

The Birds of Kenya Colony and the Uganda Protectorate

By Sir Frederick John Jackson, K.C.M.G., C.B. Completed and Edited by W. L. Sclater. Vol. 1: Struthionidae to Psittacidae. Pp. lii+542+10 plates. Vol. 2: Coraciidae to Sylviidae. Pp. viii+545-1134. Vol. 3: Hirundinidae to Emberizidae. Pp. viii+1137-1592+6 plates. (London: Gurney and Jackson, 1938.) 90s. net.

TO the making of bird-books there is no end, and out of the vast bird-fauna of Africa there comes continually something new. For more than thirty years, Sir Frederick Jackson served his country in East Africa, ending as Governor of Uganda, and all his leisure was spent on safari, mostly in the happy study of the birds. He planned a great book, but left it unfinished. It has now been completed with the utmost care and skill by Mr. W. L. Sclater, and, beautifully illustrated by Mr. Lodge and Mr. Grünwald, it takes its place beside the works of Reichenow, Shelley, Sclater and Bannerman.

In a graceful preface, Lady Jackson tells how her husband on his first arrival in East Africa was cheered by the call of a curlew and gladdened by the familiar sight of sandpipers, oyster-catchers and ringed plovers. It is indeed wonderful to find true swallows, kestrels, nightjars and many another homely bird, not to speak of the all but world-wide osprey and barn-owl, all at home in the same land with trogons, barbets, plantain-eaters, guinea-fowl and the endless host of foreign fowl besides. The book is packed full of field notes, straight from the diary of a true field-naturalist. An admirable example is Sir Frederick's account of the great fish eagle (*C. vocifer*), the home of which is on Lake Victoria, and which ranges from the ocean to the Belgian Congo. How its mode of fishing differs from the osprey's is beautifully explained; and the zoologist will be interested to know how it catches perch, catfish and an occasional lungfish (or *Protopterus*), but leaves the last uneaten! The hammerhead (*Scopus*), the ground hornbill and several of the sunbirds are a few more among the countless examples of Sir Frederick's powers of observation and description. The book is a fine memorial to a modest and a useful life.

Outline of Historical Geology

By Dr. A. K. Wells. Pp. xiv+266. (London: George Allen and Unwin, Ltd., 1938.) 12s. 6d. net.

DR. WELLS'S new book, although essentially a text-book of stratigraphy, is something more than a formal descriptive catalogue of the various divisions and subdivisions of the geological column. It is an excellent general account of British stratigraphy, pleasantly written in the form of a continuous narrative, and very fully illustrated by line drawings, many of which have been specially prepared.

The book is expressly intended for beginners in geology, either undergraduates about to commence a course in this subject, or general readers who wish to acquire a knowledge of geology for cultural reasons. The author's experience as a lecturer is sufficient

guarantee that the text is suitable for the first class of reader, but it is rather doubtful whether the needs of general readers with absolutely no previous knowledge of the subject are adequately met.

Such readers would surely be curious about the various geological processes that have operated in past ages to produce the rocks that now form the earth's crust. This branch of historical geology is, however, rather summarily dismissed in the short introductory chapter (further references to geological processes are, it is true, made in the text, *en passant*). A more complete account of these processes seems desirable in order that uninformed readers may fully appreciate the details of stratigraphy, with which 'historical geology' is largely concerned. Again, although technical terms have been avoided wherever possible, a general reader would probably appreciate a glossary in explanation of some that are used.

Apart from beginners, specialists in other branches of geology will find this work provides an excellent refresher course in stratigraphy, and it should be appreciated by a wide circle of readers.

Comprehensive Index of the Publications of the American Association of Petroleum Geologists, 1917-1936

By Daisy Winifred Heath. Pp. vi+382. (Tulsa, Okla.: American Association of Petroleum Geologists; London: Thomas Murby and Co., 1937.) 13s. 6d. net.

THE comprehensive index to the first twenty volumes of the *Bulletin of the American Association of Petroleum Geologists* is a fitting tribute to the work achieved by the Association during the first two decades of its existence. In 1917, the production of petroleum in the United States amounted to approximately 355 million barrels, whereas in 1936 it exceeded one billion barrels. The first volume of the *Bulletin*, issued in 1917, contained 176 pages, whereas the twentieth volume contains 1868 pages. This in itself is proof of the efforts made by the Association to further the search for oil and aid its scientific development during these years. The value of the work has been immeasurably enhanced by the compilation of an index, which facilitates reference to all publications of the Association during the period 1917-36.

Numerical Problems in Advanced Physical Chemistry

By J. H. Wolfenden. Pp. xx+227. (Oxford: Clarendon Press, 1938.) 7s. 6d. net.

MOST teachers of advanced physical chemistry will have felt a need of a collection of examples taken from modern publications on such subjects as photochemistry, dipole moments, activity coefficients, kinetics and molecular spectra. Mr. Wolfenden's book contains an adequate number of such exercises with answers and explanatory notes, although for the theory the reader is referred to text-books. The book is attractively produced and its price is very moderate. It may be recommended as likely to prove very helpful both to teachers and to students.