## Alfred Russel Wallace.

## A Memoir by E. R. SYKES.



the death of Alfred Russel Wallace the last link with the great workers on evolution, whose names adorn the mid-nineteenth century, is broken. One by one, Darwin, Hooker, Huxley, &c., they have passed away, and now death has taken from us the last, and one of the greatest.

We, of the Dorset Field Club, have a special interest in Wallace; he was an Ordinary Member of the Club for some years, and in 1909 became one of our Honorary Members; to many of us he was personally known, and not a mere abstract personality.

Born on January 8th, 1823, at Usk, in Monmouthshire, he was educated at Hertford Grammar School, and for a short time assisted his brother as a land surveyor. Later, he became a schoolmaster at Leicester, and there, about 1845, he became friends with H. W. Bates, whose works on the Amazon Region are so well known. This was a turning point in his career for, in 1848, he and Bates, both already keen students of nature, went out together to study and collect animals and plants in South America. After a short time they separated, and Wallace spent four years in the country, exploring the Rio Negro. Unfortunately the bulk of his collection was lost, owing to fire on the ship by which he returned home. In 1854 he started on his classic expedition

to the Malay Archipelago, then but little known; this lasted no less than eight years, and he brought back the vast store of over 125,000 specimens. On the materials so collected and his geographical studies were based his "Island Life" and "Geographical Distribution of Animals," while we may also note his discovery of what has been called "Wallace's line," dividing the Archipelago into two distinct regions, with entirely different faunas.

We may now turn to his epoch-making work, by which the name of Wallace will ever be remembered. While still in the Malay Archipelago he sent home to Darwin his essay "On the tendency of varieties to depart indefinitely from the original type," which, to the latter's amazement, proved to be in theory and reasoning precisely similar to the great work on which he himself was then engaged. It was eventually arranged that a joint paper by Darwin and Wallace should be read at the Linnæan Society, and in 1858 this was done. After a stormy controversy the great theory of the survival of the fittest has met with universal acceptation, and the foundation-stone of modern biology stands firm and secure. To us of the present day it is hard to realise that what has been well called one of the driving forces of the world, and which seems to us but a simple truth, should have been found so hard to accept. Incidentally, we gain some insight into the working of Wallace's mind, into which, after a long period of, no doubt, unconscious preparation, decisions flashed. The above conclusions came upon him suddenly, and we know that he said of himself "I am a believer in inspiration. All my best theories have come to me suddenly."

Characteristic of his enquiring mind was it, that he never considered the details of the theory as finally settled. He was far from accepting the whole of the "Origin of Species" verbatim, and, in later years, he endorsed the somewhat diverging views of Weissman. Finally, in his "World of Life," he expressed his disagreement with the view attributed to Darwin, that man, like all other animals, has been produced by the unaided operation of natural selection.

From this time onwards Wallace occupied his rightful position as one of the leaders of scientific thought; slowly, but steadily, recognition and honours poured in upon him; and he held his place till death, on November 7th, 1913, in his ninety-first year, removed him from amongst us.

It is impossible in a brief memoir like the present to give any real survey of Wallace's scientific or other work. An author who dealt with such widely-sundered subjects as Island Faunas and Spiritualism, the theory of evolution and State ownership of land, is not to be summarised in a few paragraphs. For a moment we may turn to his "Island Life," a summary it may be said, but a summary welded by a master hand. Here, after a brief essay on distribution, he points out that the key must be sought in evolution; and after dealing with glacial epochs and changes of climate, he gives a detailed survey of the fauna and flora so far as known, the result being a book of great value, not only to the specialist, but also to the general reader. In his "Malay Archipelago," again, we find most valuable observations, not only on the animals and plants, but also on the native races and their history; and that he risked many dangers in the cause of science, the mere account of his voyage from Waigiou to Ternate, in 1860, is sufficient to show.

The influences which lead men to become what they are, though often apparently small in themselves, afford an interesting study. In the case of Wallace, his taste, already slightly developed, for zoology and botany, no doubt received a great stimulus from his friendship with Bates. This association largely led to the first expedition to South America, and, gradually, the collector became the master mind, using his collections in the way they should be used—as materials for study.

To take another instance, his views on the State ownership of land may be traced to his association with his elder brother, a surveyor, and to the experience this gave him.

Patient, industrious, broad-minded, with wonderful powers of concentration, the world has lost a great naturalist and philosopher.