

Watt was obliged to circumvent them in order to carry on his business. Moreover, the State undoubtedly profits directly. It is asserted by men competent to judge that the amount received in patent fees is greater than all the profits made by inventors. In other words, the average profit made on an invention is not sufficient to cover the charges made by the State. Herr du Bois-Reymond's book may be recommended to those who take an interest in the philosophic analysis of these questions, and they may also hope to find much worldly wisdom scattered throughout its pages, and a wealth of illustration, drawn from the experience of a busy life.

W. H. S.

#### BIOLOGICAL PHILOSOPHY.

*Psychology* (pp. 124); *Sociology* (pp. 124); *Ethics* (pp. 118). By Dr. C. W. Saleeby. Three vols. Scientific Series. (Edinburgh and London: T. C. and E. C. Jack.) Price 1s. net each.

DR. SALEEBY discusses the problems of philosophy from the Spencerian standpoint in an interesting fashion. Of the three volumes, that on *Psychology* appears much the best; it is the most serious, and though the author has there one *bête noire* in the person of Dr. Ward, who suffers vicariously for all the sins of "academic psychology," the reader is not wearied, as in the *Ethics* volume, by incessant declamation against Nietzscheanism, on the one hand, and what is politely called "hell-fire morality" on the other.

On psychology our author has nothing very startling to say. He defines his subject as the science, not of consciousness, but of mind. He favours the Wundtian theory of psychophysical parallelism. He regards mind as a product and phenomenon of evolution; or rather, having boldly stated that life is prior to mind, he closes one of two chapters on the evolution of mind by maintaining that the responsiveness of the leucocyte to irritation points to sentience on its part, and by withdrawing his bold statement in favour of a bolder, that life and mind are co-equal, co-extensive, and of common origin. That is to say, he levels up the leucocyte to man. In the latter part of his book he dwells much more on the will than on the intellectual functions, as he wishes, not to lead up to a text-book on logic, but to the consideration of conduct. The result is that many questions which one finds discussed in the ordinary handbooks are not even mentioned in this; but, of course, amid the multiplicity of cheap introductory works there is no reason why all should go in the same ruts.

In the volume on *Sociology* one notes that our author follows the Spencerian line that the State has no consciousness of its own, and therefore the welfare of the State never means anything more or other than the welfare of the citizens. He follows his master, too, very closely in his opposition to free education, which he thinks as bad as free breakfasts for the children. A later chapter is occupied with an indictment of the modern city, and others with a discussion of socialism, conservatism, and liberalism.

The volume on *Ethics* has some excellences—the discussion of the origin of morality, for example, with what the author regards as the most important proposition he has to offer, viz. that organic evolution, reproductive evolution, and moral evolution are interdependent. Some other things are not quite so convincing—the statement that there has been far more vicious than virtuous obedience in human history, or another that morality is æons of æons older than the oldest creed, the proof offered being that a cat cares for its kittens. Apparently morality began ages before man was ever heard of, though, in a different context, Dr. Saleeby describes a baby as "non-moral, pre-moral, or if you like, immoral."

There is a hard saying on one page to the effect that historians of the (inaccurate and picturesque) school of Carlyle and Froude are no longer in request. This comes with rather a bad grace from one whose merits are probably—*quanto intervallo!*—much like those of the writers named; while his defects include an inadequate apprehension of the real issues involved and a stumbling knowledge of Greek. For *logos* does not mean science, nor is teleology derived from the word meaning "at a distance."

#### BIOLOGY OF THE FROG.

*The Biology of the Frog*. By Samuel J. Holmes, Ph.D. Pp. vii+370. (New York: The Macmillan Company; London: Macmillan and Co., Ltd., 1906.) Price 6s. 6d. net.

IN the vast literature that treats of the frog there is no comprehensive summary of its biology. Every natural history teacher has realised this want, which has increased in proportion with the great recent extension of instruction in elementary natural phenomena. No animal is more thoroughly known from the anatomical, histological, and embryological aspects, but on the side that appeals to teachers and commencing students, the study of habit and function, existing knowledge of the frog is scattered and often untrustworthy. This gap the author strives to fill, writing primarily for the student. His book is a compilation of what is known of the behaviour of the frog and of its several organs. Unfortunately it is not only this. Dr. Holmes has not freed himself sufficiently from formal and dogmatic zoology. He must have all the nomenclature and the anatomy of the medical school, as though we could never learn or teach zoology without a load of descriptive structural details. The new wine of comparative physiology has been poured into the old vessel and has burst it, leaking out now here now there, so that no good draught is obtainable. The wine, however, is good, and the more pity the framework was not better adapted to hold it and yield it to the thirsty soul.

The frog enters on p. 62, chapter ii. Here "we begin our study." Unfortunately there are two earlier chapters, with which most readers will begin. The first deals with the classification of Amphibia, and ought to have been simplified or postponed. The