

of extensive inquiries in Paris, not only by correspondence but also by personal visitation, and in this way he ensured the authenticity of his own statements. After the publication, so recently as last January, of his concluding Lavoisier paper, he had begun a study of the life and work of Black and was actively engaged a few days before his unexpected death in a minute examination of the contemporary and subsequent literature relating to Black's discoveries.

Meldrum studied chemistry with Japp at Aberdeen and took his D.Sc. degree at the University there in 1904, his graduation thesis being the Avogadro-Dalton monograph already mentioned. Afterwards he carried on research work in organic and in physical chemistry in collaboration with Japp, Perkin, jun., and others. In 1912, he was appointed to the professorship of chemistry in the Madhavlal Ranchhodol Science Institute, Ahmedabad, from which he was transferred later to the Royal Institute of Science, Bombay, both of these institutions being affiliated to the University of Bombay. From his post in the latter he retired in 1931 and resided thereafter in Edinburgh. He is survived by his widow and two daughters.

MR. R. LL. JONES LLEWELLYN

MR. RICHARD LLEWELLYN JONES LLEWELLYN, who died suddenly on April 19, had made a life-long study of rheumatism and allied disorders, on which he was regarded as an eminent authority. The son of Surgeon-Major Morris Jones of Aberystwyth, he assumed the name of Llewellyn in 1911 on his marriage to the Hon. Mrs. Crosse of Hulbertson, only child of the fourth Lord Headley.

Llewellyn had been president of the Balneological and Climatological Section of the Royal Society of Medicine; consulting physician to the National Hospital for Rheumatism at Bath; member of the conference on chronic arthritis convened by the Medical Research Council; chairman of the Medical Committee of the National Campaign for the Prevention and Relief of Heart Disease in Children; and vice-president of the British Committee on Rheumatism, International Society of Medical Hydrology. He was also a member of the Board of Medicine, Welsh National School of Medicine; a fellow of the Royal Society of Medicine, of the Hunterian Society and of the Royal Meteorological Society.

In his researches into rheumatic diseases, Llewellyn was greatly helped by his brother, A. Bassett Jones.

Llewellyn was the author of several books and articles on rheumatism, arthritis, fibrositis and gout. At the time of his death he was engaged on a study of the relations of rheumatism to the absence of sunshine and the consequent failure of the skin to mobilise the chemical antecedents of the endocrines, a new view which has attracted considerable attention in the United States.

Llewellyn had been a member of the central

appeals tribunal of the Ministry of Pensions, and was widely quoted as the author of "Malingering or the Simulation of Disease" (1917) and "Pensions and the Principles of their Evaluation" (1919). Llewellyn's style was picturesque and vivid; his conversation was arresting, original and spiced by shrewdness and humour.

MR. C. E. BORCHGREVINK

CARSTEN EGEBERG BORCHGREVINK, whose death at Oslo is announced, was born in that town, then Kristiania, in 1864. After an education in Norway and Saxony, he went to Australia in 1888 and spent some years in Queensland and New South Wales, first as a land surveyor and later as a teacher of modern languages and natural science.

When in 1894 Svend Foyn sent a ship to the Antarctic under the command of L. Kristensen and H. J. Bull to explore whaling possibilities, Borchgrevink signed on as an ordinary seaman, having failed to get accepted as a passenger. The ship reached lat. 74° S. in the Ross Sea and Borchgrevink in landing at Cape Adare was one of the first to set foot on the Antarctic continent. He also was the discoverer of plant life within the Antarctic Circle.

Returning to Europe, Borchgrevink tried in vain to equip a trading expedition to South Victoria Land to search for guano. In 1898, however, he induced Sir George Newnes to fit out the *Southern Cross* (formerly the Norwegian whaler *Pollux*) for a scientific expedition to the Ross Sea, the first since that of Sir James C. Ross in 1841. A wintering was made at Cape Adare where many valuable observations were made by L. Bernacchi, N. Hanson and others, and on the return of the ship in spring a voyage was made south to the Barrier face. Borchgrevink and W. Colbeck travelled over the Barrier to lat. 78° 50' S., at that time a southern record.

In 1902 Borchgrevink investigated volcanic conditions in the West Indies on behalf of the National Geographic Society and in the later years of his life was curator of the Tönte Biological Station in Norway. He received the Patron's medal of the Royal Geographical Society in 1930, and a medal of the Royal Scottish Geographical Society in 1900. His chief publications were "First on the Antarctic Continent" (1901), "Das Festland am Südpol" (1905) and "The Game of Norway" (1920-25). R. N. R. B.

WE regret to announce the following deaths:

Dr. Angel Gallardo, formerly Argentine Minister for Foreign Affairs, rector of the University of Buenos Aires since 1932, and president of the Academy of Sciences in Buenos Aires since 1927, aged sixty-six years.

Prof. C. W. Rolfe, emeritus professor of geology in the University of Illinois, an authority on the geology of Illinois, on April 6, aged eighty-three years.