

the instructor of the exact relations existing between the two structures "the tunique" and "the tunic" when that explanation could be avoided through greater consistency in the use of terms in the text.

Errors of a nature more serious than those just cited are not wanting in the text. In the discussion of the earth-worm the sperm sacs or seminal vesicles of the male reproductive system are called spermathecæ (misspelled spermothecæ three times on page 94). In so far as I have been able to determine the term spermathecæ is applied by morphologists and by specialists in the oligochætes to that part of the female reproductive system which Petrunkevitch calls the receptacula seminis. I doubt that readers of a review would consider errors of this type "of such a minor nature that to mention them might seem like petty criticism."

The all too frequent misspellings of words and inconsistencies in punctuation, in capitalization, and in the indiscriminate use of or omission of the hyphen in identical combinations of words, while items in themselves of but minor importance, impair the value of the book as one to be placed in the hands of undergraduate students, whose carelessness along these lines would tend to be accentuated. For some of these errors it is probable that the publishers are in some degree responsible. Granted that "it is not a work which gives the impression of having been carelessly put together," yet more care in proofing, in making certain of the correctness of the statements, and in the form of the expression would have added considerably to its value.

H. J. VAN CLEAVE

SCIENTIFIC BOOKS

Discovery, or the Spirit and Service of Science.

By R. A. GREGORY. New York, Macmillan and Co. Price \$1.75.

The appearance of this book could not well have been more timely. At the present date when all English-speaking peoples are in greater or less degree reaping the bitter fruits of their past indifference to the welfare of

scientific investigation, a widespread awakening to the more immediate utilitarian advantages of scientific discovery is finding expression in the formulation of far-reaching governmental plans for the furtherance of technical research, research in other words that "pays." Our governors and leaders utterly lacking the viewpoint of the investigators and any consciousness of the larger import and ultimate aims and utilities of science are of course as indifferent as ever to the welfare or outcome of the more fundamental and far-reaching problems of research, for these can not be guaranteed within any defined period to return the several hundred or thousand per cent. which the political or commercial public naturally expects as the outcome of any investment in research. There is a manifest danger that the welfare of scientific investigation will actually suffer by reason of the new-born and ill-directed interest of the politician. This is an occasion, therefore, when it is more than ever necessary to undertake a definite campaign of popularization of the true aims and aspirations and methods of the scientific discipline of thought.

The educator, no less, perhaps, than the politician, requires instruction in the true aims and inspiration of science. In the words of our author, "The following pages will perhaps show that the spirit of scientific research has inspired the highest ethical thought and action, as well as increased the comforts of life and added greatly to material welfare. We seek to justify the claim of science to be an ennobling influence as well as a creator of riches; and therefore as much importance is attached to motive and method as to discovery and industrial development, however marvelous or valuable these may be." It may be added that the citations in this little book will perhaps serve to show our "humanistic" colleagues that science has been able to inspire literature which will bear comparison in nobility of thought and beauty of expression with the literary standard of the "humanities."

By a pardonable oversight on page 103 the Yerkes Observatory is situated in California.

T. BRAILSFORD ROBERTSON