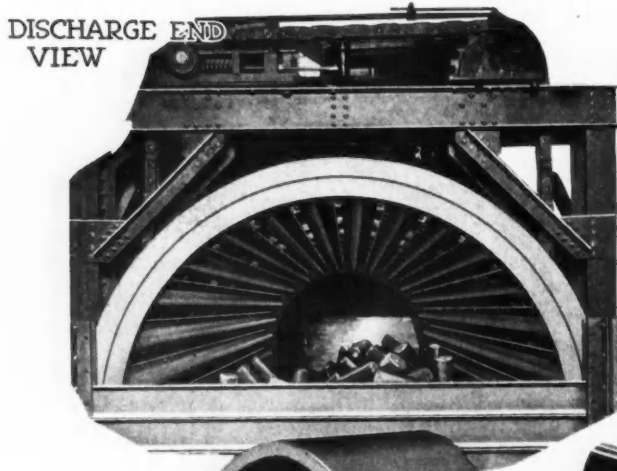


where other rotary barking machinery has been in use—is always a surprise in this feature of smooth operation. It is due in great measure to the principles of drive and suspension.

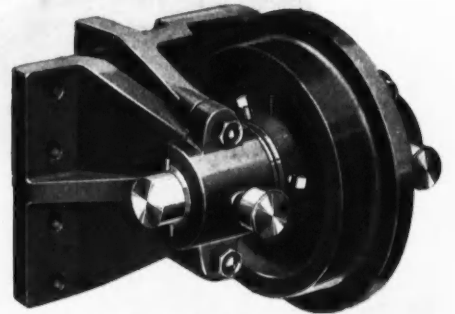
In spite of its heavy load, our drum will revolve—stop—start—with less apparent stress and strain than seemed possible.



Constructional advantages that are unique



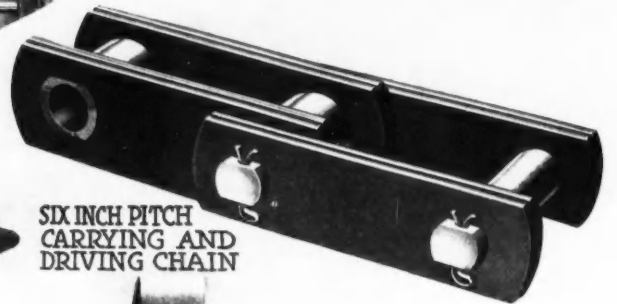
DISCHARGE END VIEW



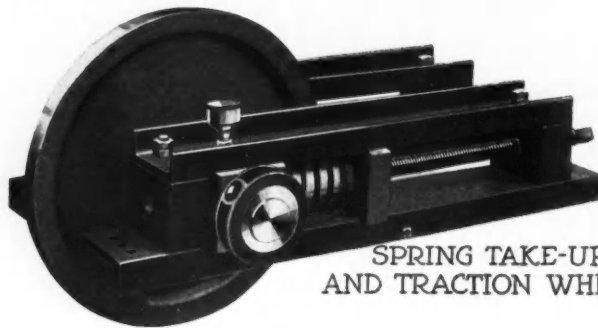
GUIDE ROLL AND BRACKET



SECTION OF U-BAR



SIX INCH PITCH CARRYING AND DRIVING CHAIN



SPRING TAKE-UP AND TRACTION WHEEL



SPROCKET SECTION SHOWING CHILLED RIM



DRIVE SPROCKET

A BARKING drum is a heavy-duty machine. One weak spot in its design or construction will upset every other calculation. There are no weak points in our drum or in its drive, simply because we have developed strength in our drum—part by part, year by year.

It is not possible here to picture the inherent strength of our drum. But a few important details, pictured above, are indicative of the way we have stressed the factor of *strength*.

From intake to discharge, we have attained such strength of design as to have overcome all but accidental or extraordinary breakage.

Notice the smooth, flat ring forming the drum end; free from bolt ends, or rivet heads which would offer leverage for log ends.

The famous U-bar, in addition to its securance of tumbling without bruising the wood, is many times stronger than an angle-bar.

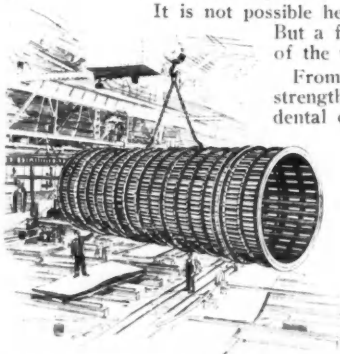
Uncommon strength of both guideroll and bracket maintains the true guidance of the drum under any stress of load.

We use a chain for the carrying and driving of our drum which has proven unbreakable so far as we know. Contrast this design with other drive chain.

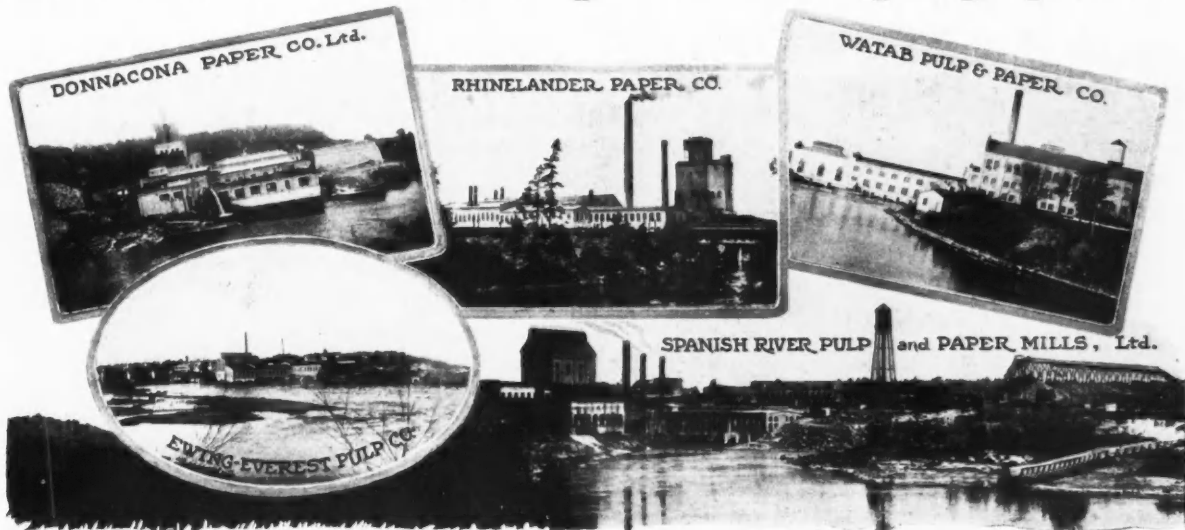
Our spring take-up and traction wheel offsets any amount of wear and is adequately strong.

See the section of sprocket, broken to show the thickness of chill at the rim (indicated by the light portion).

Drive sprockets on our drums resist breakage. Notice how they are hardened.



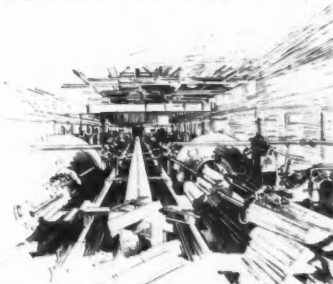
Proof of our leadership in barking equipment



Observe long list of representative mills using our drums—in order of purchase. Figures in parentheses tell how many drums. Those marked thus (*) have re-ordered our equipment.

- | | |
|---|---|
| Escanaba P. & P. Co., Escanaba, Mich..... (1) | Filer Fibre Co., Manistee, Mich..... (1) |
| Spanish River Pulp & Paper Mills, Ltd., Espanola, Ont. (1) | Donnacona Paper Co., Donnacona, Que..... (1) |
| Island Paper Co., Menasha, Wis..... (1) | *Pejepscot Paper Co., Great Salmon River, N. B. (1) |
| Ontario Paper Co., Thorold, Ont. (1) | Fraser Companies, Ltd., Edmundston, N. B. (2) |
| Nekoosa-Edwards Paper Co., Port Edwards, Wis. (2) | Mount Tom Sulphite Pulp Co., Mount Tom, Mass. (1) |
| Marathon Paper Mills Co., Rothschild, Wis. (1) | Detroit Sulphite Pulp & Paper Co., Detroit, Mich. (2) |
| Riordan P. & P. Co., Haileybury, Ont. (1) | Manistique P. & P. Co., Manistique, Mich. (1) |
| Pejepscot Paper Co., Great Salmon River, N. B. (1) | Northwest Paper Co., Cloquet, Minn. (2) |
| Rhineland Paper Co., Rhineland, Wis. (1) | *Riverside Fibre & Paper Co., Little Rapids, Wis. (2) |
| *Lake Superior Paper Co., Sault Ste. Marie, Ont. (5) | Burgess Sulphite Fibre Co., Berlin, N. H. (2) |
| *Nekoosa-Edwards Paper Co., Port Edwards, Wis. (1) | Union Bag & Paper Corp., Hudson Falls, N. Y. (2) |
| *Nekoosa-Edwards Paper Co., Nekoosa, Wis. (1) | *Burgess Sulphite Fibre Co., Berlin, N. H. (2) |
| Thilmany P. & P. Co., Kaukauna, Wis. (1) | St. Croix Paper Co., Woodland, Me. (1) |
| Riverside Fibre & Paper Co., Appleton, Wis. (1) | *Burgess Sulphite Fibre Co., Berlin, N. H. (2) |
| Interlake P. & P. Co., Appleton, Wis. (1) | *St. Croix Paper Co., Woodland, Me. (2) |
| Munising Paper Mills, Munising Mich. (1) | *Lake Superior Paper Co., Sault Ste. Marie, Ont. (2) |
| *Marathon Paper Mills Co., Rothschild, Wis. (1) | Brompton Pulp & Paper Co., Bromptonville, Que. (1) |
| *Spanish River Pulp & Paper Mills, Ltd., Espanola, Ont. (1) | Port Arthur P. & P. Co., Port Arthur, Ont. (1) |
| Watab Pulp & Paper Co., Sartell, Minn. (1) | *Spanish River Pulp & Paper Mills, Ltd., Espanola, Ont. (1) |
| St. Anne Power Co., Beaupre, Que. (1) | *Ewing-Everest Pulp Co., Merrill, Wis. (1) |
| Dells Paper & Pulp Co., Eau Claire, Wis. (1) | *Chicoutimi Pulp Co., Chicoutimi, Que. (1) |
| *Spanish River Pulp & Paper Mills, Ltd., Sturgeon Falls, Ont. (3) | St. Regis Paper Co., Deferiet, N. Y. (1) |
| Chicoutimi Pulp Co., Chicoutimi, Que. (1) | St. Lawrence Pulp & Lbr. Co., Chandler, Que. (2) |
| Cornell Wood Products Co., Cornell, Wis. (2) | P. H. Galtfelter Co., Spring Grove, Pa. (1) |
| Wisconsin River Paper & Pulp Co., Stevens Point, Wis. (1) | News P. & P. Co., St. Raymond, Que. (1) |
| Fitzdale Paper Co., Fitzdale, Vt. (1) | Nekoosa-Edwards Paper Co., Port Edwards, Wis. (1) |
| Flambeau Paper Co., Park Falls, Wis. (1) | Finch, Prayn Co., Glens Falls, N. Y. (1) |
| *Riverside Fibre & Paper Co., Appleton, Wis. (1) | *Powell River Co., Powell River, B. C. (1) |
| Inasea Paper Co., Grand Rapids, Minn. (1) | Belgo-Canadian Pulp & Paper Co., Shawinigan Falls, Que. (4) |
| Eastern Mfg. Co., Lincoln, Me. (1) | New York & Pennsylvania Co., Johnsonburg, Pa. (1) |
| Interlake P. & P. Co., Appleton, Wis. (1) | York Haven Paper Co., York Haven, Pa. (1) |
| Abitibi Power & Paper Co., Iroquois Falls, Ont. (4) | *Pejepscot Paper Co., Brunswick, Me. (2) |
| Wayagamack Pulp & Paper Co., Three Rivers, Que. (2) | *Union Bag & Paper Corp., Cheboygan, Mich. (1) |
| St. Maurice Paper Co., St. Gabriel, Que. (2) | Mattagami Pulp & Paper Co., Smooth Rock Falls, Ont. (2) |
| St. Maurice Paper Co., Three Rivers, Que. (2) | S. D. Warren & Co., Cumberland Mills, Me. (1) |
| St. Maurice Paper Co., Charlemagne, Que. (1) | *New York & Pennsylvania Co., Johnsonburg, Pa. (1) |
| Central Paper Company, Muskegon, Mich. (1) | *Lake Superior Paper Co., Sault Ste. Marie, Ont. (2) |
| Inland Empire Paper Co., Millwood, Wash. (1) | Dare Lumber Co., Elizabeth City, N. C. (1) |
| Kingsport Pulp Corp., Kingsport, Tenn. (1) | Whyte-Campbell Lumber Co., Rawdon, Que. (1) |
| Powell River Co., Powell River, B. C. (1) | Ontario Paper Co., Thorold, Ont. (1) |
| New York & Dominion Corp., Roberval, Que. (1) | |
| Nashwag P. & P. Co., St. John, N. B. (2) | |
| West Virginia P. & P. Co., Cass, West Va. (2) | |

- | | |
|---|--|
| *St. Regis Paper Co., Deferiet, N. Y. (1) | |
| Bedford P. & P. Co., Coleman Falls, Va. (1) | |
| Port Arthur P. & P. Co., Port Arthur, Ont. (1) | |
| Chesapeake Corp., West Point, Va. (1) | |
| Crown-Willamette Paper Co., Camas, Wash. (1) | |
| *Donnacona Paper Co., Quebec (1) | |
| *Escanaba Paper Co., Escanaba, Mich. (1) | |
| Bathurst Lbr. Co., Bathurst, N. B. (2) | |
| *Flambeau Paper Co., Park Falls, Wis. (2) | |
| Spanish River Pulp & Paper Co., Sault Ste. Marie, Mich. (making their sixteenth drum) (1) | |
| Schroon River Pulp & Paper Co., Warrensburg, N. Y. (1) | |
| *Fraser Companies, Ltd., Edmundston, N. B. (2) | |
| *Fraser Companies, Ltd., Cabano, Que. (1) | |
| San Rafael Paper Co., Mexico City, Mex. (1) | |
| *Interlake P. & P. Co., Appleton, Wis. (1) | |
| Nekoosa-Edwards Paper Co., Port Edwards, Wis. (1) | |
| Gulf P. & P. Co., Clarke City, Que. (1) | |
| J. & J. Rogers Co., Au Sable Falls, N. Y. (1) | |
| *Union Bag & Paper Corp., Hudson Falls, N. Y. (2) | |
| Cushman Paper Co., Augusta, Me. (1) | |
| A. E. Reed & Co., Bishop Falls, N. F. (1) | |
| Hinckley Fibre Co., Hinckley, N. Y. (1) | |
| *Spanish River Pulp & Paper Mills, Ltd., Sturgeon Falls, Ont. (1) | |
| Northern Paper Mills, Ltd., Green Bay, Wis. (1) | |
| *Fraser Companies, Ltd., Chatham, N. B. (2) | |
| Groveton Paper Co., Groveton, N. H. (1) | |
| *Detroit Sulphite Pulp & Paper Co., Detroit, Mich. (1) | |
| *Abitibi Power & Paper Co., Iroquois Falls, Ont. (4) | |
| New Ontario Colonization Co., Jacksonboro, Ont. (1) | |
| St. Regis Paper Co., Oscalana, Que. (1) | |
| *Consolidated Water Power & Paper Co., Grand Rapids, Wis. (2) | |



A typical experience with our barking drum



PEJEPSCOT PAPER COMPANY
 MANUFACTURERS OF PULP, PAPER AND LUMBER
 111 BROADWAY
 NEW YORK

Mr. H. W. Guettler, February 18, 1918
 Dear sir:

One of your drums installed at our preparing plant on the bay of Fundy, New Brunswick, has been in operation two years. The other, built especially to handle slabs, for one year.

We find no difficulty in removing bark from slabs or pulpwood, perfectly.

Personally, I do not believe any manufacturer can live in business and prepare wood by the old method of also barking, or peeling in the forest.

We have found your drum satisfactory in all its details. I recommend without hesitation the barking drums of your manufacture.

Yours very truly
J. H. Pejepscot
 President

PEJEPSCOT PAPER COMPANY
 MANUFACTURERS OF PULP, PAPER AND LUMBER
 111 BROADWAY
 NEW YORK

Mr. H. W. Guettler, July 1, 1920
 Dear sir:

I am very glad to inform you regarding the two drums we had you install in our Pejepscot mill, in Maine, a year ago.

We have had most successful results. We put through a total of 13,000 pieces of 4-ft. wood in eight hours. Now, you can estimate what this means in cordage.

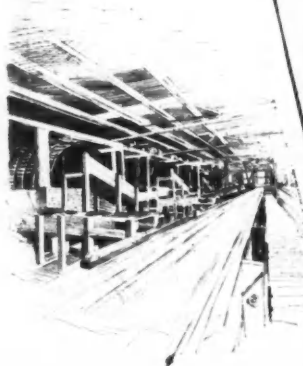
These two drums are perfect in construction, and perfect in operation. I would be very glad if your representative could arrange to meet me sometime in Maine, and see these drums in operation.

With my kindest regards,

I am,
 Very truly yours,
J. H. Pejepscot
 President

Illustration above is of an installation made by us for the Pejepscot company, the efficiency of which is told by their president's two letters, here reproduced.

There is double significance to Pejepscot's commendation of our equipment. Their first commendatory letter is followed by another, telling of just as successful results from other of our installations.

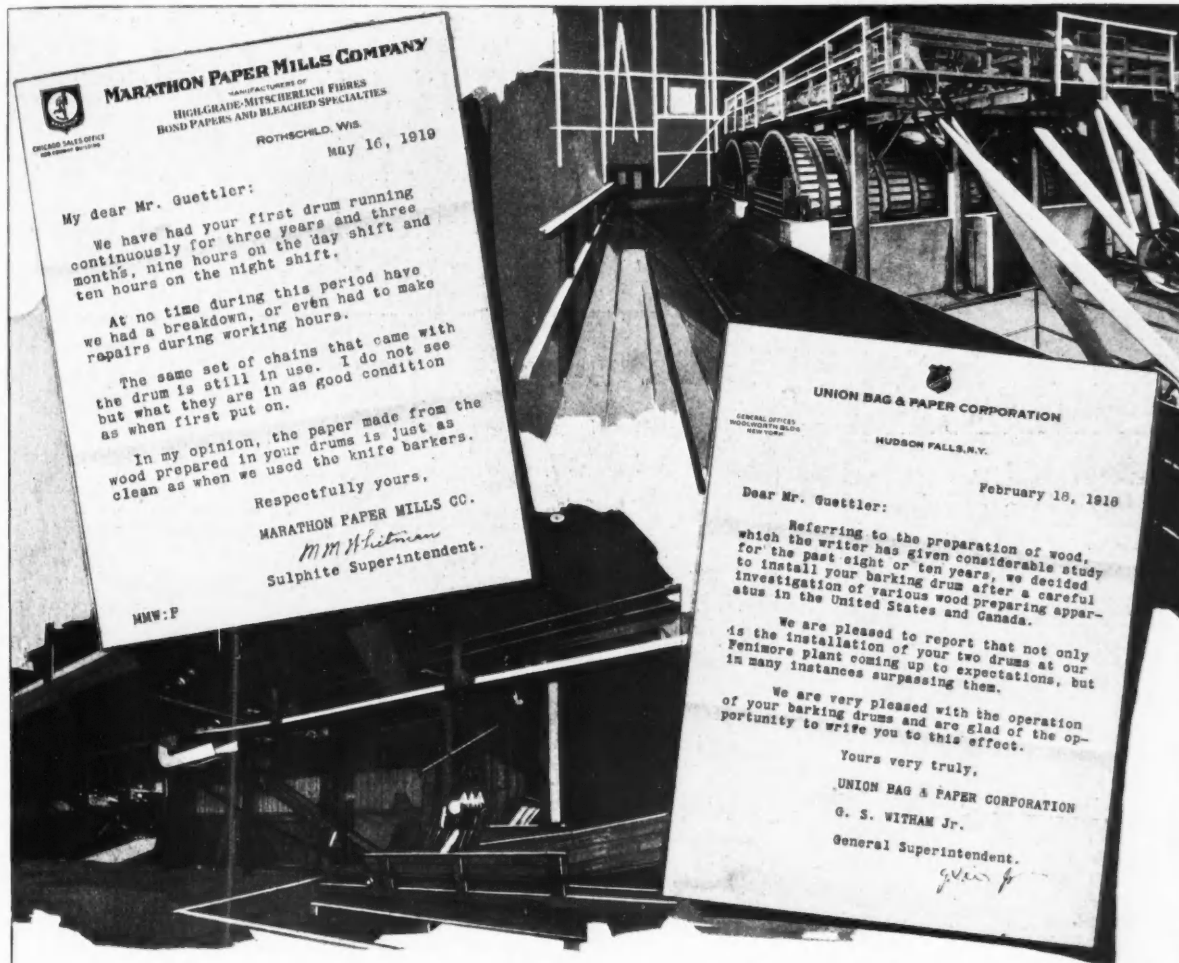


Many letters like these

We think letters of this character carry weight. We have a great many such evidences of the superiority of our drums.

The Abitibi Power and Paper company after a recent inspectional tour decided in favor of our equipment as our list of users will reveal. They bought four drums.

Testimony of two representative paper mills



IMMEDIATELY above, installation for Marathon mills at Rothschild, Wisconsin, U. S. A. This is our 10' x 30' size drum.

We cannot assure purchasers of our drums that they will never experience a breakdown. But Mr. Whitman's letter proves that years of uninterrupted service is possible with equipment designed as well.

The Union Bag and Paper mills at Hudson Falls, New York, U. S. A., their letter and a view of our drums installed at their plant appearing above, have repeatedly expressed satisfaction with our equipment. Under date of August 6th, 1920, the Donnacona mills

We study the individual requirements

With what is doubtless the largest aggregate experience in the field, we nevertheless approach each new installation of our drums with the most careful investigation and study of the exact conditions to be met.

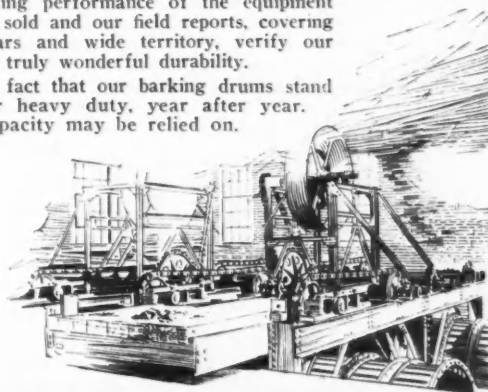
Our drum is sold not merely as a device, but as a means to accomplish certain work to be done—in your mill, and under your own manufacturing conditions. We will gladly undertake a survey of your properties, and report specifically. Please feel free to request the information we are pleased to give.

