

Obituary.

COL. C. SWINHOE.

THE death of the distinguished entomologist, Col. Charles Swinhoe, who had for many years past been recognised as a leading authority on the Lepidoptera of the Indian region, took place on December 2 at his residence at West Kensington. Born on August 29, 1836, of a family which has produced more than one distinguished zoologist, Col. Swinhoe entered the army in his nineteenth year as an ensign of the 56th Regiment. Shortly after the end of the Mutiny, the young officer was dispatched to India, and was gazetted to the Bombay Staff Corps, in which he served for upwards of thirty years, and was with Lord Roberts in the historic march to Kandahar. The rich and varied Indian fauna soon engaged his attention, and he became an enthusiastic student of the Lepidoptera, of which order of insects he formed one of the largest and most comprehensive collections in existence; though his energies were by no means confined to entomology, as is shown by several able memoirs on Indian birds from his pen. In collaboration with Mr. E. C. Cotes, of the Indian Museum, he published the first great "Catalogue of the Moths of India" (Calcutta, 1887-89), and also gave much assistance in the compilation of the "Lepidoptera Indica," this work having been completed by him after the death of its principal author, Dr. Frederic Moore.

On his retirement from active service, Col. Swinhoe at first made his home at Oxford, where his time was largely devoted to the preparation of the "Catalogue of Eastern and Australian Lepidoptera-Heterocera in the Oxford University Museum." This important work appeared in two volumes in 1892 and 1900, and the honorary degree of M.A. was conferred on its author by the University of Oxford. Col. Swinhoe removed to London in 1902, and was for many years a familiar figure at the Natural History Museum. He contributed largely to the publications of the learned societies of which he was a member, and as recently as last spring his "Revision of the Genera of the Family Liparidæ" appeared in the "Annals and Magazine of Natural History." A paralytic seizure in August last, just as he was entering on his eighty-seventh year, brought his life-long work to a close. He had been since 1881 a fellow of the Linnean Society, and had served on its Council, as well as on that of the Entomological Society of London, of which in 1892 he was vice-president. J. J. W.

CANON THEODORE WOOD.

THE sudden death on December 13, at the age of sixty-one, of Canon Theodore Wood, vicar of St. Mary Magdalene, Wandsworth Common, has taken from us one who, both by his writings and by his lectures, did much to popularise natural history, and to awaken in the public mind a sympathetic interest in the birds, insects, and other common animals that come under the notice of dwellers in country places. Brought up under the influence of his father, the Rev. J. G. Wood, who was known even better to a former generation than the son is to the present as the author of excellent books on natural history, he early acquired the seeing eye of the expert naturalist, and a close, personal acquaintance with the ways and habits of many forms of animal life.

In manhood Canon Wood handed on to others the torch that he had thus received. His frequent articles in "Our Country Page" of the Saturday issues of the *Morning Post*, though adapted to the general rather than to the scientific reader, were accurate, showed a considerable knowledge of current scientific literature, and were always worth reading. The titles of his books, "Our Insect Allies," "Our Insect Enemies," "Our Bird Allies," "The Farmer's Friends and Foes," to name but a few of them, indicate his desire to instruct the public on the economic importance of many of the lower animals, and to prevent the ignorant slaughter of useful and beautiful creatures by fruit-growers, farmers, and gardeners; while many a boy naturalist has to thank him for "Butterflies and Moths," a useful introduction for the young collector. As a lecturer he was eminently successful, holding his audiences by his simple, clear language and enthusiasm for his subject, and not less by the skilful and rapidly executed black-board drawings with which he would illustrate his discourse.

M. GUSTAVE EIFFEL.

THE death is announced, at the age of ninety-one years, of M. Gustave Eiffel, whose name will always be associated with the gigantic tower named after him and built by him in Paris in 1889. Alexandre Gustave Eiffel was born on December 15, 1832, and was educated as an engineer. His earlier work was concerned mainly with bridge-building on the Continent, and in this, as in all his engineering work, he introduced novel means of construction.

In 1900, M. Eiffel took up meteorological research, and for some years published an annual "Atlas Météorologique." A laboratory with a small wind-tunnel was established at the Champ de Mars, and experiments on air resistance were also carried out at the Eiffel Tower. In 1907 he published "Recherches expérimentales sur la Résistance de l'Air exécutées à la Tour Eiffel," and in 1910 there appeared a volume describing the experimental work; this was translated into English and German (*v. NATURE*, November 20, 1913, p. 342). A better equipped laboratory was secured at Auteuil, some account of which was given in our issue of February 20, 1913, p. 677; it contained a wind tunnel in which velocities of 2 to 32 metres per second could be produced. The results obtained were embodied in a volume issued in 1914. Work on aeroplanes, propellers, and projectiles was carried on throughout the War, a report on the experiments being issued in 1919, and in 1920 M. Eiffel published "L'Hélice aérienne." His work was of primary importance in aeroplane design and construction.

M. Eiffel was an honorary member of the Institution of Mechanical Engineers and a former president of the French Society of Civil Engineers. In 1913 he received the third Langley medal of the Smithsonian Institution of Washington, "for advancing the science of aerodynamics by his researches relating to the resistance of the air in connexion with aviation."

WE much regret to announce the death of Dr. Otto Klotz, chief astronomer and director of the Dominion Observatory, Ottawa, aged seventy-one.