

Wörterbuch der mathematischen Wissenschaften  
Band 1: Deutsch-Englisch. Von Dr. Leo Herland. Pp.  
235. (London: Hafner Publishing Co., Ltd., 1951.) 24s.

THIS book is a first attempt to fill a need long felt by mathematicians for a specialized technical dictionary. It will be of considerable help to research students who, with little previous knowledge of German, are faced with the task of reading a good deal of mathematics in German, such as the "yellow-backs" or "Ergebnisse" tracts. The book is well produced. A large type has been used in the printing, and this makes for unusual clarity. Numerous cross-references are given under many of the key words which occur in widely differing branches of the subject, and altogether the author has produced a commendable and relatively complete work.

However, there are some serious omissions, such as the following. The words *Verband*, *schlicht*, *Zelle* and *Spaltung*, all commonly occurring in non-specialized branches of mathematics, are missing. In geometry, which the author curiously emphasizes by separating it from the main stream of mathematics, the omissions are particularly serious. Examples are *Hauptdreieck*, *Doppelgeschlecht*, *Leitkurve* and *Restschnitt*. It would help a geometer if, under cross-referencing, the words *Konstantenzahl*, *Hüllfläche* and *adjungierte Fläche* appeared. And what about *abzählende Geometrie*? This does not appear under *Geometrie*, and for *abzählen* the meanings given are 'count, denumerate', but not the usual translation 'enumerate'. Incidentally, I cannot find the verb 'denumerate' in the "Oxford Concise Dictionary", so this translation of *abzählen* is not to be recommended on the grounds of common usage. Another word, *Auflösung*, is used in algebraic geometry to refer to the 'resolution' of singularities, but no cross-reference to this is made. Apart from omissions such as these, there are some incorrect translations: *perfekt* (algebra) should be 'complete', and *mehrdeutig* in function theory is, literally, 'many-valued' and not 'ambiguous'.

If these omissions and errors can be rectified in a second edition, the book should be in great demand among mathematicians.

L. S. GODDARD

#### Physics as a Career

By Norman Clarke. Pp. 70+9 plates. (London: Institute of Physics, 1952.) 6s. net.

THE author of this book, Mr. Norman Clarke, is the deputy secretary of the Institute of Physics and he has spent most of the past seven years, as he reminds the reader in the preface, talking, writing and listening to physicists, intending physicists and employers of physicists; this fact should be sufficient to commend the book as a useful and authoritative guide to those seeking a career in physics. In addition, as many members of the Institute can testify, particularly those who have consulted Mr. Clarke with regard to problems concerning salaries, conditions of employment and training, and in connexion with applications for posts as physicists, his sound advice and wide experience have been invaluable. His knowledge with regard to these matters is now made available to a wider public, and it is to be hoped that it may stimulate those who have the talents to study and take up professional careers in physics.

The author deals briefly, in separate sections, with physics and its applications, professional education and qualifications, posts in industry, the universities, government service, technical colleges, schools, research associations and work as hospital physicists.

Details of the salaries and prospects of promotion in these various posts are clearly stated. In the four appendixes, useful factual information regarding technical colleges recognized by the Institute of Physics as training centres, and the various research associations of the Department of Scientific and Industrial Research, is given, in addition to a short bibliography of books about science, and the addresses of the various physical societies and associations of physicists. The illustrations are interesting and lend tone to the book, but are superfluous to the text.

#### Under the Red Sea

By Hans Hass. Translated from the German by James Cleugh. Pp. 208+47 plates. (London: Jarrolds Publishers (London), Ltd., 1952.) 16s. net.

CONSIDERABLE publicity is being given in the popular press to the possibilities of leaving this earth to explore worlds beyond our own. Much more accessible than Mars or the moon, however, is a world on which man has still barely set foot: the world beneath the seas, where "the surface of the water is the sky . . . and the waves are its clouds". The fascination and enchantment of it can be judged from some of the superlative photographs which liberally illustrate this book by Dr. Hans Hass. Outstanding are a series of nine pictures of the manta, *Manta birostris* Walbaum. Very great credit, too, must be given to the author's courage and considerable swimming skill in obtaining these.

Unfortunately, it is the photographs alone which commend "Under the Red Sea" to the serious attention of biologists. The text contains little of scientific worth and presents, for the most part, a rather trite and superficial account of the author's brief acquaintance with the Sudan, the Sudanese and its British officials. Quite unexpectedly, however, there are here and there passages of vividly descriptive writing, as when he portrays some exquisite coral land- (or sea-?) scape, or in describing the sensations of being alone in this underwater world with a myriad of animals of unknown habits. At such times he writes with a passion for this environment as great as that of a countryman writing of the countryside he loves.

ALAN J. BROOK

#### Les négritos de l'île de Luçon (Philippines)

Par Dr. E. Genet-Varcin. (Ouvrage publié sous les auspices de la Société d'Anthropologie de Paris.) Pp. 260. (Paris: Masson et Cie., 1951.) 1200 francs.

THIS is a study of the pygmy skeleton, with special reference to material from the Philippine island of Luzon. The material consists of the remains of fifteen adult males, fourteen females, two adolescents and five infants and is probably the most complete collection of Negrito skeletons yet made, or ever likely to be made. It is a great pity, therefore, that the measurements of the individual crania and other bones have not been included, as this omission makes the publication useless for comparative studies making use of modern biometrical techniques. Mean measurements when based on such a small sample can be very misleading, and this criticism applies even more strongly when they are compared with means relating to other groups of pygmies where the numbers on which the means are based are even more inadequate—in some cases merely a single specimen. Any conclusions derived from this study must therefore be regarded as hypothetical until they can be supported by more complete data.

G. I. JONES