

A PROPHET OF EVOLUTION.*

Although a voluminous *Life of Wallace* was published ten years ago, we welcome Mr. Marchant's volume as a useful summary of the labors of that great naturalist. It is by no means a mere abstract of the autobiography; it not only covers the last years of Wallace's life, subsequent to the publication of the larger work, but includes many new letters of great interest belonging to the earlier periods. The whole of the correspondence between Darwin and Wallace, so far as preserved, is given. The chapter on home life, by Wallace's son and daughter, is charming. From every point of view, it must be said that Mr. Marchant has been successful in producing a book which will remain as one of the more important and permanently valuable biographies of scientific men.

Our interest in Wallace has much less to do with the external circumstances of his life than with the development of his ideas and the expression of his remarkable personality. He was a great amateur, and as such contrasted strongly with the usual American type of naturalist, produced by the colleges. Those who have been brought up in the relatively narrow paths of scientific and academic orthodoxy may well be amazed at Wallace's strange and diverse opinions, or at his broad interests. If we hold that he would have been wiser to confine his activities to a narrower field, or if we believe that his freedom was only justified by his genius, we may yet ask ourselves whether we are not likely to err in an opposite direction. English nineteenth century science was dominated by a set of men who could hardly have developed as they did in any other country or period; in certain respects the very weakness of academic and official life in scientific fields gave them their opportunity. To-day our young men are fed into the jaws of a machine.—a splendid and beneficent machine to be sure, but still a machine, which produces types rather than individuals. It is unthinkable that we should do without our institutions for higher education; the very fabric of our civilization depends upon their development. But, like all institutions, they have tendencies to be fought and guarded against. Fortunately the interplay between the different foci of scientific activity all over the world affords a fair guarantee against excessive rigidity of doc-

trine. It is not to be expected or feared that science will ever develop an orthodoxy comparable to that of certain churches; but it is possible through educational processes to influence the mind in such a manner that without any visible constraint it will move in narrow circles. One so trained could never do the work of a Darwin or a Wallace, though he might do things which they could not.

The relations between Darwin and Wallace have often been described, but now that everything is set forth in full we can appreciate even better than before the admirable spirit shown by both men. Upon the appearance of the "*Origin of Species*," Wallace wrote in 1860 to his friend Bates:

I know not how or to whom to express fully my admiration of Darwin's book. To him it would seem flattery, to others self-praise; but I do honestly believe that with however much patience I had worked up and experimented on the subject, I could never have approached the completeness of his book—its vast accumulation of evidence, its overwhelming argument, and its admirable tone and spirit. I really feel thankful that it has not been left to me to give the theory to the public. Mr. Darwin has created a new science and a new philosophy, and I believe that never has such a complete illustration of a new branch of human knowledge been due to the labors and researches of a single man. Never have such vast masses of widely scattered and hitherto utterly disconnected facts been combined into a system, and brought to bear upon the establishment of such a grand and new and simple philosophy!

About fifty years later, at the jubilee meeting of the Linnean Society, Wallace said:

I should have had no cause for complaint if the respective shares of Darwin and myself in regard to the elucidation of nature's method of organic development had been henceforth estimated as being, roughly, proportional to the time we had each bestowed upon it when it was thus first given to the world—that is to say, as twenty years is to one week. For, he had already made it his own.

Mr. Marchant points out, and his book abundantly shows, that this modesty regarding his own work and desire to recognize that of others were characteristic of Wallace throughout his life. Indeed, his tolerance of others and readiness to believe in their good intentions more than once led him into trouble, though fortunately in Darwin he found a man fully equal to himself in his generosity and sense of justice. As he grew older, Wallace came to what might appear paradoxical conclusions concerning human nature and society. It seemed to him that "our whole system of society is rotten from top to bottom, and the social environment as a whole in relation to our possibilities and our claims is the worst that the world has ever seen"; while at the same time he felt that practically *all* human nature, given favorable conditions, was capable of good. So he said:

*ALFRED RUSSEL WALLACE. *Letters and Reminiscences*. By James Marchant. With portrait. New York: Harper & Brothers.

It is therefore quite possible that *all* the evil in the world is directly due to man, not to God, and that when we once realize this to its full extent we shall be able not only to eliminate almost completely what we now term evil, but shall then clearly perceive that all those propensities and passions that under bad conditions of society inevitably lead to it, will under good conditions add to the variety and the capacities of human nature, the enjoyment of life by all, and at the same time greatly increase the possibilities of development of the whole race.

These may be exaggerated statements, but they express the necessary aims of moralists, who may be permitted to show the optimism of workers in another field, who look forward to the day when the last of the infectious diseases will disappear before the attacks of medical science.

Wallace never became converted to any definite programme of eugenics, but he believed that with the increasing education and independence of women, indirectly eugenic results would come from more intelligent choice in mating, defective types being eventually eliminated. War he regarded as barbarous and inexcusable, and among his last writings were some letters to the "London Daily News," suggesting that it should be made a law of nations that flying machines should not be used to drop bombs on towns, etc. The present reviewer made an attempt at the time to get one of these letters reproduced in an American journal ("The Outlook"), but without success. In this, as in so many other matters, Wallace was ahead of current public opinion.

A very useful appendix gives for the first time a practically complete list of Wallace's writings. Mr. Marchant states in the preface that the available letters and documents by or concerning Wallace would fill four volumes instead of one. Possibly at some future date some of these materials may be published, but they will only add details to the essentially adequate and clear account which he has given us.

T. D. A. COCKERELL.