

but, as is the fashion in general text-books, they are very incomplete on the embryological side. On the other hand, the subject of Vertebrate Histology receives very satisfactory attention. It will be seen that the work is one which covers a very large area. While it is necessarily greatly condensed, it is at the same time written in such a perfectly clear style that it is wholly intelligible, and the lay reader, as well as the student, will find it a very valuable presentation of the leading principles of the science. An Introduction of twenty-four pages covers the essentials of microscopical technique. The work is illustrated throughout, in part with the author's drawings and in part with many standard illustrations. In the histological part of the chapters on the Frog the cuts are largely from Quain's Anatomy.

*A new text-book
of Biology.*

We are wont to look very much askance at every new text-book of biology. So many of them are already in the field struggling for life, many of them goaded to the unequal combat by the stimulating influences of their publishers' voices, that we insist now that each new competitor shall demonstrate his right to enter the lists. With a knowledge of the difficulties of the case, Professor John Bidgood has prepared his "Course of Practical Biology" (Longmans). There is one respect in which the work can fairly be said to be a departure. Each subject that is taken for study is treated in a series of paragraphs, each one of which directs some operation, the point of which is discussed in its immediate connection. This ought to have the effect of making a student thoughtful of the progress and significance of his work. We do not know of any other biological text-book in which this principle is so well applied as here. The subjects first taken up are several of the Fungi and Protococcus. A chapter on the Bacteria is included, with directions for some simpler experiments in culture and a consideration of their relation to disease. Then Chara, the Fern, and the Nettle are taken up in great detail. These complete the botanical side of the work, and occupy in all about half of the treatment. The fifty-four pages devoted to the Fungi and Protococcus form as good an introduction to the modes of biological work and thought as has yet appeared. We do not see, however, any sufficient reasons for the selection of Chara, or for the choice of the nettle rather than of some others of the Phanerogams with a regularly racial flower—as, for instance, the geranium, which latter can be had at all seasons at the florist's. We also regret that some of the filamentous algæ were not touched on, if only briefly, as they are so very accessible for study. The animal forms selected are Amœba, Vorticella, Paramecium, Hydra, Anodonta, Astacus, and Rana. These are all well treated on the side of anatomy,