

English translator well says, that many and valuable ideas may be obtained. The interesting commentaries contained in this volume render it possible for even the general reader to do this with pleasure and profit.

MANSFIELD MERRIMAN.

Gleanings from Nature. By W. S. BLATCHLEY. Indianapolis. 1899. 16mo. 348 pp., 15 pl., 100 cuts.

The State Geologist of Indiana has here given us a dozen or more chapters on the natural history of his State, with the laudable purpose of interesting young people in the objects about them. If but a fraction only of the 800,000 children to whom he dedicates the book will read it, the results should be good; for the author speaks at first hand of all he writes, and seems equally at home whether discoursing of quadrupeds, birds, reptiles, fishes, insects, trees, weeds or caverns, to which latter feature of southern Indiana much space is given. We have noticed but one serious error, where the femora of *Mantis* are taken for tibiae. The stories are simply told, and derive their chief value from being the outcome of close personal contact with nature and from their local flavor. The book is to be heartily recommended to the young people not only of Indiana but of the neighboring states, to which it is nearly as well adapted. It will take them out of doors on every page and awaken a new interest in living nature. The illustrations are mostly good, many excellent and all to the purpose. There is a sufficient index.

S. H. S.

LIVERPOOL MARINE BIOLOGICAL COMMITTEE'S
MEMOIRS.

THE appearance of No. I., of the Liverpool Marine Biological Committee's 'Memoirs on Types of British Marine Plants and Animals,' deserves more attention from teachers and students of natural history than the intrinsic scientific value of the volume, however much this may be, can justly claim. This because of the uniqueness in several ways of the series which this number introduces. In the first place these volumes are to be unique in the matter of price. Who has ever before heard

of a bound volume, in the English tongue at least, on a natural history subject, written by a distinguished specialist, and containing fifty pages and four good plates, being sold for 37½ cents? Yet that is the price of this first memoir.

It is written by the editor of the series, Professor W. A. Herdman, and the type treated is *Ascidia*, as might be anticipated from the editor's long and distinguished devotion to the group of animals of which this is a representative.

The series again is well-nigh unique in its origin and purpose. What these are may be best shown by extracting a paragraph from the editor's preface.

"In our twelve years, experience of a Biological Station (five years at Puffin Island and seven at Port Erin), where college students and young amateurs formed a large proportion of the workers, the want has been constantly felt of a series of detailed descriptions of the structure of certain common typical animals and plants, chosen as representatives of their groups, and dealt with by specialists. The same want has probably been felt in other similar institutions and college laboratories."

Some twenty other memoirs of like nature and by nearly an equal number of workers are promised.

It is hardly necessary to say that the number before us is scientifically accurate and up to date. It could hardly be otherwise; for its author has himself contributed more than any one else to the making of our knowledge what it is to-day, of the structure and speciology of the Tunicata. No one is better able than he to write such a book, and he has written it as well as he is able to.

The only instances in which I have noticed any doubtfulness or unclearness of statement are in connection with the pericardium and heart, and the coelom. On page 34 we are told that the "pericardial sac and its invagination the heart have formed in the mesoblast between the endostyle and stomach." A reader not already familiar with ascidian embryology would find difficulty, I should think, in harmonizing this statement with the clear statement of the fact found on page 10, viz.: that