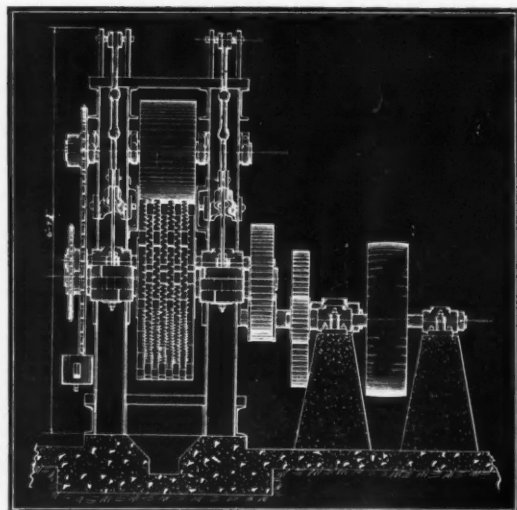
wrote: "Your first drum has now been installed three years. The new one has been running for a month. We are well satisfied, as they are barking six hundred cords of wood in twenty hours, practically clean, without the use of return conveyors."

The item of repairs almost negligible

We doubt if any company maintains greater watchfulness of operating performance of the equipment built and sold and our field reports, covering many years and wide territory, verify our claims of truly wonderful durability.

It is a fact that our barking drums stand up under heavy duty, year after year. Their capacity may be relied on.





Choosing a bark-press

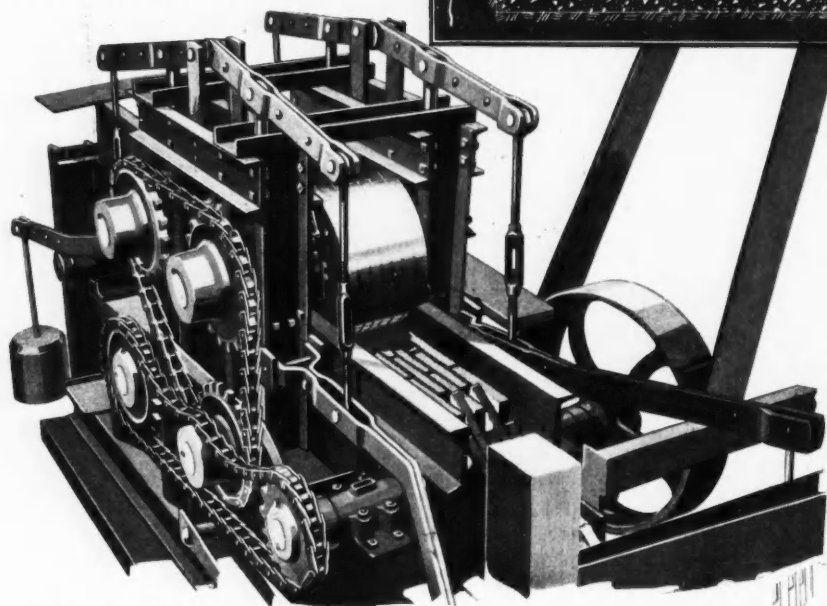
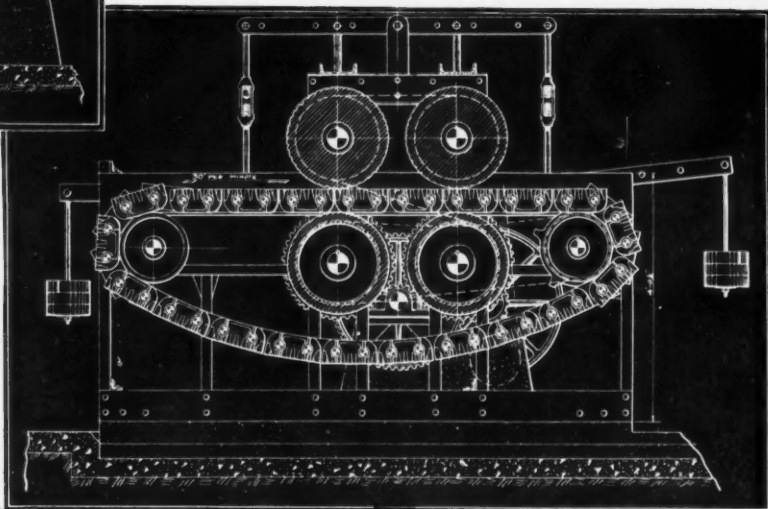
As with the barking drum, the successful bark press must possess tremendous strength. Mill men have found our bark presses peculiarly practical and effective for the heavy work which is entailed in the pressing of bark of varying thickness.

We show constructional prints which convey something of the solidity and simple principle of our bark press. It handles bark of any thickness, and takes sufficient moisture out to permit its use as fuel.

Adaptability, strength, complete efficiency

A thoroughly practical press, of great durability, that will handle a great quantity of bark of any character.

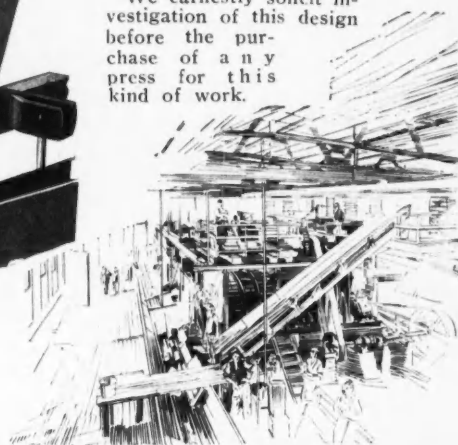
Horizontal apron of extra heavy stoker chain, running between a double set of press rolls. The rolls move up or down as the thickness of bark varies. weights and levers both sides of bearings exerting the necessary pressure for thorough, effective work.



A design that resists wear

Many refinements of design make this a most satisfactory choice of press. An example is the stops on top roll bearings which prevent wear between rolls and apron when running free from bark.

We earnestly solicit investigation of this design before the purchase of any press for this kind of work.



Complete information on any of our equipment is gladly furnished. Particularly do we invite submission of facts and figures on your specific requirements, on which we may base dependable data, prices, etc.

FIBRE MAKING PROCESSES, INC.
TOWER BUILDING CHICAGO



DEVELOPMENT OF SYSTEM OF DILL & COLLINS CO.

(Continued from page 34)

1st. The expense which the foreman is directly responsible for, such as his expense materials, repairs, etc.

2nd. The indirect expense or the share of other departments which it absorbs, such as steam and power, the yard gang, filter house, general mill, etc.

3rd. The items of productive labor are brought out in detail and the total of these three, direct, indirect and productive labor, gives the total operating cost in his department.

The available and actual hours and the production are also brought in to get the cost per. It is needless to go into this any further except to say that the departments are arranged in four (4) ways:

- 1st. Non-Productive... Steam and Power, Mechanical Department, Yard Gang, etc.
- 2nd. Auxiliary Depts... Paper Stock, Bleach Plant, Pulp Mill, etc.
- 3rd. Productive Dept... Paper Machine, Coating Room, etc.
- 4th. Finishing Dept... Calendars, Cutters, Sorter, etc.

Now that all expense has been analyzed we have only two more steps to go, one being the monthly operating statement and the completion of order and grade costs.

In general the operating statement has the same headings as the expense analysis—i. e., direct expense, indirect expense, power and productive labor. To these is added the cost of materials used in each department and the total cost of any process is thus obtained. Each of the items mentioned has its own column and gives an excellent idea of the proportion of expense and cost. Into these items are divided the hours, production, etc., from which we get a cost per hour, per cent activity, cost per 100 pounds manipulation, cost per 100 pounds raw materials and cost per 100 pounds processed material.

In fact, almost any "cost per" can be obtained from this sheet.

The Cost System

Outside of saying that there are forms in each department on each machine for each operation each day in each order, I believe it useless to take up time in explaining each one except to say that the totals each day are checked by operation and entered on the order and grade cost cards. The items are material, hours, gross weight, weights, waste, etc.

There is one form I would like to explain and that is the one we use for obtaining the cost per 100 pounds of coating for each formula to cover the shrinkage and waste. We call it "coating formula cost." On one side the mixer weights of each ingredient are entered each day and totaled for the month.

On the other side of the sheet we enter every day the total mixer weight, the uncoated run, the uncoated waste, the net coated weight and the coated waste. These are also totaled by month and after the cost has been multiplied out by figures obtained from the material cost record, the total formula cost is thus obtained.

To the net coated weight we *add* the coated waste, which gives the total coated run, and from the uncoated run we *subtract* the uncoated waste, which gives the net uncoated run.

By subtracting the net uncoated run from the gross coated the difference is the number of dry pounds of coating applied during the month.

Divide this dry weight of coating into the total formula cost and you have the cost per pound applied. Multiply the per cent of waste and you have the adjusted cost per pound to apply of coated orders using that formula.

This does away with using any arbitrary shrinkage figures.

After all figures from the departments have been entered for the month on the order cost record, the accounting figures are received and they are transferred to what we call a "monthly

tie-in sheet," for the purpose of proving the costs and applying any unearned burden.

After the results have been proved the costs are posted back to the order cost record, which gives the cost of any order or grade at any point in process.

Only stock grade costs are reported unless otherwise specified and this is done on which we call "monthly report of grade costs." This form, used in connection with estimates based on market and internal conditions, also gives the estimated cost for the ensuing month. From this sheet the operating expenses can also be proven, the shipments shown which would give the per cent of turnover of stock grades and from which a profit or loss can be shown.

I have now covered roughly the accounting and cost systems and will show them in detail by using the lantern slides.

Before doing so, however, I wish to explain that we started with a good cost account but made it better. We had no reliable order costs or organization to handle them. We now have a record department of two girls, a cost department of three, a planning department of two, a chart department of two and accounting department of three people, all working together efficiently and beginning to show good results.

One girl of the record department also takes charge of the auto truck costs, the standardization of all forms, their printing, and the requisitioning of their use and has charge of the instruction of all help. One of the assistant bookkeepers has charge of the addressograph and ditto machines and a store room where all stationery used in the mill is kept on a "balance of stores cards," a commissary for employees, which we are just starting, also a small library, and helps me with our part of a company magazine.

It might be well to state here that the offices have been systematized, all forms standardized on 8 x 5, 11 x 8½ and 14 x 17 inches and 104 new ones started in our search for better records and reports. Each department will have its own representative color scheme and will therefore be easily distinguished. The chart department has 126 charts in working order and are starting more continually.

There is in process of working a plan for the more accurate costing of rags and waste papers and the handling of perpetual inventories.

I will not say that everything we have is working smoothly, because it is not, for we are still, and expect to be for some time, only in the embryo state.

Conclusions

I have tried to make it clear that when a cost system is installed, that if worked efficiently, it is not a burdensome overhead but a help to the plant executive, the foreman, the individual workman, the sales department, the purchasing department, etc., because it shows in plain facts, with the help of the planning and charts, just what everything costs, what every department and individual is doing and assists them to help themselves. However, you must sell your cost system and yourself, not only to the executives, but to the individual working man, for without his co-operation your results are far from being satisfactory; and I think I have shown that altogether a cost system is directly responsible for other departments, it cannot correctly be charged with their expense, for each stands for its own classification of work.

From personal observation I have found that too many companies are using a strenuous individual or a systematized type of cost system instead of an efficiently aggregated type.

By that I mean some are controlled and operated principally

by one person who is strenuous enough but who cannot go further and besides if anything happens to them the system goes to pieces. Others are so systematized that it is always the same dull, dry routine where everything smacks of precedent. This tends to destroy the individual and allows too many mistakes to filter through.

I have endeavored to build our system along the efficiently aggregated type by bringing together the excellent strenuousness of the individual and the routine of system without destroying initiative, for we have no iron-clad systems in our mills.

I have now explained the development of the accounting and cost systems, how data is compiled and expenses distributed, and the type of system in vogue by the organization and how results are obtained.

I have purposely failed to state, however, the premises that

should underlie every modern cost and efficiency record system.

Their aims are briefly

1. To tie factory operations into the treasurer's records.
2. To show the standard and actual cost of each operation.
3. To show the efficiency of each operation as to its cost, time and quality.
4. To show the actual loss or gain of time and money of each operation.

Any cost system that does not fulfill reliably, immediately, adequately and permanently all these four essentials is deficient.

Our system is still in its infancy and we admit it is deficient in many respects, but we know where and have remedies to meet the complaints.

We believe we are aiming toward the right goal and hope some day to come close to it.

CONSUMPTION OF PULPWOOD IN THE UNITED STATES

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., September 22, 1920.—The Bureau of Foreign and Domestic Commerce has just issued an interesting bulletin on consumption estimates. In connection with the consumption of pulpwood the bulletin shows the following:

PULPWOOD: ANNUAL CONSUMPTION AND TOTAL COST FOR SPECIFIED YEARS, CALENDAR YEARS, 1899 TO 1918.

[Source: Forest Service, Department of Agriculture.]

Year.	Consumption.		Year.	Consumption.	
	Cords.	Total Cost. Dollars.		Cords.	Total Cost. Dollars.
1899.....	1,986,310	9,837,516	1910.....	4,094,306	.....
1905.....	3,192,123	17,735,665	1911.....	4,328,052	.....
1906.....	3,661,176	16,411,887	1914.....	4,470,763	39,408,453
1907.....	3,962,660	32,360,276	1916.....	5,228,558	45,785,682
1908.....	3,346,953	28,047,473	1917.....	5,480,075	60,815,057
1909.....	4,001,607	34,477,540	1918.....	5,250,794	78,167,118

¹Not including cost of "slabs and other mill waste" in Louisiana, Massachusetts, North Carolina, and Virginia.

PULPWOOD CONSUMPTION: TOTAL QUANTITY CONSUMED, CALENDAR YEAR 1917, AND QUANTITIES CONSUMED, BY STATES AND SPECIES, CALENDAR YEAR 1918.

[Source: Forest Service, Department of Agriculture.]

State.	Spruce.		Hemlock. Cords.	Balsam Fir. Cords.	Poplar.		All Other Species. Cords.	Total, 1918. Cords.	Total, 1917. Cords.
	Domestic. Cords.	Imported. Cords.			Domestic. Cords.	Imported. Cords.			
	California, Oregon and Washington.....	35,385			145,583			
Maine.....	799,649	136,487	18,482	89,234	136,591	20,230	34,296	1,234,969	1,309,239
New York.....	428,284	328,185	68,408	69,055	48,847	51,776	9,187	1,003,742	1,056,556
Wisconsin.....	230,557	32,153	472,310	65,207	2,576	.....	58,054	860,857	805,490
Pennsylvania.....	36,851	89,854	5,151	7,000	8,851	5,400	230,592	383,699	415,776
New Hampshire.....	185,334	55,119	436	101,804	538	.....	2,041	345,272	416,553
Michigan.....	72,332	10,793	54,521	23,373	1,270	.....	41,237	203,516	187,117
Minnesota.....	167,457	.....	.....	.....	.....	.....	14,545	182,002	205,026
Virginia.....	60,197	.....	17,840	.....	.....	.....	51,600	129,637	141,579
West Virginia.....	60,290	.....	27,933	.....	.....	.....	21,662	109,885	119,918
Vermont.....	75,563	11,704	.....	11,304	838	278	.....	99,687	109,616
All other States ¹	52,244	1,879	25,742	1,140	11,338	670	364,741	457,754	450,911
Total.....	2,204,143	666,164	836,406	368,117	210,849	78,354	886,761	5,250,794	5,480,075

¹Includes Delaware, District of Columbia, Georgia, Louisiana, Maryland, Massachusetts, Mississippi, North Carolina, Ohio, South Carolina, Tennessee and Texas.

PULPWOOD CONSUMPTION: QUANTITIES CONSUMED, BY SPECIES, AND PROCESSES OF MANUFACTURE, CALENDAR YEARS 1917 AND 1918.

[Source: Forest Service, Department of Agriculture.]

Kind.	1917.					1918.				
	Reduced by—					Reduced by—				
	Mechanical Process. Cords.	Sulphite Process. Cords.	Soda Process. Cords.	Sulphate Process. Cords.	Total. Cords.	Mechanical Process. Cords.	Sulphite Process. Cords.	Soda Process. Cords.	Sulphate Process. Cords.	Total. Cords.
Spruce:										
Domestic.....	1,076,027	1,290,817	4,890	14,232	2,385,966	911,483	1,250,909	5,612	36,139	2,204,143
Imported.....	264,570	415,870	1,010	.....	681,450	232,914	426,114	5,792	1,344	666,164
Hemlock.....	55,628	689,703	11,069	18,603	775,003	51,803	745,640	1,134	37,829	836,406
Poplar:										
Domestic.....	21,009	1,748	291,198	.....	313,955	19,124	37,072	154,653	.....	210,849
Imported.....	508	3,522	88,268	.....	92,298	6,468	8,099	63,787	.....	78,354
Balsam fir.....	98,225	262,478	924	20,409	382,036	80,016	245,904	7,753	34,444	368,117
Yellow pine.....	11,477	5,724	50,816	74,077	142,094	7,662	3,576	31,546	90,990	133,774
Jack pine.....	6,001	.....	64,698	4,683	75,382	17,487	.....	124,090	10,547	152,124
Tamarack.....	12,393	4,784	.....	41,555	58,732	728	6,438	.....	44,865	52,031
Yellow poplar.....	.....	.....	41,155	.....	41,155	665	.....	60,582	.....	61,247
White fir.....	2,646	30,535	.....	.....	33,181	7,506	27,613	.....	.....	35,119
Cottonwood poplar.....	131	58	32,804	.....	32,993	.....	72	18,613	.....	18,685
Gum.....	.....	.....	32,513	.....	32,513	28	.....	47,117	.....	47,145
All other kinds of wood.....	212	16	196,510	2,597	199,335	1,567	1,000	220,829	8,637	232,033
Other mill waste.....	4,806	187,067	27,193	14,916	233,982	7,984	107,735	7,130	31,754	154,603
Total.....	1,553,633	2,892,322	843,048	191,072	5,480,075	1,345,435	2,860,172	748,638	296,549	5,250,794

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CORDAGE

COST ACCOUNTING FROM THE STANDPOINT OF AN EXECUTIVE*

BY HENRY D. SCHMIDT, VICE PRESIDENT, SCHMIDT & AULT PAPER COMPANY, YORK, PA.

My belief is that the Cost Accounting Department is the clearing house or central station of all information for the Control of an enterprise. It can, and should control the operations of all other departments. It should cater to all and point out and erect the sign posts for the road to success.

Let us pause for a moment and consider this word Control. Webster says: "Control is the power to check, direct, influence and govern." But in reality is not Control the all important factor which determines earning power and success? Is not Control the keynote of any active business? The more intelligently it is disclosed and actively followed up, the more effective the results. It is useless and worthless unless based on and continuously supported by actual facts, dependable knowledge and correct figures to make it absolutely reliable. The progress of a locomotive is only effected by the efforts of the engineer. Just so, your cost department, it can function and control the destinies of your concern, providing your executives have absolute faith, up to the limits of your chief accountant.

Concentrated Knowledge of All Departments

What better place to have the control of an enterprise than in the cost department? Is it not the one department that has or should have concentrated knowledge of the workings of all other departments? That's where you cost accountants come in. You can "make" or "break" yourself but, more easily "make" by proper concentration and analysis. You have at your beck and call the most intimate facts and figures of your business which can be assimilated to make you the best informed person in your concern, and which can be so put together or analyzed, to make this the most valuable feature of your business; in other words, to determine and exercise control.

From a financial standpoint, cost accounts should be tied in with the general books and balanced off or accounted for the same as cash, enabling all to have faith in your figures.

Then, a good cost accountant can intersperse his financial data with grouped figures, derived from his costs, which everyone can be sure are dependable. You know it is all very interesting for accountants to follow through a month's tedious detail on some particular operation or group of operations from a cost standpoint, but when all is said and done, the average executive is far more interested from the control standpoint, in reviewing a periodic statement of operations properly subdivided.

Take a planning department. In Washington, one branch of the War Department in 1917 created a planning department, whose primary function was to lay out schedules of production and watch progress. It grew and expanded under an able leader until a few months later it was re-christened, "The Control Department," with authority to control the workings of the entire branch.

But there, they had no sales or finances to worry about; and someone else did the manufacturing.

How Control Can Be Developed

Let us see how the cost department, such as I have in mind, can develop and exercise this control. One important feature to any progressive and systematic executive is the budget. The budget should be made up of reserves, at hand and anticipated through profits, and should provide the control of disbursement. This does not necessarily mean for dividends and capital expenditures alone, but for active employment of all working capital to

the best possible advantage. It can and should be revised periodically to check up all advance expectations and predictions. Under the existing Income Tax Laws, there should be included in this budget, either directly or by sub-division, provisions for tax payments not only to insure the use of these reserves and release in the proper amounts, when and as due, but, also, to estimate monthly, by use of proper tables, your proportionate donation to Uncle Sam, in order to avoid a sudden and possibly serious awakening at the year's end.

This budget may be quite useful to finance changes, recommended particularly by your engineers, for you know all engineers seem to have an excellent faculty for making savings by changes or new installations, which, nevertheless, cost money. Without a budget, it is difficult to arrange for proper sequence of authorizations, unless unlimited capital is at hand to accomplish the quickest return. Then, again, we occasionally run across someone who is a little too theoretical, or who has imaginary ideas of the cost of installation. The cost department can, however, exercise the necessary control by proper and prompt records, following up specific work. As an example, we had occasion to build a small coffer dam a few weeks ago, which was originally estimated by someone at \$250, but which was put down at \$500. The cost figures, three days after the dam was completed, showed that the actual cost was \$881. Upon investigation, it appeared that the engineer and erecting superintendent had an argument about the method to be employed. The superintendent being the man on the job, used \$250 of labor and material, all of which were washed down the stream. It was then put in by a second method with the above results.

Old Time Methods

Going over to the manufacturing department, in the old days the "also-rans" slipped by unless the executives were good "watch dogs," because there was no data that was daily and periodically gathered by anyone, which could be shown to the superintendent or foreman at the end of the month, with that demanding word, "Why?" As a result, at the end of the year there was a very rude awakening; and frantic efforts were made to catch up or change some methods, which had been in effect for too long a period with disastrous results. Now, proper control of these departments in many mills, may be exercised by their cost department. For this, the expense analysis plays an important function, for as the name implies, it analyzes all expenses by periods or months, making a record well worth a proper and conscientious review, periodically, by the executives in order to exercise the necessary control. Study of this discloses items that retard operations or earning power, some of which are:

1. Hidden or unknown items of expense.
2. Wastes and leaks.
3. Faulty factors in organization.
4. Inadequate or obsolete equipment.

Viewed from another angle, the following questions may be asked:

- A. Do you know what your mill is most qualified to produce?
- B. Is your plant efficiently operated?
- C. Is every department of your plant arranged and equipped to produce at maximum earning power?

Control of Purchasing Department

With the proper assimilation of data, the purchasing department may, also, be controlled by the cost department. Purchasing
(Continued on page 48)

*Read at the Fall Convention of the Cost Association of the Paper Industry, New York, September 27, 1920.

*Direct from Producer
to Consumer*

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ACCOUNTING FROM AN EXECUTIVE'S STANDPOINT

(Continued from page 46)

agents centre their efforts in purchasing materials for present or future use, and in following this by daily order or contract prices. The cost department, however, can step in and provide summary sheets periodically, which will point out to the purchasing department, the purchases that most vitally affect costs, the corresponding percentages, the average, periodic or yearly prices, etc. Through their knowledge of manufacturing, they can suggest points of investigation, for instance: changes in containers for supplies, which should be made to decrease handling costs; over purchases for contemplated but not fulfilled future requirements, in anticipation of market changes; and dead inventory items, although in some mills this is controlled by the storekeeper.

Sales Department

And, last but certainly not least, one department of a paper mill, the control of which by costs, we have heard a great deal about, is the sales department. Much of this, however, dealt with grade and weight costs, special order costs, etc., which are excellent points to dig into; but, from an executive's standpoint, the cost department also, can bring out figures to control the general sales in more of a statistical manner. For instance, the yearly and monthly sales analyzed as to territories and customers, in order to continuously control the sales department for proper distribution. Selling commissions is another big item on certain papers which are often too quickly glanced over by the sales manager and which, if brought out in the proper manner, would be quite apt to change the selling policy. Analyze the cost of performing certain functions in the sales department, such as

telephoning. One sales manager that I know, used his telephone so often that the enamel was worn off before their antiquated cost department awoke to the tremendous telephone bills.

