

author tells us, "to illustrate in a popular manner a few of the various modes in which animals—especially vertebrates—are adapted to similar conditions; and also to demonstrate some of the more remarkable types of structure obtaining among the higher vertebrates."

The subject is one upon which Mr. Lydekker is well qualified to write; this is alone a decided recommendation to the book. As a rule, the writing of "popular" books and magazine articles is done by persons who have no special knowledge of the matters of which they treat, and the result of this is not at all gratifying to instructed readers. Mr. Lydekker recognizes the fact that it is impossible to write upon zoology without using plenty of technical terms. When such terms are used they are introduced without any apologies. There are some authors who have the habit of invariably interpolating an apologetic remark in brackets whenever an unusually lengthy word is used. This practice is not at all humorous; and, besides, it is insulting to the intelligence of the reader. Anyone who is likely to read an article upon zoology is perfectly well able to take care of himself when he meets with a strictly technical explanation of some fact. Mr. Lydekker is therefore, in our opinion, quite right in speaking of "Condyles," "Dinosaurs," "Iguanodons," &c., with perfect freedom. Sometimes, however, he goes out of his way to invent or borrow an English equivalent for a scientific name; thus the Ichthyosaurus is always referred to as a "fish-lizard." It seems to us that if there be any fossil creature whose name is absolutely without need of translation it is the Ichthyosaurus; we cannot remember the time when this name was unfamiliar to us; besides, to speak of these reptiles as "fish-lizards" implies that they are intermediate between fishes and lizards, which is by no means the case. It would have been in every way much more reasonable if Mr. Lydekker had spoken of the Dinosaurs as "bird-lizards."

The chapter dealing with these same Dinosaurs is perhaps the most interesting. The information which is given must be newer to the general reader. There is a figure of one of the splendid skeletons of the Iguanodon recently unearthed in Belgium, and now on view in the Brussels Museum; the reproduction of the plate illustrating M. Dollo's memoir upon these remains is not, however, very good; it is difficult to distinguish the numerous small bones which lie along the vertebral column, and which are an indication of the immense development of the tendons of the muscles used to move the powerful tail of the reptile. M. Dollo thought that the Iguanodon lived principally in marshes swimming with the aid of the tail, and only occasionally coming forth to browse upon shrubs on the dry land.

There is naturally a chapter upon the Monotremes. Quite close to the beginning of the chapter it is stated that "within the last few years" these Mammals have been discovered to be oviparous, like reptiles and birds. Mr. Lydekker's book deals mainly with extinct forms of life, and he must have forgotten that in this chapter he was dealing with historical and not with geological time. It is surely unnecessary to remind the author that the oviparity of the Monotremata is not a discovery of the last few years; the *re*-discovery by Mr. Caldwell of this remarkable fact strikingly shows how an important point

of this kind may be utterly forgotten. The history of the whole question has been the subject of an interesting article in this journal by Prof. Baldwin Spencer, which appeared two or three years ago.

F. E. B.

OUR BOOK SHELF.

Silk Dyeing, Printing, and Finishing. By George H. Hurst, F.C.S. (London: George Bell and Sons, 1892.)

PUBLISHED information connected with the application of colouring matters to silk is somewhat limited, and for the most part scattered throughout the various pamphlets issued by coal-tar colour manufacturers, the periodicals devoted to dyeing, &c.

The present publication is therefore very acceptable, since it brings together, in a convenient and useful form, much of this diffused information, and constitutes one of the well-known series of technological hand-books edited by Sir H. Trueman Wood, Secretary of the Society of Arts.

The author, Mr. Hurst, has here rewritten and brought up to date his articles on the subject of silk-dyeing which appeared during 1889 in the pages of the *Dyer and Calico Printer*, and has added chapters on silk printing and finishing, and on the testing of dyed silks.

The language and style of the book are clear and explicit, and it has evidently been written with distinctly practical aims, so numerous are the working details given throughout the work.

The opening chapter contains an account of the origin, structure, composition, and properties of the most important varieties of silk, followed by one on the preliminary operations of "boiling-off" and bleaching. Special chapters are devoted to the dyeing of blacks, fancy colours, and mixed fabrics. The concluding chapters deal with silk printing, the machinery used in dyeing and finishing, and the examination and assaying of raw and dyed silk.

Some 170 selected and also original recipes, together with 66 dyed patterns of yarn and cloth, appear as an appendix. Altogether the author has succeeded in compressing into a somewhat limited space of about 230 pages, a considerable amount of useful practical information.

In the body of the work, containing numerous technical details of dyeing, explanations of the principles underlying the different processes involved are here and there interspersed, so that the volume may be recommended as a handy book of reference not only for the practical dyer and his apprentice, but also for the student and teacher in technical schools where silk dyeing is taught.

Phycological Memoirs. Edited by Geo. Murray, F.R.S.E., F.L.S. Part I. (London: Dulau and Co., 1892.)

THE establishment of this new serial is an indication of the increased attention given in this country during recent years to the study of Algæ, whether marine or fresh-water. It is intended to form a medium for the publication of the results of researches on Algæ carried on in the Department of Botany at the British Museum, and for making known the treasures of the Museum; and the present number is full of promise of valuable additions to our phycological literature. The place of honour is given to a paper by Miss Margaret O. Mitchell and Miss Frances G. Whitting on *Splachnidium rugosum*, a well-known seaweed of the Southern Seas, hitherto included under the *Fucaceæ*, but which the authors regard as a new type of Algæ occupying possibly an intermediate position between the *Fucaceæ* and the *Laminariaceæ*. For reasons which certainly seem cogent, they are of opinion that the reproductive organs contained in the conceptacles are not sexual oogones and antherids homologous to those of