

Paläogeographie: mit besonderer Rücksicht auf die Fehlerquellen

Von Dr. Fritz Kerner-Marilaun. Pp. viii+410. (Berlin: Gebrüder Borntraeger, 1934.) 30 gold marks. As palaeogeography is a composite science which serves to co-ordinate stratigraphy, palaeontology and tectonic geology, the palaeogeographer must be conversant, not only with the aims and methods of these branches of geology but also with the possible sources of error which may arise. We already possess several excellent standard treatises on palaeogeography, such as the classical works of Arldt and Dacque, which follow more or less conventional lines. The author of the present book, however, approaches his subject from an entirely different point of view by discussing the problems with special reference to the possible sources of error.

The book is divided into four parts. Part 1 deals with the sedimentary rocks and the criteria to be applied in determining the conditions under which they were formed. It provides an up-to-date discussion of the problems of sedimentation, and a most instructive section is that dealing with the many errors possible in the recognition of desert deposits. Part 2 is devoted to correlation and the use of fossils both in the correlation of beds and in the determination of sedimentary environment. Part 3 is a modern presentation of the various theories of mountain building, including a discussion of Wegener's theory of continental drift.

Part 4 includes about one third of the entire book and is devoted to palaeogeography. The author here stresses the importance of distinguishing clearly between palaeogeographic investigations in unmoved areas in which the palaeogeographic lines can be projected, without error, on to the present maps, and investigations in areas which have suffered lateral translation by folding or thrusting. In the first case the sedimentary rocks occur in the areas in which they were originally deposited but, in the second case, their original regions of deposition lie at a greater or lesser distance from their present position. This movement factor is one which often escapes recognition, and the author has performed a great service in directing attention to it.

Altogether the book should prove of great use and value to geologists working in many different fields, but it is of an advanced nature more suited to the needs of the research worker than those of the student.

The Handbook of Palestine and Trans-Jordan
 Edited by Sir Harry Luke and Edward Keith-Roach. Third edition. Pp. xvi+549+1 map. (London: Macmillan and Co., Ltd., 1934.) 16s. net.

CONDITIONS change with such rapidity in modern Palestine that it is not surprising that very considerable revision has been necessary in the preparation of the new edition of "The Handbook of Palestine and Trans-Jordan". Information and statistics have been brought up to date, and, to quote Sir Arthur Wauchop's introduction, it now "gives a full account not only of the country's past, but of the achievements and changes of the last four years".

In view of the interest of Palestine's prehistory, it is a pity that the section dealing with this subject has not been more adequately revised. Miss Garrod's more recent discoveries are not completely covered, though, presumably, the final revision of the text had not been made before some, at least, were available for inclusion, while Sir Flinders Petrie's work in the neighbourhood of Gaza is barely mentioned. The important results obtained at Tell Duweir do not appear at all. Hence the largest Tell of archaeological importance in Palestine does not appear on the map, while its identification with Lachish, now certain, entails correction of both map and text.

These, however, are perhaps minor blemishes, where so much ground is more than satisfactorily covered. The handbook continues to be a never-failing source of information on the geography, history and social and economic conditions of the country.

Hutchinson's Technical and Scientific Encyclopædia: Terms, Processes, Data, in Pure and Applied Science, Construction and Engineering, the Principal Manufacturing Industries, the Skilled Trades; with a Working Bibliography, naming Three Thousand Books and other Sources of Information, under Subjects. Edited by C. F. Tweney and I. P. Shirshov. In 3 vols. Vol. 2: Direction of Rotation to Hydrogen-Ion Concentration. Pp. ii+673-1344. (London: Hutchinson and Co. (Publishers), Ltd., 1935.) 28s.

MUCH credit is due to the editors of this "Encyclopædia" for the design and execution of their work. So many subjects may be regarded as "technical and scientific" that to endeavour to afford appropriate information upon all matters pertaining to them, not only for scientific workers and technologists, but also for intelligent inquirers among the general public, would seem almost an impossible task. So far, however, as is practicable within the limits of three volumes, and judging by the contents of the two volumes already published, the editors will achieve their purpose. In the present volume, for example, sixty-seven pages are devoted to electrical subjects from "Electric Cables" to "Electrostatic Units". Glass and glass manufacture occupy twenty pages; dyes, eight pages; hormones, four pages (we note, by the way, that the word endocrine is not indexed); glucosides, eight pages; furnaces, nine pages; gemstones, six pages; and geophysics, four pages. We have tested the volume for many words and terms used in various branches of science and technology, and have rarely been disappointed. Many biological terms are included but no attempt is made to cover this whole field, though "commodities of botanical and zoological origin are named and described". This accounts, perhaps, for the omission of 'gene' and 'genetics'.

No work of the same scope and standard has been issued in England for many years; and we congratulate the editors and publishers upon their production, which should find a place in every reference library.