The sales and manufacturing departments may conflict on two points, namely, grades or weights, and routing of orders through the mill, which sometimes require the accountant to referee. In times of extreme competition, a keen sales manager, bent on keeping his mill running may seek new fields which may not prove to be attractive from the cost standpoint, due to inadaptability of the equipment to handle economically the weight or grade, or due to a narrow trim. Again a sales manager may be overzealous of service to his customer, and not to the mill, in suggesting that some small order be tacked on to another run. A wide-awake cost accountant will soon discover the extra expense, and hindrance to production, that is caused by failure to "bunch all hits."

Graphic Charts

In all of this work, no accountant should overlook one of the best tools at his command for presenting and comparing facts—graphic charts. These may be as elaborate or as simple as desired; but, in any event, they show high or low spots, allowing an executive to make quick comparisons better than any sheet of figures.

In conclusion, I must apologize for absence of cost details, but I so sincerely feel the magnitude of the field for all cost accountants that I have striven to outline some of the main ways, through which an accountant may point out the many by-ways leading to failure, and control the progress on the road to success.

REPORT ON CANADIAN RECIPROCITY

A high degree of timely interest attaches to a report that has just been issued by the United States Tariff Commission. The report deals with Canadian Reciprocity, a subject of much excited discussion just ten years ago.

There is strong likelihood that our trade relations with Canada will once more attract serious attention at an early date. The movement for preferential treatment of Imperial trade by all the dependencies of Great Britain, and the recent agreement between Canada and the West Indies providing for reciprocal concessions that the United States will not enjoy, may divert from this country much trade that nature seems to have intended should flow in this direction. The Dominion Government is now making preparation for a general revision of the tariff, and there are indications that this country within twelve months will be likely also to revise its commercial relations. In Canada, the official platforms of the Liberal Party and of the Farmer-Labor party demand a renewal of reciprocity negotiations with this country. In the meantime, our former offer of reciprocity to Canada still stands upon our statute books, although a bill for its repeal passed the House of Representatives last year.

The report of the Tariff Commission is the first careful study of the effect on commerce that the measure would have had if the Canadians had accepted it.

The commission outlines at some length the political situation in the United States and Canada at the time of the passage of the act by Congress and notes what appears to be the present feeling towards reciprocity in the Dominion. In the United States reciprocity was in accord with a movement against high duties which was felt in both parties. The Republicans who were opposed to the tariff of 1909 might have been expected to follow President Taft in his support of the measure. These so-called "insurgents"

came, however, largely from agricultural constituencies, and because the chief duties removed were on agricultural products, many of them voted against the bill as a discrimination against the farmer. Both the "insurgent" and the "regular" Republicans showed a majority against the bill; but sufficient Democratic votes were cast for it to effect its passage. Reasons for the defeat of the measure in Canada, in addition to the opposition of the interests directly affected, were numerous. Among them were resentment arising from the earlier attitude of the United States towards reciprocity, the strength of the idea of Imperial unity and the fear, however ill-founded, that the agreement was prompted by political motives, and would lead to an ever growing dependence of Canada on the United States. Present Canadian support of reciprocity comes from the Liberal Party, which was defeated on this issue in 1911, and the Farmer-Labor Party, which has shown political strength in the Dominion during the past year.

Copies of the report may be obtained for twenty (20) cents each from the Superintendent of Documents, Government Printing Office, Washington, D. C.

Dutch Visitors at American Paper Mill

HOLYOKE, Mass., September 27, 1920.—J. and J. M. Beuker, of the firm of Van Gelder Sons, Amsterdam, Holland, were visitors at the office of the American Writing Paper Company last week. They are making a six weeks' trip studying the paper industry of the United States and Canada, also visiting the news print mills in Maine and the Provinces. After leaving Holyoke they went to the mills of the Strathmore Paper Company at Mittineague. They expressed themselves as much interested in the methods used by the American manufacturers and over the high quality of the paper manufactured here.

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



WE ARE SAFE IN OUR PROPOSITION

YOU'LL MAKE NO MISTAKE IN ACCEPTING IT

PICKLES DRYING REGULATOR

will do everything we claim for it and more. The test costs you nothing until you are satisfied. Many mills tried one and now have every machine equipped. Write for list of users and other information.

W. F. PICKLES, Buckland, Conn.

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

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

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

The Orr Felt & Blanket Co.

Piqua, Ohio, U. S. A.

Buchanan & Bolt Wire Company

ESTABLISHED 1878 AT HOLYOKE, MASS.

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

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

CHICAGO
10 SOUTH LA SALLE ST

CAMERON MACHINE COMPANY

SLITTING AND REWINDING MACHINES
61 POPLAR ST BROOKLYN, N.Y.

CABLE ADDRESS
CAMACHINE, NEW YORK

August 4, 1920

Gentlemen:

News has reached us that the old Langston Winder which has been lying in "dead storage" in your mill for a couple of years or more, has now been overhauled and equipped with new slitting methods, also Cameron coil separating grooves in the front drum, and a number of other new features, and is showing signs of life. We have reason to know that the principles of construction which have recently been incorporated in this machine, are the sole and only reason for its being able to give reasonably good service.

In writing to you at this time, our only purpose is to make it clear to you that if the course of action which we may find necessary against Samuel M. Langston Company to protect our legal and commercial rights should involve your esteemed concern as one of the users of machines violating our rights, this circumstance will be a matter of very sincere regret to us.

We remember very kindly the patience, courtesies, and fair treatment received at your hands in connection with the installation of our Heavy Duty Rewinding Machine in your mill. Since that time, we have vastly improved our machines both as to the working principles and as to heavy and substantial structure. These improvements have been arrived at by us out of hard work both from an engineering and from a practical mechanical point of view, coupled with years of experience and an expense of money which seems huge when we look back at the total expense of construction thus developed and our own property. The principles of construction thus developed are our sole stock in trade, as morally and legally, and are, in a sense, our sole stock in trade, as we build nothing but Slitting and Rewinding Machines of various types. It is necessary for us to protect our rights in these principles of construction, to safe-guard our business and to insure continued progress for ourselves as a company, and our staff and employees as individuals, because we are all in the same boat.

We are not in a position to lay our whole case before you at this time as to the course of action against Samuel M. Langston Company, Camden, New Jersey; but we wish to convince you in every way that if it becomes necessary for us to involve the users of Langston Machines employing principles now incorporated in your machine of their make, we shall do so in no unfriendly spirit, but purely out of the absolute necessity of protecting our rights and our business.

CAMACHINE

August 4, 1920

We build nothing but Winders, and our whole success depends on this line of machinery solely. The development of new principles as to improvements in Slitting and Rewinding Machines which belong to us are, in reality, our stock in trade. It appears to us that these rights are being violated in a mean and sneaking sort of way; and if reports to this effect which are reaching us prove correct, there is no course open to us except to prevent the practice by every means within our power. If, in doing this, it becomes necessary for us to involve the users of machines employing our principles of construction, originated by us and legally and morally our property, we shall do so only as a last resort; and we earnestly hope that our motives will not be construed as personally hostile to yourselves or others who may be innocent parties mixed up in this fracas through no conscious fault of their own.

Very truly yours,

CAMERON MACHINE COMPANY

James A. Cameron
JAMES A. CAMERON, PRES.

JAC-JL

To the Paper Mill Trade

We regret to call attention to the letter here reproduced, but our common interests seem to call for its publication.

We feel compelled to invite your attention to the following facts:

1. We have been making Langston winders of the present type for paper mills for at least ten years.

2. We first built a small Langston drum winder for cutting and winding small rolls of paper 16 years ago.

3. Our slitters and rewinders, which have always been a part of our business, are fully covered by our own patents.

4. We have not infringed any patents of the Cameron Machine Co. The Cameron Machine Company has never directly charged us with such infringement. What charges they have made have been indirect and indefinite, and have been aimed, in every case, not against us, but against users of Langston slitters.

On the other hand, we claim the Cameron Machine Company is infringing our patent No. 1,174,738. In support of this claim we have already entered suit directly against the Cameron Machine Company in the United States District Court of the Eastern District of New York.

5. And we are also entering civil suit against the Cameron Machine Company to protect our customers from further annoyance of this kind and ourselves from such slanderous innuendoes as are contained in their letters to our trade.

In other words, instead of harassing or threatening purchasers of Cameron machines—who are innocent parties to any act of infringement—we are going right after the Cameron Machine Company themselves, and using action instead of words.

We should be glad to have our attention called to any further communications of the kind here reproduced.

SAMUEL M. LANGSTON CO.

CAMDEN, N. J., U. S. A.

Editorial

Vol. LXXI New York, September 30, 1920 No. 14
FORTY-NINTH YEAR

Standardization in Paper

The resolution passed at the annual convention of the United Typothetae of America for standardization in the printing and paper industries is a sensible move which, it is to be hoped, will be carried out as soon as possible. As may be seen from the resolution, which is printed elsewhere in this issue, the important feature, so far as the paper industry is concerned, recommends that an "effort be made to analyze the needs, reduce the number of sizes, weights, colors and grades of paper, standardize machinery sizes, investigate methods of increasing paper production and determine a reduction to the minimum of the number of water marks in commercial paper."

The American Writing Paper Company, in a full-page advertisement in the New York dailies, says:

This resolution stands as one of the most progressive acts in modern business—an example and a challenge to every other industry in America in which unnecessary styles and duplication of effort are curtailing production and raising prices.

This resolution for standardization is not the first important action that the U. T. A. has taken in this direction.

Last year this organization standardized the sizes and weights of cover papers. The adoption of the U. T. A. cover paper recommendations has resulted in a tremendous saving throughout the industry.

The U. T. A. recommendation for standard catalogue sizes to the National Association of Purchasing Agents has been adopted by that organization and is today conserving paper.

The U. T. A. has also put into practice many other changes in trade customs which have reduced friction and waste effort, and have benefited the buyer.

The present blanket move for standardization is momentous. Not enough paper is being manufactured today to supply the needs of the country. Unlike conditions in many other industries, there are no large stocks of paper that can be thrown on the market. On the contrary, there is real danger that the scarcity of paper and rising labor costs will force printing so high that buyers will be unable to pay the resulting prices. Such a condition would mean that presses, of which there is even now a surplus, would be idle, and that overhead costs would pile up in every printer's plant.

In counteracting this tendency toward higher costs, the U. T. A. is performing a service of far-reaching importance. By eliminating unnecessary sizes, weights, colors and watermarked grades of paper, this organization is also helping to standardize quality, stabilize prices, make possible better values.

In the trade, standardization means smaller stocks, less investment in slow-moving lines, faster turnover, better service.

The net result will be that the mills will be able to produce more. With standardization, it will be unnecessary to stop and start the big paper-making machines at too short intervals in

order to "run" special lots of paper. Every phase of manufacturing will be stabilized. Production is bound to increase.

This U. T. A. resolution, therefore, is not only in the interest of better conditions in the paper and printing industries, but is of direct benefit to all buyers and users of paper.

Heretofore printers have exerted their greatest efforts toward the improvement of direct relations with customers. Now they are reaching far back to the industries that serve them, and directing these industries in standardizing production and distribution.

That the paper trade is likely to co-operate heartily in this movement may be judged from the remarks of R. P. Andrews, president of the National Paper Trade Association, who, speaking on this subject, said:

"It is of primary importance, and it will become more important as the months roll by, that all of us who are interested in these closely related industries shall think together and work together toward the elimination of wastage, toward the removing of lost motion caused by non-standard items of product, so that we can concentrate machine capacity on standard sizes, weights and grades.

"We are interested in increasing volume of production through standardization because it insures not only permanency of business, but also continues operation of mill equipment, and enables manufacturers to keep their organizations intact and eliminate labor troubles and other causes of friction, all of which in the end are directly reflected in the value of paper."

The Gospel of Work

It has been requested that the following editorial from the *U. S. Floating Power Plant News*, by Mr. H. H. Southgate, advertising manager of the United States Motor Truck Company, be reprinted in the *PAPER TRADE JOURNAL*. This request is cheerfully complied with as it is believed that the sentiments expressed cannot be too strongly emphasized or too widely circulated just now:

"Is America to become a nation of shirks and slackers? Shall we continue to 'let George do it?' Or are we now ready to emerge from the mental slump which followed the Great War and jump aggressively into the world-wide battle of commerce, forcing our way to our rightful leadership among the nations of the earth?

"Our place is among the leaders of the earth in commerce, finance and industry. But unless we come out of our trance that place will be forever lost to us. America today plays the part of the dissolute Nero, jazzing away the precious hours while the Rome of our opportunity is destroyed by the fires of indifference.

"George"—meaning both our friends and enemies among the nations—is doing it, all right. He is going full speed ahead. Instead of leading, we are trailing. And lack of production is wholly responsible.

"Work pays the bills. Work earns promotion. Work—honest, hard work—will help bring down the high cost of everything. Nothing else will. What America needs is less conversation and more perspiration.

"We idle. We talk. We play. Others work. They toil night

and day to repair the ravages of war, and to build up production in all lines.

"What is the answer to be? Will America work, or will she want? Is the high cost to decrease, or will idle plants and empty shelves force it still higher?

"The man who works fewer hours or does less work hurts his own cause. He cuts down production. He is an industrial slacker. There is no more excuse today for his conduct than there was in war times for the man who evaded his war obligations. Not alone does he injure himself. He hurts his family—his friends—his country.

"Our safety as a nation depends upon production—hard, driving effort to forge ahead. Before the war, and during it, we made wonderful progress through production. Then we stopped to rest. Our minds and bodies are now rested and refreshed. Once more we must work—work to live. The prosperity of the future depends wholly upon our actions today.

"Production means work—work—and still more work!—until each of us has reached the height of his efficiency and earning power. Not alone do we need production in the factory, but in the office, on the road, on the farm, in the home—in every phase of our lives.

"Work for the joy of the work itself—for the sake of successful accomplishments—for the betterment of all—to bring down the high cost of living through increased production and decreased overhead—for the future peace and comfort of our sons and daughters—for the salvation of America—work!

"Talk will not right conditions. Act! Work more and talk less. And as production creeps higher, day by day, the difference in prices and conditions will become apparent. Production alone will make that difference. Work brings production. Preach the gospel of work."

Management Education

A course in "management education" to provide a sufficient number of properly trained executives for the industries of the United States is to be established in a majority of the 620 American colleges, according to Dr. Hollis Godfrey, president of the Drexel Institute, Philadelphia, formerly commissioner of the advisory commission of the Council of National Defense.

The plan, an outgrowth of a convention attended by representatives of industry and colleges in Philadelphia last March, is backed by corporations representing a capitalization of \$26,000,000,000. It is the result, Dr. Godfrey said, of these two factors coming to a definite working agreement for the first time through the establishment of the council of management education, an organization formed "to study mutual problems in order that the colleges may render the greatest possible service to industry."

Doctor Godfrey, chairman of the new body, assisted by Dr. Samuel P. Chapen, general director of the American council on education, representing the 620 colleges, and Dr. Frederick C. Ferry, president of Hamilton College, are perfecting the plan, which contemplates establishing practical courses in the schools, assisting undergraduates and others to choose their life's work, by placing several thousand students and teachers in industry during the summer months and by introducing extension courses for men now in industry. By the summer work, students will be enabled to defray their expenses at college, obtain an insight into American industry, and enable the executives to select future management men.

The council of management education, which has been formed,

it was said, to become "a clearing house for all industrial and educational matters in the country, to promote the mutual understanding of the mutual problems of industry and the college, and to keep perpetual inventory of the educational needs of industry and of the ability of the colleges to meet these needs," has opened temporary offices in the Drexel Building, Philadelphia, until headquarters are furnished in Washington.

An annual appropriation of \$100,000, entirely borne by American industry, has been made to carry on its work, which has been divided into two classes: First, to determine the field of service which each college can cover, and, second, to provide the college with all industrial data which may be utilized in forming undergraduate courses for men contemplating entering industry and in reaching the management men already in industry through extension courses.

While the majority of American industries are represented on the council, those having members on the executive committee are the railroads, public utilities, oil, textiles, mining, rubber, leather and shoes, paper, machinery and cotton finishing. The executive member of the council for the paper industry is Col. B. A. Franklin, vice-president of the Strathmore Paper Company, Mittineague, Mass.

Paper Men to Parade for Harding

General Charles H. Sherrill, who has managed the patriotic parades in which the paper trade has been actively interested in the past, is organizing a parade in honor of the Republican presidential candidate—Warren G. Harding—for the evening of October 25.

William G. Luke, with the assistance of a committee of some of the veterans in the management of parades is the marshal for the Paper Trade Division.

This notice is given thus early in order to allow for the formation and the early consideration of the different business organizations. It is the wish of the management that an extensive turnout will take place for the Republican candidate.

In previous parades great interest has been taken in slogans. One year the lumber trade had a load of lumber with a sign—GET ABOARD FOR HUGHES. Committee in charge this year offers a prize of \$5 for the best slogan. William C. Ridgway, Charles Walden and "Kid" Warner have been asked to be judges. Send in your slogan—help along the trade and win the \$5.00.

Swedish Discount Rate Higher

STOCKHOLM, Sweden, September 22, 1920.—The Bank of Sweden has raised its discount rates $\frac{1}{2}$ of 1 per cent to $7\frac{1}{2}$ per cent. Previous rate of 7 per cent had been in effect since March 18 last.

EDWIN BUTTERWORTH & CO.

MANCHESTER, ENGLAND

Packers of all kinds of

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

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Boston Office, 136 Federal St. CHARLES H. WOOD, Sr., U. S. Mgr. New York Office, 1123 Broadway, Chelsea 958 LEWIS JENNINGS, Manager

"WATERBURY"

Felts-Jackets

ORISKANY, N. Y.

OUR TIGHT FITTING, DIAMOND "W" JACKETS

WILL NOT LICK UP AT ANY SPEED

1869 {MADE ONLY BY} 1920

{GUARANTEED BY}

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

APPLICATION OF COST WORK TO MANAGEMENT*

By B. E. HUTCHINSON, TREASURER, AMERICAN WRITING PAPER COMPANY.

While forward looking business men have pretty generally accepted the proposition that the foundation of success is service to the public, the fact must not be overlooked that such service must be profitable if it is to be continued. Some countries are now experimenting with a social and economic order predicated upon the assumption that virtue is its own reward, and others are flirting with the idea. My own point of view may be somewhat reactionary, but the ideas which I am going to submit for your consideration this afternoon are those of a business man who believes the laborer is worthy of his hire, and that one of the prime requisites of a successful industry is that it be profitable. Furthermore, to be of maximum service to the public consuming its products and to the labor dependent upon its operations for daily bread, these profits must be consistently maintained and conditions in the industry stabilized in so far as possible.

Dependent on Sound Sales Policy

The attainment of this desired result is dependent upon the establishment and maintenance of a sound sales policy more than upon any other factor. The phase of cost and accounting work with which this discussion will deal is the contribution which it can be expected to make to the solution of sales problems, particularly to the method by which selling prices may be determined upon a basis of cost. It is not contended that an automatic system for the determination of selling prices has been or can be devised. Supply and demand are and will remain dominant factors. However, the price which must be obtained for our product if under average conditions, fair profits are to be earned is the resultant of certain determinable factors, and these factors are susceptible to systematic analysis. After these factors have been determined and analyzed they can in turn be applied to the systematic determination of the selling price of each and every individual item manufactured, be those items one or one thousand, and determined in such a way as to make each sale contribute its fair share, no more and no less, to the desired profit. From prices so determined such deviation

chines, No. 1 a 75 in. machine and No. 2 a 90 in. machine, and including the usual finishing equipment for a mill of this character. The owner or manager of this mill feels that he is entitled to make a return before Federal Income or Excess Profits Taxes of 15 per cent upon the investment. This would be \$240,000.00 per annum or \$20,000 per month. There is no need to blush at this expectation. There is excellent authority for this rate of profit in the paper business.

Idealized, the monthly operating statement of this mill would appear about as in Exhibit B. The figures are approximately

Exhibit B

MONTHLY OPERATING STATEMENT	
Gross sales to customers (1,010,000 lbs. at 15.07 average).....	\$152,200.00
Less:	
Freight and cartage allowed.....	\$700.00
Returns and allowances (10,000 lbs.).....	1,500.00
	2,200.00
Net sales to customers (1,000,000 lbs. at 15c. average).....	\$150,000.00
Cost of raw material and supplies consumed.....	\$78,625.00
Labor.....	25,000.00
Mill overhead (taxes, insurance, depreciation, supervision, etc.).....	10,000.00
Total manufacturing cost (1,010,000 lbs.).....	\$113,625.00
Less: Increase in paper inventory (10,000 lbs.).....	1,125.00
Cost of Sales.....	\$112,500.00
Gross profit, 25 per cent.....	\$37,500.00
Packing and shipping expense.....	\$3,500.00
Selling expense.....	\$5,000.00
General administrative expense.....	2,500.00
Mortgage bond interest.....	2,000.00
Total general overhead expense.....	9,500.00
	13,000.00
Net profit from operations.....	\$24,500.00
Other Income—Discount on purchases.....	\$250.00
Income Charges—	
Discount on notes.....	250.00
Cash discounts allowed.....	4,500.00
Net total.....	4,500.00
Net profit—Interest earned on investment.....	\$20,000.00

consistent with what might be found in actual fact in a mill of this character, except that possibly on the basis of today's prices the value of the sales would be a little higher in proportion to the investment. So far the outlines of the picture are fairly distinct. But this mill manufactures 57 different varieties of paper, to say nothing of variations in color, folio weight, size and finish. What price must be secured for each and everyone of these multitudinous items in order that each may contribute its fair and just portion of profit to the desired \$20,000.00 a month, and what contingencies must be faced in order to assure the maintenance of this \$20,000.00 a month year in and year out?

One thing is certain. If prices are estimated on the assumption that the mill will operate year in and year out at its normal capacity, the net profit indicated by this specimen operating report will not on the average be maintained. Severe winters do come, railroad strikes do occur, the demand for paper does fall off at times to such an extent that the manufacturer does not feel justified or is unable to finance the building up of paper stocks in tonnages sufficient to keep the mill running to capacity, low water comes in the summer time, the railroads confiscate coal, employees go out on strikes, and "other contingencies beyond our control" are not mere fictions. Most mills have faced several of them within the past twelve months. Few mills are in a position to say with assurance that none of them will be faced in the year to come. What provisions should be made for these contingencies in the determination of selling prices?

Some estimate must be made of the extent to which these contingencies will restrict the normal operation of the mill. After

(Continued on page 56)

Exhibit A

CONDENSED BALANCE SHEET

ASSETS.	
Cash.....	\$25,000.00
Accounts receivable.....	225,000.00
Merchandise inventories.....	\$300,000.00
Less reserve.....	25,000.00
Net.....	275,000.00
Total quick assets.....	\$525,000.00
Land, buildings and equipment.....	1,075,000.00
Total.....	\$1,600,000.00
LIABILITIES.	
Accounts Payable—	
Trade creditors.....	\$100,000.00
Notes payable.....	50,000.00
Accrued Accounts.....	10,000.00
Total current liabilities.....	\$160,000.00
Mortgage bonds.....	400,000.00
Capital stock.....	1,000,000.00
Surplus.....	40,000.00
Total.....	\$1,600,000.00
Ratio: 3.28 to 1.	

may be made as the exigencies of the market demand or permit, and with prior knowledge of what the consequences will be.

