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SHORT REVIEWS

BIOLOGY

Everyday Biology: an Introduction to the Study of Life. By Dr. G. Pugh Smith. Pp. xii+283. (London: G. Bell and Sons, Ltd., 1939.) 3s. 6d.

HERE is a very useful and readable introduction to biology written for young beginners who need a general survey of the subject prior to going into it more deeply for the School Certificate examination. The author has taken the point of view—unfortunately all too rare among authors and teachers of biology—that the subject should relate itself to life and thus teach the reader something about himself. Again, the author takes the refreshing course of opening up with a general review of the plant and animal kingdoms. So many biologies begin with a germinating seed or the detailed study of a plant, which more often bewilders rather than captivates the young beginner. To begin with a general survey of what is already known (at any rate, in part) is undoubtedly the best means of approaching a difficult subject.

The author has broken new ground, even in many of his illustrations, though here he is not so successful. Many are novel and look well, but they teach little. For example, the skeleton is illustrated by three photographs. One is of the "Transparent Woman", which, according to the legend, shows the "skeleton, organs and blood vessels and their relationship to each other". The actual model does this, of course; but the very much reduced photograph shows very little. The other two illustrations are X-ray photographs which will certainly intrigue the young beginner, but will tell him little of the actual anatomy of the skeleton. In the next edition, these photographs should be accompanied by a line drawing. Another excellent, though scarcely helpful, illustration is the photograph of the head of an earthworm which, without the help of the legend, would puzzle many a trained biologist.

In the second edition, the author would be well advised to reconsider certain of the illustrations (so important to any work on biology), and then it would be difficult to better this book for the standard for which it is intended.

Medical Entomology

A Survey of Insects and Allied Forms which Affect the Health of Man and Animals. By Dr. William A. Riley and Dr. Oskar A. Johannsen. (McGraw-Hill Publications in the Zoological Sciences.) Second edition. Pp. xiii+483. (New York and London: McGraw-Hill Book Co., Inc., 1938.) 25s.

WE welcome the appearance of a second edition of this text-book. After an interval of six years much new knowledge has accumulated while older theories and facts have undergone modification. While only seven additional pages are incorporated in this volume, careful reading will show that the revision has been adequate and conscientious. Thus, the account of *Latrodectus* (or the 'black widow' spider) has been brought well up to date with new illustrations. The role of *Phlebotomus* in relation to the transmission of kala azar is well discussed, and the conclusion is reached that the insect-vector theory of the transmission of this disease is not borne out as being a major factor in the process.

In the account of mosquitoes an adequate statement of recent work on the biological and other races of these insects seems to be an omission of importance. In dealing with dipterous larvæ as agents in the treatment of osteomyelitis, reference is made to the newest aspect of this method. This involves the use of sterile larval extracts and the isolation therefrom of allantoin or the urea split off during allantoin treatment. In this way a definite advance seems to have been made in overcoming the repulsion aroused by the application of living larvæ to wounds.

In connexion with yellow fever a guarded account is given and a not too optimistic view taken as to its entire elimination from the American continent, owing to the prevalence of the disease in an endemic jungle form. In the great forests of Africa and South America, monkeys and maybe other non-human reservoirs have to be contended with, while various little-suspected species of mosquitoes are probable vectors. At the end of the book there is a supplementary list of literature which brings this aspect of the subject reasonably up to date.