

as all manual workers in the years from the early eighties down to the present. And in relation to these issues, this history supplies evidence which has significance for an understanding of all American unionism.

This narrative is important to those interested to foster a science of management because it shows a large and prominent union growing intellectually in a direction which is broadly in harmony with policies they are advocating. The reader sees in interesting perspective the trade union mental evolution which had its definite counterpart in the mental evolution simultaneously undergone by many engineers and managers within the Taylor Society itself. There is a good characterization of the work and influence of Robert G. Valentine in this industry in 1915-16; and it was during the consulting labors of Mr. Valentine for this union in New York in 1915 that his famous paper on the relation of efficiency to consent was given before the Taylor Society. These and other influences at work in the union and among the managers eventually bore fruit more tangibly than in 1916, when Mr. Valentine's death joined with other causes to bring to a halt the experiment over which he presided.

In consequence, by 1924 the scene presented a radically different complexion. The collective agreements in Cleveland, for example, since 1919, and in New York City in 1924, have embodied concretely a new emphasis in policy which is a marked departure from typical union views. At least, these agreements have established certain principles as acceptable; and their fuller development is only a matter of time. These principles may be briefly summarized as follows:

1. Acceptance by the union of a share in responsibility for getting production.
2. Use of guaranteed weekly pay rates; but use of payment incentives for work done above a defined standard.
3. Definitions of fair minimum standards of amounts of work on a basis of careful study of jobs, determination of amounts to take place under joint agreement.
4. Guarantees of regular employment for a defined number of weeks per year.
5. Guarantees of unemployment compensation for the weeks of idleness in excess of the number in which work is not guaranteed.

All this represents, of course, a virtual reversal in policy from that of many unions on questions of measured production, use of scientific methods to discover fair amounts of work, willingness to allow the better workmen to earn more than the union scale—in fact, the whole cooperative emphasis in the matter of production. The workers get, in return, a longer working year and the pledge of compensation for prolonged idleness—assuming that industrial conditions in general do not become too depressed. Hard work will not, under normal conditions, work them out of a job. Honest application to work is calculated to bring larger wages for the workers and lower unit costs for the employers. All this does not solve the problem of defining a fair day's work and of paying a fair return to the workers. But it does provide a sensible and approved method for narrowing the possible area of conflict

over work and pay, by widening the area in which facts can have their mediatory influence.

Indeed, if its present program carries on, this union will go down in history as among the very first of those within the fold of the American Federation of Labor to realize that its prosperity and the industry's prosperity are inseparable, and that all the union can do to strengthen the industry will in turn strengthen it. It stands thus to exercise no little influence as an object lesson to other unions confronting similar problems. But to do this the union must, to use Dr. Levine's telling phrase, carry through successfully with its "new synthesis of trade union realism and social idealism."

The continuance of such a program does not, of course, come by chance any more than its inception did. It comes because certain leaders have had the vision and determination to win others to their point of view. And in the present situation a program as liberal, moderate and tolerant as this, in a group a large fraction of whom are party socialists, requires a real educational program to be put over. The formal educational and social welfare work of the union (with an annual budget of \$17,500) is not tied up too closely with the inculcation of these matters of policy, but is devoted to cultural ends, physical and intellectual, of a more general character. Yet it is reasonably certain that the increasing attention paid by the union to formal adult education is making it easier to retain the policies which are being worked out.

To the student of economic development in this country this book cannot be too highly recommended. It calls attention to new problems and throws new light on old ones. Perhaps as valuable as any feature is its practical insistence on what is to the union the obvious fact, that industrial problems cannot be solved if the rights, aspirations and desires of the manual working group are for long ignored.

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Seasonal Operation in the Construction Industries, The Facts and Remedies. Report and Recommendations of a Committee of the President's Conference on Unemployment. McGraw-Hill Book Company, New York, 1924, pp. 213. (658.9:69)

Customs which became fixed when builders had not yet learned how to cope with adverse weather conditions are mainly responsible for seasonal idleness in the construction industries, not climate. The development of new equipment and new methods has made it possible to carry on most types of construction all year round in all parts of the United States. "It may be stated without fear of contradiction that both from an engineering and quality standpoint any type of modern building construction can be accomplished, and most classes of engineering construction fully as well, in the winter months as at other seasons, if the proper protection during the progress of certain parts of the work

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is provided." Nor is the cost of this prohibitive. "The available data indicate that even for those types of work primarily affected by weather conditions there is a decrease in the labor cost. On the remainder of the work not primarily affected by winter conditions it is also fair to assume at least a similar saving in cost due to increased productivity at seasons of relative inactivity. . . . Where there are also taken into account the pecuniary advantages of more continuous operation of force and equipment, the lower material cost and the saving to the owner of capital time charges through quicker occupancy, it is evident that these latter can be considered almost entirely net savings. These facts, little appreciated by the building industry itself and entirely unknown to the owners, should if properly impressed on the minds of the owners contemplating building, result in an appreciable decrease in the present seasonal fluctuation in building."