It would be easy to generalize further along these lines, but perhaps the most lucid exposition of the subject can be obtained from the consideration of a concrete example. Exhibit A is the balance sheet of a rag paper mill, equipped with two paper ma-

* Read at Fall Convention of the Cost Association of the Paper Industry, New York, September 27, 1920.

Nitro Pulp Mills,
 NITRO, Incorporated WEST VIRGINIA

Bleached Cotton Pulp
 Suitable for Highest Grade Paper

Fifty Tons Daily Capacity

SOLE SELLING AGENT:

Fred Enders & Company
 INCORPORATED
 52 Vanderbilt Avenue, New York City

Jeffrey Type "E" Swing
 Hammer Shredder

(BALL BEARING)

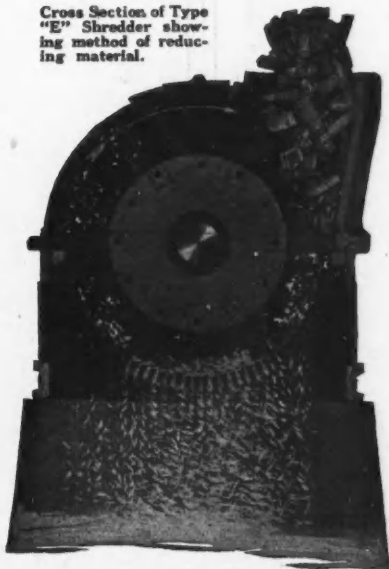
**For reducing Wood Chips, Bark
 and other Fibrous Materials**

**Insures High Percentage of Extraction—Uniform Prod-
 uct, Minimum of Oversize—Small Loss of
 Material in Fine Dust**

Ball Bearings Eliminate Bearing Troubles

Fully described in our new Shredder Catalog No. 259-E, which
 also contains valuable engineering information, plant layouts
 and other data of service to plant managers and superin-
 tendents.

Cross Section of Type
 "E" Shredder show-
 ing method of reduc-
 ing material.



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BRANCHES:

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Boston	Pittsburgh	Birmingham	Denver	Montreal
Philadelphia	Cleveland	Dallas	Detroit	Los Angeles
	Buffalo	Charleston, W. Va.		

APPLICATION OF COST WORK TO MANAGEMENT

(Continued from page 54)

making a careful study of the operation of our mills of the general character of this example, the American Writing Paper Company has come to the conclusion that it would not be conservative to assume the operation of the mill on a year in and year out average to an extent greater than 85 per cent normal capacity, or in other words, that the mill will be inoperative on the average for the causes enumerated above about 15 per cent of the time.

Inoperative Contingency

This factor is called "Inoperative Contingency." If we apply this Inoperative Contingency to the hypothetical case we are considering, what conclusions may be drawn that will affect the selling price to be asked for its product?

During the time the mill is inoperative the expense items of taxes, (other than Federal Income and Excess Profits Taxes), Insurance, Depreciation, etc., amounting to \$10,000.00 a month will go on unabated. The General Overhead Expense of Sales and General Administrative Expenses and Mortgage Bond Interest are absolutely independent of whether the mill operates or not. The profit of \$20,000.00 a month will not be earned during the period of inoperation but if the average profit is to be maintained this item must be treated as a potential loss, and earned during the time the mill does operate. There remains

Exhibit C**INOPERATIVE CONTINGENCY.**

Computation of the reserve necessary to absorb the expense occasioned by 15 per cent of "down time," and based upon one month's operation:	
Labor	\$25,000.00
Mill overhead	10,000.00
General overhead	9,500.00
Anticipated rate of profit (interest on investment)	20,000.00
Total	\$64,500.00
Cost of "down time," at anticipated rate of 15 per cent of normal operation, including loss of profit	9,675.00
Cost per hour of "down time," based on normal operation of 500 productive hours per month, and including anticipated profit	129.00
The same distributed to machines on the basis of deckle:	
No. 1 76 inch Deckle	59.06
No. 2 90 inch Deckle	69.94
Total 166 inch	129.00

one item on Exhibit C which has not been discussed, namely, labor. Under some circumstances in the event of inoperation incidental to the causes enumerated some portion of the labor item might be saved by sending the men home. Frequently, however, this is impractical. It results in the demoralization of the organization, and all protestations to the contrary notwithstanding, very few managers are in a position or are disposed to ruthlessly send workmen home when there is a more or less temporary shortage of work, particularly if the anticipated interruption is of short duration. The temptation to help the men out by tiding over with non-productive work is well nigh irresistible. An enlightened management considers it good policy whenever practical to keep the organization together. This costs money. We believe in being conservative, and our estimates are based upon the assumption that we will not be able to accomplish any saving in our direct labor during these periods. Including this item of labor, the cost of maintaining this mill idle is at the rate of \$64,500.00 per month: \$129.00 an hour on the basis of 500 operating hours per month normal!

Anticipating 15 per cent Inoperative Contingency, this mill would have to earn \$9,675.00 in addition to its profit of \$20,000.00 during each month of normal operation in order to provide adequate reserves against the cost of inoperation, if the average rate of return is to be maintained.

Unabsorbed Manufacturing Expense

The next item "Average Monthly Unabsorbed Manufacturing Expense," will be immediately recognized and easily under-

stood by those who have in use a budget system of cost finding. However, while this item is most readily determined in a mill operating under a budget cost system, it is a real contingency in most paper mills, certainly in mills of the character of this example.

Very few paper mills are perfectly balanced. Equipment is maintained to meet the demands of the trade which is not possible to operate at all times to normal capacity. Orders will be taken for paper with varying percentages of rag content, and while the rag room, bleach boilers and washers will be operated to capacity one month, the next month the orders run on the machine may be of such a character that only 75 per cent of the capacity of these departments will be required. In a machine dried mill the orders may be for machine finish paper one month, and the next month for paper calendered, cut, plated, trimmed and packed in ream packages. The demands for finishes vary to such an extent that equipment only adequate to meet the demands of the trade during one period may lie idle a large part of the time during another.

Certain expenses in these departments go on all the time whether operated or not. Taxes, insurance and depreciation charges must be met. Fire protection frequently demands that the space which they occupy must be kept warm to prevent sprinkler heads from freezing. Details of this kind could easily be multiplied. When there is no operation of the department obviously there is no product against which to charge these costs. No sales made will defray these expenses unless there is included in the selling price some factor calculated to meet this contingency. If the anticipated rate of profit on the business done is to be obtained, however, expenses of this character must be taken care of first. Otherwise the results obtained will be disappointing.

It would be very easy to let the discussion of this point extend itself into a full exposition of the principles behind budget costs, but time will not permit. The American Writing Paper Company operates under a strictly budget cost system. For the purpose of obtaining conservative figures for inventory valuations and preventing the possibility of anticipating profits through the valuation of its product at cost higher than normal, departmental rates used for costing purposes are kept, if anything, on the low side. Under these circumstances under absorbed manufacturing expenses amounting to \$5,000.00 per month in mills of this character will frequently be found.

This item must of course be determined for each papermill on the basis of the facts actually obtaining. Naturally it will vary greatly with the character of the mill, the particular class of trade to which it caters, the policy pursued in the accounting department governing the determination of departmental rates, and other factors. The point to be made here is merely that in estimating selling prices this factor, whatever it may amount to, cannot be overlooked. Investigation may be expected to show that it frequently amounts to more than might at first be anticipated.

To recapitulate the argument at this point, it appears that if an average net profit of \$20,000.00 a month is to be earned year in and year out, the selling price at which individual orders are taken must provide for earning in addition to this rate of profit, an Inoperative Contingency of \$9,675.00 per month, the under absorbed manufacturing expense of \$5,000.00 per month.

Individual Selling Prices

The next phase of the problem is the application of these figures to the determination of individual selling prices. The as-

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CLAY

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G. W.—K. L. M.

THERE is no need to go abroad for CLAY. Our enormous capacity can safely take care of your requirements. All through the war, paper mills were served to their entire satisfaction by our five plants, both as regards deliveries and **QUALITY.**

Our reserve stocks are the largest in America.

Our experience in clay washing is longer by many years than that of our nearest competitor.

Our clay is positively the lowest in percentage of grit and moisture of ANY clay, domestic or foreign. When you contract with us for shipments you can depend upon prompt deliveries whether the season is rainy or dry.

"AMERICAN MADE FOR AMERICAN TRADE"

is our slogan. It should also be **YOURS.**

Miner-Edgar Company

110 William St.,
New York

300 TONS DAILY

FROM MINE TO MILL

**American
MADE For
American Trade**

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sumption is made in this argument that the mill has in operation a cost system which will give with substantial accuracy the cost of manufacturing paper, and that the accounting department is in a position to supply such reports on operations as a whole, as are customary in industrial concerns.

Exhibit D

CALCULATION OF MACHINE HOUR ESTIMATING RATES

	Cost per Month	Cost per 100 D. I. H. Normal Operation		No. 1 Machine	No. 2 Machine
		Cost per 100 D. I. H. Normal Operation	Cost per Mach. Hour	Cost per Mach Hour	Cost per Mach Hour
General overhead	\$9,500.00	\$11.45	\$8.70	\$10.31	\$10.49
Inoperative contingency.....	9,675.00	11.66	8.86		
Under absorbed manufacturing expense	5,000.00	6.02	4.58	5.42	
Profit—Investment interest...	20,000.00	24.10	18.32	21.69	
Total.....	\$44,175.00	\$53.23	\$40.46	\$47.91	

Based upon a normal operation of 500 productive hours per month; 76 inches plus 90 inches, equal total deckle of 166 inches at normal operation of 500 productive hours per month, equal 83,000 productive Deckle-inch-hours per month, or 830 hundred Deckle-inch hours.

It will be observed on Exhibit D that in total \$44,175.00 per month must be earned over and above manufacturing cost in order to provide for Selling, General Administrative Expense, Mortgage Bond Interest, Inoperative Contingency, Underabsorbed Manufacturing Expense, and Investment Interest or Profit. It might occur to some that provision for this sum could be made by assuming a normal production of this mill of say, 1,000,000 pounds per month, and making a charge above manufacturing cost on all estimates of \$4.47 per 100 pounds. Provision for \$3,500 Packing and Shipping Expense, Cash Discounts to the amount of \$4,500.00 and the allowance of \$1,500.00 a month for returns, rejections and adjustments would require another \$9,500.00 a month, or 95c. a 100 pounds on the same basis—\$5.37 a hundred pounds above manufacturing cost to cover these items. The precise effect that such a course would have upon the selling price will subsequently be discussed in detail.

Others might maintain that the \$53,675.00 a month composed of the items just enumerated is 32.59 per cent of the normal months sales plus the reserves for inoperation and underabsorbed manufacturing expense which it is hoped to earn, and that selling prices should be calculated on a basis to provide this percentage of gross profit above manufacturing costs. The effect of such a procedure also will receive further consideration.

Some manufacturers are not impressed with the necessity for providing reserves such as is instanced by the Inoperative Contingency and Underabsorbed Manufacturing Expense previously discussed. If the usually unwarranted assumption that the normal production can be maintained year in and year out is made, and if the mill equipment is perfectly balanced with the demands of the trade so that no part of the equipment need ever stand idle, \$3.75 a 100 pounds above manufacturing cost would in the case under consideration meet the demands of \$20,000.00 a month profit. Or under the same assumption if the percentage method of figuring is preferred, a gross profit of 25 per cent of the selling price would suffice. Examples of each are subsequently discussed.

All of these methods, and modifications of them, are widely used throughout the trade, and all of them are fundamentally wrong in that they fail in practice to return the predetermined rate of profit when applied indiscriminately to a wide range of products.

Sold by Pound But Made by Yard

Paper is customarily sold by the pound or by the ream. It is in reality, however, manufactured by the yard. Any profit which accrues to a paper mill must be made from paper that necessarily goes over the paper machine. The paper machine is the neck of the bottle that determines production. A mill

may get behind in its finishing departments, and catch up by working overtime, or possibly by adding another calender or plater. If chronically short of stock another beater or washer may be installed, but short of a major development through the addition of another paper machine with all of its correlating equipment the capacity of the mill is definitely and finally limited by its machine capacity, and any and all profit made must be made on the paper machine capacity as it exists.

Now if this fact is recognized as fundamental, the immediate conclusion to be drawn is that the sale of an item of paper should not be regarded as the sale of so many reams or pounds of paper, but as the sale of so much machine capacity—the sale of a certain number of paper machine hours. The price at which paper is sold should be determined for each item on the basis of renting the mill to the customer for such length of time as may be required to produce his order.

The practical application of this principle to the example in question is this. Here is a paper mill with two machines, No. 1 machine with 76 in. deckle, and No. 2 machine with 90 in. of deckle, or a combined deckle of 166 in. Experience has shown that the normal capacity of the mill is about 500 productive hours operation per month. This is 83,000 deckle inch hours. Or to use a more convenient figure, the normal operating capacity of this mill is 830 deckle-inch-hours per month. Calculated on this basis, Exhibit D shows that the total cost of the four items enumerated is \$53.23 per 100 deckle-inch-hours normal operation. This cost is also itemized, and shown distributed by items to the two paper machines on the basis of their respective deckle, giving for each paper machine an itemized machine hour rate.

It would seem obvious that if every order taken is priced so as to earn, above its manufacturing cost, \$40.46 for each hours time required to run it over No. 1 machine, or \$47.91 on No. 2 machine, as the case may be, that full provision would be made for the earning of all overhead expenses, contingencies, and the predetermined rate of profit. This basis of estimating makes full provision for all variations in production occasioned by folio weight, deckle, watermark, or any other factor affecting production. To reduce it to an absurdity, if a customer wished a sheet of paper 10 in. wide and No. 7 folio run on the 90 in. machine, a price could be figured which would return to the manufacturer precisely the same rate of profit which he would obtain from the best fill of the most highly productive folio weight which could be put on the machine.

The full force and significance of this argument does not appear, however, until attention is given to the application of this method of estimating to some specific cases. For the purpose of illustration an example has been prepared, and is shown on Exhibits E and F.

Down to the point of total Manufacturing Cost as shown in Exhibit F there is nothing novel and probably just about this method would be pursued in the figuring of a selling price in any paper mill office. It might be well in passing to call attention to the fact that the material costs are based upon current market prices. Some manufacturers are reported to figure their estimates upon the average cost of materials which are on hand or on order. This would seem to be an entirely unnecessary contribution to the customer, as the raw material will have to be replaced by new purchases at the market price, and any speculative profit which may have accrued since its purchase would seem properly to belong to the manufacturer who has taken the risk of carrying it in inventory during the period.

Furthermore, such speculative profits in raw materials cannot be regarded as secure until the return of a period of normal

(Continued on page 60)



¶ In a big way we are building an intensive national reputation for Northern paper products—towels and toilet tissues. On the high confidence which we have in the superiority of the fine product which our mills are now delivering, we are building in a big way.

¶ The paper towel and toilet tissue field is capable of immense development. No other paper line, perhaps, has its possibilities. Dealers everywhere have been quick to recognize the good work we are doing in this field. The Northern Paper Mills at Green Bay, Wis., sells its output only through regular wholesale and retail trade.



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prices, and from them ample reserves against the depreciation of the value of inventories should be set up. It will be observed that in the specimen balance sheet exhibited there appeared an item of a \$25,000.00 reserve.

Packing and Shipping Expense

From the point of total manufacturing cost on, however, some comment on each item may be desirable. It will be observed

Exhibit E

SELLING PRICE ESTIMATE.

Furnish	Percentage	Current Market Price	Cost per 100 lbs.
3 rds and blue half-stuff.....	25	\$9.00	\$2.25
No. 1 Bleached sulphite.....	65	9.00	5.85
Paper scrap.....	10	4.75	.48
Total fibre cost.....			\$8.58
Cost per 100 lbs. fibre of alum, rosin and starch.....			.22
Gross furnished cost.....			\$8.80
Invisible waste, 5 per cent.....			.46
Net cost of furnish.....			\$9.26

both in the estimate and in the monthly operating statement that Packing and Shipping Expense is carried below the Gross Profit line. There is rather a nice point in accounting involved here, and one upon which some difference of opinion exists in the paper industry. The question need not be developed here as

of paper that remains after all finishing operations have been completed, and which can be billed to the customer. Therefore, the machine production rate must be corrected by deducting the amount of finishing broke which may be expected from the particular item of paper which it is proposed to price. In the case of Production Orders Nos. 4, 5, and 6, an overall finishing waste of 8 per cent has been anticipated, and the machine production used in applying the estimated costs above the manufacturing cost, reserves and profit to the determination of per pound prices, correspondingly decreased.

Six production orders, three of them from the same beater order, have been calculated, and based upon the corrected machine production, and the machine hour rates calculated in Exhibit D, the cost per pound of General Overhead, Inoperative Contingency, Underabsorbed Manufacturing Expense, and Investment Interest or Profit has been figured on a per pound basis.

Bad Debts, Adjustments and Allowances

There is also included here, at a flat rate of 15 cents per pound a reserve for Bad Debts, Adjustments and Allowances. Such things do happen, even in the best managed companies, and it is a great deal better to anticipate them than to explain away a disappointment in the profit finally earned by showing what the expense of these items has been, and tell what the profits might

Exhibit F

SELLING PRICE ESTIMATE, NO. 2 MACHINE

	Estimate No. 1	Estimate No. 2	Estimate No. 3	Estimate No. 4	Estimate No. 5	Estimate No. 6
Cost of net furnish.....	9.26	9.26	9.26	8.00	12.00	16.00
Machine prod. in lbs. per machine hour.....	1,080	810	1,350	1,080	1,080	1,080
Paper machine hour conversion rate.....	18.00	18.00	18.00	18.00	18.00	18.00
Cost per pound of machine conversion.....	1.67	2.22	1.33	1.67	1.67	1.67
Cost of rough paper.....	10.93	11.48	10.59	9.67	13.67	17.67
Finishing Costs—						
Super calendering.....				800	800	800
Product per hour.....				800	800	800
Machine hour rate.....				3.00	3.00	3.00
Cost per pound.....				.38	.38	.38
Rewinding—				750	750	750
Product per hour.....				2.00	2.00	2.00
Machine hour rate.....				.27	.27	.27
Cost per pound.....				.32	.32	.32
Finishing waste.....				8%	8%	8%
Total finishing.....	.32	.32	.32	1.81	2.16	2.51
Total manufacturing cost.....	11.25	11.80	10.91	11.48	15.83	20.18
Packing and shipping expenses.....	.35	.35	.35	.35	.35	.35
Pounds finished paper produced:						
Per paper machine hour.....	1,080	810	1,350	994	994	994
Per D. I. H. normal fill.....	12	9	15	12	12	12
General overhead.....	10.31	.95	1.27	.76	1.04	1.04
Inoperative contingency.....	10.49	.97	1.30	.78	1.06	1.06
Unabsorbed manufacturing expenses.....	5.42	.50	.67	.40	.55	.55
Profit—Investment interest.....	21.69	2.01	2.68	1.60	2.18	2.18
Reserve for bad debts adjustment and allowances.....	.15	.15	.15	.15	.15	.15
Estimated selling price:						
Net f. o. b. mill.....	16.18	18.22	14.95	16.81	21.61	25.51
3% cash discount.....	.51	.56	.45	.51	.65	.77
Total.....	16.69	18.78	15.41	17.33	21.81	26.30
(a) Estimate at 25% gross profit.....	15.00	15.73	14.54	15.31	21.11	26.91
(b) Estimate at 32.59% gross profit.....	16.69	17.50	16.18	17.03	23.48	29.94
(c) Estimate at 33% gross profit per lb.....	15.00	15.55	14.66	15.23	19.58	23.93
(d) Estimate at 5.37c. gross profit per lb.....	16.63	17.18	16.29	16.86	21.21	25.56

it is not of material consequence to the main points at issue, except to call attention to the fact that Packing and Shipping is an item of expense that must be included somewhere. The American Writing Paper Company believes it is better practice to charge it against Gross Profit than to include it in Manufacturing Cost.

The total percentage of finishing waste must receive consideration in the application of these overhead machine hour rates. After all, it is not the production of paper over the machine that tells the story when it comes to making a profit, it is the quantity

have been "if" no adjustments or special allowances to customers had been found necessary, or if everybody had paid their bills one hundred cents on the dollar.

Our customers expect, and we carry for their benefit, large inventories of our products, in order that we may render the best possible service. The manufacturer must be compensated for this service, and the loss occasioned by the deterioration of paper stocked must be absorbed.

Including this last item, a total estimated selling price f. o. b.

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Manufacturers of

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

Our Boards and Papers lie flat, hang straight, and register because they are made right. Orders for regular or special sizes are given prompt attention. Quality guaranteed.

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A Shepard Transfer Crane in Your Mill—

means hoisting and carrying facilities at every point.

The crane is run to a point where it connects with monorail track. The hoist can be run from the crane track to the monorail, which is installed at intervals, making it an easy matter to pick a load and deposit it at any point on a floor.

One man, the operator riding in the hoist cages, controls the entire operation of "picking up," conveying and "putting down."

Shepard engineers will gladly assist you in laying out an efficient system for your plant, large or small.

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Member Electric Hoist Manufacturers' Assn.
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the mill is obtained. To this must be added the cash discount allowed, if any, and if the paper is sold on a delivered or freight allowed price, the cost of delivery must be included also. With all of these items taken care of, and with the estimate based upon a manufacturing cost in which the raw materials are priced at market, a paper manufacturer can estimate the selling prices which he must obtain for his product in order to protect any predetermined rate of profit under such operating conditions as his cost system may have disclosed to him to exist in his mill, and if he is successful in disposing of his product upon prices so determined he can rest assured that his predetermined rate of profit will be actually forthcoming, not only in months of favorable operating conditions, but year in and year out.

Right here may be as good a place as any to remark that this proposed basis of estimating assumes an equal rate of finished paper inventory turnover on all items manufactured, an assumption which probably is never strictly warranted, and which may under some circumstances be very wide from the mark indeed. There is no gainsaying the fact that slow moving items of inventory tie up working capital, involve extra risk of shrinkage in value through physical deterioration and downward market movements, require extra handling in storage and more storage room, all factors entitling the manufacturer to a higher profit for handling them. These facts are mentioned so they will not escape your attention, and should not be overlooked in the practical application of this estimating method to the establishing of selling prices. However, no further detailed reference will be made to them, as in the more or less rigid treatment which it is proposed to give this subject of estimating the introduction of these items would greatly complicate our hypothetical company's affairs, and probably obscure somewhat the main issues.

Selling Price Estimate

It may be interesting to compare the selling price estimates calculated by this method with those which would have been obtained by other methods commonly in use and previously referred to.

Six estimates are submitted, and they fall in two groups. Estimates Nos. 1, 2, and 3, are all based upon the same cost of furnish, but due to differences in the mill and in the folio weight the machine production in pounds per hour varies considerably. Nos. 1, 4, 5, and 6, on the other hand, are all based upon the same machine production rate in pounds per hour, which incidentally is the normal average rate for the operation of the mill as a whole, but illustrates the effect of widely different furnish costs.

With a view to furnishing a base line with which to compare the other estimates, No. 1, has purposely been made to conform to the average of the mill as a whole as far as production and total manufacturing cost are concerned. It will be observed that the Total Manufacturing Cost of \$11.25 is precisely the same as the average manufacturing cost as disclosed by the hypothetical Monthly Operating Statement. (See Exhibit B.) The same holds true of the production rate of 12 pounds per deckle-inch-hour.

