

Experimental Method in Industrial Relations

AN interesting discussion arranged by the Department of Industrial Co-operation of Section F (Economic Science and Statistics) at the Aberdeen meeting of the British Association dealt with the use of the experimental method in the field of industrial relations. It would probably have attracted more attention had it not been postponed to the last morning of the meeting.

The three papers forming the basis of the discussion were all highly stimulating and suggestive. Mr. M. H. Dubreuil's paper on autonomous groups in industry was essentially a plea for greater delegation of responsibilities in industry as a means of associating the workers with the success of the business which employs them. M. Dubreuil pointed out that this involves the discovery of responsibilities in accordance with the character and extent of the special abilities of the worker, and not in accordance with the abilities possessed by persons in the business entrusted with quite different tasks. The secret of scientific progress in the internal organisation of work lies in these terms of differentiated abilities.

Many problems of equipment, distribution of work, supplies, processes, etc., outside the scope of the abilities of the general manager could usefully be appreciated by the workman, and M. Dubreuil envisaged the subdivision of the business into relatively autonomous groups corresponding to the various tasks revealed by analysis of its technical structure. To this technical subdivision might be added a subdivision of the general budget, so that members of each group might act as if they really formed an independent business, thus ensuring an interest in the profit ensured by the good management of the fraction of the budget entrusted to them. M. Dubreuil believes that organisation of work on these lines is to be preferred to many profit-sharing systems.

This plea for experimental study of the structure of industrial organisation was followed by another striking paper, by Prof. F. Meyenberg, on the improvements in industrial relations arising from the intervention of the management consultant. Prof. Meyenberg pointed out that the independent consultant possesses definite advantages. He is not tied to a daily routine and can give his whole time to questions of organisation. Being free from departmental bias, he can keep in view the harmony of the whole organisation. Moreover, his experience in different branches of industry makes it easier for him to recognise common principles and to avoid undue attention to relatively unimportant details.

In addition, since such a consultant is concerned primarily with the large field of management and not with questions of technology or production, any essential knowledge of the particular trade required to avoid difficulty in the introduction of management methods can easily be acquired by a man of the ordinary technical education essential for any consultant. These advantages and the freedom from the deadening effect of tradition on those who have spent long years in an industry give the management consultant a wide sphere of service in industry which is far from being generally appreciated or utilised.

In Prof. Meyenberg's opinion, some of the prejudice against the use of an outside consultant is due to the fact that the wrong man has sometimes been called in. This is probably a less important factor than the conservatism of the average industrialist, but the importance of the quality of the consultant needs no emphasis. Prof. Meyenberg made the further suggestion that such consultants might be recruited from the captains of industry themselves.

The third of the three papers, that of Mr. R. J. Mackay, was concerned with experiments in readjustment of relations between finance-capital, management and operative labour. Mr. Mackay pleaded for experiments in reversal of the customary relations between absentee owners and working personnel, such that capital will only be attracted if the capitalist has confidence in the efficiency of the team which desires to hire his capital. Among other rather revolutionary suggestions in an admirable plea for the improvement of the relations between capital, management and labour, Mr. Mackay submitted a case for the division of medium- or large-sized businesses into relatively independent responsible groups of working personnel, and indicated its bearing upon the wider utilisation of biological laboratory technique for vocational selection, guidance and placement of existing and potential industrial personnel of all qualities.

These three thoughtful papers pleading for wider use of experimental methods in studying the structure and development of industrial organisation give a highly significant picture of the wide field which industrial management offers for the use of scientific methods. The future of industry, and to a large extent the structure of society, are bound up with the application of impartial studies in this field, and the Department of Industrial Co-operation is to be congratulated once again upon the way in which it has attempted to indicate the possibilities in this direction to the British Association and to the public.

American Stratosphere Ascent of July 29, 1934

A BRIEF account was given in NATURE of July 28, 1934, p. 132, of a projected American ascent into the stratosphere in the balloon *Explorer*, jointly organised by the National Geographic Society and the U.S. Army Air Corps. The following week it had to be recorded that the flight had failed, but that the pilot, Major W. E. Kepner, the observer, Capt. A. W. Stevens, and the alternate pilot, Capt. O. A. Anderson, had escaped by parachute from the falling balloon. Most of the valuable instruments

were completely destroyed; but it would now appear that many of the records made on photographic strip have been saved.

Some of these results have recently been described in London at the International Conference on Physics in a contribution by Bowen, Millikan and Neher, while in the *National Geographic Magazine* of October Capt. Stevens contributes an article on the general aspects of the flight from which some further ideas of the faultless organisation and mechanical skill of