## V.—Obituary.

## ALFRED RUSSEL WALLACE.

THE death of Dr. Wallace, which took place on November the 7th, in his 91st year, severs the last remaining link of the chain of great names of the mid-Victorian era associated with the introduction and confirmation of the doctrine of Evolution by Natural Selection.

First conceived by Charles Darwin as far back as 1842, and communicated only to Sir Charles Lyell and Sir Joseph Hooker, his most intimate friends, it was not till 1858 that he received from Wallace, who was then in the Moluccas, an essay for publication, "On the Tendency of Varieties to depart indefinitely from the Original Type," which almost exactly reproduced Darwin's own views.

Wallace's essay, together with a sketch of Darwin's own ideas, were communicated jointly to the Linnean Society on July the 1st, 1858, and his views were further elaborated in his 'Contributions to the Theory of Natural Selection' (London, 1875) and in 'Darwinism; an Exposition of the Theory of Natural Selection, with some of its Applications' (London, 1889). It was in these two volumes that Wallace contributed to the progress and understanding of the Darwinian doctrines. But he did not quite see eye to eye with Darwin in every respect. He was of opinion that Natural Selection alone could not account for the development of the human race, and adopted views of a teleological character which he elaborated in a later volume, the 'World of Life,' published in 1910, in which he argued that the complexity of the structure of living beings necessarily implied a creative power, a directive mind, and an ultimate purpose, and that man was the one crowning product of the whole cosmic process of development.

Wallace was born at Usk in Monmouthshire, on January 8, 1823, and was educated at Hertford Grammar School. During his early years he first earned his living as a land surveyor and an architect in company with an elder brother, and

afterwards as a teacher in a school at Leicester. During these early days he showed a marked taste for natural history, and especially for botany. About 1844 he became acquainted with H. W. Bates, and they formed a plan to make an expedition together to South America, in order to form natural history collections, by the sale of portions of which they hoped to recoup themselves for the expenses of the journey.

Finally they embarked from Liverpool, in 1848, for the Amazon. After working for a year or so together they separated, Wallace exploring the Rio Negro, one of the principal tributaries of the Amazon, while Bates devoted himself to the main river. Wallace returned in 1852, but was unfortunate enough to lose the greater portion of his collections and notes owing to the ship in which he was returning taking fire. In the following year he published an account of his journey, 'Travels on the Amazon and Rio Negro,' as well as a volume on 'The Palm Trees of the Amazon.'

In 1854, having disposed of such specimens as he had saved, he started off for the Malay Archipelago, where he remained for eight years, collecting and exploring, and visiting most of the islands from Sumatra to New Guinea. The collections he brought back numbered over 125 000 specimens, including some 8000 bird-skins, most of which are now in the British Museum. It was during this period, while living at Ternate in the Moluccas, and while he lay suffering from a sharp attack of intermittent fever, that the idea of Natural Selection occurred to him, and three days later he had written out an outline of his theory and posted it to Darwin.

Among other results of his investigations in the east was his discovery of a distinct break in the faunal continuity between Asia and Australia in the narrow strait dividing the two small islands of Bali and Lombok, the former being Asiatic in its affinities, the latter Australian. This line has since come to be known as Wallace's line, and his first

communication to 'The Ibis' was a letter on the "Geographical Distribution of Birds," dated Batchian, March 1859, containing criticisms and suggestions in regard to the Zoo-geographical Regions as proposed by Dr. P. L. Sclater in a paper published in the Linnean Society's Journal of the previous year. These studies finally culminated in his classical book 'The Geographical Distribution of Animals' (1876), and that fascinating volume of essays, 'Island Life' (1880). The general account of his wanderings in the east was contained in two volumes on 'The Malay Archipelago,' not published till 1869, but since often reprinted—which forms with Bates' 'River Amazon' and Darwin's 'Journal of Researches' the three most entrancing works of natural-bistory travels ever written.

After his return from the Dutch Indies Wallace settled down in England, and spent the rest of his long life writing mostly on problems of natural history, but also on those of economics, politics, and psychology, on all of which subjects he held advanced and original views.

He was elected an Extraordinary Member of the B. O. U. in 1860, while still in the east, and between 1859 and 1874 wrote a good many papers in 'The Ibis,' chiefly about the birds he had met with and collected in the Malay Archipelago. A list of these is added to this memoir. He also communicated a series of papers on his ornithological collections to the Zoological Society.

Many honours and distinctions were conferred on Wallace. He was awarded a Royal Medal of the Royal Society in 1868, and in 1890 very appropriately the Darwin Medal, but it was not till 1893 that he was elected a Fellow of the Society. He received honorary degrees of LL.D. from Dublin in 1882, and of D.C.L. from Oxford in 1889, and was chosen a member of the Order of Merit in 1908. In 1881 he was granted a Civil List pension of £200 a year. In addition to many other books on political and social problems he published an autobiography, 'My Life,' in 1905, reissuing it in a condensed form in 1908.

During the latter part of his life he lived at Broadstone, a village in Dorset, about seven miles from Bournemouth, and it was there that he died after a short illness lasting only a few days.

Wallace was perhaps the last distinguished representative of an old type—the naturalist, traveller, biologist, geographer, and knower of species, with a mind always seeking to discover the causes of things, but with no taste for the modern methods of morphology, or for the newer forms of chemical, physical, and mathematical analyses now so much in vogue in zoological research. A man of great human sympathies, always ready to champion the cause of the oppressed and to make the world a better place to live in, he was himself of a gentle and reflective nature and had no ambition to shine forth among his fellow men.

## List of Wallace's Contributions to 'The Ibis.'

- (1) Letter from Mr. Wallace concerning the Geographical Distribution of Birds. Ibis, 1859, pp. 449-454.
- (2) The Ornithology of North Celebes. Ibis, 1860, pp. 140-147.
- (3) On the Ornithology of Ceram and Waigiou. Ibis, 1861, pp. 283-291, pl. ix.
- (4) Notes on the Ornithology of Timor. Ibis, 1861, pp. 347-351.
- (5) On some new Birds from the Northern Moluccas. 1bis, 1862, pp. 348-357.
- (6) Notes on Corvus senex Garn. & Less., and on Corvus fuscicapillus G. R. Gray. Ibis, 1863, pp. 100-102.
- (7) Notes on the Fruit-Pigeons of the Genus Treron. Ibis, 1863, pp. 318-320.
- (8) Remarks on the Value of Osteological Characters in the Classification of Birds. Ibis, 1864, pp. 36-41.
- (9) Remarks on the Habits, Distribution, and Affinities of the Genus *Pitta*. Ibis, 1864, pp. 100-114.
- (10) Note on Astur griseiceps Schlegel. Ibis, 1864, p. 184, pl. v.
- (11) On the Pigeons of the Malay Archipelago. Ibis, 1865, pp. 365-400, pl. ix.
- (12) On the Raptorial Birds of the Malay Archipelago. Ibis, 1868, pp. 1-27, 215-216, pl. i.
- (13) On the Arrangement of the Families constituting the Order Passeres. Ibis, 1874, pp. 406-416.