It is interesting to observe that under these conditions it is immaterial which method of estimating is used. If consideration is given to the necessity for setting up reserves against the contingencies of inoperation and underabsorbed manufacturing expense, a selling price of approximately \$16.69 is obtained, whether the method advocated in this discussion, or the percentage, or per pound method is used. If the reserves are disregarded, the estimate checks out to the selling price of \$15.00, the average as disclosed by the hypothetical monthly operating statement.

It is more interesting to observe, however, that this is the only instance in which this is true. As soon as an estimate is prepared on the basis of a production or a manufacturing cost varying from the average, the method used becomes a matter of vital consequence.

In this connection your attention is invited to the following schedule prepared to show what the profits of this mill would be if it were to run entirely on paper estimated under Estimate No. 2. The selling price of \$18.78 a hundred pounds would produce a gross profit of \$52,140.60. Deducting from this the Packing and Shipping Expense of 35 cents a hundred pounds, the General Overhead Expense of \$9,500.00 a month and a 3 per cent cash discount on the sales amounting to \$4,208.60 we would have remaining a net profit of \$35,817.50. This, however, is predicated upon the operation of the mill at its normal rate and if the mill had operated at a normal rate and allowance was made for the various reserves, bad debts, allowances and adjustments, inoperative contingency, and underabsorbed manufacturing expense amounting in all to \$15,795.50 a month, there would remain a net profit of just \$22.00 over and above the \$20,000.00 mark which has been set. Furthermore, our argument has conclusively shown that this reserve of \$15,795.50 in the net profit in a month of normal operation would be entirely absorbed in subsequent months if the inoperative contingency of the mill on an average were 15 per cent.

Estimate No. 2

Estimate No. 2, figured on a 25 per cent gross profit, would give a selling price of \$15.73, leaving a gross profit of \$3.93 a hundred pounds above the manufacturing cost of \$11.80. This production order, however, calls for a production of only 9 pounds per deckle inch hour which is only 75 per cent of the normal productive rate and the mill would during a month of operation on such an item of paper produce only 747,000 pounds which at a gross profit of \$3.93 a hundred pounds would produce only \$29,357.10. After meeting the packing and shipping expense, general overhead, and cash discount from this gross profit there would remain a net profit of only \$13,717.51. It will be observed that this is some \$6,300.00 short of providing the required net profit even before meeting the reserves for inoperation, underabsorbed manufacturing expense, etc., amounting to \$15,795.50. Under the assumption of such contingencies as this argument is based upon the actual results of operating this mill and selling its product for \$15.73 on this item of paper would be a net loss each month of \$2,077.99.

The calculation of the selling price on this item of paper on a basis of 32.59 per cent gross profit produces somewhat more satisfactory results but still falls far short of producing the necessary net profits. The net profits on this basis would be \$26,542.75 per month if no contingencies were provided for but after providing for the contingencies there remains only \$10,747.25 net profit or just about one-half of the predetermined rate.

A manufacturer producing paper of the description of Estimate No. 2, and figuring on securing 3¾ cents per pound gross profit, would operate his mill for a gross profit of \$28,012.50 a month, leaving a net profit before contingencies of \$12,113.24, and after providing for contingencies a net loss of \$3,382.26.

The higher per pound gross profit rate of \$5.37 would produce a net profit of \$24,224.06 before contingencies, but after providing for contingencies this net profit would have shrunk to \$8,428.56.

In conclusion we may say with reference to Estimate No. 2, which covers the production of an item of paper at less than

(Continued on page 64)

The Bergen Shopping Bag

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The Bergen Stachel Bottom Millinery Bag

Two sizes, 12x14 and 14x15½
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Our organization are experienced paper men and are in a position to dispose of large tonnage at short notice.

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Caldwell Paper Company

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New York

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normal rate, that any basis of estimating which is founded upon the provision for profit at a rate of so much per pound or such and such a per cent of manufacturing cost will prove entirely inadequate and will result in the sale of the mills product at a price which will produce less than the predetermined rate of profit.

Estimate No. 3

In Estimate No. 3 we have under consideration an item of paper which you will observe runs at 25 per cent greater production than the normal rate. The calculation of the selling price on the proposed basis gives a result of \$15.41 per hundred pounds and this selling price applied to the capacity of the mill at its normal operating rate would produce a net profit of \$19,869.36, or within a little over \$100 of the predetermined rate.

The 25 per cent gross profit method produces a net profit of only \$9,362.81, while if provision for a gross profit at the rate of 32.59 per cent is made the net profit goes way above the predetermined rate and amounts to \$29,168.20, that is, if the manufacturer were successful in disposing of his product at a price of \$16.18 per one hundred pounds in the face of competition.

Estimate No. 3, calculated upon a $3\frac{3}{4}$ cents per pound gross profit rate, would produce a net profit of only \$10,811.99. While again the calculation of this selling price on the basis of \$5.37 per one hundred pounds gross profit or a selling price of \$16.29 will produce a net profit of over \$30,000.00 per month.

The consideration of Estimates 1, 2, and 3 have shown what the general tendency is in the estimating of selling prices by the per pound or per cent method when the factor of a varying production rate per machine hour is introduced. We will now pass in Estimates Nos. 4, 5, and 6 to the consideration of the effect which a variation in the cost of furnish has upon estimating.

Estimate No. 4

On Estimate No. 4, calculated according to our proposed method, the selling price would be \$17.33, which would produce a net profit per month, after providing for the contingencies, of \$20,084.17.

Figured on a basis of providing a gross profit of 25 per cent, however, the selling price on this item would figure only \$15.31, which at the normal rate of profit would provide a net profit of \$18,179.28 before contingencies, but after the contingencies had been provided for the remaining net profit would be only \$2,129.80.

The higher rate of gross profit at 32.59 per cent, which is supposed to include contingencies, and applied to Estimate No. 4, gives a selling price of \$17.03. That this percentage of gross profit is not adequate, however, is borne out by the fact that at this selling price on this particular item of paper the mill would only produce a net profit of \$17,417.68 a month, due primarily in this case to the fact that provision under the per cent gross profit rate had not been made for the fact that the normal machine operation for this mill on this item of paper was further curtailed by the fact that 8 per cent finishing broke was made.

The selling price on Estimate No. 4, figured at a gross profit of $3\frac{3}{4}$ cents per pound, is \$15.23 a hundred pounds. This would produce a gross profit for the month of \$34,362.00, but after the packing and shipping expense, general overhead and cash discount had been taken care of the gross profit would have shrunk to \$17,468.21, a figure which in itself is inadequate to meet the predetermined rate of net profit, and after provision had been made for the contingencies the net profit would have shrunk to \$1,418.73, less than 10 per cent of the predetermined rate.

Figured on a gross profit of \$5.37 a hundred pounds the result is better, but still inadequate. The net profit earned amounting

to only \$15,960.67, or about 80 per cent of the predetermined rate.

Estimate No. 5

In Estimate No. 6 we consider a case of normal production, but on paper of much higher than average grade. This paper, which has a manufacturing cost of \$20.18 a hundred pounds under our proposed method of estimating, would sell for \$26.30, at which figure it would produce a net profit for the month, after taking care of contingencies, of \$20,092.42.

Figured on a 25 per cent gross profit, however, the manufacturer would ask \$26.91 for this grade of paper and at the normal rate of production his net profit for the month would be \$25,514.29.

If, however, he were giving consideration for the provision for contingencies in his percentage gross profit rate, and established his selling price on the basis of the 32.59 per cent gross profit, his price would be \$29.94 a hundred pounds, and run on this item of paper at this price the mill would actually produce in a month \$52,445.84.

The results obtained by the application of per pound profit rate to Estimate No. 6 are not so favorable. The discrepancy between them is startling and illuminating. At $3\frac{3}{4}$ cents per pound gross profit the mill would actually make a net loss of \$972.86, while at the higher rate of \$5.37 gross profit per 100 pounds the rate, which is presumed to take care of the contingencies, the net profit after providing for the contingencies would be only \$13,515.08.

Confidence in Values

No end of time could be spent commenting upon these variations. If the only question involved in this subject were the profits of each particular company in the paper industry it would not be a matter of such vital moment, and might well be left to the disposition of each individual company. But as a matter of fact the issue is a great deal broader. The stability of the industry is dependent upon confidence in values, confidence not only on the part of the manufacturers of paper, but of the paper merchants and the consuming public. What is the effect upon this confidence of the quotation on a single item of prices ranging from 24 cents to 30 cents per pound? This is instanced in Estimate No. 6. Moreover, there is no consistency in the prices obtained. A comparison of the various bases shows that one method of estimating will give as compared with another a low price on one grade of paper and a high price on another, and both estimates based upon the same fundamental facts as far as material costs and mill operations are concerned. Is it to be wondered, under such conditions, that as soon as the paper market comes under pressure a great uncertainty as to the real values develops?

This state of affairs was brought very forcibly to the attention of the American Writing Paper Company by the fact that in the operation of 54 paper machines in 26 divisions, we have conditions paralleling those in the industry at large. There is competition between the divisions in the same sense that we are continually faced with the necessity for assigning business to one mill or another, and naturally a desire to put each order on the machine that can run it to the best advantage.

A Matter of Vital Consequence

In presenting this method of estimating to the Cost Association, there has been no intention on our part of assuming a dogmatic attitude, although the brevity demanded under the circumstances may have made it appear so. It is urged, however, that the question of the correct method of estimating selling prices, this "second degree" cost work, is a matter of vital consequence to the industry and a subject to which the Cost Association would do well to address itself with all seriousness.

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They are made to fit the working conditions and guaranteed to get the highest efficiency.

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High Grade Brass and Bronze Screen Plates and Dandy Rolls

**OLD PLATES
CLOSED AND RECUT**  **DANDY ROLLS AND
WATER MARKING**

**Secure Our
Prices**   **We Can
Please You**

New York Trade Jottings

Capt. W. H. Draper, who is interested in the pulpwood industry, with headquarters in the city of Quebec, was among the trade visitors in New York last week.

* * *

The Delio Paper Stock Company, Inc., Brooklyn, has filed notice with the Secretary of State at Albany, N. Y., of an increase in its capital stock from \$10,000 to \$50,000.

* * *

The Credit Bureau members of the National Association of Waste Material Dealers held a dinner and conference at the Hotel Astor, Wednesday evening, September 29. The occasion was an interesting and profitable one for all present.

* * *

Sir Frederick W. Bowater, of W. V. Bowater & Sons, Ltd., London, and a director of the Hudson Packing and Paper Company, is in New York with his wife, Lady Bowater, on a visit for some four or five weeks, staying at the Ritz Carlton Hotel.

* * *

Members of the Foreign Trade Division of the National Association of Waste Material Dealers met at 11.30 o'clock Wednesday morning at the Hotel Astor. O. K. Davis, who is secretary of the National Foreign Trade Council and who is an expert on foreign trade, delivered an interesting address at the meeting.

* * *

The office sales manager of the Howard Paper Company, Urbana, Ohio, was in New York last week conferring with the Eastern sales representative, to obtain a clearer understanding of the needs of the company's customers. Every effort is being made to give the firm's customers the best service possible during these times of great demand for paper.

* * *

The Washington Paper Company, 55-57 Great Jones street, has been appointed sole selling agent in New York and adjacent towns for the sale of Dextre Products, which are made at Buffalo, N. Y. The Dextre Products Company, Inc. manufactures "Prepared Dry Gums," which increases production and decreases cost, so long sought for in the paper box and book binding industries.

* * *

The Eureka Mills Paper Company has opened an office at 36 East 23rd Street to carry on business of general paper jobbers, mill representatives, paper exporter and converter. The concern will handle news print, book, ledger, bond, onion skins, covers, krafts, manilas, fibres, tissues, boards, textile and silk wraps crepe napkin, paper towels toilet, automobile, tire wrapping, pleating tissue, adding machine, barbers head rest and all specialties.

* * *

The Gotham Card and Paper Company, which has been located at 122 Norfolk street for the last five years has just completed a reorganization. Barnet A. Smith remains as president, and Morris Liebman has been elected treasurer, both of the above officers having acquired control of the company. The firm has enjoyed an unusually good business year and is prepared for larger trade in the future.

* * *

Louis I. Elson, president and general manager of the Washington Paper Company, 55-57 Great Jones street, has just returned from a trip through the New England states and to Buffalo. He reports that after interviewing the representatives of about twenty mills he found that they are all running behind in the completion of their orders and are encountering a delay in the receipt of raw stock. It is stated that this shortage of raw material will continue through to next spring.

The Sandoz Chemical Works, Inc., owing to increasing business have found it necessary to enlarge their offices, warehouse and mills facilities and have made arrangements to unite the selling force of the dyestuff business of F. Bredt & Co., 238 Water Street, New York, and 12 South Front Street, Philadelphia, with their own. The company will carry in stock a complete stock of the Sandoz Chemical Works of Basle, Switzerland, and the Cincinnati Chemical Works, Inc., of Norwood and St. Bernard, Ohio. F. Bredt & Co., will continue under the old firm of F. Bredt & Co., 238-240 Water Street, New York city, as manufacturers, importers and commission merchants in the entire line of products as heretofore, with the exception of aniline colors, which department has been taken over by the Sandoz Chemical Works, Inc.

Beaver Brook Paper Mills to Expand

[FROM OUR REGULAR CORRESPONDENT.]

DANBURY, Conn., September 27, 1920.—The Beaver Brook Paper Mills, of which James E. Gallagher, of this city, is the head, is preparing to erect a large addition to its plant and install additional papermaking machinery and equipment, for the purpose of increasing the capacity of the mills to about five times the present maximum output.

Mr. Gallagher said that plans for the improvements are now being drawn and it is hoped to begin construction operations within a few weeks, in order to make it possible to take immediate advantage of opportunities for greatly increasing the company's business. At the present time the company has sufficient orders on its books to keep the present mill busy for six months.

An interesting feature of the proposed extension of the business is a plan to finance the improvements by means of local capital, either bonds or preferred stock to be issued. The details of this plan have not yet been announced, but the financing is to be handled through the firm of Melhuish & Co., of 40 Wall street, New York.

The Beaver Brook Paper Mills is one of the oldest manufacturing concerns in Danbury, having been established about sixty years ago by the McArthur Brothers, who conducted it successfully many years. The business changed hands a few years ago, and Mr. Gallagher acquired it about three years ago, since which time he has conducted it with much success. R. B. Livermore, a paper manufacturer of twenty-five years' experience, is associated with him as superintendent of the factory, and is to continue in that capacity.

The company manufactures wrapping paper, colored specialties, hardware paper, textile papers and tube papers. Its present maximum output is from five to six tons a day and it is proposed to increase this to not less than twenty-five tons a day. Twenty persons are employed in the mills at present and when the enlargements are completed the number of employes will be increased to about forty.

Linen Rags for Export from Argentina

Owing to the unsatisfactory prices now prevailing in the local market for linen rags and cutting, according to Trade Commissioner P. S. Smith, Argentine manufacturers of cuffs and collars are desirous of making connections with foreign buyers of this class of goods. Since the linen is imported and of good quality, the larger remnants may be used for making facings for men's wear and the odds and ends for making paper. In July, 1920, the large strips were selling for 80 centavos per kilo (15.4 cents per pound at par value of the peso), while the price of the smaller rags was 40 centavos per kilo (7.7 cents per pound), baled and ready for transportation to the docks in Buenos Aires. Approximately 12 to 14 metric tons can be baled monthly.



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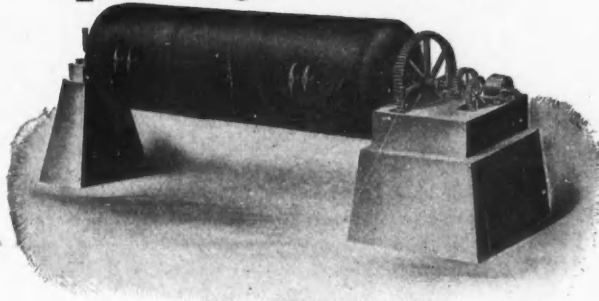



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Obituary

Franklin Weston

DALTON, Mass., September 27, 1920.—Franklin Weston, age 54, Chairman of the Board of Directors of the Byron Weston Company, died at his home in Pittsfield, Mass., Friday, September 24.

Mr. Weston was born in Dalton, August 13, 1866, the son of the late Lieutenant Governor and Mrs. Byron Weston. He was educated at Graylock Institute in South Williamstown, Mass., and at Phillips Academy, Andover, Mass. From there he entered his father's mill in the summer of 1887, and worked from the bottom up. Having acquired a practical knowledge of paper making, he entered the business which his father had established in 1863. In 1892 the business was incorporated and Franklin Weston was then elected treasurer. Upon the death of his father, in 1898, he was chosen president, and held that office until February 7 of this year, when, at the annual meeting, he was elected chairman of the Board of Directors; Philip Weston being elected president at that time, and Donald Weston treasurer.

Mr. Weston was married to Miss Edith Clement Brewer, daughter of Mrs. and the late Edward S. Brewer, in Christ Church at Springfield, Mass., June 14, 1893.

Besides his widow, he is survived by three daughters—Mrs. Wheaton Byers, of Lexington, Mass.; Miss Elizabeth A and Miss Sarah Edith Weston, of Pittsfield, Mass., and one son, Byron Weston, of Chicago. He also leaves two sisters, Mrs. Hale Holden, of Chicago, and Mrs. John McWilliams, Jr., of Pasadena, Cal., and two brothers, Philip and Donald, of Pittsfield, Mass.

The funeral was held from the family home in Pittsfield on September 27, burial being in the family plot in Dalton, Mass.

Alden L. Delesdernier

[FROM OUR REGULAR CORRESPONDENT.]

BOSTON, Mass., September 25, 1920.—The death of Alden L. Delesdernier occurred at his home here on Sunday last and was a shock to his numerous friends throughout the paper industry of New England and with which he had been identified for nearly forty years. "Del" as he was known to everyone was for nearly twenty-five years New England manager for the PAPER TRADE JOURNAL and by his conscientious effort and loyalty to his friends, justly earned the confidence of the entire trade. "Del" was a friend in its truest meaning and never failed to fulfill any promise or request made of him. In 1908 he severed his connection with the PAPER TRADE JOURNAL at which time he took up the duties of representing the *Paper Mill* in New England.

Mr. Delesdernier is survived by his widow and one son. The funeral took place at his late home 42 Bloomfield Street, Dorchester, Mass., and was largely attended by members of the paper trade, every paper house being represented at the services.

Alvah Bushnell

PHILADELPHIA, September 28, 1920.—Alvah Bushnell, president of the Alvah Bushnell Company, 925 Filbert street, and one of the oldest and best known manufacturing stationers in this country, died on Monday in Philadelphia. He was 83 years old. He was born in Lakeville, Conn. In his earlier years he went to New York State, where he engaged in horticulture. In 1876 he moved to Philadelphia. He was one of the deans of the National Association of Stationers and Manufacturers.

Albert Chamberlain

[FROM OUR REGULAR CORRESPONDENT.]

EASTHAMPTON, Mass., September 27, 1920.—Albert Chamberlain, whose death occurred recently in Douglas, Wyo., was a former

resident of Easthampton. Many years ago he was associated in the paper manufacturing business at Loudville, a section of Easthampton, the firm name being Watson & Chamberlain. He was a native of Dalton, Mass. After leaving Easthampton he established a ranch in Wyoming. He was a 32d degree Mason. He leaves a widow and a son Henry.

H. C. Courtney Leaves Howard Smith Mills

BEAUHARNOIS, Que., September 27, 1920.—H. C. Courtney, director and superintendent of the Howard Smith Paper Mills Limited since its inception eight years ago, has severed his connection with the company, and will now devote his whole time to the installation of the Barber Dry Loft, of which he is part owner.

The occasion of his departure from Beauharnois was marked by a touching tribute of friendship and appreciation of the three hundred employees who gathered in the finishing room and presented him with a beautiful walking stick and a set of pipes, and to his wife, Mrs. Courtney, a solid gold handled silk umbrella.

Rev. Canon Nepveu, Pastor of Beauharnois, who was the guest of the employees on the occasion, paid a glowing tribute to the worth of Mr. Courtney and said that his departure would be a serious loss to the community: H. S. Furminger, who is Mr. Courtney's successor, made a very graceful presentation speech, and in the course of his remarks, expressed his appreciation of the cordiality and the good will shown by Mr. Courtney, to make his new duties as pleasant as possible. Mr. Courtney was very much affected, and in a feeling manner thanked the employees for the loyalty and co-operation which they gave to Howard Smith and himself in developing the present splendid position of the company, stating that President Smith arose from the ranks through his own sterling worth, hard work, and perseverance, and that so long as Mr. Smith was president of the company, the employees could rely on him for a square deal. As for himself he regretted to leave them, but owing to climatic conditions and the health of his family he was forced to make a change, and he urged that the same loyalty and co-operation which he enjoyed be bountifully bestowed upon Mr. Furminger.

Resolution on Standardization

The following is the resolution on standardization which the U. T. A. has just passed at its annual meeting in St. Louis:

Whereas, The paper situation throughout the country is proving a serious menace to the printing industry, and the printing equipment is increasing more rapidly than the paper manufacturing equipment, and

Whereas, The printing equipment is constantly increasing its production percentage while the paper manufacturing equipment has already reached its maximum by operation both night and day, and

Whereas, The existing situation causes an abnormal and unjustifiable competition for the paper production between the publishers, commercial printers and paper merchants, with the naturally resulting greatly increased prices, and

Whereas, The advancing cost of paper, labor and overhead may force printing prices to a point where volume may be necessarily curtailed because of greatly increased prices,

Be it therefore Resolved, That national organizations of paper merchants, paper manufacturers and printing machinery manufacturers are requested to severally appoint committees to join with a special committee representing the United Typothetae of America, the appointment of which by the incoming administration is hereby recommended and authorized, in an effort to analyze the needs, reduce the number of sizes, weights, colors and grades of paper, standardize machinery sizes, investigate methods of increasing paper production and determine a reduction to the minimum of the number of watermarks in commercial paper.

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Save One-Half the Paper



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Fits any roll.
 One sheet at a time.
 Roll locked on.
 Strong, durable, nickel plated, for towels and toilet paper.

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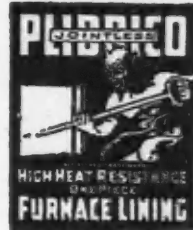
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who have sought our opinions and are among our valued customers today.

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 We are at your service at any time, anywhere.

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U. S. WILL BE BEST MARKET FOR CANADIAN NEWS PRINT

George F. Steele, Gen'l Mgr. of the Canadian Export Co., Returning From Abroad Is Not Optimistic Regarding the Prospects of the English Market—Both He and Mr. Bothell Were Greatly Impressed With the Wonderful Mills in the Scandanavian Countries—Finland Now Independent of Russia Impressed Mr. Steele as Offering Best Possibilities for Pulp and Paper.

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., September 27, 1920.—Geo. F. Steele, General Manager of the Canadian Export Paper Company of Montreal, is not very optimistic regarding the prospects of the English market for Canadian news print. He has just returned from a lengthy trip to Great Britain and Scandinavia, and as a result of his investigations there, he says that he is convinced that the United States will continue to be by far the largest customer for Canadian news print and that the next best markets will be South America, Australia, South Africa, and New Zealand, respectively. He continued:

"There is ample opportunity for us to do business in England, but I doubt whether it would be to Canada's advantage to do very much there in the future. Norway, Sweden, and Finland supply the bulk of England's surplus news print requirements, while some paper comes from Holland and some from Germany and some will come from Belgium. Business has started to come from Germany already. A very limited business is being done and will be done with Canada. A contract will shortly be closed by which we will supply the London *Express* with 1,000 long tons per month of news print to be supplied by the new machine of Price Brothers. This has been made with Lord Beaverbrook, largely on account of his personal connections with Price Brothers Company. This will mean about 12,000 tons a year or nearly the whole capacity of the new machine.

