—a representative of the employers and a representative of the workers. Disagreements, which fortunately have been unexpectedly infrequent, are referred to an Impartial Chairman[5]—a person wholly outside the industry and chosen by both sides. A Board of Referees also mutually chosen and recruited from without the industry fixes the wage scale annually. It may be revised at six months' periods on the request of either side with a change in the cost of living affording the only basis for a change either up or down.

Two outstanding features of the Agreement are the concession of a guarantee of forty weeks of work on the part of the employers, and the acceptance of measured production for the individual employe on the part of the Union through

a weekly minimum guaranteed wage for each worker and an additional wage depending upon his or her production measured by standards based upon time studies.

It is provided that "the unit of measurement shall be the production of a worker of average skill working at normal speed for a week of forty-four hours."

There is a committee on standards recruited from the workers, named by the Union in every department of a shop. This committee approves or disapproves the standards submitted to it. In case the standards submitted are rejected either by the committee of the Union or by the employer, the matter is taken up by the representative of the Union and the representative of the Association. In case of a disagreement it is provided that these two shall select "a third party who shall be a person skilled in the trade." The decision of this third party is final.

Thus it was early recognized that disputes about standards (i. e., the determination of the quantity of work that is to be performed in a given time by an individual employe) involve questions highly technical in character which do not lend themselves readily to equity procedures. In stipulating that such disputes were to be settled "by one skilled in the trade" it is probable that the intent was to discourage such disputes by practically throwing them outside the Agreement. At any rate during the first five or six years of the Agreement such disputes as arose about standards were ironed out in the shop. Once in 1924 and again in 1925 the writer notwithstanding his lack of "skill in the trade" was asked to hear and settle disputes of this character.

The following quotation from the decisions rendered in these cases bear directly on our subject:-

1. Our procedures wisely afford the employes, through an appropriate committee, an untrammeled opportunity to comment upon and even to criticize each and every standard set up. This relates to any given standard as a whole as well as to any of the elementary units or parts of which it may be composed. Any restriction of this opportunity for critical comment on time study data would not only be entirely contrary to the spirit of the Agreement, but would not make for that basis of understanding, as between the technicians and the workers, which is essential to progress.

However, the undiscriminating refusal of an entire line[6] is not at all of a piece with either the Agreement or a scientific approach to industry. Such a sweeping rejection of time study work—presumably carried on in good faith—if made with a full understanding of its implications, would be the equivalent of rejecting standards—perhaps not the most essential idea underlying our Agreement—but certainly one which if abandoned would require a radical revamping of the understanding under which the market has been satisfactorily operating for over five years.

2. The employes have rejected the standards set for virtually the entire line largely on the ground that the earnings under them showed a decided falling off as compared with previous seasons. Assuming reasonable performance on the part of the manufacturer, and especially on the part of the time study man who determines the standards, any such wholesale rejections would be tantamount to a violation of the spirit of the Agreement. Styles do not change so completely from season to season as to warrant wholesale rejections. Standards mutually acceptable one season are, other things being equal, not subject to question the following season. In other words assuming a proper analysis (through time study) of a given piece of work and of the time taken on its individual elements as well as the orderly maintenance of clear records of previous observations and standard determinations—such wholesale rejections are entirely out of order. Such criticisms of standards as are made must be reasonably discriminating and capable of detail statement and analysis.

Criticisms once raised must likewise be met—not by generalities, but by reference to the data which are in such shape as to be reasonably convincing even to the layman. After all standards (shop standards, market standards and some day inter-market standards) will only come into general use as they are understood by and command the confidence of those who work under them as well as those who make the determinations. It is a part of the duty of the time study man to interpret his work to those most intimately affected by it. Access to time study records should always be reasonably easy. The records themselves should be maintained in such a way as to make them understandable and broadly informative.

As a direct result of the hearing of the last of these two cases Mr. Francis Goodell, an industrial engineer and a member of the Taylor Society, was employed at the joint expense of the Union and the Manufacturers Association to make a study of the whole standards situation. A copy of his report of this inquiry[7] with comments thereon by the various parties at interest has been filed in the Engineering Societies Library. As this report has the distinction of carrying the first discussion of the technique of time study as viewed by organized workers this concluding paragraph of the Union's letter of comment is not without significance:

In conclusion we beg to advise that our proposals for the further improvement of the standards system are submitted in a constructive spirit. We agree with the thoughts expressed by Mr. Goddell in his report and by Mr. Cooke in his letters of transmittal concerning the value and soundness of the system and the progress made towards its realization. We stand ready and willing to do what is in our power as a union of constructively minded, skilled and capable garment workers to make our contribution to the further improvement of the standards system.

It would be a mistake to over emphasize the importance of this Cleveland departure from usual industrial procedures. The number of workers involved is small and the Cleveland garment market is not by any means a dominant factor in the garment industry. The resources available are necessarily limited. In appraising the results we have to recognize that on both sides there always have been, and still are, serious misgivings as to the operation of the plan. The Cleveland manufacturers, by virtue of their geographical location, have had difficulty in securing a proportionate share of the trade as against the more favored Chicago and New York markets. But that in spite of handicaps these novel industrial procedures—involving severe disciplines self imposed upon employe and employer alike—have survived affords strong testmony in their behalf. There is certainly no thought of their abandonment.

In Mr. Goodell's report both time study and standards are discussed with a range much wider than is possible in this present paper. Further references to it and the Cleveland Agreement will therefore be made only as they contribute directly to the development of my theme.

The fact that the Cleveland garment workers constitute a section of one of the more important needle trade organizations which in turn is affiliated with the American Federation of Labor is quite incidental. The discussion applies to so-called company unions or to any situation where some degree of group solidarity has been established or where group reactions are in any way recognized or valued.

Indeed such a recognition of the groupings of the workers in industry is forced on us by the growing integration of the industrial process. We have come to realize that the production mechanism cannot break or even weaken at one point without endangering the total effort. The effects of discord and lack of understanding can no longer be wholly localized in view of the inter-dependence of all the agencies of production. Because, for instance, there must be maintained a nice balance as between sales, finance and production, the enthusiasm of the sales force—even the attitude of the investing public—may strongly influence the men and women at work on the product. So we come to reckon with the collective mind as well as with the reactions of individuals. Further progress in establishing the art and science of time study will become more and more dependent upon morale interpreted as the state of mind not of one group but as that totality of attitude resulting from those various groupings and regroupings through which we members of the human family are related to any given undertaking.

As first practiced time study was concerned almost wholly with the individual. Taylor recommended in the early days that an operator while being studied should, as far as possible, be isolated and further suggested that while being observed he be given some special compensation to insure active participation in the work. As the mechanisms of time study became more familiar in the shop and their purpose better understood these measures were neither necessary nor desirable. Today—except for a negligible amount of laboratory research—time studies of individuals are

[5] At present Dr. Jacob H. Hollander, Professor of Economics, Johns Hopkins University, Baltimore, Md.

[6] This term is used as including all the season's models, in this case numbering seventy to eighty individual garments.

[7] A report on the Production Standards Situation in the Ladies Garment Industry of Cleveland with comments by officers of the Employers Association and of the Union, August, 1925.