These and similar statements are to be found in a study which is important not only for what it says but for the persons who say it. Responsibility for the extracts quoted is taken by a committee of the President's Unemployment Conference, appointed by Secretary Herbert Hoover to make a thorough study of seasonal operation in the building trades. The committee includes a representative group of men of national repute as builders, manufacturers of building materials, architects, bankers specializing in financing building operations, consulting engineers, labor leaders in the building trades and others with intimate knowledge of the conditions. The actual investigation was carried on largely by the staff of the Division of Building and Housing of the Department of Commerce.

The study brings out three important conclusions. First, that winter construction is entirely practicable from a technical standpoint. Emphasis is laid on certain elements of scientific management, particularly on careful planning. By the right kind of schedule the shell of a building may often be made ready by the time winter comes, then by closing it in, the interior work may be completed with artificial heat. There are numerous difficulties in planning operations, but no greater complexities than are encountered in some other industries where uniform working schedules have become a regular practice of the better plants. When planning does not make it possible to avoid outdoor work, there are methods of conducting construction in cold weather without deterioration to the building, and ample practical advice is given on such points.

The second conclusion, already indicated, is that winter construction is not merely practicable technically but is practical from a business standpoint as well. Winter construction may even yield a profit over peak load operation, and in any event need not involve more than a slight addition to costs.

These two significant conclusions focus attention on the third, explaining why seasonal operation remains the rule in the trade. Tradition is seen as the crux of the whole problem. However, the knowledge that custom, not climate, is mainly responsible for seasonal idleness in the building trades puts us only one step nearer to a solution of the problem. For customs, the sociologist tells us, are generally more stubborn than technical obstacles. The

latter may often be solved completely by the work of a single scientist; the former may present the huge problem of changing the habits of a nation.

The individual builder is practically powerless to modify social custom. Public authorities, such as the federal, state and municipal governments, must be induced to substitute for their clumsy ways of letting contracts on buildings, roads and other construction work, methods of far sighted planning which take account of both cyclical depressions and seasonal slack times. Public utilities must be induced to follow a like policy. Individuals letting contracts for commercial and industrial buildings and builders of homes must be educated to make their decisions earlier and allow for better planning. Landlords must be persuaded to establish several leasing dates every year in place of a common single leasing date. Contractors and builders themselves, used to the old methods, must be taught to experiment with longer seasons of building and to develop more of an interest in the subject of continuous employment and operation.

The report sees this issue clearly. In the strongest terms it urges organization for propaganda purposes. It advocates the organized effort of the professions and of the various trade groups concerned, individually and collectively, locally and nationally. It points to the need of personal persuasion, of newspaper publicity, of circulars and advertising. It outlines in detail methods by which every organized group or interest may promote a common program. If the investigation is not too optimistic in its conclusions as to the technical facts, one may say that all-year building is no longer a major problem of scientific management. It is the social problem of getting society to accept an improved mode of action.

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Employees' Representation in Coal Mines. A Study of the Industrial Representation Plan of the Colorado Fuel & Iron Company, by Ben M. Selekman and Mary Van Kleeck. Russell Sage Foundation, New York, 1924, pp. xxv, 454. (658.3151.)

This is one of five industrial studies, either made or in progress, by the Russell Sage Foundation; the others are: The Industrial Representation Plan of the Minnequa Steel Works, The Partnership Plan of the Dutchess Bleachery, the Works Council of the Rock Island Arsenal and the employment policies of William Filene's Sons Company in Boston.

The usefulness of the book is greatly enhanced by a synopsis of nine pages which answers most of the general questions one would naturally ask about the Plan.

What is the Plan? "At each nine two or more representatives, in accordance with the number of men employed, are elected to serve for one year. These employees' representatives from all branches of the company come together

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