

Obituary.

DR. FINN MALMGREN.

DR. FINN MALMGREN, who, after the wreck of the airship *Italia* in the Polar regions in May, lost his life in a brave effort to cross the ice on foot with two companions to North-East Land, Spitsbergen, was a Swedish meteorologist of considerable achievement and great promise. Educated at Upsala University, he became assistant to Prof. Hamberg at the high altitude observatory at Portetjälkä, whence he returned to Upsala to work at the meteorological observatory. Later he served at Pettersson's Hydrographic Institute at Bornö.

Dr. Malmgren's first polar experience commenced in 1922, when he became assistant scientist under Dr. Sverdrup in Amundsen's expedition in the *Maud* during the two years' drift in the polar ice. Returning to civilisation in 1925, Dr. Malmgren was soon engaged again in polar work, for he was one of the small body of men which crossed the north pole in the airship *Norge* during the Amundsen-Ellsworth expedition from Rome to Alaska in 1926. This year he responded yet again to the call of the polar regions, when, on the invitation of General Nobile, he became meteorologist on board the airship *Italia*, in which Nobile intended to carry out flights over the polar basin for scientific purposes from a base at King's Bay, Spitsbergen. After flying from Milan to Spitsbergen, two flights were carried out in the direction of Nicholas II. Land, and it was during the return from the north pole on the third flight that the accident happened to the airship which led to Dr. Malmgren's tragic end, at the early age of 32 years. The airship had, however, reached the pole, and Dr. Malmgren was therefore one of the few men who have been there twice.

Of Dr. Malmgren's contributions to scientific literature, perhaps that best known is the work summarising his observations of humidity and hoar frost in the *Maud*, for which special instruments were devised in view of the small water content of the air at the low temperatures experienced.

Dr. Malmgren was not unknown personally in England, for during the call of the *Norge* at Pulham on her way to the north pole an opportunity was afforded of appreciating his vivid personality. In the meteorological office at Pulham many interesting discussions took place, especially those relating to the weather conditions for the next stage of the flight.

Dr. Malmgren's death is to be deplored, not solely on account of his promise of brilliant scientific work in the future, but because much of

his extensive scientific experience of the polar regions must now go unrecorded. M. A. G.

MR. FRANK CASTLE.

THE death of Mr. Frank Castle on Aug. 4, at seventy-one years of age, will be regretted by a wide circle of friends and by thousands of artisan students who have profited by the courses of instruction in his text-books of practical mathematics and related subjects. Mr. Castle was born at Dewsbury, Yorkshire, and served his apprenticeship with a firm of engineers and tool-makers there. After working at his trade and introducing several improvements in grinding machinery, he became in 1883 an assistant in the mechanics and mathematics division of what is now the Royal College of Science, South Kensington, and he occupied that position for twenty-six years. Hundreds of students who passed through the College during that period will remember his retiring nature and are grateful for the assistance he was ever ready to afford them on either the mechanical or the mathematical side of their work. When Prof. John Perry, who was appointed professor of mathematics and mechanics at the College in 1896, was carrying on there his campaign for the teaching of everyday or practical mathematics, Mr. Castle became an enthusiastic exponent of the reform, and in quick succession produced his "Practical Mathematics for Technical Students" (1899), "Practical Mathematics for Beginners" (1901), and "A Manual of Practical Mathematics" (1903), all of which became standard text-books and remain so even now. He was the author also of "Machine Construction and Drawing," "A Manual of Machine Design," and several useful books of mathematical tables. His success as an author and a teacher was due to his early workshop training and an instinctive appreciation of the difficulties of elementary students. He was for many years lecturer in mathematics at the Morley College, London, and at the time of his death was lecturer in practical mathematics, machine construction and drawing, building construction and applied mechanics at the Municipal Technical Institute, Eastbourne.

WE much regret to announce the death on Aug. 12, at sixty-eight years of age, of Dr. Charles Chree, F.R.S., superintendent of the Kew Observatory from 1893 to 1925 and a leading authority upon terrestrial magnetism, atmospheric electricity, and related subjects.

News and Views.

THE bicentenary of the birth of the great navigator Captain James Cook is to be celebrated in the Cleveland district of Yorkshire on Sept. 8 and 9. Cook was born in the village of Marton, Yorkshire, on Oct. 27, 1728, and though as a boy he was apprenticed to a haberdasher near Whitby, he gained his first experience at sea in a Whitby collier. At the age

of 27 he joined the Navy as a volunteer, and as such soon attracted attention. He was present at the capture of Quebec, surveyed the St. Lawrence from Quebec to the sea, and was made marine surveyor of Newfoundland and Labrador. His three great voyages of exploration occupied the years 1768-1771, 1772-75, and 1776-79. The primary object