

It is not quite clear for what class of reader the book is designed. The ordinary student cannot be expected to make much progress beyond the earlier chapters. The expert will find it a convenience to have an elementary account of quadratic forms in three and four variables to

which he can refer, but he is unlikely to be interested in the various modifications of Waring's problem, or in the introductory chapters. The book, however, will certainly be of great value to research students whose field is related to one of the topics dealt with. H. DAVENPORT.

PREPARATION OF REPORTS

(1) Writing the Technical Report

By Prof. J. Raleigh Nelson. Pp. xv+373. (New York and London: McGraw-Hill Book Co., Inc., 1940.) 16s. 6d.

(2) Industrial Surveys and Reports

By Prof. Walter Rautenstrauch. Pp. x+189. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1940.) 15s. net.

THE literature available for the guidance of scientific workers in the preparation of reports of scientific and technical papers is already considerable, as a glance at the bibliographies contained in Soule's "Library Guide for the Chemist" or the "Manual on Research and Reports" issued some years ago by the Committee of Research of the Amos Tuck School of Administration and Finance shows. The bulk of this literature is of American origin, to which indeed the two present volumes are no exception, and it cannot be said that, whether in industry generally or in particular fields of science, the scientific worker has yet shown himself anything like as competent in his standard of presentation of the results of his work as is to be desired.

(1) Prof. Nelson's excellently written book, however, leaves no scientific worker with any excuse for failing to obtain a reasonable standard of proficiency in this respect. An outstanding weakness of many technical reports is failure to realize the reader's point of view or the purpose which the report is intended to serve. Prof. Nelson insists that the report is a document prepared for a designated reader or group of readers who need it for certain definite uses. This definition of the report is emphasized throughout the book, and with it emphasis is placed on the design of the report as a structural whole. These two conceptions dominate the whole argument and plan of the book. They are kept clearly in mind in treating of the need for classification and organization of material as a basis for writing and in the recognition of the shaping and determining effect of the objective on the structural characteristics of a report. The technical ideal of fitness for the purpose is as valid for reports as in the design

of other structures qualified to carry their loads.

The first of the four parts of Prof. Nelson's book deals with the design of the report, the second with suggestions as to the form and style of the report, covering such matters as stationery and typing, use of words, abbreviations, tabulation, annotations, etc., while the third part deals with criticism of the report with the object of helping a writer to examine his own work with a view to continual improvement. Throughout these parts Prof. Nelson's lucid writing is assisted by the free use of admirably selected illustrations. His points are ably and clearly made, and nothing but sheer indifference or laziness can account for poor reports from any scientific worker who takes the trouble to read this book. Outstanding not only for the lucidity of its exposition but also for the numerous practical examples it contains and their lavish treatment and clarity, it is unquestionably the best guide to the writing of reports which has yet appeared. The careful explanation of the functions which the various features in a report have to serve, such as the introduction, the headings, summary and conclusions and the use of the paragraph in the design of the report are well worth attention even from the experienced writer. Prof. Nelson has earned the gratitude of all scientific workers who are concerned with the skilful, orderly and accurate exposition of the results of their work.

(2) Dr. Rautenstrauch's book has much slenderer claims on the interest of scientific workers. He gives us an excellent opening chapter on the general principles of report writing, in which many of the principles enunciated by Prof. Nelson are much more briefly mentioned. For the rest, the title of the book is misleading. The application of these principles is limited to investigations in financial matters and does not include the wider field which the term "Industrial Survey" would naturally suggest to those familiar with the reports of such surveys prepared by various universities, for example, in recent years at the request of the Board of Trade or the like.

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