

*THE DARWIN-WALLACE JUBILEE CELEBRATION AT THE LINNEAN SOCIETY.*

ON July 1, 1858, Sir Charles Lyell and Dr. J. D. Hooker communicated to the Linnean Society a remarkable paper entitled "On the Tendency of Species to form Varieties; and on the Perpetuation of Varieties and Species by Natural Means of Selection," by Mr. Charles Darwin and Mr. Alfred Wallace. The history of this paper is familiar to every student of biology. Darwin had for many years been studying the question of natural selection and its bearing upon the origin of species, but, although his views were well known to several intimate friends, he had refrained from publishing them, and was still occupied in the collection of evidence when he received from Wallace a manuscript essay "On the Tendency of Varieties to Depart indefinitely from the Original Type," in which the same ideas were set forth. At the request of the author this manuscript, after perusal, was forwarded by Darwin to Sir Charles Lyell, with the added suggestion that the essay should be published as soon as possible. After consultation with Hooker, Darwin was induced to allow an extract from his own work on the subject to be published simultaneously.

The reading of this joint paper at the Linnean Society formed the starting point of a revolution in scientific thought the effect of which it would

be impossible to overestimate, and the Society has duly recognised the importance of the occasion in the commemoration which took place last week.

A peculiarly gratifying feature of the proceedings was the presence at the afternoon meeting of Dr. Wallace and Sir Joseph Hooker, and the fellows of the society and their guests thus had the remarkable privilege of hearing an account of the great event of fifty years ago from the lips of two of the principal actors therein. The society is also to be congratulated on the very cordial response made to their invitation by the numerous universities, academies and learned societies to which it was sent, the gathering being in all respects a thoroughly representative one.

The afternoon meeting was held in the large meeting room of the Institution of Civil Engineers at Westminster, and was attended by about three hundred and fifty fellows and guests. The proceedings were opened by the president, Dr. D. H. Scott, F.R.S., who explained the purpose of the meeting and welcomed the delegates and guests in a short speech. The Darwin-Wallace medal, of which we give an illustration, was then presented by the president to the seven representatives of biological science who had been selected for the honour, viz. Dr. Alfred Russel Wallace, Sir Joseph Dalton Hooker, Prof. Ernst Haeckel, Prof. Eduard Strasburger, Prof. August

Weismann, Dr. Francis Galton, and Sir E. Ray Lankester, the copy given to Dr. Wallace being in gold and the others in silver. Each medallist was addressed by the president in an appropriate speech in which his claims to the distinction were duly set forth, and all were received by the audience with great enthusiasm.

Dr. Alfred Russel Wallace, in replying, spoke of the actual relations between Darwin and himself, and of the share which each had contributed to the theory of natural selection. With characteristic modesty he laid stress upon the fact that the idea had occurred to Darwin nearly twenty years before it occurred to himself. In endeavouring to explain why the same solution of the problem of the origin of species had occurred to both of them, he pointed out that a closely similar course of events had led up to the same result in each case. Both Darwin and Wallace had the passion for collecting, and both in early life had been ardent beetle-hunters. Thus they had been led to take an intense interest in the mere variety of living things and to seek for an explanation thereof. Later on both become travellers, collectors and observers in some of the richest and most interesting portions of the earth, and had forced upon their attention all the strange phenomena of local and geographical distribution, with the numerous problems to which they give rise. Then, finally, at the critical period when their minds were freshly stored with information and reflection upon the problem to be solved, both had their attention directed to the system of positive checks expounded by Malthus in his essay on population. "The effect of this," continued Dr. Wallace, "was analogous to that of friction upon the

specially-prepared match, producing that flash of insight which led us immediately to the simple but universal law of the 'survival of the fittest,' as the long-sought *effective* cause of the continuous modification and adaptation of living things."

Sir Joseph Hooker, in his address, dwelt upon the considerations which determined Mr. Darwin to agree to the proposal of his friends for the joint publication of his own and Mr. Wallace's theories by the Linnean Society. He also pointed out that at the meeting Mr. Darwin was unable to be present, being himself very ill, and with scarlet fever and diphtheria raging in his family. The meeting was the last of the session, and was unusually late owing to the death of the great botanist Robert Brown, otherwise the Darwin-Wallace paper would have had to wait for at least four months, until the beginning of the next session. The paper was actually read by the secretary of the Society. Sir Charles Lyell and Dr. Hooker said a few words to emphasise the importance of the event, but although intense interest was excited, no discussion took place—"the subject was too novel and too ominous for the old school to enter the lists before armouring."

Prof. Haeckel and Prof. Weismann were unfortunately unable to be present. The medals were received on their behalf by a representative of the Ger-

man Embassy, and a short address from Prof. Haeckel was read by the Zoological Secretary. Prof. Haeckel laid stress upon the importance of the theory of organic evolution, and described the foundation by himself of a new phyletic museum at the University of Jena.

