

he also wrote the first report of the College of Aeronautics to be issued.

Duncan's teaching at the College was outstanding in excellence, as is witnessed by the fact that many of his students who specialized in aerodynamics now occupy major positions in the aircraft industry and in aeronautical research. He left Cranfield in 1950 to become the first Mechan professor of aeronautics and fluid mechanics in the University of Glasgow, a post which he held until the end of his life. He had been chairman of the Aeronautical Research Council since 1957, and was very active not only on the Council but also on many of its committees and sub-committees.

Prof. Duncan was an able mathematician and a first-class engineer, painstaking and thorough in all his work, and a great inspiration to those who had the good fortune to work with him. He was elected a Fellow of the Royal Society in 1947 and was appointed C.B.E. in 1953. His publications, besides the two books already mentioned, include one on "Physical Similarity and Dimensional Analysis", together with numerous reports and papers published in the Reports and Memoranda of the Aeronautical Research Council, the *Proceedings of the Royal Society*, and the *Philosophical Magazine*. His death will be felt as a great loss by his many friends and collaborators, and by the world of mechanical engineering in general.

ERNEST F. RELF

#### Prof. J. G. Andersson

PROF. JOHAN GUNNAR ANDERSSON, formerly director of the East-Asiatic Collections at Stockholm, was one of the Swedes who have made lasting contributions to our knowledge about the natural resources of China and the history of the civilization of that country.

He was born on July 3, 1874, at Knista in the province of Örebro, and died in Stockholm on October 29. After studying at the University of Uppsala, he obtained there the degree of M.Sc. in 1901, became D.Sc. in 1902, and was appointed professor of geography in 1906. Already during his years as a student he devoted himself to the examination of the Silurian deposits of his native county of Närke and of Öland. These investigations resulted in a couple of palaeontological communications and a study of the distribution of phosphorites in the Silurian.

As a young student he took part in several expeditions into the Arctic regions. Thus he was a member of the expedition to Spitsbergen led in 1898 by the Swedish polar explorer A. G. Nathorst. In 1899 Andersson undertook an expedition of his own to Beeren Island. The geological results of this undertaking he described in his doctoral thesis, "Über die Stratigraphie und Tektonik der Bären Insel". When in the years 1901-3 Otto Nordenskjöld undertook his famous Antarctic expedition, Andersson was second in command, and when Nordenskjöld together with some other members had established winter quarters on Snow Hill, Andersson took over the leadership of the expedition to South Georgia, the Falkland Islands, and Tierra del Fuego, and also during the second trip of the vessel to the Antarctic. Afterwards Andersson left the vessel with two companions in order to reach Nordenskjöld's winter quarters by land. Before reaching it he was, however, forced to spend a winter under very trying conditions. He then joined Nordenskjöld's group in the

following spring. In the meantime, their ship foundered in the pack-ice, yet without loss of human lives. This expedition and its rescue by an expedition sent out from Argentina forms one of the more thrilling chapters in the history of the exploration of the polar regions.

In 1906 Andersson was made head of the Geological Survey of Sweden. After having had leave of absence since 1914, he left this post in 1916. During his comparatively short time as head of this organization, he introduced a number of new and important investigations into its programme. This applies first of all to the production of oil and radium from the oil-shales. The organization of the Geological Survey as established in 1914, which has remained in force to the present day, is to a large extent due to him. During the Eleventh International Geological Congress, held at Stockholm in 1910, he was, partly in collaboration with H. Munthe and A. Gavelin, the editor of the publications of the Congress.

As mentioned already, Andersson had obtained leave of absence in 1914 from his post as head of the Geological Survey, and had entered the service of the Chinese Government as mining adviser and organizer of the geological exploration of the ore and mineral resources of China. It was during this period that he became widely known as an explorer of China. In addition to the study of ore geology, he found time for extensive studies of the fossil faunas and floras of China as well as for remarkable archaeological excavations that threw light on the earliest settlement of China. In his endeavours he enjoyed powerful support from the Chinese Government and from the Swedish Parliament. From this field of activity 'China Gunnar', as he was called in many circles, brought back extensive collections which are now in different Swedish museums.

After his return from China, Andersson was appointed in 1926 to a chair of geology in the University of Stockholm. From this he retired, however, in the following year, in order to devote himself to the arrangement of his collections, and to a new trip to China. On his return from his second visit to China he was made director of the East-Asiatic Collections in Stockholm, and was given a personal chair in East-Asiatic archaeology which he then occupied until 1939.

Andersson published the results of his researches and explorations in a great number of scientific papers. His studies in the Far East were summarized in his "Topografisk-arknologiska studier i Fjärran Östern" (1939). He had a great gift of popularizing his knowledge, both as a lecturer and as an author. In 1926 he published his account of China, "Draken och de främmande djävlarerna", followed by "Den gula jordens barn" (1932), the autobiographical "Kineser och pingviner" (1933), and "Under brinnande krig" (1938). He surveyed his own life and his life's philosophy in a book, "Mitt liv och min tro" (1956).

ERIK ÅHMAN

#### Dr. Louis Clarke

LOUIS CLARKE'S death on December 13 leaves a gap in the hearts of his innumerable friends, for he was a much-loved man. He was wealthy and was blessed with intelligence and common sense, with a lively understanding of human nature and with the standards of behaviour of his Christian Victorian upbringing. He travelled widely after leaving Cambridge, especially in South America and