

nephritis, tumors of the spinal cord, examination of urine, are presented in a most effective manner. Equally well handled are the surgical subjects. Especially worthy of mention are the titles aneurysm, gunshot wounds, hernia, surgery of the intestines, neck and stomach.

Diagnosis forms a valuable part of the work. Besides the portions on diagnosis under the various diseases such general titles as physical diagnosis of the abdomen, examination of the blood, examination of the chest and heart, pain, are presented in a concise and most interesting manner. The same observation applies to the portions which give the treatment of the various diseases.

Among the specialties the eye is especially skilfully treated. The titles cataract, cornea, glaucoma, lenses, trachoma, deserve special mention.

The work contains the latest discoveries in medicine. We find in it an account of Bier's hyperemic treatment, Brill's disease, hook-worm disease, immunity, opsonines, pellagra, serum therapy. The title syphilis contains the latest additions to our knowledge of this disease; it gives a clear and concise exposition of the Wassermann reaction and of the new treatment with salvarsan.

And now we come to the defects; they are few. Some subjects are perhaps too lengthily treated, as for instance, climatology, constipation, life assurance, the latter title taking up more than six pages, which is out of proportion to the general concision of the work. We miss some titles like adalin, decompression of the brain, intratracheal insufflation, vestibular nystagmus, pantopon and a few others. But all in all the work is as complete as can be expected. The few defects are easily outweighed by the many merits the work possesses.

A number of tables of the arteries, muscles, nerves, poisons, reflexes, tumors, etc., form a valuable addition. There are 653 illustrations, those on anatomy and surgery being especially good. On the whole it may be said of this work that its defects are few, its merits many

and the general practitioner will find it a valuable aid in the daily routine of his work.

A. ALLEMANN

ARMY MEDICAL MUSEUM

*Genera Insectorum*, 122me Fascicule. Dermaptera. By MALCOLM BURR, D.Sc. Brussels, Wytsman. December 15, 1911. Pp. 112, 9 plates.

Since De Borman in 1900 gave to the world in "Das Thierreich" his "Monograph of the Dermaptera," the number of species known to science has been doubled and the number of genera erected by various authors has been quadrupled. In 1910 Dr. Malcolm Burr published a volume upon the Dermaptera of India, Burmah and Ceylon, which was issued as one of the volumes of "The Fauna of British India" which is being printed under the auspices of the Indian government. At the time of its appearance that work was noticed by the present writer in the columns of SCIENCE. The work before us is an advance upon the former treatise in so far forth as it endeavors to outline the classification of the dermapterous fauna of the world, giving the characters of the various genera, lists of the known species, and their synonymy.

The author recognizes three suborders. The first, the Arixenina, is parasitic, and thus far is known by but one genus and species, *Arixenia esau*, described by Dr. Karl Jordan in 1909. This curious insect has the eyes only feebly developed, is apterous, and inhabits the pouch of the Javan bat *Cheiromeles torquatus* Horsfield. The second suborder, the *Hemimerina*, is likewise represented by a single genus and species. It is also parasitic, living on the widely distributed African rodent, *Cricetomys gambianus* Waterhouse. It is viviparous, apterous and totally blind. The third suborder comprises the Forficulina, or ear-wigs proper, which are oviparous, have fully developed eyes, are either winged or apterous, and have the cerci developed into horny forceps. None of them are parasitic. In the latter suborder the author recognizes three super-families, the Protodermaptera.

divided into two families in which are included fifty-two genera; the Paradermaptera, in which there is but one family, including two genera; and the Eudermaptera, divided into three families, containing seventy-seven genera.

Dr. Burr is recognized to-day as the most eminent student of this order of insects, which until recently has been somewhat neglected, but with which, thanks to his patience and learning, no entomologist need now claim ignorance for lack of adequate and authoritative treatises upon the subject. The end of Dr. Burr's labors has not, however, been reached, and he intimates that he is preparing a still more complete and elaborate work, which will deal with all known species from all parts of the world. When this task shall have been completed no order of insects will have been more thoroughly monographed than this.

The plates illustrating the present work are excellent, and with the exception of a few errors in punctuation the typography is as good as the illustrations.

W. J. HOLLAND

*College Zoology.* By ROBERT W. HEGNER. Macmillan. 1912. Pp. xxv + 733.

In this book "(1) Animals and their organs are not only described, but their functions are pointed out; (2) the animals described are in most cases native species; and (3) the relations of the animals to man are emphasized." The discussion of each phylum is introduced by an account of one or more types. The general plan is not unlike that in Parker and Haswell's "Text-book of Zoology." Hegner's book will, however, probably prove to be better suited to American students because it discusses types they may meet every day.

The book is progressive and up-to-date. Such topics as the recent work on the hookworm in the United States, and the investigations of the United States Department of Agriculture on bird foods are considered. Many old familiar names are replaced by more modern terms and we find *Trichinella* for *Trichina*, *Ameba* for *Amœba*, *Dolichoglossus*

for *Balanoglossus*, *Anthozoa* for *Actinozoa*, *Branchiostoma* for *Amphioxus*, etc. The derivation of all scientific terms is given, and there is full citation of the authorities for figures. Few of the figures are original, but have been largely selected from other works. They are good for the most part.

Evidences of carelessness or hasty preparation appear in several places. For example, it is said that in the Metazoa, "the entoderm becomes the epithelium of the digestive tract, pharynx and respiratory tract" (p. 89)—a statement that will not hold true for all invertebrates; the aboral pole of crinoids is said to be "Usually with cirri or sometimes with a stalk" (p. 190) when the opposite is true; the eyes of the crayfish are said "to produce an erect mosaic or 'opposition image'" (p. 286), which would doubtless lead a student to believe that the two types of images were the same; on page 300 "*Cyclops*" is referred to as a species; *Branchipus stagnalis* is said to be a form of *Artemia salina* (p. 293), a view that has long been given up; *Polychærus* is listed as a triclad turbellarian (p. 156); the pericardium is affirmed to be a part of the cœlum (p. 406). The book is remarkably free from typographical errors.

In the opinion of the reviewer this work is the best general college text-book of zoology that has been written up to the present time for use in the United States. The publishers have done their part in excellent fashion; the text is generally clear and understandable; the figures are good; and there is a fine index. The book contains many loose statements and some small errors; the writer has evidently been actuated by a desire to get out a good book *quickly* and has not always made conservative statements nor checked errors carefully. Nevertheless these defects are not serious enough to detract from the general value or usefulness of the work and it will doubtless continue to be popular for several years. A second printing has already been issued.

A. S. PEARSE

UNIVERSITY OF WISCONSIN