Geographical Conditions

"The situation in so far as the European markets for Canadian news print is concerned revolves itself mainly into geographical conditions. The other people, that is the Scandinavian countries, as well as Germany, Belgium, Holland, are closer to England and France. They have lower freight rates and at the present time at least exchange works in their favor. This matter of exchange is a very difficult one to figure out, but as between Norway and Sweden and England the position is just about the same as in normal times, the currency of both countries have depreciated about the same, which gives Sweden and Norway an advantage in England as against Canada. The currency of Finland has depreciated considerably more than that of Norway and Sweden through its connection with Russia, of course, and the mark has depreciated from about 20 cents to about 3 cents. Nor have labor prices in the Scandinavian countries advanced sufficiently as compared with Canada to make up for the difference in exchange, although labor has gone up more relatively than in Canada and under normal conditions we would be on a better competitive basis with the Scandinavian countries than before the war.

"The point that impressed itself upon me in regard to the policy we should adopt for an export field is simply that if we forced Scandinavian countries out of a portion of their markets in Europe, they would seek markets elsewhere in territories which we now occupy and which it would be to our advantage to hold. What object would there be in our sending paper over to England to find the Fins and the Swedes selling news print in New York.

"There is another point in connection with the English situation, and that is that the mills are endeavoring to increase largely their output of news print so as to meet as far as possible their own demands. It is a question of raw materials almost entirely. They are getting pulp now from Chicoutimi; they have bought the Clark City plant; they bring in pulp from Newfoundland (in one year having brought in 45,000 tons of news print). Indeed there are ample sources of supply of pulp and it is largely a matter of increasing their news print capacity.

Advantageous Freight Rates

"There was one point that impressed me in regard to the situation so far as the Swedes are concerned and that was that the freight rates are greatly to their advantage. The situation there is much the same as in Germany before the war, for the Government has subsidized steamship lines, and the harbors there show long lines of vessels going out for Siam, Japan, Australia and every country in the world. Another point that impressed me, too, was that whereas Germany before the war, through the port of Hamburg, operated in the way of selling agent for a large portion of the output of the Scandinavian countries, which went under the name of German pulp and paper, Sweden itself and the others are now taking care of this and will look after their own sales end in future.

"Mr. Bothwell and I were greatly impressed with the wonderful mills in those countries. But most of all we came away with admiration of their policy in connection with the conservation of their timber resources. Forty years ago when I was in Wisconsin, I saw our elm, birch, pine, maple being burnt in piles. At that time Sweden was beginning a policy of reforestation and the results have been marvelous. The mills there are never allowed to cut more than the natural growth. In one of the rivers opening into the sea I saw some twenty miles of mill after mill on both sides of the river turning out their products and bringing down enormous quantities of wood from their forests, using many of the new trees that had been planted forty years ago. Contrasting our policy or lack of policy in Canada, I felt that our wasteful and extravagant use of our resources should make us hang our heads in shame.

"As far as the three countries are concerned Finland impressed me as offering the greatest possibilities for pulp and paper development now that the country is independent of Russian control and at Enso I saw the finest pulp mill I have ever seen. Sweden and Norway, the latter especially, seemed to be at the apex of their development, particularly through lack of supplies of raw material, for the cut is limited. We in Canada are eating up our capital. It is as if a man were left \$100,000 and the interest on this was \$7,000, but he used \$15,000 instead. Unless we stop this shameful policy we will come a cropper some day. Norway and Sweden and Finland are living on their \$7,000."

New York World Buys Pulp Plant

A despatch from St. John, N. B., states that the proprietors of the New York *World* newspaper have acquired control of the St. George Pulp and Paper Company, of St. George, N. B. The announcement is made by Albert C. Roy, manager of the concern. The company's mill is equipped with six grinders and five wet machines. At this mill only ground wood is manufactured, the capacity being 60,000 pounds every 24 hours. The same company manufactures paper at Norwalk, Conn.

New Company in New Brunswick

Incorporation has been granted to the Jost Pulpwood Company of Campbellton, Limited, with power to deal in general pulpwood and lumbering business and with a capital stock of \$75,000 and head office at Campbellton, N. B. The incorporators are P. M. Jost, A. E. Weaver, Dougall Cushing, G. S. McFadden and D. L. Labbe, ally of Quebec province.

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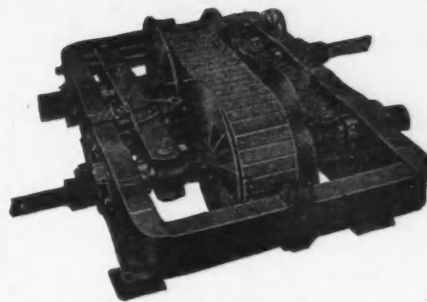
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are rubber, too, but the rubber has a steel "backbone" enveloped in it. They stand up under extreme pressures and give the perfect seating that prevents slippage. Every piston stroke returns full value.

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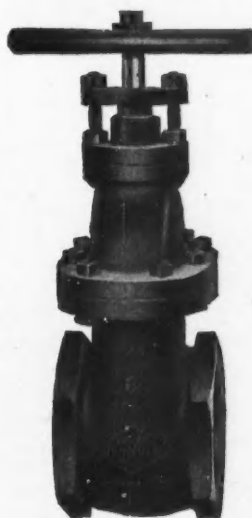
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Double face solid wedge type. Design of body and bonnet insures perfect casting free from internal shrinkage strains, and secures the maximum of strength and rigidity, enabling the valves to resist without distortion and leakage the severe stresses due to working pressure expansion and contraction, and the like. Has bronze seat rings, and bronze rings firmly secured to the wedges—in smaller sizes wedges are made entirely of bronze. 16" and smaller for 125 pounds steam pressure, 18" and larger for 100 pounds. 16" and smaller for 175 pounds water pressure, 18" and larger for 125 pounds. Genuine Jenkins Valves are marked with name and Jenkins Diamond—at supply houses.



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Fig. 325

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BIDS AND SPECIFICATIONS FOR GOVERNMENT PAPER

Purchasing Officer of the Government Printing Office Receives Bids on Numerous Lots of Paper—Purchasing Officer of the Government Printing Office Announces Awards on Lots of Paper on Which Bids Were Opened Recently—Purchasing Officer of the Panama Canal Opens Bids and Announces Awards on Paper—Bids and Awards on Paper for Other Government Departments.

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., September 29, 1920.—The purchasing officer of the Government Printing Office has received the following paper bids for 60,000 pounds (2,000 reams) 21½ x 32½—No. 16, high finish white writing paper: Wilkinson Brothers Company, 21 cents; Dobler & Mudge, 19½ cents; Maurice O'Meara Company, \$0.225; Old Dominion Paper Company, \$0.2498; D. L. Ward Company, \$0.215, and Whiting-Patterson Company, \$0.275.

222,200 pounds (3,400 reams) of various sizes machine finish printing paper: Wilkinson Brothers Company, 20 cents.

15,000 pounds (300 reams) 25 x 38—No. 50, white antique laid printing paper: Maurice O'Meara Company, \$0.219; Dobler & Mudge, \$0.199; Wilkinson Brothers Company, \$0.1925; Mathers-Lamm Paper Company, 20 cents, and R. P. Andrews Paper Company, 16½ cents.

40,800 pounds (400 reams) 21 x 31—No. 102, pink, melon, buff and Quaker drab Bristol board: Maurice O'Meara Company, \$0.179; Old Dominion Paper Company, \$0.1748, and Carter Rice & Co., \$0.1165.

The purchasing officer of the Government Printing Office has received the following bids for 25,450 pounds (700 reams) of various sizes white writing paper: American Writing Paper Company, at 30 cents and 37 cents; R. P. Andrews Paper Company, at 29 cents and 35 cents; Dobler and Mudge, at 23 cents; Whitaker Paper Company, at .3619 cents; and Old Dominion Paper Company, at .3024 cents and .3777 cents.

16,500 pounds (1,000 reams) 17 x 28—No. 13, thin white glazed bond paper: American Writing Paper Company, at 42 cents and 37 cents; Whitaker Paper Company, at .3619 cents and .4145 cents; Old Dominion Paper Company, at .3777 cents and .5324 cents.

Government Printing Office to Open Bids

The purchasing officer of the Government Printing Office will open bids on October 1 for 100,000 pounds of U. S. M. O. blue safety writing paper in 11 and 22" rolls.

50,000 pounds of 24 x 38—50 pounds wood Manila paper.

Bids will be opened on September 29 for 10,025 pounds (275 reams) of various sizes white ledger paper.

Bids will be opened at the printing office on September 29 for 800 pounds, 24 x 38—16, white paraffin paper.

The purchasing officer of the Government Printing Office will open bids on October 4 for 14,800 pounds (100 reams) of 24 x 38—148 Manila sulphite paper. Bids will be opened on the same date for 5,000 pounds 24 x 36—70 fibre sulphite or kraft paper.

The purchasing officer of the Government Printing Office will open bids on October 1 for 3,050 pounds of 28 x 29—No. 28, white commercial ledger paper.

Government Printing Office Awards

The King Paper Company has been awarded the contract by the purchasing officer of the Government Printing Office for furnishing 7,700 pounds (100 reams) of 24 x 38—77, double coated rag book paper at 21 cents per pound. Bids for this paper were opened on September 3.

119,200 pounds (900 reams) of various sizes high finish sulphite manila paper will be furnished by George W. Millar & Co., at 16 cents, and Wilkinson Brothers Company will furnish 66,350 pounds

(700 reams) of various sizes sulphite manila paper at 15 cents per pound, bids for which were open on September 10.

The Holyoke Card and Paper Company will furnish 4,000 pounds of 22½ x 28—200 pounds, blue card board, at \$28.75 per ream, and R. P. Andrews Paper Company will furnish 1,500 pounds of 19 x 24—50 pounds, white stereotype molding paper at .175 cents per pound. Bids for these items were open on September 13.

Panama Canal Awards

The R. P. Andrews Paper Company has been awarded the contract by the purchasing officer of the Panama Canal for furnishing 150 reams (5,000 sheets) of 17 x 22—No. 16 buff bond paper at \$768.

The Whitaker Paper Company will furnish 5,000 sheets of 24 x 32 terra cotta press board at \$637. Bids for these items were opened on September 13.

The purchasing officer of the Panama Canal will open bids on October 12 for the following:

100 reams (150,000 sheets) 17 x 22—No. 32, white bond paper; 300 reams (150,000 sheets) 17 x 28—No. 20, white bond paper; 30,000 pounds—No. 16, white bond paper, in 17" rolls; 1,200 pounds, 1 pound white writing paper, in 5" rolls; 20 reams (10,000 sheets) 22½ x 28½—90 pounds, white index Bristol board.

Stone & Forsyth Co. Outing

BOSTON, Mass., September 27, 1920.—The second annual outing of the Stone & Forsyth Company Associates was held at Sharon Heights Grove.

The Everett factory and Boston office closed for the entire day and joined forces for a good time.

The mode of transportation was by motor, both going and coming, and the trip, consequently, was greatly enjoyed. Upon arrival at the Grove a baseball game arranged between the factory and Boston office was speedily gotten under way. The teams were rather evenly matched, with the result of a score of 2—1 in favor of the Boston office, who won by their efforts a beautiful silver loving cup—presented by the president and vice-president, O. H. Karnheim and Frank Van Da Linda.

After a short period of intermission, allowing for a light lunch and the taking of the group picture, the day was on in full swing, the factory and Boston office contesting hotly for the honors in all the events—breaking about even.

Those not joining in the sports put in pleasant hours in the dance hall, where a snappy jazz orchestra kept things lively.

At the close of the sports a bounteous dinner was served by Caterer Merrill of the Schlehuber Company, of Lynn, which was followed by community singing, led by Leader Schaffner, of the Community Sing House, during which E. H. Stone, treasurer, and O. R. Karnheim, president, were called upon for speeches, which were greeted with much applause.

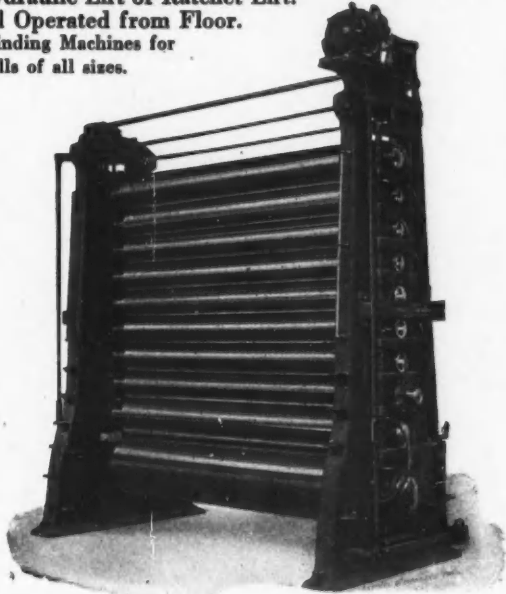
Following the singing, further dancing was enjoyed by all, and when at 8:00 the tired but happy throng embarked for Boston it was unanimously voted a huge success, and everybody agrees to work during the coming year for a bigger, better and busier third annual for 1921.

Much Pulpwood Arriving at Portland

PORTLAND, Me., September 21, 1920.—Three cargoes of pulpwood are expected to arrive here today from provincial ports, the *Eimac* coming from Gaspé, P. Q., while the *Garibaldi* and *Sheaf Mount* loaded at Chatham, N. B. The cargoes of the three steamers will foot up over 5,000 cords, the largest quantity ever received here in one day, the *Sheaf Mount* also having the largest single cargo ever received at this port. There is apparently no end to the pulpwood that is coming here this fall, and the shipment will probably continue until the Canadian loading ports are frozen over, which usually happens early in November.

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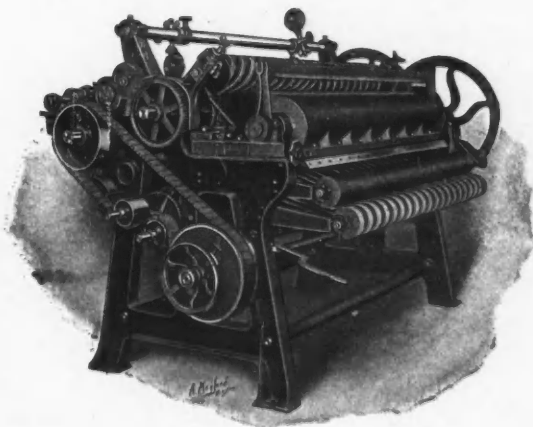
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NO SIGN OF PRICE DECLINE IN PHILADELPHIA MARKET

In Fact Slight Advances Are Quoted on Manilas and Krafts and Early Days of October Will, It Is Expected, Bring Advances on Some Other Varieties of Paper—What Is Regarded by the Trade as a Fake Effort Is Made to Break Book and News Print Prices But Is Without Effect—With the Exception of Book Stock the Paper Stock Market Continues Very Active.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, September 28, 1920.—“Paper not brains is the only requisite to money making in the trade these times” is the terse form in which one of the oldest if not leading distributors summarized the situation not only as it existed during the week but for the elapsed three-quarters of the year. In the midst of price recession on virtually every article in this market save tobaccos, paper value stand out firm with no indication of a decline and indeed with the indication that the close of the month or the opening days of October will bring upward revision for those grades which have not been advanced during the last two weeks. As a matter of fact there were limited advances during the week. Manilas and Krafts went up a half cent a pound. Demand for these and the general line of wrapping and coarse papers, which fell off during the early part of the month, improved during the week and steady gains are anticipated with the advent of the holiday season.

Sales of fine papers to printers and publishers showed an improvement too. The smaller printers are as a class quite dull, but they are gaining rather than losing ground and they are confident of the future. News print continues in quite active demand, but is scarce and choice spot deliveries promptly made bring as high as 15 and 16 cents.

A Sinister Effort to Break Prices

What the trade regards as an underhand and sinister effort to break book and news prices came to the attention of several firms during the week in the form of letters received by the larger publishers, setting forth that the So and So Company, New York, was offering a large stock of book and news at a price considerably below the market. Other letters gave the name of alleged paper brokers in New York office buildings. Through correspondents in New York the houses to whom the letters were shown by customers ascertained that the tenders of off-price paper were probably fakes, because no such firms as had subscribed to them were located at the address given or that no such addresses existed.

Paper Stock Market Active

In the paper stock market, the only slow moving grade is book stock and this the jobbers are continuing to store. There is now quite a large stock of book on hand but the dealers declare they will continue to pile it away rather than make price concessions. The largest local consumer of mixed, commons and news has not given notice of revision of prices it recently announced, but the stock men say they are not concerned over that fact at all and that they are shipping stock out of town quite as fast as they can get it together and at the outside quotations too. During the week advances of from 5 to 10 cents were reported on both grades of hard white shavings, on No. 1 soft white shavings, on choice new manilas, container manilas and old Kraft.

Scrap Book of Paper Prices

Of particular interest and usefulness in these days of soaring

prices is a looseleaf collection which Sparta Fritz, now floor manager for the D. L. Ward Company, has at his elbow. He began back in September, 1917, filing away the price lists of the Ward Company as they appeared, continuing up to the time he went with the now liquidated States Paper Company. Recently, after returning to the Ward Company, the old file came to hand again. It tells the story of what happened in the past three years—advances of from 75 to almost 300 per cent—the latter for news, quoted in September, 1917, at 3½ cents and in September, 1920, at 16 cents.

Ward Co. Reunion

The Ward family, not only in Philadelphia, but in its distributing branches in Baltimore, Washington, Richmond, Scranton, Wilkes-Barre and Trenton is to have a reunion and outing on Saturday afternoon, October 2, at the Curtis Country Club at Olney, a northern suburb of the city. The fraternity and sorority is to assemble at the big Front Door at noon to be transported by autos to the Country Club grounds for outdoor diversions with the climax a baseball game between the Sales and the Service Departments, the former having been for three years victors. In the early evening there is to be an open air assemblage around the big flag pole at which Mayor J. Hampton Moore will deliver an address. Thereafter there will be eats and finally dancing with a Ward jazz band to accompany.

Speculation Regarding York Haven Co.

The trade is awaiting somewhat eagerly an announcement from the Continental Paper and Bag Company regarding its sales policy with regard to the products of the York Haven Company recently taken over. It is understood that the sales organization in the Land Title Building headquarters and consisting of Waldo Smith, A. C. Mason, Louis T. Condon and Miss Young, office manager, will be continued.

Austria's Pulpwood Resources

Fred D. Fellow, who had charge of the trading department of the Friends Service Committee, has just returned to headquarters in the Quaker City with the story that while there can hardly be exaggeration of the plight in which Austria finds itself, not all its natural resources have been lost through the Great War, and among the most important he said were its forests. “The greatest natural resource still left in Austria and one which it would be wise for Americans to utilize,” he said, “are its immense forests. There are too, still ready for production, many pulp manufacturing, only idle because of the great coal shortage.” He argued that if American publishers would aid Austria in securing fuel either directly or by arranging credits, there would be opened up a source of paper supply which would yield a profitable return for a long while to come.

Paper Men Go to Marion

Though President J. F. Auer, of Auer & Twitchell, was called in only at the last minute by Coleman du Pont as chairman of the Traveling Men's Bureau, to organize a Philadelphia delegation on a pilgrimage to Presidential Candidate Harding, hard work enabled him on Saturday to take to Marion, Ohio, three carloads of enthusiasts and with a larger representation of the paper trade than any other industry. Included in the party were these voters: Mr. and Mrs. Auer, Mr. and Mrs. Herbert S. Fox, Fibro Manufacturing Company; Mr. and Mrs. P. F. Melchior, Auer & Twitchell; Sidney Bieber, president; John A. Wesley, sales manager, and Roy Creveling, superintendent, Lehigh Paper Mills; W. H. Hanauer, Fibro Manufacturing Company, and J. W. Duffell and G. B. Aiken, Consolidated Paper Tube Company.

George F. Van Aken, vice-president and manager of the Trenton Folding Box Company, was in the city recently endeavoring to arrange for direct representation here.



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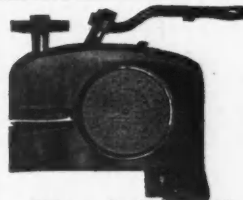
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New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, September 29, 1920.

There has been little or no change in the paper situation in the past week. Everything is holding firm and there is as yet no indication that paper is preparing to follow other commodities on their downward trend. It is doubtful if paper will take any radical downward move unless the entire market falls off so much that advertising becomes a great deal less. Even such a condition would only tend to make the demand a little more as it used to be before the present very abnormal conditions prevailed, for at present the demand is so far in excess of the supply that it is hard to prophesy when there will be a normal balance again.

News print is still an interesting feature of the market. Statements have been spread broadcast that the high prices in this field are absolutely unjustified, that there is no real lack of standing timber for pulp wood manufacture and that the shortage is artificial. As nearly as it is possible to ascertain by going about among the trade, these statements are greatly exaggerated, in fact many of the paper men say that there is little truth in them. It is hard to see how it is possible for any such condition to exist in the news print market, since this branch of the paper industry was frequently examined during the war by the government and many of the news print mills are still furnishing reports to the Federal Board of Trade. Importations still continue to increase. There are many jobbers who are offering German stock and the opinion seems to be that this is about the best of the material from overseas. There has also been some German fine paper—machine finished and super grades—available, and that too seems to be of a very satisfactory quality.

There have also been some importations of Scandinavian and Finnish pulp, but the opinion seems to be divided on these. Some say that the fact that it is air dry and requires longer beating unfits it for competition with the wetter domestic stock. Others say that the slightly lower price and the fact that the buyer gets all pulp for his money and no water offsets this difficulty. However that may be, the stock is evidently on the market to stay.

Mechanical Pulp

Mechanical pulp is still continuing to fall off, not rapidly or to any great extent, but this week finds it even lower. The supply has been somewhat increased by the betterment of water power conditions throughout the northern part of New York and New England and also by recent large importations. The demand is still strong but the supply seems to be able to meet it. This market will be undoubtedly a good deal easier, providing the big dealers do not hold in an attempt to keep prices high.

Chemical Pulp

This market too continues to grow a little easier bit by bit. The supply has been much augmented by importations and by the loosening of the railroad tie-up, so that it is now just about able to meet the supply. There is not enough, however, to make any danger of an oversupply, and the price will probably not go down very far.

Domestic and Foreign Rags

Domestic rags are in great demand and are getting livelier all the time. Perhaps this is due to a slight falling off in importations which two or three dealers report. All grades of whites prove to be the most popular, but the entire field is very brisk.

Old Rope and Bagging

Old rope and bagging are not as lively as the rest of the

market but there is a good and growing demand and dealers show very little anxiety as to their fall business. They confidently expect the demand to become much stronger when the mills begin buying up their winter supply.

Waste Paper

Waste paper continues very strong with prices all holding firm. All kinds of shavings are in great demand with no signs of any falling off and the other grades are not far behind.

Twine

The demand is normal for twine and the supply seems to be meeting it all right. There has been no change in the situation since last week.

News Print May Be Investigated Again

WASHINGTON, D. C., September 29, 1920.—While no statement has been made public by the Department of Justice and while officials of the department refuse to discuss the situation at this time, it is understood that another investigation is now under way in connection with the news print situation.

