ever, and together they give a good picture of the impact of science on modern farming, stressing the large contribution that has already been made and indicating the exciting quests which still remain.

It is doubtful if the book would provide a very digestible meal for the non-technical reader; it is very concentrated, and there is no room for explanation of all the terms used. To the agriculturist and to the farmer (in common parlance these two words are not synonymous) it offers a real feast. chapters on the soil and on crops are sound and satisfying (except for a misprint in regard to the production of sugar in Great Britain), while that on grassland is absorbingly interesting; pests and diseases of crops and livestock, the breeding and feeding of farm animals, herbicides and ensilage are ably discussed. The reviewer started reading the book with some scepticism, doubting whether in such a small compass enough could be included to be useful with sufficient description to make it intelligible. But there is no denying that the aim has been achieved and the reader's interest is held, though that of one reader flagged somewhat over the work of the engineers.

This is not a text-book, although it contains much information. It brings the reader up to date on many questions, impresses on him the importance of science in agriculture and stimulates him to ask for more. It is certainly very easy to read because the English is simple and clear, with a nice economy in words.

THE NEW FOREMANSHIP

The Foreman

A Study of Supervision in British Industry. Undertaken by the National Institute of Industrial Psychology and sponsored by the Human Factors Panel of the Committee on Industrial Productivity. Pp. 158. (London and New York: Staples Press, Ltd., 1951.) 12s. 6d. net.

S Sir George Schuster says in the foreword, this A solved deserves notice for three main reasons. First, it is a study of a subject the importance of which is recognized by all who are concerned with the pressing need to increase Britain's industrial productivity. Secondly, the method of investigation -the collection of facts before the elaboration of theories or opinions—is one which is relatively unknown in those sectors of Britain's industrial life which determine the behaviour of men and women. The third merit of the book is that it is one of the projects sponsored by the Human Factors Panel of the Government Committee on Industrial Productivity. It is, in fact, the first comprehensive report to be published on any of these projects, and its contents and presentation augur well for those on joint consultation and other aspects of human relations in industry which are yet to come.

The contents of the book are partly based upon information collected by six investigators over a period of two years. During this time 107 factories were visited, and individual studies of 752 supervisors and their jobs were completed; the report relates to information collected from 87 of the factories and all the individual supervisors. During these investigations a questionnaire covering various aspects of foremanship was sent to some 4,700 establishments employing more than 250 persons, of which 751 returned completed forms. The investi-

gators also devised and carried out trial selection procedures and training courses as well as collaborating with others who were responsible for similar courses. Visits were made to a number of supervisory training courses within firms, in technical colleges and training institutions in Britain and other European countries. In addition, the activities of various foremen's associations, discussion groups and related organizations were observed, while the investigators also made an extensive study of the British and foreign bibliography on foremanship.

It may thus be fairly claimed that the survey has been comprehensive and thorough. But the investigators have not been misled into thinking that their observations have been complete or made into typical cross-sections of British industry. It proved impossible, for example, to arrange for a random sample of firms to be studied, and many of the factories visited were probably above average in several aspects of management policy and practice. Similarly, the foremen seen in each firm probably included too high a proportion of the more able men. For these reasons the investigators readily admit that, almost certainly, the study presents too favourable a picture of existing practice in British industry.

Yet the conclusions will not be without value if they do no more than stimulate discussion on an important subject. They confirm the common belief among thoughtful managers that foremanship to-day requires different skills from those needed in the past; the power of being able to 'sack' has given way to the need for positive leadership based on knowledge, ability and personal qualities. The modern foreman is closely concerned with questions of human relations and administration as well as with his technical and production responsibilities. He must be selected for his capacity to gain the respect, confidence and co-operation of his operatives, colleagues and managers, and he must be trained so that these potentialities will be fulfilled.

Apart from the statistical analyses, much of this book is devoted to the views of the investigators on the status of the supervisor and ways in which he should be selected and trained. occupational analysis of supervisory work (on pp. 32-34) is one of the most valuable features of the book, although their prescriptions for selection and training may need revision as further diagnoses are In this connexion one of the most practical suggestions put forward by the investigators is the need for a residential centre for supervisory training. For small and medium-sized firms, particularly, such a centre would be of incalculable worth, and it is to be hoped that the sponsors of this investigation will make the necessary approach to industrial and educational organizations and the government departments concerned; a junior version of the administrative staff college is overdue.

The presentation of this survey leaves little to be desired. It is always concise and usually clear; occasionally there is evidence of the efforts of several writers not all of whom have the same gifts for writing or clear thinking. The summaries at the end of each chapter are brief and to the point; the 'review and summary' at the end of the book has been shrewdly prepared so that readers may not forget that the evidence collected and the views put forward by the investigators represent one of the most valuable statements yet prepared on the means of promoting good human relations in British industry.

T. H. HAWKINS