PATRIK DANIELSSON, who was one of the founders of Svenska Polarklubben, died on 29 November 1953, at the age of sixty-four. He was mainly interested in Spitsbergen, where he spent some time as an engineer in the coal mines, specializing in underground construction work.

JOSEPH WILLIAM DAWSON died in Terrace, British Columbia, on 10 March 1954. Born near London, Ontario, in 1875, he went out to British Columbia as a young man and became interested in mining. He was a pioneer prospector of the northern part of the province and spent many years mining near Prince Rupert.

LEON J. DION, one of the party of four prospectors who in January 1915 discovered the copper and zinc deposits at Flin Flon, northern Manitoba, died at The Pas in March 1954 at the age of seventy-five.

Professor ANTONI BOLESŁAW DOBROWOLSKI, the distinguished Polish meteorologist, hydrologist and glaciologist, died in Warsaw on 27 April 1954 at the age of eighty-one. He was born in Poland in 1872 and was educated at the universities of Zürich and Liége. In 1897 he joined A. de Gerlache de Gomery's Belgian Antarctic Expedition as assistant meteorologist. During the southern winter of 1898, when the Belgica was beset in the Bellingshausen Sea, Dobrowolski made a special study of the formation and movement of clouds and of the different forms of snow and ice in the atmosphere. He published the results of his observations in 1903 in two monographs, entitled "Observations des nuages" and "La neige et le givre" in the series entitled Résultats du voyage du S.Y. Belgica en 1897-1898-1899...Rapports scientifiques...(Antwerp, 1901–49). Dobrowolski's observations of clouds in particular greatly influenced the work of the International Commission for Synoptic Meteorology and became the basis of the international system of classification of clouds. In 1914 Dobrowolski published a history of polar exploration entitled Wyprawy polarne. Historja i zdobycze naukowe (Warsaw). This was followed in 1923 by a comprehensive treatise of international repute dealing with the natural history of ice-Historia naturalna lodu (Warsaw). Many years afterwards, in 1948, two of the most important chapters dealing with the structure and movement of glaciers were published in an English translation in Biuletyn Polskiego Towarzystwa Geofizyki (Warsaw).

HUGO ECKENER was born at Flensburg on 10 August 1868 and died at Friedrichshafen on 14 August 1954. In 1930 Eckener, who had played an important part in developing airship aviation and had made a round-the-world flight in 1929, succeeded Fridtjof Nansen as president of the organization known as "Aeroarctic', an international society for the exploration of the Arctic by means of aircraft. He was a skilled pilot and himself commanded the *Graf Zeppelin* when that airship made her arctic flight in July 1931 from Friedrichshafen by way of Berlin, Leningrad and Arkhangel'sk to Zemlya Frantsa-Iosifa, Severnaya Zemlya, Mys Chelyuskina, Poluostrov Taymyr, Ostrov Diksona and Novaya Zemlya, returning to Berlin by way of Arkhangel'sk and Leningrad. The flight proved the airship to be exceptionally suitable for magnetic, meteorological and photographic survey work, but the experiment was never repeated. Eckener remained president of Aeroarctic until 1937, when the society was dissolved.

Commander J. HENNESSY, R.N.R., died on 22 May 1954 at the age of sixty-nine. As deputy marine superintendent of the Meteorological Office, a post to which he was appointed in 1919, he played an important part in organizing the statistical treatment of marine meteorological data. He was closely associated with the production of charts showing the distribution of sea ice in the Arctic and Antarctic, and was also responsible for the equipment and administration of British ocean weather ships.

DMITRIY BORISOVICH KARELIN, the Soviet meteorologist and sea ice expert, was born in 1913 and died on 21 December 1953. He joined the staff of the Arctic Institute [Arkticheskiy Nauchno-Issledovatelskiy Institut] in 1935 and worked there for 15 years. He took part in many arctic voyages and flights, specializing in the problems of recording and forecasting sea ice, a field in which he was a pioneer. On these and related subjects he published more than sixty books and papers, including several popular works on the polar regions.

ALFRED KOLLER was born on 17 May 1878 and died on 28 July 1951. Between 1906 and 1936 he took part in no less than nineteen expeditions to Svalbard, where he was engaged upon topographical surveying. He also worked in Jotunheimen and in north Norway, and made a special study of glaciers there.

