

origin of the rift valleys is proved alike by the evidence of earthquakes, gravity anomalies, and volcanic distribution. He contrasts what he terms the 'Zerrungstheorie' against the 'Antiklinaltheorie,' which he attributes to de Martonne.

The distinction between the two theories is not clear. The explanation put forward by the reviewer in 1896 was that the rift valleys were due to a raised band of country that extended north and south throughout East Africa, having been torn asunder by parallel fractures, along which bands of the crust subsided. As remarked later (*Geog. Jour.*, July 1920, p. 39), Africa, during the formation of the rift valleys, 'was in tension,' and fractures led to the sinking of long strips between parallel faults. The term 'Zerrung' presumably comes from 'zerren,' to pull. If the 'Zerrungstheorie' means that the whole valley is due to the two sides being pulled apart, it would be inconsistent with the facts; for the main formation was due, as is clearly shown by Prof. Krenkel's diagrams, to subsidences between parallel faults. The difference between the two theories appears to lie in the stress laid on the movements before the faulting. The so-called 'Antiklinaltheorie' implies that the rift valleys occur along a broad belt of highland, and therein agrees with Prof. Krenkel's description of the area traversed as 'Hochafrika.' How that 'Hochafrika' was formed is immaterial; it may be described as a geanticline, as Haug has called the area to the east a geosynclinal. Prof. Krenkel's view fully supports the view that the rift valleys are tectonic, and due to tensional fractures on this highland belt.

The section of this volume of most special value is that on Tanganyika Territory, to knowledge of which the author has himself made important contributions. He clearly summarises the excellent work of the German geologists there and the results of the excavations in the Tendaguru area, which have enriched the Berlin Museum with a collection of giant Mesozoic reptiles. In dealing with this region, and also with the Red Sea, Prof. Krenkel gives a valuable account of the gravity surveys and their bearing on the structure of East Africa. The author maintains that the pendulum observations do not show that the ocean floors expose the heavy sima shell. The chapters are each accompanied by a well-selected bibliography, and the book is illustrated by beautiful photographs and many clear diagrams and maps. So far as can be judged from the first volume, the book will take its place as the standard work of reference on the geology of Africa.

J. W. G.

Our Bookshelf.

Handbuch der biologischen Arbeitsmethoden. Herausgegeben von Prof. Dr. Emil Abderhalden. Lieferung 245. Abt. 2: *Physikalische Methoden*, Teil 2, Heft 6. *Mikrophotographie.* Von August Köhler. Pp. 1691-1978. (Berlin und Wien: Urban und Schwarzenberg, 1927.) 15 gold marks.

A REMARKABLE library of practical information concerning the methods of biology has for some time been in preparation under the editorship of Prof. Abderhalden, of the University of Halle. Already nearly three hundred parts have appeared or are in the press. This particular part, although devoted to the comparatively limited subject of photomicrography, contains no less than one hundred thousand words. There can be few details of the art and practice of the subject that are not dealt with in this comprehensive compilation.

It is essentially a work of reference, of, however, a readable nature, as the information, which is largely of a descriptive character, is presented without resort to mathematics of an abstruse kind. The work presents a somewhat limited outlook so far as much of the material and many of the illustrations, which refer to the products of one particular firm, are concerned. No knowledge whatever is assumed on the part of the reader. The operation of the simplest mechanical elements usually taken for granted and the arrangements of parts self-evident from the illustrations are described at length. Without adversely affecting its usefulness, the book might well have been reduced to half its size.

No introduction whatever has been provided: the book commences with a mechanical description of a particular microscope equipment. Neither is there any indication of the contents, nor any index—so essential to a work of reference. Presumably for these omissions the editor, not the author, is responsible. Indexes, apparently, are only published on the completion of parts, each of which comprises a considerable number of volumes. Until these are available, the reader must search for the information he requires with only the assistance of the section headings, which do not afford complete guidance.

J. W. F.

- (1) *The Book of Woodcraft and Indian Lore.* By Ernest Thompson Seton. Pp. xxiii + 567. (London: Constable and Co., Ltd., 1927.) 7s. 6d. net.
- (2) *White's Selborne for Boys and Girls.* Edited by Marcus Woodward. With reproductions of Bewick's Woodcuts. Pp. xvi + 308 + 8 plates. (Oxford: Basil Blackwell, n.d.) 7s. 6d. net.

(1) ONE of the most interesting and informative boy's books we have read. It discusses all manner of subjects likely to touch upon woodcraft, and that in a summary and practical fashion which gives a business-like touch to its instructions and comments. The principles of scouting, the Indian way, its ceremonies and disciplines, signalling, handcraft stunts and makeshifts, the wild life of the woods, tracking animals, the summer camp, and so on;