

Vitamine und Mangelkrankheiten:

ein Kapitel aus der menschlichen Ernährungslehre. Von Dr. Hermann Rudy. (Verständliche Wissenschaft, Band 27.) Pp. ix+160. (Berlin: Julius Springer, 1936.) 4.80 gold marks.

THIS little book, which is of a size and price that would cause it to be sold for about 2s. 6d. in Great Britain, avoids many of the characteristics of current German scientific publications. Being of a semi-popular nature, it quite rightly refrains from giving detailed references and also, for the most part, investigators' names.

Few errors have been detected in the text, but the formula given for calciferol is now (and had been for months before this book was published) known to be inconsistent with experimental facts, which demand the presence of a methylene group and three conjugated double bonds. On the other hand, the recent work of Dam and his associates, leading to the recognition of an anti-hæmorrhagic factor, vitamin K, is given notice.

Dr. Rudy's observations (pp. 143 *et seq.*) on "Die Vitamine als Heilmittel" are particularly interesting and significant. Without at any point departing too ostensibly from current orthodox pharmacology, he gets extremely near to suggesting that the vitamins may be regarded, and used, as individual specific therapeutic agents, on the basis of their established physiological action rather than of their 'normal' role in 'natural' nutrition. So far, this view has only been tentatively and timidly adumbrated in speculative or controversial articles, but seldom, if ever, put forward in print for serious consideration by those who direct official medical and biochemical opinion. That it should now be implied or expressed in a book, and in a German book at that, seems to the reviewer a sign of the times. A. L. B.

Memoir on Fossils of the Late Pre-Cambrian (Newer Proterozoic) from the Adelaide Series, South Australia By Sir T. W. Edgeworth David and Dr. R. J. Tillyard. Pp. xi+122+13 plates. (Sydney: Angus and Robertson, Ltd.; London: Australian Book Co., 1936.) 7s. 6d.

THIS volume appears to have been issued as a memorial to the late Sir Edgeworth David. It gives a fuller and more detailed account of the work published in 1928, of which a notice appeared in *NATURE* (123, 659). The supposed fossils were found in the Adelaide Series near Adelaide, and are regarded as indicating the existence of Algeæ, Radiolaria, annelids and arthropods in pre-Cambrian times. The specimens which have been seen in England are far from convincing, but it is claimed that as the result of the mass effect of a very large collection "no Australian scientist, whether palæontologist, zoologist, or geologist, who has taken the trouble to study the specimens, has any doubt whatever as to their being genuinely organic".

The chief addition in this volume is an account of the supposed arthropods by Dr. R. J. Tillyard. He maintains their arthropod nature on the grounds that the specimens, although fragmentary, do show

evidence of bilateral symmetry, segmentation, segmented appendages and sculpture. After comparing them with various groups of arthropods, he concludes that they show some relationship to the Eurypterida, but that they are more primitive than any known arthropods, and must be placed in an independent class, since the prosoma is formed of distinct segments, each with a pair of appendages. The abdomen is regarded as formed of seven segments, but without segmented appendages. The restorations give a clear idea of Dr. Tillyard's interpretation, but we cannot test their validity from the evidence of the specimens figured. An excellent portrait of the late Sir Edgeworth David forms the frontispiece to the volume.

Ziema:

Fizyka globu, mórz i atmosfery. Napisal Dr. Edward Stenz. (Z Dziedziny Nauki i Techniki, Tom 11.) Pp. xiv+303+26 plates. (Warszawa: "Mathesis Polskiej", 1936.)

THIS comprehensive Polish work on the physics (and incidentally much geology) of the globe, the sea and the atmosphere is a noteworthy publication and does credit to its author and his nation. It opens with a brief history of astronomy with reference to the earth and its relation to the sun, moon and planets. This is followed by a sketch of the geological epochs and such physical and chemical considerations as the magnetism and composition of the interior of the earth.

The section devoted to the sea is concerned with its magnitude and saline contents, and with tides and inundations. The role of the atmospheric envelope and the stratosphere and phenomena associated with them are considered, and in his final section the author discusses various cosmic phenomena, the age and probable fate of the world. Discoveries by Polish savants are referred to in detail and emphasis is given to matters of direct interest to Polish students. Thus, illustrations and examples are drawn wherever possible from local sources.

Food and the Principles of Dietetics

By Dr. Robert Hutchison and Prof. V. H. Mottram. Eighth edition. Pp. xxvii+634+3 plates. (London: Edward Arnold and Co., 1936.) 21s. net.

WHEN this work was first published, thirty-six years ago, little attention had been given in Great Britain to scientific problems relating to food and human dietetics. The authors were among the pioneers in this field, and their work greatly assisted in creating new interest in the subject. In the eighth edition, now available, the history of dietetics is outlined in a new chapter in which it is pointed out that "If the nineteenth century was the quantitative epoch of dietetics the present century has so far been a qualitative epoch". The great advance of knowledge of food and nutrition has necessitated a number of changes and additions, and these will serve to maintain the position of the volume as a readable account of human foods and principles of feeding, as well as an authoritative work of reference.