When I had done those things in regard to the labor ation then I would turn to the side of production, and hould consider there everything, that deals with individual apacity and in its relation to securing the greatest possible utput socially possible at any time. Absolutely getting out limitation of output, it seems the first thing is to develop e selling department as nearly as possible to a state of effection and study the flow of orders that will come into hat plant through proper salesmanship. It has been my experience that frequently the selling side of the business eft to be organized until long after the factory side ha een organized. At the end when you have your selling rganization completed in this new factory, then I would do Il my planning work, and all the system for maintenance chedule, and all kinds of work analysis: I think before the Iotion-and Time people get, on the job, these things should e, considered, task matters should be considered.

Then I would shift the lower costs to the heading called The rights of the Consumer in the Business"; and there I would lay out the maximum conditions of the business. Tould not wait for the law to reach me—I would have no vafered stock, restricted dividends, in gonecaled management salaries—and I would see that the sanitary conditions re good; and then I would say, that it is due to me and to the consumer for me to get my unit cost lower and lower and lower.

If there were some labor union men, in this meeting I hould take pleasure in saying that where I had arranged o deal with the unions—and this of course would be easien a perfectly new undertaking, rather than in an old-one. Ithough it is practical in both—I could still get by every highe thing that a majority of you people in this room would eclare to be legithmate scientific management; that I could et by every single element, because the whole business of elationship between employer, and employe would have een shifted from the violent method of adjustment to anstitutional basis, and the whole list of crimes now comitted by labor unions and by employers also would have fearted.

Discussion

HENRY P. KENDALL: AIr. Valentine has made some volutionary suggestions. He has touched on one significant actor of organization—lifting the employment department to ne equal status with that whigh has to do with the production, with machinery, with sales, and other parts of the reganization. I think that too little attention is given to employment feature in any industrial concern. The oldors of putting that work up to the foreman, to hire and discharge, to regulate wages, administer discipline is fast requiring archaic.

I am not ready to accept Mr. Valentine's theory of putting uch a man on the same status as the other partnership memers in the, business. I do not know where such men care secured at the present time. It is a stiff proposition to the proposition of the proposi

The matter of the regularization of employment is a queslon of the utmost importance to the American people. It a part of this question of non-employment now surging throughout the country, in the different cities and different states. I feel that for any management to impress the people they must organize by industries, and force a change in the customs of the country that affect seasonal employment. One of the greatest drawbacks in the business in which I am engaged—that is the printing and the binding of school books is that it is a seasonal employment. As schools open in September and public school boards never adopt the booksuntil their last meeting in June, it brings the business of furnishing these books into a few months and prevents the manufacturers from knowing in the winter time what they can manufacture. There is no reason why pressure should not be-brought on the public authorities to compel school boards to adopt in January the books for their next season's business. And yet that custom is one of the causes in the book business for seasonal employment. Each manufacturer, and employer must work to meet these conditions,

In the second part of his paper, the "Possible Relations of Scientific Management and Labor Unions" I feel that Mrr. Valentine is a rank theorist. The whole hypothesis of democracy in industry is all right as a working hypothesis. There are some of us, however, who are engaged in one single cross section of industry. We have to think of the pay roll for next week, how labor opposition will affect our sales next month, and how this law will absorb our surplus through factory changes and workmen's compensation. That is, we are lighting the whole situation all over the country; but we also have an eye on the cross section which affects us; and we are powerless as an individual plant to affect the whole problem.

. I do not know that I should begin that new industry which Mr. Valentine speaks of in exactly the way he would. I should have too much fear that in some communities with the closed shop prevailing, and the labor union leader who could hardly be distinguished from the ward boss politician—and there are such—whether such an industry could even get started, to say nothing of holding its own later on. Those are problems which a man viewing the cross section too closely might well hesitate to take his chances on.

There are always other factors which control labor unions than merely the local group. Your local group in the city may be entirely in sympathy with your enterprise and willing to co-operate in every way. The national union and the affiliated unions may have the opposite view. The question is whether you can view a particular industry, or your particular job for the next five years as the basis for the whole theory of industrial democracy, or the cross section of it which will touch you in the next five years; will you not have to view it as a cross section, but with the understanding and sympathy and belief, which you should have for the whole problem.

MR. C. B. THOMPSON: With Mr. Valentine's main point, the necessity of recognizing and co-operating with organized labor, I must of course agree. I have been preaching this policy continuously for two years and I proposed a definite method of co-operation between employers and organized labor at the Chicago meeting of the Western Economic Society early in 1913.

