Elsevier's Dictionary of Automation, Computers, Control and Measuring in Six Languages

English/American, French, Spanish, Italian, Dutch and German. Compiled and arranged on an English Alphabetical base by W. E. Clason. Pp. vi+848. (Amsterdam : Elsevier Publishing Company ; London : D. Van Nostrand Company, Ltd., 1961.) 140*s*.

THE increase in technical and scientific knowledge has occasioned a crying need for multilingual technical dictionaries. Bilingual technical dictionaries (many of which are of indifferent standard) are common enough; multilingual dictionaries are less common. The present *Dictionary* is one more attempt to make good the deficit.

There are 3,390 entries with an excellent index in each of the five non-English languages giving quick access to any of the entries in any of the languages used. Clearly, because of the extent of the scientific field covered, there must be a priority among the entries selected since it is not be to expected that 3,390 entries could cover such a number of highly specialized fields. As with all choices, the present one cannot be expected to meet with wholesale approval or to be everyone's taste and must inevitably be a function of the compiler's bias. Nevertheless I question why, for example, there are no entries for 'electronic counter', 'core', 'obey', whereas there are entries for "Westphal balance" and "mobilometer". On the other hand, it is only fair to point out that one welcomes the (unexpected) entries "tape travel" and "pigeon hole pocket". One might comment at random in this way but it does not detract from the fact that this appears to be an excellent addition to the long line of Elsevier multilingual dictionaries covering other scientific fields. Its price may place it outside the average scientific pocket, but it will certainly be of help in the libraries of scientific and industrial research laboratories.

The printing, binding and lay-out of the work are of the high standard and quality one has long come to expect from Elsevier. S. Whelan

Practical Microscopy

By Dr. C. L. Duddington. Pp. ix+237. (London: Sir Isaac Pitman and Sons, Ltd., 1960.) 30*s*. net.

Histological and Histochemical Technics

By Prof. Harold A. Davenport. Pp. xxii+401. (Philadelphia and London: W. B. Saunders Company, 1960.) 49*s*.

Section Cutting in Microscopy

By Dr. H. F. Steedman. Pp. vi+172. (Oxford: Blackwell Scientific Publications; Springfield, Ill.: Charles C. Thomas, 1960.) 21*s*. net.

SO many books on microscopy and microscopical technique have appeared in the past few years that new publications on these subjects may seem unwarranted. All three books reviewed here, however, seem to have much to justify their publication. Dr. Duddington has addressed his work to the serious amateur, and to the elementary student of biology. He assumes no previous scientific knowledge, and introduces the reader in turn to the component parts of the microscope and to some of the basic techniques of microscope manipulation. The second part of the book consists of an introduction to the methods of preparing botanical, zoological and bacteriological specimens for investigation. There is a short bibliography, listing most of the standard reference works on the subject, some of which may, however, prove too technical for those who have only just taken up this type of study. Perhaps a future edition might grade the references and indicate those likely to prove most useful for elementary students. The book is well produced and clearly illustrated.

Histological and Histochemical Technics, by Prof. Davenport, is designed for the advanced worker, and is concerned entirely with methods of preparing specimens. It provides a survey in some detail of the processes of fixation, embedding and staining, including an extensive discussion of their more theoretical aspects as well as the actual formulæ. One useful chapter describes techniques of staining in the block, a method of preparation which seems to attract comparatively little interest at the present. The final chapters are devoted to a brief survey of histochemical methods, and would serve as a good introduction and source-book for those who use such methods only occasionally.

Section Cutting in Microscopy, by H. F. Steedman, is a book largely for the expert. It presents details of all the usual methods of microtomy, in addition to describing several new techniques developed by the author. The approach is logical throughout and the author has made a most commendable attempt to rationalize some of the more common microscopical techniques. It is pleasing to see the inclusion of a section on possible faults which may present themselves during the cutting of paraffin sections. Other chapters deal very fully with the use of ester waxes, the water-soluble waxes and with the use of urea formaldehyde resin. There is also a chapter on the preparation of ultra-thin sections for electron microscopy. This book is a welcome addition to the reference works which one expects to find in every histological laboratory. S. Bradbury

The Theory of Crystal Structure Analysis

By A. I. Kitaigorodskii. Translated from the Russian by David and Katherine Harker. Pp. xi+275. (New York : Consultants Bureau, Inc., 1961.) 12.50 dollars.

IN the preface of this book, which appeared in the original Russian version in 1957, the author makes it clear that he is describing his subject-matter up to the year 1955. It is perhaps a tribute to the rate of development in this field that many of the author's analyses and opinions seem either outmoded or bizarre at the present time. In particular, the analyses concerned with distribution functions have been repeated more formally and elegantly in the past few years ; the author also dismisses anomalous dispersion as of 'no importance' and the difference synthesis as 'devoid of interest' (this even drew a translators' comment).

However, much of the book is devoted to the basic theories of the Patterson method, intensity statistics and direct methods and, for these, lack of topicality is of less consequence. The treatment of these topics is such as will commend itself either to the crystallographer of mathematical inclinations or to the mathematician with some knowledge of crystal structure analysis. The section dealing with inequality relationships is of particular interest, being concerned to a large extent, with the author's own excellent work. The book reads well, which is symptomatic of the quality of the translation.

To summarize: a work of considerable interest to those able to appreciate it and one the main faults of which are due to the lapse of time since it first appeared. M. M. Woolfson