

the role of water, methods of preparation, the influence of physical factors, specifications for ingredients, and the analysis and testing of concrete.

A summary of Palestinian regulations for building materials and an interesting glossary of Hebrew technical terms are also given.

This book should be found very useful by all interested in the building industry in Palestine, and particularly by those who intend to study this subject in Palestine. It should also be of interest to the philologist, for is it not a miracle that the age-old Hebrew language, used for so long only as a vehicle for prayer and the study of Jewish sacred writings, should to-day be sufficiently revived to enable a scientific text-book to be written in it? N. G.

Industrial Electricity: Direct-Current Practice
By Prof. William H. Timbie. Second edition. Pp. xii+636. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1939.) 15s. net.

TECHNICAL students and industrial workers who desire to qualify for posts where a knowledge of electrical science is necessary will find this book very helpful as an introduction to the subject. Phrases used in everyday work such as voltage drop, potential gradient, floating batteries, dielectric constant, etc., are not easy to understand without some theoretical basis on which to build. In our opinion, the almost universally used phrase 'dielectric constant' is not very happily chosen as almost all, if not all, of this kind of *constant* varies with temperature. We like this book because it describes the underlying principles of such problems as the stresses in insulators, the action of vacuum tubes, and the phenomena of the kare, the spar and the corona. The object is not to help students to pass written examinations, although it will be a help in this direction as it is well written and thoroughly up to date. In describing electric heating, illustrations are given from electric toasters, stoves, apparatus for air-conditioning, etc.

We were interested to see in this book a photograph of a very up-to-date flat-iron made in America, where electric flat-irons are almost universally used. It was fitted with a device which automatically switched out the circuit when temperature rose to a definite desired value, less than 700° F., which is the highest permissible temperature if scorching is to be avoided. Beyond very elementary algebra, practically no demands are made on the mathematical knowledge of the reader.

Radio Laboratory Handbook
By M. G. Scroggie. Pp. x+384. (London: Iliffe and Sons, Ltd., n.d.) 8s. 6d. net.

THE methods and measurements used in a modern radio laboratory are described in this work, which includes details and illustrations of the available apparatus for making such measurements. The whole range of alternating current frequencies used

in radio and acoustic technique is covered. Practical advice is included on the lay-out and equipment of a laboratory on scientific lines, and some useful information is provided on the construction and use of many items and components which are auxiliary to the main sets of apparatus. The book should prove very helpful to all those engaged in the use of a radio laboratory, whether from a design and development or from a research point of view. R. L. S.-R.

Fundamentals of Radio
By Prof. Frederick Emmons Terman, with the collaboration of Lieut. F. W. Macdonald. Pp. viii+458. (New York and London: McGraw-Hill Book Co., Inc., 1938.) 21s.

THIS book is essentially an abridged version of the author's "Radio Engineering". It presents the basic principles of radio communication in a form suitable for an introductory course for the physicist or engineer. The treatment is confined very closely to this objective, all reference to the practical applications being reduced to the absolute minimum. The work is, however, quite up to date in so far as established principles are concerned, and the series of problems at the end of each chapter should be of great assistance to the student using the book. R. L. S.-R.

Geology

Geology and Allied Sciences
A Thesaurus and a Coordination of English and German Specific and General Terms. By Walther Huebner. Part 1: German-English. Pp. xvii+405. (New York: The Veritas Press, Inc.; London: Thomas Murby and Co., 1939.) 7.50 dollars.

THE need for a comprehensive German-English dictionary of geological terms has long been apparent to workers in this branch of science, and the work under notice is therefore welcome. The author has been engaged in its preparation for fifteen years, and certainly the work is not lacking in thoroughness. Indeed, so careful has the compiler been that no slight shade of meaning should be overlooked, that he may be accused of under-estimating the intelligence of his readers. It is not difficult to find occasional faults in his rendering of German terms, and it may be suggested that specialists would be doing a good service if they accede to the author's request to communicate corrections to him.

The price of the book is perhaps a little high for the average student, and a future edition, it may be suggested, could be shortened without loss by the omission of German terms the English equivalents of which are spelt so similarly as to make the translation obvious. Many composite words, too, have been given though their meaning is so self-explanatory as scarcely to call for inclusion in the thesaurus. Even a reader with the most elementary knowledge of both German and geology should be able to deduce for example, through looking up the terms 'basalt'