

but believe that with a competent sales planning function, which is integrated with the other administrative functions of financing, buying, manufacturing and planning labor requirements, such a fund will not be a drain upon the Company. On the contrary, it will give two vitally important benefits; first, it will provide a valuable stimulus to continuing and far-sighted sales administration, and second, it will liberate an unprecedented degree of co-operation.

In addition, such a fund should not mean a heavy outlay. With adequate control of the distribution problem, the amount expended may be trivial. And the financing may be made conservative by limiting the amount of liability to the amount of the reserve.

To sum up, the Union believes that the Company can supply conditions which will cut waste in line with their proposals by supplying the machinery for constructive discussion, by getting and giving out the facts relative to the cost requirements, and supplying in some way the confidence that lower costs will not only work to the ultimate benefit of all concerned, but that readjustments within the Company, or from the Company to other companies, will be made in conformity with the practical needs of the employees.

Mr. Goodell has been with us since February and progress has been made. With the fact-finding, fact-facing and fact-using program carried onward, the Union feels that it can jointly and co-operatively aid in reducing costs of operation, which should in turn result in a larger volume of sales, provide increased profits and wages, with regularization and continuity of employment.

The Union is co-operating in and promoting a sales program for the aforesaid reasons.

We as a Union have made every effort to organize our competitive non-union workers and in almost every case have met with the usual tactics—discharge of the leaders, followed by strikes settled only on a condition. It seems to me that the textile manufacturers have no evidence in the way of profits or improved conditions to warrant the continuance of this policy. They might do well to try instead building up the labor organization within their plants.

The case for the Union-Management program is well stated in the *American Federationist* of February, 1928, "A Challenge to Employers and the Public."

"The constructive policies of organized labor in the United States challenge the owners and management of industry to co-operate with it in the establishment and maintenance of sound economic standards and industrial peace. We welcome the opportunity of giving our collective skill, training and technique to the development of industrial and individual efficiency. We believe that American living standards and national prosperity can be fostered only through the maintenance of a high industrial productivity level and a high and still higher mass purchasing power.

"The real problem will be that of financing commodity consumption. Not only must the consuming mass of people be encouraged to buy but they must be financed to the point where they can buy freely.

"How will the owners of industrial enterprises meet this challenge? Will they accept organized labor's offer of co-operation? Will they assist in the giving of new force and meaning to collective bargaining so that all concerned may think in terms of industrial peace and of the peaceful solution of industrial problems which affect the relationship of employers and employees?

"Team work on the part of employers and employees is a very desirable thing, but before it can be a practical reality there must be a will to work together and a frank recognition of and respect for each other's rights.

"Opposition to the American Federation of Labor and its constituent parts through the organization of company unions, the use of court injunctions and the arbitrary denial of the exercise of the right of employes to join the labor union of their choice tend to fan the flame of industrial conflict and to widen the breach between employers and employees. Will those employers who have been pursuing such an opposition policy during the past continue to do so in the future?

"The experience of the past can be repeated or a new era of industrial good-will can be ushered in. Corporations can experiment with company unions and various brands of welfare plans and in this way can oppose the standard, independent trade unions, as represented by the American Federation of Labor, or they can accept our offer of co-operation and service.

"Which shall it be? The answer must come from the employers of labor."

The Technician's Point of View³

By FRANCIS GOODELL

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MR. SMITH and Mr. O'Connell have brought the story down to date. They have pointed out that a union has initiated the employment of outside engineers and that the Union has raised the issue of adequate safeguards for the future of Pequot demand. These are two outstanding and perhaps unprecedented developments in industrial history. The Company has underwritten the very heavy expense of outside counsel upon several points and is paying the wages of two Union representatives who work full time to protect the Union against any unfair decision. To my mind, the beauty of these conspicuous moves is that each side is doing these unprecedented things in its own interest. There is a certain vigor about the relationship.

It is up to me to describe our joint research in more detail and then to tell what joint research asks of each party—the managers and the Union membership—and what it offers each.

The job of joint research is "to ascertain the facts and devise methods of co-operation for the elimination of waste and the improvement of working conditions as related to quality and quantity of production." Put in terms of Naumkeag at this time it means—to look into the question of extension or stretch-out methods and to determine fair job standards. What justifiable extension means may require a minute of explanation. In most industries you talk output. In ours, we talk extension. Most of the operations may be described as continuous and the chief question is, how many machines can an operator handle? If a weaver has twelve looms, can his job be extended to sixteen or twenty? With reservations, the output will take care of itself. And incidentally our output is extremely high, a factor which partly compensates for our relatively high wages.

Why should extension so suddenly become an issue over the whole East and South? It is the result of better maintenance and operation control. If the given looms have a large number of un-

³Paper presented before a meeting of the Taylor Society, New York, December 6, 1929.

expected stops per hour, naturally the weaver has got to be on hand to provide for these emergency breakdowns. If he has to be on hand ready for an emergency, then he might as well do the incidental work around the loom while he is waiting, because this incidental work can be set aside when the emergency comes. Incidental work consists of cleaning the looms, taking out the finished cuts of cloth, "purling" the battery end of the cloth and oiling. These things do not have to be done on the instant. Therefore the weaver has until recently cleaned his looms and performed most of the incidental work. This is probably the best arrangement, if he has got to stick around for emergencies.

Now, however, the art of maintenance has taken a great step forward. It has been learned that there is an emphatic economy in prevention of these breakdowns, in periodic inspections and renewals. As a result the "end breakage" is much lower. Nearly every mill has, or is getting, a "bogie," as Mr. Kendall calls it. Recently we operated for a week at .65 stops per loom hour, and we are proud of it. They could not be that low if we did not have excellent machine conditions and piecing-up which is skillfully and faithfully done.

Now that the end breakage is low, the unexpected stops are almost negligible, and the weaver need no longer be assigned looms on the basis of serious trouble. He can, therefore, handle more looms. How many more depends upon whether he is still to do the incidental work around the loom. Some of this incidental work really requires help as skilled as the weaver himself. In such cases it is probably unwise for us to divide it. But some of it, like cleaning, can be done by a less trained and experienced worker, and at a lower wage cost. That cleaner can become expert—intensively trained in that single operation and equipped with tools well adapted to that one special job—and the other advantages of division of labor can be enjoyed.

A great many companies have tried to make extensions without improving and controlling the end breakage. They have usually failed to maintain their new standards. Others have made extensions