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## A HUNDRED YEARS OF EVOLUTION<sup>1</sup>

By Professor E. B. POULTON

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THINKING over the subject of this address, I have been encouraged by a metaphor given me by Oliver Wendell Holmes at a delightful dinner of the Boston Saturday Club in January, 1894—"Memory in old age is a palimpsest with the records beneath standing out more clearly than those above." And, indeed, memories of my first British Association, at York in 1881, are clearer than those of many in later years. It was a great meeting, as befitted the fiftieth anniversary, and nearly every sectional president had been a president of the association. It also marked a turning-point in evolutionary controversy, being, I believe, the last meeting at which opposition was offered to evolution as apart from its motive cause or causes. From 1881 onwards the battles in this section have been over Lamarekism and natural selection and their factors, especially heredity; over the size of the steps and the rate of progress. Evolution

itself has been generally accepted. It was different at York in 1881. Dr. Wright's indignation, when the reptilian affinities of *Archeopteryx* were explained in the geological section, was stirred by the hated doctrine which gave meaning and life to the demonstration. I well remember, too, how Professor O. C. Marsh, discussing one of the meetings in this section with a young and inexperienced naturalist, said that he had felt rather anxious about the way in which his paper on the Cretaceous toothed birds of America would be received by the president, Sir Richard Owen. His fears were, however, groundless, and all was well.

The difference between the controversies raised in the first and the second of these half-centuries of evolution reminds us that long before Darwin saw his way to an explanation of evolution he was satisfied that evolution was a fact; reminds us, too, that we are celebrating another great centenary, for he sailed in the *Beagle* on December 27, 1831, thus entering upon the five years' voyage which, in his own words, "was by far the most important event in my life, and

<sup>1</sup> Address of the president of Section D—Zoology, British Association for the Advancement of Science, London, September, 1931.

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