

pharmacognosy should be a trained pharmacognosist. As an account of the morphology and anatomy of drugs it might have been successful; as a text-book of pharmacognosy it is a failure.

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*Catalogue of the Lepidoptera Phalaenae in the British Museum.* Vol. viii., Catalogue of the Noctuidæ. By Sir George F. Hampson, Bart. Pp. xiv+583; pls. cxxiii-cxxxvi, and 162 text-figures. (London: British Museum, Natural History, 1909.) Text, price 15s.; plates, price 12s.

WE have again to congratulate Sir George F. Hampson and the Trustees of the British Museum on the completion of another volume of the great catalogue of moths, which bids fair to surpass even the catalogue of birds in extent and importance. Vol. viii., now before us, is the fifth volume devoted to the Noctuidæ, and the second of the great subfamily Acronyctinæ, which it will require a third volume to complete. Fifteen subfamilies of Noctuidæ were indicated by the author at the commencement of his work; possibly he may find it necessary to increase the number before its completion. The Acronyctinæ, occupying three volumes, is only the fourth subfamily out of the fifteen, but, in the sense in which the author employs it, it is, perhaps, the most extensive of all. The remaining subfamilies, with three or four exceptions, appear likely to be of very much smaller dimensions.

Works of this character are far too costly to be undertaken by private enterprise, and though the price at which they are published by the museum cannot be remunerative, the cost of an extensive work issued in successive volumes soon becomes prohibitive to private students.

Hence we would urge on the librarians of public libraries and museums at home and abroad to secure sets of such publications as those of the British Museum before the volumes become too numerous, and before any of the earlier ones go out of print. Many of the earlier publications of the Museum were issued in comparatively small numbers, and several are now scarce and difficult to obtain. Sometimes early volumes have been exhausted even before the whole series has been completed. This is another reason why public libraries, to which they will always be valuable, should not neglect to add them to their shelves as soon as they appear.

*The Geology of South Africa.* By Dr. F. H. Hatch and Dr. G. S. Corstorphine. Second Edition. Pp. xvi+389. (London: Macmillan and Co., Ltd., 1909.) Price 21s. net.

THE general scheme of the book remains the same as in the first edition, but the authors have skillfully rearranged portions of the original subject-matter and have made those additions which the rapid advance of geological investigation in South Africa since 1905 has rendered necessary.

To digest and sift the numerous official and unofficial reports dealing with the geology of South Africa is no easy task, and with respect to the stratigraphy of these regions, the authors have evidently spared no pains to bring the book up to date. They, however, almost entirely ignore the many interesting problems connected with the origin and development of the present physical features, of which striking examples have been illustrated and described in the reports of the surveys of Cape Colony, of the Transvaal, and of Natal, as well as in other publications. This is an obvious omission in a work entitled "The Geology of South Africa."

In dealing with the correlation of the widely scattered formations, the authors speak in a guarded

manner, but their suggested correlation of the older formations will not pass unchallenged.

The illustrations, of which many are new, retain a high standard of excellence. The figures illustrating the fossils of the Karroo are the least attractive, and are hardly representative, especially with respect to the well-known and interesting reptilian remains. The general index is far too meagre, and the index of place-names is overburdened by a superfluity of mere page references of more annoyance than assistance to the general reader.

*Handbook for Field Geologists.* By Dr. C. W. Hayes. Pp. ix+159. (New York: J. Wiley and Sons; London: Chapman and Hall, Ltd., 1909.) Price 6s. 6d. net.

THE preface states that this work originated in a handbook printed in 1908 for distribution to members of the United States Geological Survey. Requests for copies of this were so numerous that it was rewritten, omitting those instructions which apply only to members of the Government Geological Survey, and enlarging upon certain features which will be of service to students preparing for work in field geology. In spite of this declaration the book still contains much which is only applicable to members of a Government Survey in the United States, but is, besides, a very practical little handbook, the treatment of the problems connected with the determination of dip, thickness, and depth of beds being perhaps the least satisfactory part. These problems, if properly put, are of great simplicity; but the beginner, trusting to Dr. Hayes, might well conclude that there was some subtle difference between the dip of a fault plane and the dip of a stratum, and that problems which may be tackled in the one case are insoluble in the other.

An attempt has been made to get over the difficulty of making the same work at once a beginner's guide and an expert's *vade mecum* by dividing it into two sections, and of the two the latter seems better done. The schedules of subjects to be noticed in special investigations have their use in refreshing the memory whenever a fresh piece of work is entered on, but the ideal geologist's pocket-book is yet unpublished. Engineers and architects have their little books crammed with information cut up into pieces, each complete in itself, so that temporary lapse of memory on any particular point can be rectified, or reference made to figures which the human brain cannot carry, but which must be accurately known if required at all. Geologists, on the other hand, whether on account of the smallness of their number or their supposed addiction to dilettante methods, are condemned to wade through a mass of matter, with which they are familiar, to obtain the particular piece of information of which they are in search.

*Physiology: a Popular Account of the Functions of the Human Body.* By Dr. Andrew Wilson. Pp. vii+128. (London: Milner and Co., Ltd., n.d.) Price 1s. net.

As a contribution to scientific literature this book is negligible; as a popular exposition of the elementary principles of physiology it is untrustworthy. It is no part of a reviewer's duty to enumerate the errors scattered through it; it will be sufficient to take one as a sample. "The red blood corpuscles are also carriers of carbonic acid gas to the lungs . . . and the darker colour of impure or venous blood is explained by the fact that when carbonic acid gas unites with the hæmoglobin a darker hue is produced" (p. 64). A first year's student knows better than this. It would be better to leave the writing of physiological text-books to those who know something of physiology.

W. D. H.