It is believed that this investigation of the news print industry by the Department of Justice has been instigated partly by the report which was made some months ago by the Federal Trade Commission and partly by the report of the Senate Committee on Manufacturers, which was made public at the adjournment of the last session of Congress. No doubt officials of the Department of Justice feel that at the forthcoming session of Congress considerable attention will be given to the news print industry and they wish to forestall any criticism which may be made of the department for inactivity on their part.

Not Liberty Co. of Vanderbilt Ave.

In a recent issue of THE PAPER TRADE JOURNAL a Washington despatch mentioned the issuance of an order by the Federal Trade Commission against the "Liberty" Paper Company of New York. This did not refer to the Liberty Paper Company, of 52 Vanderbilt avenue, of New York, manufacturer of gummed tapes, sealing tapes and sealing machines, which has been identified with the paper industry for many years. The action of the Federal Trade Commission has been against a concern recently operating under the name of the Liberty Paper Company and which dealt in toilet papers. The original Liberty Paper Company has a large plant in New England, where its products are manufactured, and for several years it has maintained its general offices at 52 Vanderbilt avenue, New York.

Bids on German Paper Rejected

WASHINGTON, D. C., September 29, 1920.—The bid which was submitted to the Government Printing Office some weeks ago by the Mathers-Lamm Paper Company of this city for German-made paper, has been rejected.

Officials at the printing office state that the paper was rejected because it was found to contain all ground wood and this would not have been suitable for the purposes for which the paper was required. The officials admit, however, that the paper could have been used for many purposes. It is understood that a quantity of this class of paper is now being sold in this country.

Plan Newfoundland Paper Mills

ST. JOHN'S, N. F., September 27, 1920.—Development of Newfoundland's pulpwood resources is planned by two companies, one English and the other Norwegian, just chartered. At present the only pulp and paper mills on the island are at Grand Falls, where a plant supplies the Northcliffe papers in England with paper, and ground wood mills at Bishops Falls and Campbelltown.

Imports and Exports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING SEPTEMBER 25, 1920.

SUMMARY.

Cigarette paper	292 cs.
Printing paper	71 cs.
Tracing paper	3 cs.
Drawing paper	11 cs.
Filter paper	11 cs.
Wall paper	12 cs., 13 bls.
Tissue	7 cs., 19 bls.
Hangings	7 cs., 25 bls.
Wood pulp	64 cs.
News print	1,513 crates
Wrapping	24 bls.
Packing	50 bls.
Photo paper	1 cs.
Transfer paper	6 cs.
Miscellaneous paper	36 cs., 629 bls.

CIGARETTE PAPER.

P. Lorillard & Co., Meissonier, Havre, 25 cs.
P. J. Schweitzer, Niagara, Havre, 247 cs.
Hill Bros. Co., Vardulia, Liverpool, 20 cs.

PRINTING PAPER.

P. C. Zuhlke, Lapland, Antwerp, 38 cs.
Oxford University Press, Carmania, Liverpool, 21 cs.
B. F. Drakenfeld, Celtic, Liverpool, 22 cs.

TRACING PAPER.

F. R. Arnold, Mesaba, London, 3 cs.

DRAWING PAPER.

Favor, Ruhl & Co., Mesaba, London, 6 cs.
Reeve, Angel & Co., by same, 5 cs.

FILTER PAPER.

Reeve, Angel & Co., Mesaba, London, 11 cs.

WALL PAPER.

Bech, Van Sienen & Co., Lisbon Maru, Kobe, 12 cs.
A. Murphy & Co., Belgic, Liverpool, 7 bls.
R. F. Lang, Port Bomen, London, 6 bls.

PAPER HANGINGS.

A. E. Bulkley, Belgic, Liverpool, 7 cs.
A. C. Dodman, Jr., Celtic, Liverpool, 25 bls.

TISSUE PAPER.

Davies, Turner & Co., Belgic, Liverpool, 2 cs.
Wilfred Schade & Co., by same, 2 cs.
Meadows, Wye & Co., Carmania, Liverpool, 2 cs.
Wilkinson Bros. & Co., Inc., Bonic, Manchester, 19 bls.
F. C. Stryfe, by same, 1 cs.

WOOD PULP PAPER.

Newark Paraffine Parchment Paper Co., Kermit, Hamburg, 64 pgs.

NEWS PRINT PAPER.

Agar Bernson Corp., Susquehanna, Danzig, 1,513 crates.

WRAPPING PAPER.

Hensel, Bruckman & Lorbacher, M. Jensen, Hamburg, 24 bls.

PACKING PAPER.

Luhr Corp., M. Jensen, Hamburg, 50 bls.

PHOTO PAPER.

J. J. Ganin, Carmania, Liverpool, 1 cs.

TRANSFER PAPER.

L. A. Consmitter, Carmania, Liverpool, 6 cs.

PAPER.

Agar Bernson Corp., Susquehanna, Danzig, 598 bls.
Cuttly & Co., Lafayette, Havre, 5 cs.
Japan Paper Co., Lisbon Maru, Yokohama, 31 cs.
C. A. Johnson, Celtic, Liverpool, 31 bls. To Philadelphia.
J. L. N. Smythe Co., Kermit, Hamburg, 86 cs.
J. L. N. Smythe Co., Mette Jensen, Hamburg, 164 cs.
D. L. Ward Co., by same, 176 pgs.

PRINTING PAPER.

To Syracuse, N. Y.
B. F. Drakenfeld, Carmania, Liverpool, 3 cs. To Austin, Ill.
Meyercord Co., by same, 17 cs.

RAGS, BAGGINGS, ETC.

E. J. Kellar Co., Columbia, Trieste, 89 bls. rags.
American Woodpulp Corp., Mette Jensen, Hamburg, 51 bls. new cuttings.
American Woodpulp Corp., by same, 109 bls. rags.
Solomon Bros. & Co., by same, 207 bls. rags.
Albion Trading Co., Mesaba, London, 287 bls. rags.
Castle, Gottheil & Overton, Niagara, Havre, 235 bls. rags.
M. O'Meara & Co., by same, 40 bls. rags.
E. J. Keller Co., by same, 271 bls. rags.
Bay State Waste Co., Lisbon Maru, Kobe, 100 bls. cotton waste.
Chase National Bank, by same, 44 bls. cotton waste.
E. Butterworth & Co., Belgic, Liverpool, 94 bls. baggings.
A. Salomon, Inc., Tongrier, Rouen, 519 bls. baggings.
A. Salomon, Inc., by same, 49 bls. cotton waste.
A. Salomon, Inc., by same, 649 bls. new cuttings.
A. Salomon, Inc., by same, 64 bls. flax waste.
A. Salomon, Inc., by same, 323 bls. baggings.
Salomon Bros. & Co., Bearport, Manchester, 16 bls. paper stock.
Henry Gates Sons, Ltd., by same, 65 bls. cotton waste.
Salomon Bros. & Co., La Touraine, Havre, 100 bls. baggings.
Albion Trading Co., Bonic, Manchester, 37 bls. rags.
Ladenburg, Thalman & Co., by same, 83 bls. paper stock.
E. Butterworth & Co., by same, 184 bls. baggings.
E. Butterworth & Co., by same, 190 bgs. pickers.
Salomon Bros. & Co., Londonier, Antwerp, 104 bls. new cuttings.

E. J. Kellar Co., by same, 230 bls. rags.
Lloyd Royal Belge, by same, 212 bls. rags.
Albion Trading Co., Celtic, Liverpool, 15 bls. rags.

Arrowhead Mills, Port Bomen, London, 102 bls. waste paper.
Castle, Gottheil & Overton, Tongrier, Rouen, 788 bls. rags, 64 bbls. flax waste, 73 bls. and soles old rope, 254 bls. old bagging, 49 bls. cotton waste, 649 bls. rags.
Castle, Gottheil & Overton, Londonier, Antwerp, 230 bls. rags, 253 bls. bagging.

OLD ROPE.

International Purchasing Co., Hellig Olav, Copenhagen, 67 coils.
Core & Herbert, by same, 55 coils.
Core & Herbert, by same, 10 bls.
National Bank of South Africa, Belgic, Liverpool, 38 bls.
A. Salomon, Inc., Tongrier, Rouen, 23 bls.
A. Salomon, Inc., by same, 50 coils.

WOOD PULP.

Scandinavian-American Trading Co., Thordis, Himmelnik, 2,100 bls. wet wood pulp.
French, Edye & Co., Hellig Olav, Copenhagen, 1,400 bls. dry wood pulp.
American Writing Paper Co., Lisbon Maru, Kcbe, 1,348 bls. bleached sulphite.
Irving National Bank, A. F. Luckenbach, Rotterdam, 2,175 bls. wood pulp.
Tidewater Papermills Co., Lake Tippah, Clarke City, Que., 14,340 bls. ground wood pulp; 1,434 tons.
M. Gottesman & Co., Hellig Olav, Copenhagen, 1,400 bls. wood pulp.

CASEIN.

A. Klipstein & Co., Mesaba, London, 200 bags.
Atterbury Bros., Doehra, Buenos Aires, 536 bags; 32,150 kilos.
In Transit to New Orleans, La.
Mente & Co., Inc., Bonic, Manchester, 195 bls. paper stock.
To Baltimore, Md.
Caldwell & Co., Meissonier, Havre, 37 bls. rags.
Caldwell & Co., Niagara, Havre, 44 bls. rags.

BOSTON IMPORTS

WEEK ENDING SEPTEMBER 25, 1920.

Castle, Gottheil & Overton, Maryland, London, 331 bls. waste paper.

PHILADELPHIA IMPORTS

WEEK ENDING SEPTEMBER 25, 1920.

Castle, Gottheil & Overton, Sloterdijk, Rotterdam, 243 bls. rags.
Castle, Gottheil & Overton, Alpine Range, Glasgow, 99 bls. rags.
Castle, Gottheil & Overton, Start Point, London, 619 bls. rags.
Castle, Gottheil & Overton, Sloterdijk, Amsterdam, 145 bls. rags.

West End Paper Co. Increases Stock

CARTHAGE, N. Y., September 28, 1920.—The West End Paper Company has filed notice with the Secretary of State at Albany of an increase in its capital stock from \$150,000 to \$600,000.

Indices of Wholesale Prices

The following indices of wholesale funds are specially interesting in view of the very perceptible decrease just now in the price of most commodities, with the notable exception of paper:

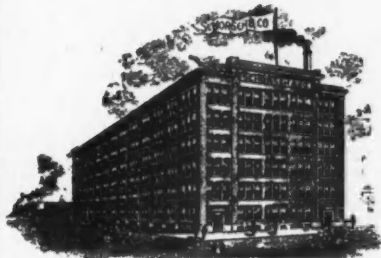
Index	Latest Available.	Preceding.	Per Cent Change.	Per cent Decline from Peak
Bureau of Labor	250. (Aug. avg.)	262. (July avg.)	4.6 (dec.)	8.9 (May avg.)
Bradstreet's	195.1 (Sept. 1)	204.4 (Aug. 1)	4.5 (dec.)	13.9 (Feb. 1)
Dun's	205.4 (Sept. 1)	208.7 (Aug. 1)	1.6 (dec.)	5.7 (May 1)
Economist's (British)	287.5 (Sept. 1)	292.5 (Aug. 1)	1.7 (dec.)	7.9 (April 1)
Statist's (British)	298.2 (Sept. 1)	299.3 (Aug. 1)	.4 (dec.)	5.0 (April 1)
Canada	244. (Aug.)	256. (July)	4.7 (dec.)	7.2 (May)
Italy	632. (Aug.)	613. (July)	3.1 (inc.)	6.9 (Apr.)
Calcutta	209. (Aug.)	209. (July)		4.1 (Jan.)

R. E. Ramsay Speaking in the West

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., September 27, 1920.—Robert E. Ramsay, director of sales and promotion publicity and advertising of the American Writing Paper Company, is touring the West this month and making speeches on the value of planned publicity in up-to-date merchandising. His main address, "Back to Brass Tacks in Business Building," deals with modern development of advertising and is illustrated with graphic charts and statistics that have been compiled after long and careful study.

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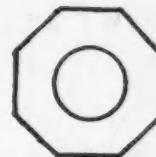
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500 East 133d Street : New York



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BLEACHED SULPHITE

FOR

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Offices, 1807-1810 Finance Bldg.,
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MANUFACTURERS OF

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ENTIRE PRODUCT FOR 1920 CONTRACTED

Mills at Felts Mills, Great Bend and Lefebvre, N. Y.

Main Office,

Sherman Building, WATERTOWN, N. Y.



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

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

Inquiries are solicited for spot and contract deliveries.

THE STANDARD SILICATE COMPANY

MANUFACTURERS OF

SILICATE OF SODA

CINCINNATI, OHIO.

Miscellaneous Markets

Office of THE PAPER TRADE JOURNAL,
WEDNESDAY, September 29, 1920.

ALUM.—There has been no sign of a general falling off in the alum market during the past two or three weeks and the future holds forth little hope for any radical drop in the chemical market in spite of the downward tendency which is general now throughout the commodity market. It is quite probable that if this downward tendency should continue to become more and more pronounced chemicals and paper will follow, but as yet there is no evidence of such a condition occurring, and it is reasonable to conjecture that these things will be the last to become cheaper. The mills are experiencing considerable difficulty in keeping up with the demand for alum, and the price still remains at about 5@5.50c for lump, 5.50@6c for the ground, and the same price per pound for the powdered.

BLANC FIXE.—This field, too, is marked by the inability of the supply to meet the demand. There is practically none of the material to be found in the open market, and it is very difficult for new customers to get any of it even on terms most attractive to the seller. Several of the large dealers are absolutely out of the market. Difficulty is still experienced in procuring proper containers for the shipment of blanc fixe. The price is still at about \$100@110 per ton on the basis of large shipments.

BLEACHING POWDER.—This article is so scarce that practically none is finding its way into the spot market, and when some does percolate in by some strange turn of circumstances the price is largely governed by what the buyer is able to pay. The contract price is not running much below 6 cents per pound and in many cases is somewhat higher.

BRIMSTONE.—In this branch of the market the supply appears to be just about adequate with very little to spare. The mills are working at top speed to maintain this condition, and it is unlikely that any drop in price is to be expected. It is now quoted at \$17 per ton.

CASEIN.—A short supply in the Argentine field makes all dealers believe that things are not going to ease up any for the next six months or so, unless there should be a tremendous falling off in the demand. Had the coastwise and railroad shipping not become so much better in the last month a much more difficult situation would have occurred. The price is still quoted at 15@15.50c per pound in large shipments.

CAUSTIC SODA.—There is a certain amount of caustic soda in the hands of the jobbers, but by no means enough to supply the demands of the small buyers. A slight easing up is reported but not enough to cause any very appreciable drop in the price. Some of the mills report labor troubles and this, of course, has been tying up the supply to an even greater extent than it was. These are practically settled now, however, and dealers believe that this commodity is going to be a little easier to get. The price is about 5@5.50c a pound.

CHINA CLAY.—The shortage of cars in the South seems to be diminishing a little, and thus it is a little easier to procure china clay than it has been. The situation is by no means normal, and the supply is still short enough both in the foreign and the domestic stock to be keeping prices fairly high. Prices are reported as follows: Domestic, unwashed, \$9@12 per ton, washed \$13@15; imported runs from \$19@20 on the basis of large shipments.

ROSIN.—Rosin has been declining because of a falling off in the Southern market. More material is coming into New York than there was a month ago and all of this has tended to cause a slight drop. Prices on E, F and G grades are quoted around \$11@12 per ton.

SODA ASH.—There has been no drop in soda ash, but it is reported to be a little easier to get. There is little in the hands

of the jobbers, but the demand has fallen off somewhat so that things are beginning to even up a little. It is now quoted at about 2.70@2.80c.

STARCH.—Starch has been just about holding its own and there has been no real change over last week. Some of the dealers seem to believe that it will fall off even more because of the large supply of corn that will be available with this fall's harvest.

SULPHATE OF ALUMINA.—Sulphate of alumina is still very scarce and can be procured only in small quantities at a very high price. The supply is only about one half of normal while the demand is strong.

TALC.—The car shortage has been affecting this market, but a slight easing up is expected soon. As far as the supply goes the price, however, is not expected to change very much, and it is now from \$16@20 per ton.

Market Quotations

(Continued from page 77)

No. 1 Soft White	7.50	@	7.75	Cottons—according to grades—	
No. 2 Soft White	6.00	@	6.50	Blue Overall	12.00 @ 12.75
No. 1 Mixed	3.50	@	4.00	New Blue	8.50 @ 9.00
No. 2 Mixed	2.75	@	3.00	Nek Black Soft	6.75 @ 7.25
Solid Ledger Stock	4.50	@	4.60	New Light Sec-	
Writing Paper	4.00	@	4.25	onds	7.00 @ 7.25
No. 1 Books, heavy	3.60	@	3.75	Khaki Cuttings	7.25 @ 7.75
No. 2 Books, light	2.50	@	2.75	Corduroy	6.50 @ 6.75
No. 1 New Manila	6.50	@	6.75	New Canvas	14 @ 14.50
No. 1 Old Manila	4.00	@	4.25	New Black Mixed	5.75 @ 6.25
Container Manila	3.25	@	3.50	Old	
Old Kraft	6.25	@	6.50	White, No. 1—	
Overissue News	2.50	@	2.75	Repacked	15.50 @ 16.00
Old Newspaper	2.25	@	2.30	Miscellaneous	12.50 @ 13.50
No. 1 Mixed Paper	2.10	@	2.15	White, No. 2—	
Common Paper	1.75	@	2.00	Repacked	7.00 @ 7.50
Straw Board, Chip	2.10	@	2.15	Miscellaneous	6.00 @ 6.50
Binders' Bd. Chip	2.10	@	2.15	Thirids and Blues—	
Domestic Rags—New				Repacked	4.75 @ 5.25
Price to Mill, f. o. b. Phila.				Miscellaneous	4.25 @ 4.50
Shirt Cuttings—				Black stockings	4.50 @ 4.75
New White, No. 1	.21	@	.22	Roofing Stock—	
New White, No. 2	.13	@	.13 1/2	No. 1	2.90 @ 3.20
Silesias, No. 1	12.50	@	13.00	No. 2	2.50 @ 2.60
New unbleached	15.75	@	16.50	No. 3	1.70 @ 2.00
Washables	10.75	@	11.00	No. 4	2.40 @ 2.50
Fancy	12.75	@	13.50	No. 5A	2.25 @ 2.50
				B.	2.00 @ 2.25
				C.	1.25 @ 1.50

TORONTO

[FROM OUR REGULAR CORRESPONDENT.]

Paper		Sulphite, news grade. 160.00 @ 170.00	
(Mill Prices to Jobbers)		Sulphite, bleached... 200.00 @ 210.00	
Bond—		Sulphate ... 140.00 @ 150.00	
Sulphite	19 1/2 @	Old Waste Papers	
Light tinted	20 1/2 @	(In carload lots, f. o. b. Toronto)	
Dark tinted	21 1/2 @	Shavings—	
Ledgers	20 @	White Env. Cut. 7.50 @	
Writing	15 @	Soft White Book	
News, f. o. b. Mills—		Shavings	
Rolls (carloads)	5.50 @	White Bl'k News 6.00 @	
Sheets (2 tons or over)	6.00 @	Book and Ledger—	
Sheets (less than 2 tons)	6.15 @	Flat Magazine and Book Stock (old)	
Book—		Light and Crumpled Book Stock 3.00 @	
No. 1 M. F. (carloads)	15.50 @	Ledgers and Writings	
No. 2 M. F. (carloads)	15.00 @	Solid Ledgers... 4.00 @	
No. 3 M. F. (carloads)	14.75 @	Manila—	
No. 1 S. C. (carloads)	16.00 @	New Manila Cut. 6.00 @	
No. 2 S. C. (carloads)	15.50 @	Printed Manilas... 3.00 @	
No. 1 Coated and litho	19.50 @	Kraft ... 6.25 @	
No. 2 Coated and litho	18.50 @	News and Scrap—	
No. 3 Coated and litho	17.75 @	Strictly Overissue 2.75 @	
Coated and litho, colored	19.75 @	Folded News ... 2.50 @	
Wrapping—		No. 1 Mixed Papers ... 2.20 @	
Grey	10.75 @	Domestic Rags—	
"B" Manila	11.00 @	Price to mills, f. o. b. Toronto.	
No. 1 Manila	12.50 @	Per lb.	
Kraft, M. F. or M. G.	13.00 @	No. 1 White shirt cuttings	
		No. 2 White shirt cuttings	
		Fancy shirt cuttings	
		No. 1 Old whites	
		Thirids and blues	
		Black stockings	
		Roofing stock	
		No. 1	
		Roofing stock	
		No. 2	
		Gunny bagging	
		Manila rope	

The Mathieson Alkali Works (Inc.)

General Offices

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Works
Niagara Falls, N. Y.

New York City

Works
Saltville, Va.

“EAGLE THISTLE” BRAND OF PRODUCTS

High Test Bleaching Powder

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

Special wooden lined drums for export.

Liquid Chlorine

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

Soda Ash

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

Caustic Soda

Solid—Ground—Flaked

60%—70%—72%—74%—76%—78% Grades.

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

Bicarbonate of Soda

Packed in Cases—Bags—Barrels—Kegs

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

WANT AND FOR SALE ADVERTISEMENTS

HELP WANTED

WANTED—First class beater man on bending box boards. Must be A-1 and able to keep stuff uniform. Two tours. Address, National Folding Box Co., New Haven, Conn.

WANTED—Two good machine tenders and one back tender. Permanent work. Good chances for promotion. Two tour mill. Open shop. Nice town, cheap rents. Manufacturing Fibre Wrapping Papers. Address, Box 2628, care Paper Trade Journal. S-30

WANTED—Night boss for Container Board Mill in Middle West. Salary \$250.00 per month. Must be a practical paper maker. State age and experience and give reference in first letter. Address, Box 2629, care Paper Trade Journal. tf

WANTED—Superintendent for two-machine mill, running tissues and light weight papers on cylinder machines. Wanted high grade man, and to such would be paid satisfactory salary. Address, Box 2650, care Paper Trade Journal. tf

SALESMAN WANTED—To cover Central Pennsylvania, including Scranton, Wilkes-Barre, Williamsport, Harrisburg. One acquainted with all kinds of paper, fine, coarse, and envelopes. Established business. Drawing account and commission. Whiting-Patterson Co., Philadelphia, Pa., 320 N. 13th St.