Pastor JOHN LAGERKRANZ was born on 4 February 1875 and died on 7 January 1954. He had been curate of a Stockholm parish for many years and had reached the age of forty-four before he decided to read botany at Stockholms Högskola, where he studied from 1919 to 1922. Soon afterwards he began to specialize in arctic flora, and later made botanical investigations in Greenland in 1934, 1936, 1938 and 1946. He also visited Iceland and Spitsbergen. In 1950 he published the results of his "Observations on the flora of West and East Greenland...' in Nova Acta Regiae Societatis Scientiarum Upsaliensis (Ser. 4, Vol. 14, No. 6). He had already published in 1942 a biography entitled Hans Egede. Missionär och folkuppfostrare på Grönland.

ALBERT PETER Low, the distinguished Canadian geologist, died in Ottawa on 9 October 1952.

He was born at Montreal on 2 May 1861 and was educated there, taking his degree in applied science at McGill University in 1882. In that year he joined the Geological Survey of Canada. It was in 1884 that Low first went to the Labrador peninsula with a geological party, crossing overland from the north shore of the St Lawrence River to Lake Mistassini and wintering there. During the early spring of 1885 he travelled to Ottawa in order to obtain further instructions and then returned to Lake Mistassini to direct the summer's work, finally crossing with his party overland to James Bay. In 1886 he was engaged in mapping the area between Lake Winnipeg and Hudson Bay and in 1887 surveyed the islands in James Bay.

It was in 1892 that Low returned to the Labrador peninsula to undertake the exploratory work for which he is best known. Between that year and 1899 he covered many thousands of miles in this region by canoe, by dog sledge, by boat and on foot. In 1892 he made a second overland crossing, by another route, from the St Lawrence River to Lake Mistassini and James Bay. In 1893 he followed this route as far as Lake Mistassini and then continued northwards overland to Ungava Bay. That autumn his party took passage in a Hudson's Bay steamship to Hamilton Inlet on the east coast of Labrador, where they spent the winter. In 1894 they headed inland to map the area around Grand Falls, including Mitchikamau Lake, which proved to be the second largest in the peninsula. In the autumn the party returned southwards overland to the Gulf of St Lawrence. In these two years Low



A. P. LOW

Geological Survey of Canada photograph

covered a total distance of 5460 miles, including 1000 on foot. On his return he was able to report the presence of millions of tons of iron ore in the Labrador peninsula. In 1895 he made a traverse from the St Lawrence River to Lake Nichicum and return. In the following year he sailed 450 miles northwards from James Bay along the east coast of Hudson Bay to Richmond Gulf, and then led his party overland to Ungava Bay, returning from Fort Chimo to Quebec by sea. In 1897 he explored and mapped the shores of Ungava Bay and the south side of Hudson Strait and in 1898 did similar work along the east coast of Hudson Bay from Cape Wolstenholme southwards to Great Whale River, where he wintered. In the summer of 1899 the survey was extended farther southwards, into James Bay.

In 1903 Low was appointed to command the first Canadian Government expedition to the Arctic, on board the *Neptune*, which visited various points on the east coast of Baffin Island and then entered Hudson Strait. After wintering at Fullerton Inlet on the mainland west of Southampton Island, the *Neptune* headed north again, this time reaching the east coast of Ellesmere Island. Later the south side of Devon Island was explored. The *Neptune* then returned southwards to Halifax, calling once more at Fullerton Inlet on the way, having successfully completed a fourteen-month voyage of some 10,000 miles. The expedition is described by Low in his *Report on* the Dominion Government expedition to Hudson Bay and the arctic islands on board the D.G.S. Neptune 1903-1904 (Ottawa, 1906).

In 1906 Low became Director of the Geological Survey and in 1907 Deputy Minister of Mines. He held this post until 1913, when he was incapacitated by illness and decided to retire.

The magnitude of the deposits of iron ore discovered by Low in Labrador has only been generally appreciated in recent years, but he lived to see the start of their present large-scale exploitation.