Prof. Strasburger dwelt upon the influence of the

Darwinian teaching upon his own career and that of Haeckel, and Dr. Francis Galton replied briefly to the president's speech. Sir E. Ray Lankester addressed the meeting at greater length, and struck a fresh and appropriate note in emphasising the share taken by Huxley in the great controversy to which the Darwin-Wallace theory gave rise. He concluded by expressing the opinion that at the present day "not only do the main lines of the theory of Darwin and Wallace remain unchanged, but the more it is challenged by new suggestions and new hypotheses the more brilliantly does the novelty, the importance, and the permanent value of the work of these great men to-day commemorated by us, shine forth as the one great and epoch-making effort of human thought on the subject."

The presentation of the medals was followed by the reception of the delegates of corporate bodies. Of the colleges and schools connected with the early training of Darwin and Wallace, Christ's College, Cambridge, was represented by the master, Dr. Peile; Shrewsbury School by Mr. C. J. Baker, chief science master, and Hertford Grammar School by Mr. G. W. Kinman, headmaster. The other bodies represented were the University of Oxford (Dr. Warren, Prof. Poulton and Dr. Church); the University of Cambridge (Dr. Francis Darwin); the University of St. Andrews (Prof.



The Darwin-Wallace Medal of the Linnean Society.

Scott Lang); the University of Glasgow (Prof. J. G. Kerr); the University of Aberdeen (Lieut.-Col. Prain); the University of Edinburgh (Prof. I. B. Balfour); the University of Durham (Prof. M. C. Potter); the University of London (Sir W. T. Thiselton-Dyer); the University of Manchester (Prof. Weiss); the University of Wales (Prof. Phillips); the University of Birmingham (Sir Oliver Lodge); the University of Liverpool (Prof. Herdman); the University of Leeds (Prof. Blackman); the University of Sheffield (Prof. Denny); University College, Nottingham (Prof. Carr); University College, Bristol (Prof. Lloyd Morgan); the Royal Swedish Academy of Sciences (Prof. Lönnberg); the Royal Society (Sir Archibald Geikie); the Society of Antiquaries (Lord Avebury); the Royal Irish Academy (Dr. Scharff); the Manchester Literary and Philosophical Society (Mr. C. Bailey); the Royal Society of Edinburgh (Prof. D'Arcy Thompson); the Geological Society of London (Prof. Sollas); the Cambridge Philosophical Society (Dr. Harmer); the Royal Astronomical Society (Mr. Newall); the Zoological Society (Mr. Boulenger); the British Association (Sir David Gill); the Entomological Society of London (Mr. Waterhouse); the Royal Microscopical Society (Lord Avebury); the Chemical Society (Dr. Horace Brown); the Malacological Society (Mr. Byrne); the British Academy was represented by Sir E. Maunde Thompson.

Dr. F. Darwin and Sir W. T. Thiselton-Dyer spoke on behalf of the universities and schools, and Prof. Einar Lönnberg and Sir Archibald Geikie on behalf of the academies and societies represented. Prof. Lönnberg announced that his gracious Sovereign, His Majesty King Gustaf of Sweden, had ordered him to convey to the Linnean Society his hearty greetings and sincere felicitations on this occasion. He also presented a very beautifully illuminated address from the Royal Swedish Academy of Sciences, and a silver copy of the Linnean medal of the Academy struck in commemoration of the Linnean celebrations of last year. Several other addresses were also presented by the delegates.

The concluding speech of the afternoon was delivered by Lord Avebury, who described, in an extremely interesting manner, his own intimacy with Charles Darwin, laying especial emphasis upon his peculiarly amiable personal character and upon the devotion shown by Mrs. Darwin to her husband and children. He referred to the quiet life at Down, and told the delightful story of one of Mr. Darwin's gardeners, who thought it was such a pity that his master had not got something to occupy him, for he wandered about the garden doing nothing, and would stand for as much as ten minutes at a time gazing at a flower!

After the afternoon ceremony, ninety of the fellows and their guests dined together at the Princes' Restaurant, the party including Sir George and Lady Darwin, Dr. F. Darwin and Mr. W. E. Darwin, while foreign biologists were represented by Profs. Hubrecht, Lönnberg, Strasburger and Warming. There were no speeches, and at nine o'clock the company adjourned to the rooms of the Linnean Society at Burlington House, where a reception was held by the president and Mrs. Scott. Two short lantern lectures were delivered during the course of the evening, one by Prof. Seward on "The Jurassic Vegetation of the World: a Study in Plant-migration," and the other by Dr. Smith Woodward, on "The Evolution of Mammals in South America." Various exhibits especially appropriate to the occasion were also shown in the library. Amongst these were a beautiful series of insects from the Hope collections in the Oxford University Museum, exhibited by Prof. Poulton and Mr. J. C. Moulton, in illustra-

tion of the phenomena of mimicry and variation. Other collections of insects illustrating special points connected with the theory of evolution were exhibited by Dr. Dixey, Col. Manders, and Dr. Longstaff; while Mr. R. A. Rolfe exhibited some beautiful flowers of natural hybrid odontoglossums with their parents.

We believe the Linnean Society intends to publish a full account of the proceedings, together with the addresses and speeches, which should form an extremely interesting record of a very impressive and memorable occasion.

A. D.