WANTED—Manager of an 80-ton book and bond mill located in the Eastern states desires thoroughly reliable and capable assistant with private secretary. Must have a good general knowledge of and experience in both the manufacturing and office ends. A real opportunity for the right party. Address, Box 2636, care Paper Trade Journal. S-30

WANTED—Machine tenders and back tenders for a new Black and Clawson cylinder machine on box boards. Stacked dryers. Steady work and good wages. National Folding Box Co., New Haven, Conn. tf

SALESMAN—Best available for Glassine and other coarse papers. State territory desired. Address, Box 2561, care Paper Trade Journal. O-14

WANTED—Sulphite Superintendent for 40-ton mill, must be good mechanic able to handle help and produce first class pulp. Address, Box 2656, care Paper Trade Journal. S-30

WANTED—Master mechanic for 70-ton paper, 4-ton sulphite, 25-ton ground wood, first class mill, in Northern New York. Must have executive ability and energy. Address, Box 2657, care Paper Trade Journal. S-30

MACHINE tenders for 26 in. cylinder machines making ten-pound tissue. Work eight-hour shifts. Mill located in Pennsylvania. State salary wanted. Give references. Address, Box 2658, care Paper Trade Journal. O-7

WANTED—In a small mill in Middle West, a good steady beaterman on tissue stock. Must be sober and steady, and well recommended. Address, Box 2660, care Paper Trade Journal. O-14

MACHINE Tender for Asbestos paper mill. Two tours. Will earn between \$55 and \$60 per week, and a good monthly bonus for production. This means experienced men only, none others need apply. Mill is located near New York. Address, Box 2661, care Paper Trade Journal. O-7

WANTED—Two machine tenders in mill running blotting, absorptive papers, book and specialties. Good wages, mill located in city where there are good living conditions and good climate. Reply giving references and experience. The Albermarle Paper Mfg. Co., Richmond, Va. O-14

HELP WANTED

HELP WANTED—Male or female. Experienced stenographer capable of answering switchboard in large paper manufacturing concern N. Y. C. Five-day week. Good chance for advancement. Reply by letter only. Address, Box 2650, care Paper Trade Journal. S-30

WANTED—Experienced men as cutters, packers and porters by large manufacturing concern in N. Y. C. Good chance for advertisement. Address, Box 2681, care Paper Trade Journal. O-14

WANTED—Master mechanic thoroughly familiar with the operation and equipment of a paper mill. Wonderful opportunity for right party. In replying state age, experience and salary required. Address, Box 2682, care Paper Trade Journal. S-30

GENERAL MANAGER—Middle age, experienced and capable of taking charge of paper mill. Application confidential; give age, experience and quote particulars. Good opportunity with future to right man. Address, Box 2684, care Paper Trade Journal. O-14

WANTED AT ONCE—Experienced man to take charge of waxing department. Must know how to wax all grades of paper and secure maximum production from up to date machines. Good opportunity for right man. Address, Box 2685, care Paper Trade Journal. S-30

WANTED—Superintendent for box board mill, 2 machines 115 and 130-inch trim. We want a man who can handle help, organize his men, knows board making and who will work with progressive management. Unless you can make good don't waste time answering. Advise in first letter full details of your experience, mills you have handled, and age. MacSimBar Paper Company, Otsego, Michigan.

WANTED—First class millwright with paper mill experience. Two machine-mill making tissue and book papers. Electric and water power. State experience and wages expected. Advancement for right party. Address, Box 2686, care Paper Trade Journal. O-14

WANTED—Two competent machine tenders for slow-running news machine. Two tours. Seventy-five cents per hour. In good town. Married men only. State age and references. Address, Box 2688, care Paper Trade Journal. O-7

WANTED—Paper salesman preferably with fine and coarse paper experience to cover Connecticut Valley territory, Massachusetts, Vermont and Connecticut for progressive New England paper house. Address, Box 2687, care Paper Trade Journal. tf

WANTED—Beaterman with some knowledge of colors for progressive tissue mill. No labor trouble. Two tours. Good position open. Address, Box 2678, care Paper Trade Journal. O-14

WANTED—An experienced machine tender with full knowledge of a single-faced corrugating machine. Address, Box 2679, care Paper Trade Journal. S-30

MEN experienced tending coating machines, steady job all year round. Anderson Marble Paper Co., 427 West 13th St., New York, N. Y. tf

WANTED—Machine tender for 90-inch cylinder tissue machine making light-weights from mitscherlich stock. Large mill. Good chance for promotion. Only first class men need apply. Address, Box 2689, care Paper Trade Journal. O-14

MACHINIST capable of adjusting paper sack bottomers and complete stock machines. State salary and experience. Address, Box 2637, care Paper Trade Journal. S-30

HELP WANTED

WANTED—Machine tenders for 86-inch cylinder machine making ten pound tissue. Work in eight-hour shifts. Mill located in Pennsylvania. State salary wanted. Give references. Address, Box 2671, care Paper Trade Journal. O-7

Glazed Paper Superintendent Wanted

A brilliant position in charge of coating department (colored and white glazed), and assistant to General Superintendent is open to the right man. Must be a chemist with mill experience in this line and have personality and ambition.

Address, Box 2659, care Paper Trade Journal. S-30

WANTED

MACHINE TENDERS, BACK TENDERS, THIRD-HANDS BEATER-MEN, FINISHERS FOR NEW BOOK MILL. RUNNING THREE TOURS. MILL SITUATED IN GOOD LOCATION. Address Box 2701, care Paper Trade Journal. O-21

WANTED—Millwright, none but men capable of keeping up their end need apply. State salary and experience. Universal Pulp and Paper Co., St. Joseph, Mich. S-30

SITUATIONS WANTED

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

WANTED—Position as general manager for large mill plant or will supervise construction and complete equipment of new plant, including water wheels, steam plant, power transmission, piping, and erection of machinery, management to follow. Address, Box 2617, care Paper Trade Journal. S-30

WANTED position by an experienced machine tender on tissue on Harper or Edwards attachment. Experienced on most grades of tissue. Married, reliable. Address, Box 2667, care Paper Trade Journal. O-7

BOSS MILLWRIGHT is open for position. Twenty years' experience in Pulp and Paper mills. Any one wanting a first class man on construction and maintenance answer this ad with salary if satisfaction is given. Good recommendations. Address, Box 2669, care Paper Trade Journal. S-30

SITUATIONS WANTED

WANTED position as Superintendent of steam boilers or combustion engines; eighteen years' experience in care and management of steam boilers and combustion of coal. Address, Box 2666, care Paper Trade Journal. S-30

YOUNG MAN, 23, college trained, just finished working through paper mill from rag room to machines, desires connection with reputable Jobbing or exporting firm where he would, in a short time, sell. Address, Box 2663, care Paper Trade Journal. S-30

MANUFACTURERS' AGENT, with following among New England jobbers, is open for a line of paper specialties, on a strictly commission basis. Address, Box 2664, care Paper Trade Journal. S-30

MAN with many years experience in folding box and container manufacture, thoroughly capable of handling an executive or sales office, desires to make change from present position. Address, Box 2665, care Paper Trade Journal. S-30

YOUNG MAN, 24, ambitious, having knowledge of practically all grades of paper, wishes to connect with reliable firm where good future awaits. Address, Box 2643, care Paper Trade Journal. S-30

MACHINE TENDER wishes to make a change, 12 years' experience on box board and specialties, can get production. References if desired. Address, Box 2644, care Paper Trade Journal.

WANTED, Position as Superintendent in Paper Mill, fully qualified to build or run a Plant, understand all grades of Fibre, Book, Board, News and Bond. Address, Box 2623, care Paper Trade Journal. O-21

ASSISTANT—Superintendent desires to make change, thoroughly understands all kinds of board, ice cream and milk caps. Can get production. Best of references. Address, Box 2690, care Paper Trade Journal. O-14

AM managing and selling for small mill whose capacity does not occupy my full time. Am looking for a proposition with a paper specialty or box board mill that requires the service of a man with ability. Address, Box 2691, care Paper Trade Journal. O-14

PULP AND PAPER MILLS—Single man, 35 years of age, graduate engineer, 14 years experience manufacturing, design construction and maintenance wants responsible position with concern who desires a man with energy and ability to apply progressive but conservative methods both in human and material end of business. Address, Box 2692, care Paper Trade Journal. O-7

DO you need a technical engineer with years of experience and who thoroughly understands mechanical, electrical and steam departments of large paper mills. Address, Box 2693, care Paper Trade Journal. O-14

EXPERIENCED accountant with a number of years paper mill experience in general and cost accounting seeks connection with mill. Best references as to ability and character. Address, Box 2694, care Paper Trade Journal. O-7

A CONSTRUCTION millwright now employed as operating millwright would like to make connection with architect or engineer as foreman of construction, familiar with prints. A good organizer and producer. Address, Box 2696, care Paper Trade Journal. O-21

PAPER AND PULP MILLS—Member of Technical Society, married, American, former mill manager, with broad experience in industrial engineering and construction, practical knowledge of paper and pulp manufacture, office detail and cost accounting, desires an opportunity as assistant to executive in administration, manufacturing or in charge of department, where experience, ability and loyalty will meet with just recognition. Excellent references. Recently returned from abroad and available immediately. Address, Box 2699, care Paper Trade Journal. O-14

SITUATIONS WANTED

WANTED—Position as superintendent or manager by middle aged man of 18 years' experience in the manufacture of tissue, crepe, semi-crepe, toilet, towels and napkins, high grade man on kraft, twisting papers and specialties. A No. 1 on colors understands construction and repair work thoroughly, and can get results. Fourdrinier or cylinder machines. Best of references. Address, Box 2697, care Paper Trade Journal. O-14

POSITION is wanted by a man of 16 years' experience in sulphite and ground wood mills. Best of references. Address, Box 2695, care Paper Trade Journal. S-30

WANTED by an experienced man a position as superintendent of the installation of a conversion department, where there is a need of installing an old paper stock department, for the shrinking, cooking, washing and bleaching of magazine and ledger. Address, Box 2698, care Paper Trade Journal. N-4

YOUNG MAN with 14 years' experience in wholesale paper business wishes to make change about first of year. Best references. Can handle anything in the wholesale paper business. Address, Box 2547, care Paper Trade Journal. O-14

Position Wanted

By young and energetic man as Mill Superintendent, in mill manufacturing news, Manilas or bag. Specialist in high production and low cost. Can guarantee results. At present employed in similar capacity. Legitimate reason for changing. Address, Box 2635, care Paper Trade Journal. tf

CONNECTION WANTED—A man with 16 years' experience in the paper and allied trade, wholesale and retail, desires connection. Willing to invest capital in reliable business. Address, Box 2683, care Paper Trade Journal. O-14

MILL CONNECTION WANTED—Why not buy your new cotton rags from first hands and eliminate the wholesale dealer and broker? I have had many years experience, know where to buy due to my representing one of the largest wholesale dealers as their New York representative. The saving should appeal to you. Why not get in touch with me and let us work out details? Why not a demonstration to prove my ability? Address, Box 2649, care Paper Trade Journal. S-30

FOR SALE

FOR SALE—One Potdevin Sack Machine, practically new, used short while. Manhattan Paper Co., 70-72 Wooster St., New York, N. Y.

FOR SALE—One large size Thresher Duster. Two Whipper Dusters; two Holyoke Wing Dusters; four Daniels Rag Cutters; iron frames. Marinette and Menominee Paper Co., Marinette, Wis. O-28

FOR SALE—Two Duplex Moore & White paper cutters, knives 120" long, in first class condition. Address, Box 2594, care Paper Trade Journal. tf

I WISH TO SELL a wholesale Paper Business that has always been prosperous. Present stock about Seventy-five thousand. Owner is retiring. Address, Paper, 1014 Douglas Street, Omaha, Neb. S-30

FOR SALE

FOR SALE—Eleven dryers 36" in diameter by 88½" wide face. Also seven dryers 36" in diameter by 54" wide face. Address Gibbs-Brower Co., 261 Broadway, New York City. S-30

FOR SALE—One Miller Duplex Beating Engine, manufactured by Downingtown Mfg. Company; for information address, Box 2668, care Paper Trade Journal. tf

PAPER MILL MACHINERY FOR SALE

Fourdrinier Part Wire 101" x 50 ft. with Savery shake.

Dryers: 4-48" x 111"; 1-36" x 84"; 1-84" x 67"; 3-28" x 62"; 5-36" x 40".

Beaters: 1-70" x 54" Dillon; 2-60" x 60" Downingtown iron tub; 1-48" x 54" Downingtown iron tub; 3-40" x 40" iron tub; 1-48" x 42" Putnam.

Jordans: 1 Large Horne; 2-49" Horne.

Super Calenders: 1-55" Granger 7-roll; 1-48" Holyoke 7-roll; 2-42" Holyoke 7-roll.

Revolving Sheet Cutters: 1-104" Horne; 1-85" Horne; 1-84" Clark; 1-60" Finlay; 1-48" Moore & White; 1-40" Moore & White.

Reels: 2-116" Upright Board W'nder.

Slitter and Winders: 1-120" Warren; 1-114" Kidder; 1-110" Kidder; 1-90" Pusey & Jones single drum; 1-46" Kidder; 1-36" Kidder; 1-31" Meisel.

Screens: 6-12-plate Open-side Packer; 6-6-plate New Success.

Pumps Centrifugal: 2-10" Worthington; 1-8" Lawrence; 1-8" Wood; 1 Power water Sandusky 8" x 8" triplex; 1-9" x 11" Deane Triplex; 1-6" x 14" Duplex.

Chipper: 1-47" Carthage Chipper.

FRANK H. DAVIS COMPANY, 175 Richdale Ave., Cambridge, 48, Mass.

FOR SALE—Four 10 ft. North "Sav-alls," used about six months. Can make immediate delivery. The Boehme & Rauch Company, Monroe, Michigan. Bow-tf

MISCELLANEOUS

INCREASE Your Knowledge of Paper and Its Use. Send \$2.00 to Geo. Banta Publishing Co., Book Dept., Menasha, Wis., and receive postpaid a copy of "From Paper Mill to Press Room," by William Bond Wheelwright. Nov. 25

PAPER SHEETER wanted, 64 or 72-inch with roll stand. Moore and White or Hamblet. Dragon Paper Mfg. Co., 102 Prince street, New York. O-14

WANTED—As representative for the United States and transatlantic, first class specialist with highest references of the paper line. Offers under B.N.C. 3056 to Haasenstein & Vogler, Berlin W.35. S-30

WANTED—Will pay cash for Kidder Winder 44". Kidder Winder 72" Stack of Calenders 7 rolls 72" face with frame, etc. 2 set press rolls 74" with frames, etc., Jordan Engine, 1,000-lb. Beater. Would take any of these a little larger than specified. Must be in good working condition. Write description and price immediately or wire if you have something good. Junkins Paper Mills, Inc., Fort Madison, Iowa. S-30

WANTED—One single cylinder, second hand Wandell Rotary Screen in good condition. Address Holden Paper Co., Newburgh, N. Y.

PULP SALESMAN

PULP MERCHANTS OFFER TO AN EXPERIENCED PULP SALESMAN OF PROVEN ABILITY AN EXCEPTIONAL PROPOSITION. APPLICANT MUST BE FULLY EXPERIENCED IN SELLING ALL GRADES FOREIGN AND DOMESTIC PULP. STATE IN DETAIL AGE, PULP EXPERIENCE, REFERENCES AND REMUNERATION DESIRED. ADDRESS, BOX 2677, CARE PAPER TRADE JOURNAL.

S.-30

FOR SALE

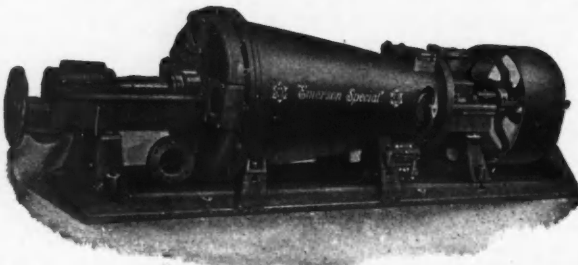
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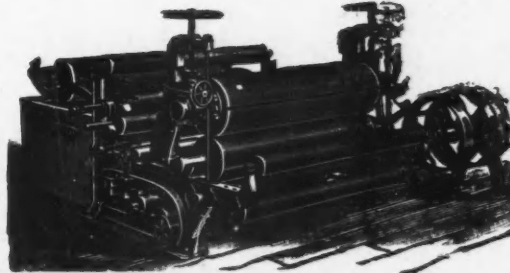
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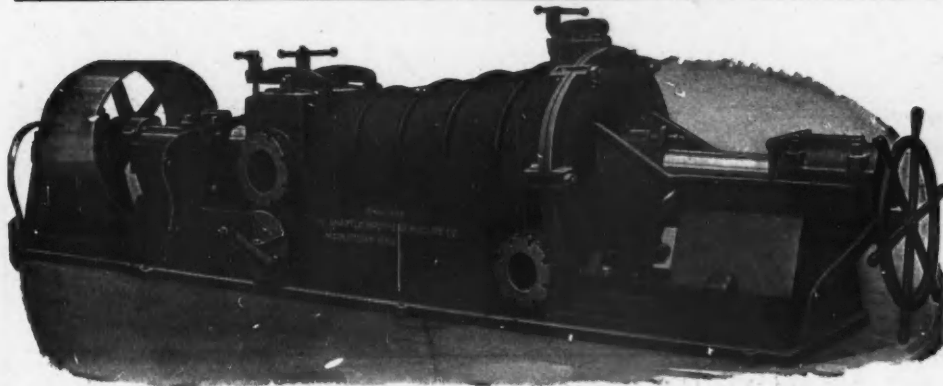
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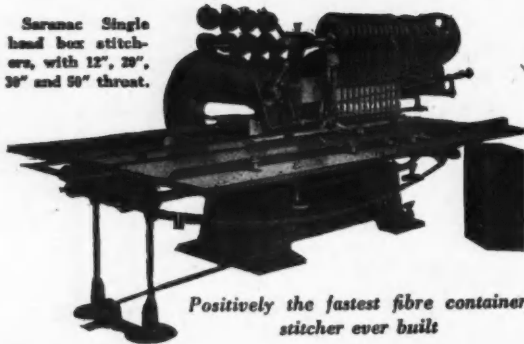
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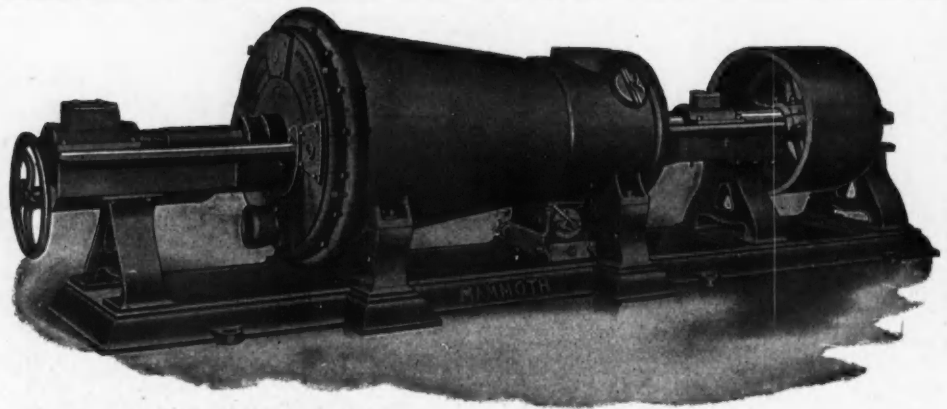
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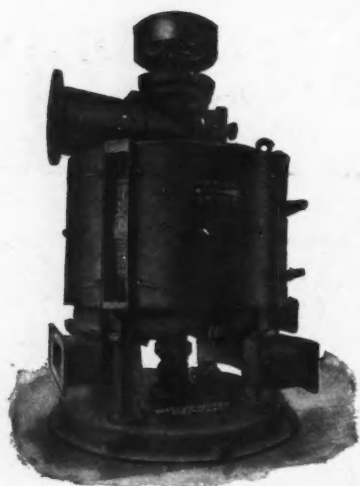
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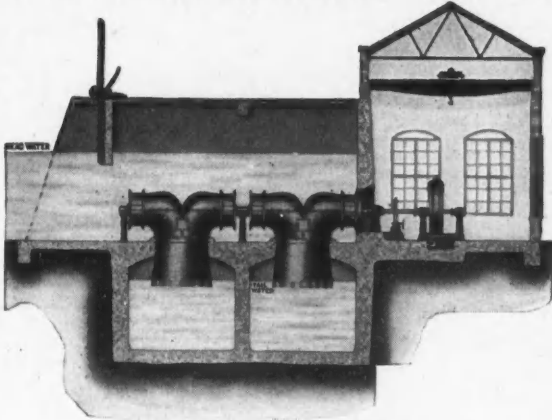
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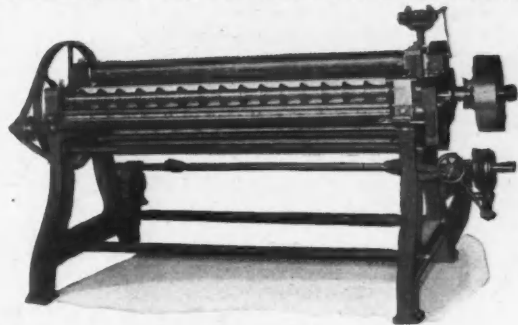
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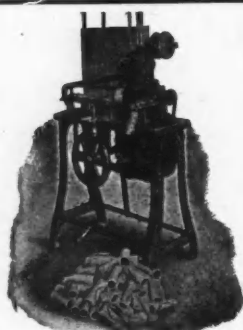
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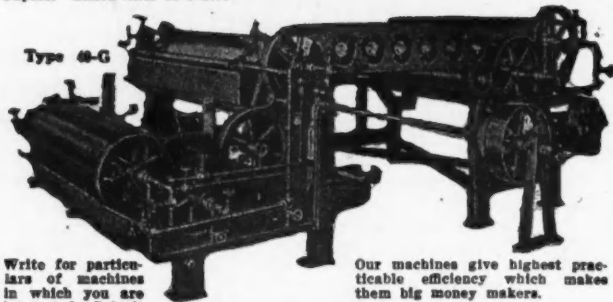
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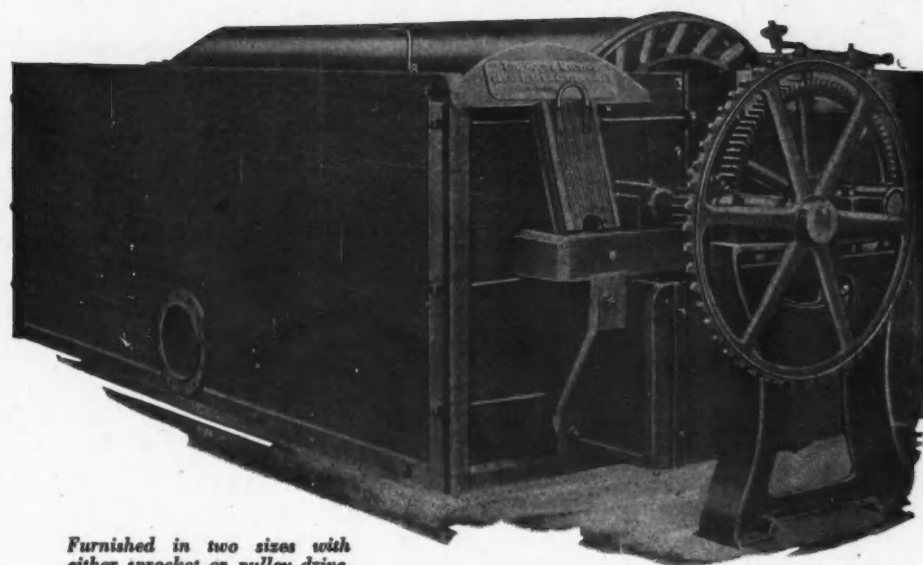
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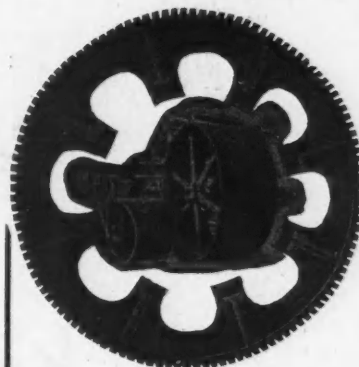
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CLASSIFIED INDEX TO ADVERTISEMENTS

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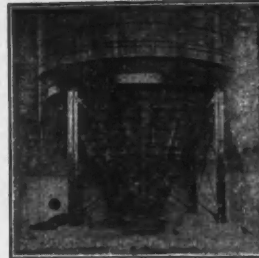
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