

Imperial Medical Encyclopædia, the "Shêng chi tsung lu", was compiled by twelve of the most eminent medical men of the time.

Dr. Needham has included bibliographies of Chinese books before A.D. 1800, Chinese and a few Japanese books and general articles since A.D. 1800, and books and general articles in Western languages. Apart from the paucity of Japanese books, the bibliographies are excellent. The work is beautifully produced by the Cambridge University Press, and we eagerly and impatiently await the later volumes.

E. D. EDWARDS

TEXT-BOOKS OF GEOLOGY

Petrography

An Introduction to the Study of Rocks in Thin Sections. By Howel Williams, Francis J. Turner and Charles M. Gilbert. (A Series of Geology Texts.) Pp. x+406. (San Francisco: W. H. Freeman and Company; London: Bailey Bros. and Swinfen, Ltd., 1954.) 6.50 dollars; 56s.

Rocks and Mineral Deposits

By Prof. Paul Niggli. English translation by Prof. Robert L. Parker. (A Series of Geology Texts.) Pp. xiii+560. (San Francisco: W. H. Freeman and Co.; London: Bailey Bros. and Swinfen, Ltd., 1954.) 12 dollars; 102s.

ALTHOUGH, within the confines of the British Isles, there occurs an immense variety of rocks, igneous, sedimentary and metamorphic, as well as many deposits of economic minerals of a diverse character, the number of British text-books of university standard describing these rocks and their origins is quite small. Text-books by authors who have studied rocks in other countries, and whose attitude to the problems involved may differ from that of British authors, should, therefore, have a definite value for British students, as a means of broadening their outlook. Both the works noticed here form useful additions to the range available.

Messrs. Williams, Turner and Gilbert's "Petrography" forms an excellent introduction to the subject for first- and second-year students, more especially because it deals with the three main rock groups—igneous, sedimentary and metamorphic—within the limits of a text-book of average size. The work is fully illustrated with a large number of figures carefully drawn from selected thin sections of typical rocks, half of which have been chosen from sources outside the United States. As the authors state, previous text-books of this standard have devoted too little attention to sedimentary rocks; but it surely ought not to be necessary to advance as justification for the inclusion of an adequate description of the rocks of this class the fact that in the United States most graduates in geology now enter the petroleum industry.

The second book noticed here is essentially a translation of the first volume of the late Prof. P. Niggli's "Gesteine und Minerallagerstätten", published in 1948. It is a work of a much more advanced character, suitable for honours and postgraduate students. The subject is dealt with against a theoretical background of geochemistry, crystal chemistry and physical chemistry. The fact that it has been prepared by Niggli's colleague, Prof. R. L. Parker, is sufficient guarantee of the adequacy of

the translation, which, however, is not literal; but an English version of the original into which has been introduced a certain amount of new material, especially in the sections on crystal chemistry and classification. On the other hand, some sections of the original have been shortened, and the section on geophysics has been omitted on the ground that it has been treated more fully in recent publications in the English language.

The publishers are to be congratulated on the high quality of the printing, paper and binding used in the production of these two books; but it is regrettable that the price is likely to put one, and perhaps both, somewhat beyond the reach of the average university student.

BILE PIGMENTS

Biology of Bile Pigments, including a Review of their Chemistry and a Discussion of Analytical Methods

By Torben K. With. Pp. xiii+523. (Copenhagen: Arne Frost-Hansen, 1954.) 50 kronor.

DURING the past five years there have been published no less than five monographs dealing either exclusively or in substantial part with the bile pigments. The latest of these, "The Biology of the Bile Pigments", is a monumental treatise which contains an account, often in great detail, of most of the major work published on the subject between 1800 and 1953. The result is a valuable book of reference, which, though indispensable to all workers concerned directly with this field, is unlikely to appeal to a wider circle of readers. To the specialist, the list of references, complete with full titles and numbering well over two thousand, will be especially welcome.

The presentation of the subject-matter is very uneven. Some chapters, such as those dealing with jaundice and with the comparative biology and biological significance of bile pigments, are excellent and contain much information of interest not readily available from any other source. The author discusses in detail the earlier view that bile constituents may be secreted into lymph, and presents an excellent case for regarding parenchymatous and obstructive jaundice as lymphogenous in nature. The use of the term 'retention jaundice', however, to cover conditions in which the liver cells are damaged and unable to secrete bilirubin without any associated secretion into the lymph, is likely to cause confusion. According to the more generally known classification of Rich, retention jaundice would be the same as Witt's production jaundice and may be hæmolytic in origin or of the type found in hereditary non-hæmolytic jaundice. It is a pity, therefore, that the author has not seen fit to integrate his new classification within one or other of the earlier schemes of the mechanism of jaundice. The experimental work leading to our theories of the detailed mechanism of the different forms of jaundice is well reviewed and rightly emphasizes that our knowledge in this field is far from complete. The last chapter is full of useful information regarding the occurrence of bile pigments in lower animals and plants and suggests that much might be learned from a more intensive investigation of their fate in species other than the higher mammals. One agrees with the author that much valuable information might accrue from further