W. J. MCDONOUGH died on 19 June 1954 at the age of fifty-five. He was born in England and served in the Royal Flying Corps during the First World War. He first went to Canada in 1928 and quickly made his reputation as an outstanding bush pilot. It was McDonough who in 1928 made the first flight from Winnipeg to Fort Simpson in the Northwest Territories. During the following years he was active in that province and in Yukon Territory, locating mineral deposits by means of air surveys. He later joined de Havilland Aircraft of Canada Ltd. as a director, and afterwards became president of Central Aircraft Ltd.

Professor LUDWIG MECKING was born in Frankfurt-am-Main on 3 May 1879 and died in Hamburg on 20 October 1952. He studied geography at Berlin, where he became interested in problems connected with sea ice. In a thesis, presented at Berlin in 1905 and published there by the Institut für Meereskunde in the following year, he described the effects of currents, winds and weather on the formation and drift of the pack ice in Baffin Bay. After leaving Berlin he worked for a time at the Deutsche Seewarte in Hamburg where he co-operated with Wilhelm Meinardus in the publication of the meteorological results of the German Antarctic Expedition in the series of reports entitled Deutsche Südpolar Expedition 1901-03 (Berlin and Leipzig, 1905-31). In 1909 Mecking was appointed a lecturer at Göttingen, and four years later became professor of geography at Kiel, whence he moved in 1920 to Münster and then in 1935 to Hamburg. His early studies left him with a life-long interest in the climate of the polar regions and related problems, to which he gave expression in a large number of publications. Perhaps the most well-known of these was "Die Polarländer", which appeared in the geographical series entitled Allgemeine Länderkunde at Leipzig in 1925. Three years later this important work was published in translation by the American Geographical Society as Special Publication

No. 8. Mecking was also an authority on sea ports in all parts of the world and, towards the end of his life, became increasingly interested in human and regional geography. Between 1930 and 1944 he edited the *Geographisches Jahrbuch* (Gotha).

THOMAS MAYNE REID, who was intimately associated with the development of aviation in Canada, was killed on 8 April 1954 in an air accident at Moosejaw, Saskatchewan, at the age of fifty-nine. Reid was already an experienced aviator when he emigrated to Canada in 1924, having joined the Royal Naval Air Service in 1915, later transferring to the Royal Air Force and, after demobilization, serving with a commercial airline. In Canada he worked for a time as a bush pilot, mainly in northern Ontario. He then became interested in the use of aircraft for locating mineral deposits and in 1929 made a pioneer flight from Churchill to Coppermine, returning south by way of Edmonton to Winnipeg, an all-round distance of 2500 miles taking six months to complete. Reid joined Imperial Oil Ltd. in 1931 as aviation sales manager, a post he held until his death.

CHARLES E. ST PAUL died at Kazabazua, Quebec, on 1 March 1954 at the age of sixty-four. He acquired an interest in prospecting and mining at an early age and worked for a time in the early silver fields of northern Ontario. It was in 1930 that he joined G. A. LaBine in the journey which resulted in the momentous discovery of pitchblende at Port Radium on the shores of Great Bear Lake. Three years later the Eldorado mine, the first metal mine in the Northwest Territories, began production there.

ANDERS WILKS died on 12 November 1953 at the age of sixty-nine. In 1904 he helped to found and organize the first Lappish association in Sweden, Vilhelmina-Åsele Sameförening, of which he was chairman for some forty years. He presided over the first national conference of Swedish Lapps, which met in 1918 at Östersund in order to form the cultural organization known as Lapska Sentralförbundet. Apart from his activities as a member of the Salvation Army among the Lapps he was well-known for his craftsmanship in Lappish tin work, and in latter years taught the art to young Lapps in north Sweden.

ALFRED W. G. WILSON died in Ottawa in January 1954 at the age of eighty. He was born at Cobourg and was educated there and at Toronto, where he took his degree in 1893. He then worked for a research degree at Harvard and later studied mining at Columbia University. Between 1901 and 1909, after having spent some time lecturing at McGill University, he led a number of prospecting parties to parts of northern British Columbia and the Northwest Territories, investigating the presence of coal deposits in these areas and the possibility of access to them by railways. During the First World War he turned his attention to the manufacture of munitions and formed a company to produce shrapnel. In 1921 he was appointed chief of the mineral resources division of the Mines Department and in 1936 became chief technical consultant to that department. He retired in 1941, after serving for a time as chairman of the committee set up by the National Defence Department to arrange for the supply of chemicals and minerals for the Canadian war effort.