This memoir—confined to a discussion of the anatomical characters, especially the structure of the gills, and to an arrangement of the different groups in conformity with the data newly obtained or now correlated by Dr. Ortmann—comprises an important advance in our knowledge of the fresh-water mussels. Giving full credit to Lea and Simpson, pioneers in the classification of these animals on the basis of the characteristics of the reproductive organs and marsupium, the author's studies of the microscopic structure of these organs have enabled him to rectify some errors and add very largely to the available data. The details are well illustrated both by text figures and excellent plates. The description and illustration of the Pennsylvanian species is reserved for future publication.

Dr. Ortmann, on account of certain archaic features, proposes for *Magaritana* a separate family, retaining the other Pennsylvanian forms in the Unionidæ which he divides into three subfamilies. He proposes a new genus *Paraptera* for *Lampsilis gracilis* (Barnes) on account of peculiarities of the glochidia. We note that he adopts for the group commonly known as *Glabaris* the name of *Anodontites* which was first applied by Bruguière. This name is undoubtedly prior to any other for the group in question, but by the rules in vogue, at the time it was proposed the termination *ites* was reserved for fossil species, and it was therefore not adopted. If *Anodontites* be rejected *Patularia* Swainson precedes *Glabaris* in date.

WM. H. DALL

*The Sources and Modes of Infection.* By CHARLES V. CHAPIN, M.D., Sc.D., Superintendent on Health, Providence, R. I., author of Municipal Sanitation in the United States. New York, John Wiley and Sons; London, Chapman and Hall, Limited. Octavo. Pp. ix + 399. 1910.

Any book written by this author is worthy of attention, and this one especially so—for in it is contained a summary of our knowledge of the subjects of which it treats and the interpretation put upon this knowledge by one possessed of wide experience. Some of the conclusions arrived at will be startling to those unfamiliar with the general trend of modern thought, but none are put forward that are not logically in sequence to the evidence presented. It will be difficult to secure general acceptance of such conclusions as this (p. 28): "While municipal improvements, such as the above" (cleaning of streets, back alleys, etc., regulation of offensive trades and prevention of nuisances generally), "are advisable, there is little more real reason why health officials should work for them, than there is that they should work for free transfers, cheaper commutation tickets—all good things in their way and tending towards comfort and health." Yet the author brings forward apparently good evidence to show that such statements are warranted. Perhaps the most valuable chapter is the second—in which stress is laid upon "carriers and missed cases" as most important sources of infection. Attention is called to the great influence of infection by contact—the comparative slight importance of infection by fomites or by air; instances are given of the favorable results following the abandonment of disinfection in certain of the infectious diseases in Providence, and a proper amount of stress is laid upon the transmission of certain diseases by insects. For all who are interested in these subjects the book will be a valuable aid in recognizing the present evidence upon which the control of infectious diseases must rest.

HAROLD C. ERNST

HARVARD MEDICAL SCHOOL

## *BOTANICAL NOTES*

### A READABLE BOOK

AMONG the most readable of recent botanical books is that on "The Evolution of Plants," by President D. H. Scott, of the Linnean Society of London (New York, Holt). In about two hundred and fifty duodecimo pages the author discusses the evolution of plants most entertainingly and lucidly, confining himself, however, to the flowering plants and the "higher spore plants."