

## ALFRED RUSSEL WALLACE AND HIS FRIENDS

*My Life.* By ALFRED RUSSEL WALLACE. Two vols. (London: Chapman & Hall. 25s. net.)

**T**HERE are few more interesting episodes in the history of the human mind than that which links the names of Darwin and Wallace as joint originators of the epoch-making theory of Natural Selection. Most people know that while Darwin was slowly elaborating his work on the *Origin of Species* in 1858, he received a manuscript from Alfred Russel Wallace, then travelling in the Malay Archipelago, which contained conclusions practically identical with his own, though arrived at quite independently. On the advice of Lyell and Hooker, it was decided to send the manuscript of Wallace, with an extract from Darwin's unfinished book, to the secretary of the Linnean Society. This was done, and the two papers were published together.

In one of the most interesting passages of Dr. Wallace's delightful autobiography, he describes how the idea occurred to him:

'At the time in question, I was suffering from a sharp attack of intermittent fever, and every day had to lie down for several hours. One day something brought to my recollection Malthus's *Principles of Population*, which I had read about twelve years before. I thought of his clear exposition of "the positive checks to increase"—disease, accidents, war, and famine—which keep down the population of savage races to so much lower a level than that of more civilized peoples. It then occurred to me that these causes, or their equivalents, are continually acting in the case of animals also. Vaguely thinking over the enormous and constant destruction which this implied, it occurred to me to ask the question, Why do some die and others live? And the answer was clearly that on the whole the best fitted live. . . . Then it suddenly flashed upon me that this self-acting process would necessarily improve the race,

because in every generation the inferior would inevitably be killed off, and the superior would remain—that is, the fittest would survive. I waited anxiously for the termination of my fit, so that I might at once make notes for a paper on the subject; and on the two succeeding evenings wrote it out carefully, in order to send it to Darwin by the next post.'

The young savant who, while confined to a sick bed in a Malayan village, had thus arrived at the magnificent generalization which was to transform the scientific thought of the century, had already attained distinction as a practical zoologist. The autobiography enables us to follow the gradual development of his taste for natural history from the time when, as a lad, working with his brother at land-surveying, he spent all his spare time in looking for wild flowers on the Glamorgan-shire hills. In 1847 he went to Brazil with his friend Bates, the naturalist, and spent there the five years of which an account is given in that charming book, *Travels on the Amazon*.

After a couple of years in London, during which he made the acquaintance of Huxley, he started again for the Malay Archipelago, where he spent eight years in collecting rare birds and insects, and amassing material for the important work on the Malay Archipelago, which was published after his return.

The record of Dr. Wallace's scientific achievements belongs to the history of progress during the nineteenth century, and can be barely indicated here. After his return to London in 1862, he came into close touch with that group of scientific men of which Darwin was the chief, and his recollections of them abound in characteristic and interesting details.

Darwin appears, as we have learned to know him, the most modest and unselfish of men. Very apparent, also, is the withdrawal of interest from everything but the solution of the problems to which he gave his life. Doubtless it was the consciousness of physical infirmity that urged him to concentrate what energy he had on the one task. Yet he was not unaware of what he had lost by this self-limitation. 'Life has become very wearisome to me,' he wrote towards the end.

On the subject of their friendship, Dr. Wallace has the following passage, which does equal honour to both:

'In 1870, he (Darwin) had written to me, "I hope it is a satisfaction to you to reflect—and very few things in my life have been more satisfactory to me—that we have never felt any jealousy towards each other, even though in some sense

rivals. I believe I can say this of myself, and I am absolutely sure that it is true of you." This friendly feeling was retained by him to the last, and to have thus ensured and retained it, notwithstanding our many differences of opinion, I feel to be one of the greatest honours of my life.'

Of Herbert Spencer he gives some interesting glimpses. He visited the philosopher in the Bayswater boarding-house, 'tenanted for the most part by rather common-place people,' where he had taken up his abode, in order, as he said, 'to avoid the mental excitement of too much interesting conversation.'

Dr. Wallace was a frequent visitor at Huxley's house, and here he met with Dr. Maklay, a Russian scientist, who had lived for fifteen months among the cannibals of New Guinea. They threatened to murder him several times, but he 'sat still and smiled,' cured their ailments, won their affection, and they ended by regarding him as a kind of demi-god.

Another of his friends was the late St. George Mivart, to whose charming personality and eminent gifts he does full justice. As a biologist Mivart was almost entirely self-taught. He was trained for the Bar, but took up anatomy when about twenty-five. The comment of his father was, 'Well, you have never earned a penny yet, and I suppose you never will.' Soon after Mivart had the pleasure of disproving his father's prediction by handing to the old gentleman a liberal cheque which he had received for a scientific article.

The year 1869 was marked by the establishment of *Nature*, to which Dr. Wallace has been a constant contributor for a quarter of a century.

Tennyson invited him to his house at Blackdown, and talked to him about the scenery of the tropics. Then 'taking down a volume, he read, in his fine, deep, chanting voice, his description of Enoch Arden's island,

"The mountain wooded to the peak, the lawns  
And winding glades high up like ways to heaven."'

and seemed pleased when the naturalist was able to assure him, from personal knowledge, that the description was correct.

In 1896 he lectured for one of Dr. Lunn's Swiss 'Conferences' on scientific progress in the nineteenth century, and met Mr. H. R. Haweis and Mr. Price Hughes. Of the latter he writes, 'He was, I think, without exception the most witty

man, and one of the best companions I ever met. . . . He was a Christian and humanitarian in the best sense of the word.' They had indeed much in common in their deep sympathy with the labouring classes, and their zeal for social progress.

Dr. Wallace seems to have regarded his visit to Grindelwald as a sort of epoch in his life, since it led to his writing *The Wonderful Century*, which was an expansion of his Swiss lecture, and also, indirectly, brought about the production of *Man's Place in the Universe*, the most widely read of his later books.

Many other topics of the greatest interest are touched on in these volumes; but the dominant impression which remains after reading them is that of the personality of the author himself. It recalls that of the Knight of Science of whom Charles Kingsley once drew such a winning portrait, disinterested, upright, faithful, devoted to the service of truth and 'the relief of man's estate.'