

compounds considered lends an added value to these chapters: in fact, they may be of use as a source of reference to those who wish to know the structure of a number of complex organic substances, including the antiseptic dyes.

The third volume deals with the changes produced in various compounds by micro-organisms and the agencies by which these are effected: one chapter is devoted to symbiosis. The arrangement of the subject matter is on the same lines as in the second volume. An important section is that dealing with fermentation. Structural formulæ are again freely used.

It is impossible in a short review to give more than an outline of the scope of the treatise, but enough has been said to show the wide appeal of the work. It is up-to-date, although in a science which is advancing so rapidly, revision with our increasing knowledge will in places be required, as the authors themselves acknowledge. Their desire that the work should indicate not only what has been accomplished, but also what remains to be done, appears to have been fully realised. It should be in the hands of all bacteriologists, as well as of those who have to deal with similar chemical processes carried out by the higher organisms. The volumes are clearly printed, and each is provided with three indexes, to authors, to subjects, and to micro-organisms.

### Our Bookshelf.

*Guide to the Study of Animal Parasites.* By Dr. William A. Riley and Reed O. Christenson. (McGraw-Hill Publications in the Zoölogical Sciences.) Pp. xv+131. (New York: McGraw Hill Book Co., Inc.; London: McGraw-Hill Publishing Co., Ltd., 1930.) 7s. 6d. net.

THIS work is the outgrowth of Prof. Riley's fifteen years' experience in presenting the main facts of parasitology to students in the laboratory. The authors suggest that the first two practical periods should be devoted to a general survey of the parasites of the frog—*Trypanosoma* and *Lankesterella* (wrongly spelt throughout the book) in the blood, Helminthes in the lungs, alimentary tract, and bladder, and Protozoa in the large intestine and kidney. Attention is then directed to the Trematoda, represented by *Polystomum*, *Clonorchis*, and *Fasciola*, and a key to the chief groups of cercariae is added. The study of cestodes begins with that of *Tænia pisiformis*, after which the human tæniae and representative species of *Hymenolepis*, *Dipylidium*, *Diphyllobothrium*, *multiceps*, and *Echinococcus* are briefly considered. *ascaris*, the hookworms, *Trichinella*, and *Trichuris* are the Nematoda chosen for examination.

Instructions are given for the examination of

fæces for eggs (with a key to the eggs of helminthes in human fæces) and of small mammals for adult worms. The section of the work on Protozoan parasites deals successively with *Entamoeba histolytica* and *coli*, *Trypanosoma lewisi*, *Giardia* and other flagellates, *Monocystis*, *Eimeria*, human and avian malaria, *Babesia*, *Sarcocystis* and the ciliates of the frog's rectum. Suggestions are added on the use of text-books, journals, and indices relating to parasitology; on the collecting, preservation, and mounting of specimens; lists are given of the more important parasites of the cat, dog, pig, sheep, rabbit, rat, fowl, and frog, the organ infected being indicated; references to works on parasitology, chiefly in English, are appended, and there is an adequate index.

The lists of parasites would have been shortened without impairing their value to the student by omitting species rarely recorded. *Sarcocystis*, common in the muscles of the sheep and the rat, and perhaps the trypanosome not infrequently present in the blood of the rabbit, might have been included in the lists.

The information and instructions set forth in the book, supplemented, as no doubt is the case, by additional details on anatomy and life-history given in the laboratory, form a sound practical guide to the beginner in parasitology.

*The Unknown Self: a New Psychological Approach to the Problems of Life, with Special Reference to Disease.* By Dr. Georg Groddeck. Pp. 207. (London: The C. W. Daniel Co., 1929.) 7s. 6d. net.

THIS little volume has been translated with the object of introducing the point of view of Dr. Groddeck to English readers. It consists of a series of short papers written at different times and for different audiences, but all informed by the same spirit. He has sought to understand *why* people get ill, in order to help them to get well. Although in sympathy with, and an exponent of, the psycho-analytic theory, yet he cannot be located to any one school of thought or therapeutic practice. He is in line with the thinkers who, at various times, have arisen as rebels against an intellectualism that would interpret the whole human being on materialistic lines.

The elusive prospect of being able to comprehend humanity on mechanical principles has always appealed to some thinkers. Galen in the second century criticised the narrow mechanical school of the methodists, while the misdirected application of the brilliant development of the so-called mechanical sciences in the seventeenth century stimulated Stahl to his polemical defence of a unifying animating principle over and above the machinery of life. Groddeck postulates an unknown and for ever unknowable force in man, which, for purposes of exposition, he calls the 'It'. The It is not merely the unconscious of the psycho-analytic school, but "includes both conscious and unconscious processes and holds absolute sway over the activities which it has built up. There is no opposition between the ego and the It; rather is the ego a function of the It." No adequate definition