It's eems to me, however, that Mr. Valentine's suggestion has omitted one vital factor. Assuming that sooner or later we will have to work with labor unions, what are we going to do about their policies of restriction of output and equalized wages? Both these policies are of course denied by some labor union leaders but their existence and constant practice are matters of every-day observation. If we must

sooner or later accept collective bargaining as a policy of Scientific Management, our bargain must include some specific and definite provision for the application of these principles of Scientific Management which are not in harmony with restriction of output and equalized pay for unequal effort. There must be provision for the establishment and enforcement of a proper day work and for the characteristic application of the bonus

ROBERT T. KENT: Several years ago I proposed that unions should grade their own workmen according to their ability; that a \$4 a day man should get a card showing that he was a \$4 man; a \$3 a day man should get a card showing him to be a \$3 man. The employer could agree with the union that if, he wanted a \$4 a day man the union would supply him with such a man. Today, if we get a union man in the shop, we cannot be sure that the union has supplied us with the kind of man we want. The union insists that we pay the union rate, whether or not the man is nothing more than a \$2 a day man. The fact that he carries a union card entitles him, solely by virtue of that card, to demand the union mage. If the employer could be sure in getting a union man he would not be paying \$4 for \$2 man, there would be less opposition to union shops.

I believe that the Brass Workers Union of England has adopted this scheme of grading its men according to their ability; that a man unsatisfied with his wages could apply for examination before a joint board selected by the employer, the unions and the town authorities. The man had to demonstrate that he was a better man in his trade than the rating assigned to him called for. If he failed in the examination he had to abide by the rating he had, and he was debarred for six months by the union from applying for an examination to regrade him. If the unions would take a step like the Brass Union in England is reported to have taken, we would have less difficulty over the question of closed and open shops.

C. N. LAUER: Mr. Valentine stated that in starting a new industry life would discuss his problem with the trade unions in the locality. What would he accomplish by that except a closed ship?

MR, VALENTINE: You would have a closed shop with the union working with you instead of opposing you. The only difference between a preferential and a union or closed shop is the method of getting the men. The preferential shop arrives at the closed shop with the door always open to get people from outside if the union cannot supply men who are up to the standard, and the union must accept your standard. Those who claim that there is an ultimate difference between the closed and preferential shop are wrong. For the union to state that it will make a closed shop is violent, whereas a preferential shop is headed for the closed shop by the educational method, which leaves everyone in better shape.

W. J. ADAM: What does Mr. Valentine mean by coorgalizing with employers to restrict output for a definite

operating with employes to restrict output for a definite period. What is accomplished by that?

MR. VALENTINE: Assume that a concern was refusing to deal with unions, or with forms of association, I would consider it absolutely necessary as a practical method for the union, in order to retain its membership and get ready for the ultimate results which will come from group action to insist on group action and equal wages. Otherwise their organization drops. As in war, they must present a steady unbroken fighting line. As soon as the necessity of fighting for their life as an organization is removed, you will find the lumion assisting you in differentiating labor. But until

this little element of emocracy is infused into the movement, the unions will read with you as a group. The moment the union is recognized, the level wage is the worst thince that they can have

saniford E THOMPSON: Not long ago in Chicagaprominent labor leader said that he believed in the print ciples of scientific management so far as they applied the elimination of unnecessary operations and of unnecessary work for the employes. More recently I was talking with the president of one of the strongest labor organizations in the country, and he agreed that if a two dollar manicould replace a three dollar man at a machine, so that the three dollar man could be employed elsewhere at a higher class of work for which he was fitted, it would be advantageous Such indications show a tendency toward the acceptance of some of the fundamental, economic principles referred to be Mr. Valentine.

One of the primary difficulties with many labor union me is the belief way down deep in their hearts that there i not work enough to go around unless they work slowly This of course is another way of expressing belief in th limitation of output. This point was brought forcibly to m attention the other day by a member of the Department's Public Works of a province of Australia. He told me the the leaders of the unions there were taking the definit stand that there was not work enough for their men unles they worked slowly. With this in mind the bricklayers hav: limited their output to 450 bricks per day on all classes of work, although even with the larger sized brick that are used in the United States they could readily lay twice th. number in many cases. As a result of this stand, the cor of building operations had increased, he said, so much a to greatly retard construction,

The matter of seasonal employment brought up-by M. Valentine I consider one of the most vital problems from the standpoint of the working man and, in fact, for a classes of wage earners—a problem much more serious that that of the minimum weekly wage. A very interesting little book has been written by the Misses Clark and Wyatt of "Making Both Ends Meet." They bring out in a most in teresting manner and very fairly the difficulties met by wage earners through irregularity of employment. The prevertion of seasonal idleness must involve in many cases a readjustment of wages and also a readjustment of prices, for margin of profit is essential in any industry if it is to live and in many cases the margin is so swall that a radic change would simply cause a shutdown which would throthe factories entirely out of business.

Recently a Committee of the Boston Chamber of Commerce, co-operating with the American Association for Labe Legislation and the American Association on Unemploymen has been making an investigation of seasonal employmen and while no final report has as yet been presented, somenative suggestions have been formulated. These illustrate the effect of irregularity of work upon both the majuracturers and the employes. As the suggestions so far a I know have appeared simply in the publication of the Boston Chamber of Commerce, "Current Affairs," and they may be of interest in this connection, and I give them, as follows:

1. On the basis of records, a careful calculation of expecte output should be made in factories at the beginning of each year and this output divided as equally as possible among the different months—advertising, buying and selling being directed to the

end.
2. A close connection should be maintained in factories between the manufacturing and selling denartments, and the bea of the sales department should thoroughly understand the manufacturing end of the business and organize his selling force of the selling