

tachygenesis and lipopalingenesis. The Biogenetic Law is generally supported by palæontologists. This, he explains, is because in animals with shells, such as brachiopods and molluscs, the early stages form a permanent and not a temporary basis for new characters as in insects or vertebrates, usually selected by those who criticise the Biogenetic Law. Thus new characters arise by additions to the life cycles and not by modifications of pre-existing characters.

*Пегматиты: их научное и практическое значение.*  
Tom 1: *гранитные пегматиты.* (*Pegmatite: Eigenschaften, Geochemie, Verbreitung, Verwendung.* Band 1: *Granitpegmatite.*) By A. E. Fersmann. Pp. 646. (Leningrad: Akademie Nauk SSSR, 1931.) 20 rub.

THE author has devoted more than twenty years to the study of pegmatite, personally explored many of the pegmatite areas in Russia and abroad, and initiated organised investigations of the problem in Russia centred in the Mineralogical Museum of the Russian Academy of Sciences. The book sets down, in a monographic form, the main results of theses and studies, and reviews critically the work of other authors. In the first part (Chapters i.-x.) a general discussion of the chemical, physical, morphological, and geological characters of pegmatites is presented, and the methods of investigations are described. The second part (Chapters xi.-xviii.) contains a monographic description of various pegmatites and their classification. The following chapters (xix.-xxv.) constitute the third part, containing a discussion on the mineralogy of pegmatites and on the geochemical and metamorphic phenomena connected with their origin. A bibliography of the main literature on pegmatites and a list of pegmatite areas of Russia are appended, while a special appendix is devoted to the economically important pegmatites. A second volume, dealing specially with the pegmatites of the basic, sienitic, and nephelin-sienitic magmas, is in the course of preparation.

*The Reclamation of Land from the Sea.* By F. M. Du-Plat-Taylor. Pp. xv+153. (London: Constable and Co., Ltd., 1931.) 21s. net.

LAND reclamation and coast erosion are matters which very closely concern the inhabitants of sea-bordered countries. The Dutch have for centuries waged an unremitting contest with the sea, driving it back inch by inch, in order to provide themselves with space to live and expand. Not less vital in Great Britain to the dwellers of East Anglia and Yorkshire is the gradual but constant encroachment of the sea on their clay cliffs and erodible soils, and though, as Sir George Courthope points out in his introductory note, "England has gained from the sea more than she has lost", the local losses are not always, or necessarily, compensated by the gains elsewhere.

Major Du-Plat-Taylor's book commences with an exposition of the objects and methods of reclamation, and proceeds to consider in detail systems of reclamation by enclosure, with a special

account of the project for the reclamation of the Zuyder Zee (to which two chapters are allocated). Reclamation by filling and by simple drainage are also considered. There are chapters on the auxiliary works and plant required for the various operations of reclamation and drainage work, embodying a good deal of useful information, a certain amount of which has been derived from the author's personal experience. Altogether, the book will be of undoubted utility to practising engineers, as assembling a quantity of data and information for reference in a compact and accessible form. There are numerous illustrations, both views of works and diagrams. B. C.

*Jahrbuch des Forschungs-Instituts der Allgemeinen Elektrizitäts-Gesellschaft.* Band 2, 1930. Pp. 332. (Berlin: Julius Springer, 1931.) n.p.

THE second annual volume of the Research Institute of the Allgemeine Elektrizitäts-Gesellschaft maintains the high standard of scientific and technical achievement reached in the first volume. It is beautifully printed on art paper, and so the photographs are excellently reproduced. All the economic and technical papers given have previously appeared in various trade journals, but the scientific worker will find most of them of great interest. Advanced mathematical theorems are given fairly fully, so that it is not difficult to verify them, and the mathematical symbols are clearly printed. The papers are collected into groups under definite headings, for example, acoustics, electro-optics, electron physics, atomic physics, atomic chemistry, electric heating, etc. The various sections are connected by prefatory reviews giving a résumé of the present state of the research field.

Scientific workers will be interested in the 'demonstration research' into Störmer's polar light theory by E. Brüche and W. Ende, and in the paper on "Theoretical and Experimental Results on the Aurora Polaris", by E. Brüche. The latter paper is printed in English. To illustrate the thoroughness with which the technical researches are carried out, we find in a paper on electric cooking the specific heats of many articles of diet. The specific heat of milk is given as 0.90, oysters 0.84, eggs 0.76, veal 0.70, fresh fish 0.80, fruit 0.81, game 0.80, pork 0.55, pork fat 0.50, blood 0.93, and so on.

*The American Annual of Photography, 1932.* Vol. 46. Edited by Frank R. Fraprie. Pp. 294 + Ads. 46. (Boston, Mass.: American Photographic Publishing Co.; London: Sands, Hunter and Co., Ltd., 1932.) Paper, 10s.; cloth, 15s.

THIS photographic annual is exceptionally well produced. It contains many examples of modern work. The book is mainly devoted to articles on photographic topics; a few of these are technical, but for the most part they deal with the artistic side of the subject. A few pages at the end of the book are devoted to a "Formulary" in which are brought together a great many formulæ for developers and such like necessities. S. O. R.