We can take the figures on that same building for all of last year, and assuming a result not so favorable, we can take 50,000 units as the theoretical maximum for the entire year of which not more than 30,000 were actually accomplished. Then the "Unemployment Score" would be forty per cent. Under the proposed plan it must be possible to subdivide this percentage indefinitely. Thus the major causes may be rated as follows:

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Absenteeism	5
Lack of Materials	10
Bad weather	4
Strikes	10
Scattering	11
Total	40

Any such approach to the study of unemployment involves some assumptions which, while not current. seem to be fully in line with our probable industrial development. For instance, it appears to be altogether in the interest of a higher qualitative production that much more importance should attach to the separation of the individual worker from a given industrial unit, than attaches to his joining it. A mistake made in taking on a given worker may always be "rectified" by a discharge before the end of the trial period. This is the purpose of the trial engagement. But once the worker has been finally accepted and made a part of the organization, he must be held much more tenaciously than is our common practice. This is not because of any ownership to the title of the job, but simply because if the worker has been carefully selected at the start, well-trained in his specific duties and properly oriented in the organization, his leave taking might be a matter of financial and human concern. In the long run, however, we cannot hold people for whom we do not provide work. So we pass to the concept that it may be just as bad to take more work than our "regular force" can perform as it is to fail to secure enough work to keep that "regular force" busy.

It is the testimony of the best managers the world over that, as we learn to carry on a given class of work in better fashion, the percentage of skilled workers increases. In fact, there is an abundance of evidence supporting the theory that when industry becomes truly scientific there will be no place for the unskilled. Hence we can safely conclude that the better the management the greater will be the financial sacrifice necessarily associated with the lay-offs and dis-

manufacturers who are to be the most prosperous in the long run will definitely decide on the size of force required and hold rather tenaciously to it. In almost every case this will mean a force smaller than the one formerly employed. The better methods involved in this decision to give steady employment to those employed almost invariably means an ultimate reduction in the normal force. Every effort should be made to effect this reduction gradually through normal separations and not by "firing" anybody. While it may be "hard doctrine," I am convinced that it is almost always a mistake to discharge for "lack of work."

Another idea which, while not current, nevertheless appears to be inherent in effective manufacturing, suggests that idleness on the part of piece workers has as decided an effect on costs as idleness anywhere else. The employer does not appear to pay in any way for this type of idleness simply because he does not pay in direct wages. But he pays in unnecessarily high piece rates and in other more direct ways. In an economic sense all idleness during predetermined hours of work is waste. Important as it is from a manufacturing standpoint to keep machines busy, it is much more so to keep the workers busy. Viewed from this angle a check on man-hours becomes altogether as important as a check on machine-hours. Our tangible investment in machines logically makes machine idleness a high crime. As we come to realize the price which has to be paid for a plant morale under which goods can be manufactured at lowest cost, more effort will be put into guarding against workers' idleness.

If these "Unemployment Scores" are to have the largest social significance and be fully effective as a guide to operating policies, lost time of every character and description must be included in the percentages, especially at the start. I recall, on a visit some years ago to an establishment which had just introduced so-called "Industrial Democracy." that a large number of the employees throughout the plant had obviously nothing to do. It developed that as a feature of the new order a promise of continuous employment had been made. The firm shortly thereafter experienced difficulty in getting an adequate supply of their raw material. Hence the people idle at their work-places. Continuous employment comes as the result of planning and good management. It cannot be had by the issuing of an order.

On the other hand, there are varieties of unemployment which result directly from a high type of management-I almost am tempted to say the highest I believe we have now arrived at the time when the type-such, for instance, as found at the Clothcraft Shops. Figure 1 shows a typical day's attendance at this plant. Under the quota (for product) system which they have used so successfully, employees having finished their tasks are permitted to go home. Hence the attendance curve begins to drop shortly after one o'clock. Under our definition, the difference between the total of these hours of work and the predetermined hours of work (44 hour week basis) constitutes unemployment. It may be considered a desirable variety. But it should be measured. Without knowing definitely its extent, even an astute man-

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Such Unemployment Scores would have an added significance if there were included in the plan some classifying and weighting of the various contributing causes so as to show their importance from a management standpoint. For instance, unemployment occasioned by bad belting practice might be heavily penalized on the ground that it can be absolutely eliminated under proper management. Again some types of "Unemployment within Employment," such as that occasioned by considered vacations, are altogether desirable from a social standpoint. Cognizance of all

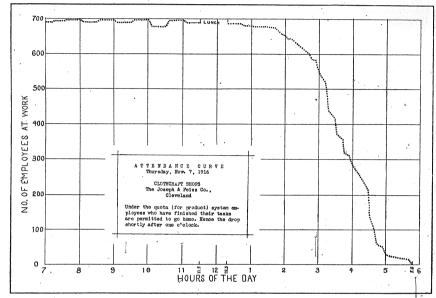


Figure 1

ager can not know whether its obvious advantages are otherwise offset.

I do not want to multiply hypothetical illustrations, but to convey a more detailed idea of the picture which a fully developed "Unemployment Score" might give, let us assume that a given group of workers over a given period have been employed sixtyfour per cent of the theoretical time, leaving thirtysix per cent as the "Unemployment Score." The unemployed time might be divided as shown in Figure 2. This figure has been so drawn as to afford an instruction card to anyone desiring to take off a score.

such considerations should be taken in the weighting scheme. In some instances it may be convenient for the manager to have the unemployment shown, divided as between two or more classes of employees, such as, for instance, between skilled and unskilled.

Assuming that we had "Unemployment Scores" for a number of different branches of the same enterprise or for a number of different plants in the same industry or for typical plants from each of several different industries, it would be possible for those making poor records in any respect to seek the counsel of those securing better results.