

News and Views

Linnean Society of London: New Foreign Members

THE following have been elected foreign members of the Linnean Society of London: Prof. M. L. Fernald, Prof. B. A. Fedtschenko, Prof. P. Pelseener, Prof. K. F. von Tubeuf and Prof. W. M. Wheeler. Prof. M. L. Fernald, curator of the Gray Herbarium, Harvard University, is well known for his highly critical work on the flora of eastern North America and for his studies in geographical botany, especially on the relations between his special area and Europe, which has had considerable influence on recent ideas about plant distribution. He has also published several important monographs on genera. He is editor of *Rhodora* and, with B. L. Robinson, edited the last edition of Gray's "Manual". Prof. B. A. Fedtschenko is professor of botany in the University of Leningrad and curator of the herbarium in the Botanic Garden. His chief work has been on the flora of Asiatic Russia, especially Turkestan. In a long series of floras and monographs he has dealt both with the purely taxonomic aspects and with more general vegetation studies. He was formerly editor of the *Journal Botanique Russe* and has long taken a leading part in influencing taxonomic botany in Russia.

PROF. P. PELSENEER, who is permanent secretary of the Royal Academy of Sciences of Belgium, is well known for his long and continued researches on the Mollusca: his volume in Ray Lankester's "Treatise on Zoology" is still regarded as the classical authority on the anatomy and classification of the group. His later work on variation and heredity in Mollusca, carried out under very difficult conditions during the German occupation of his native country, is a mine of information, as is also his recent treatise on the ethology of the group. Prof. K. F. von Tubeuf is professor in the University of Munich. His name became prominent in Great Britain forty years ago on the appearance of W. G. Smith's translation of his "Diseases of Plants induced by Cryptogamic Parasites", a work still much used. Since then he has been mainly occupied with the study of the diseases of forest trees, and from 1915 has been associated with the editorship of the *Zeitschrift für Pflanzenkrankheiten*. His other chief interest is the genus *Viscum*, of which he published a large monograph in 1923. Prof. W. M. Wheeler, professor of entomology, Harvard University, is outstanding for his work on social insects and particularly on ants. Among his more important writings are "The Ants of the Baltic Amber" (1914), "Social Life among the Insects" (1923), "Les Sociétés d'Insectes" (1926) and "The Social Insects, their Origin and Evolution" (1928). He has also translated and published Réaumur's work on ants with the title "The Natural History of Ants" (1926).

Sir Hector Hetherington

SIR HECTOR HETHERINGTON, vice-chancellor of the University of Liverpool, who has been appointed principal of the University of Glasgow in succession to the late Sir Robert Rait, has many associations with Glasgow, in that he is a graduate of that University, and was lecturer (1910-14) and professor (1924-27) of moral philosophy there. In the intervening years he held academic posts of importance elsewhere, being lecturer in the University of Sheffield in 1914-15, then professor of logic and philosophy in University College, Cardiff in 1915-20, after which he was invited to become principal and professor of philosophy in the University College of the South-West of England, Exeter. During the Great War he worked in the Intelligence Division of the Ministry of Labour and was chosen for work in connexion with the Treaty of Versailles. Following its signature, he went to Washington as one of the British assistant secretaries of the International Conference of the League of Nations. Sir Hector thus went to Liverpool with an outstanding record as a scholar and administrator, and for the past nine years he has been indefatigable in his service for the University in particular and for the general cause of education and social progress, and for hospital co-ordination. Among numerous other offices, he was elected in 1930 to serve on the Unemployment Insurance Commission. His knighthood this year was a just acknowledgment of his fine academic work and public service.

U.S. Stratosphere Balloon Explorer II

A MORE complete account of the scientific results achieved in the stratosphere flight of November 11, 1935, has now been published in the May number of the *National Geographic Magazine*. The tube counter directional system for cosmic rays was described in *NATURE* of June 29, 1935, p. 1083, and it would now appear that some modification must be made in the results from *Explorer I*. At an altitude of 72,000 feet covering 96 per cent of the earth's atmosphere, the rays show no directional preponderance from the vertical to the horizontal. It follows that as those rays coming from the more horizontal directions increase with height, these are influenced by the earth's magnetic field. Swann's explanation of the distribution is that most, if not all, the rays observed are secondaries. The Stoss chamber for observing bursts did not show any abnormal increase in their number with height. The following numbers are given for cosmic ray activity: at 40,000 ft., 40.1 times that at sea-level (*Explorer I* on July 28, 1934, gave this number as 42.3); at 53,000 ft., 51.5 (Piccard in autumn of 1934 gave 53.2); at 57,000 ft., 55, a maximum, and at 72,395 ft., 42. A Wilson chamber was not taken up, but the next best method, of recording in the body of the photographic emulsion