Islands. He also wrote petrological papers. He joined the Liverpool Marine Biology Committee, and reported on the deposits found on the bed of the Irish Sea, comparing these with older geological formations. During later years, under the auspices of the British Association, most of his leisure was devoted to the study of the British Trias and a comparison of it with modern deserts. In 1905 he visited some of the desert regions in South Africa and Egypt, and when he met his death by accident in December last he was extending his researches to the region round Biskra in Algeria.

For many years Lomas was a well-known leader of field excursions, and he organized the excursion of the Geologists' Association to the Berwyn district of Wales last summer. He was also an active member of the British Association, and had been for several years Recorder of Section C (Geology). His personal charm and good nature and his enthusiastic cheerful manner endeared him to a large circle of friends, who mourn his unexpectedly early loss. The Geological Society of London acknowledged his scientific worth by the award to him of part of the Lyell Fund in 1897; while the Geological Society of Liverpool honoured him by election for two terms to its Presidential chair.

Mr. Lomas was a frequent writer on geological subjects. His separately published papers amount to seventy-two in number, thirty-one being read before the Liverpool Geological Society, twenty-four before the British Association, nine in the GEOLOGICAL MAGAZINE, and the rest read before various local scientific societies, that on existing Deserts compared with the British Trias (see GEOL. MAG., 1907, pp. 511 and 554) being one of the most important.

J. S. GRANT WILSON.

BORN JUNE 2, 1855. DIED DECEMBER 29, 1908.

WE regret to record the death of Mr. J. S. Grant Wilson on December 29 after thirty-two years' service on the Scottish Staff of the Geological Survey. After completing his education at St. Andrews University, where he carried out a series of analyses of minerals in the chemical laboratory under the supervision of the late Professor Heddle, he joined the Geological Survey in 1876. He received his first instruction in field mapping under Dr. B. N. Peach and Dr. Logan Jack when they were engaged in surveying the Silurian, Old Red Sandstone, and Carboniferous Rocks of the border territory in Eskdale and Liddesdale.

During his official career it fell to his lot to map large areas of crystalline schists in Banffshire, the north-east of Aberdeenshire, Central Perthshire, the fascinating region on either side of Ben Nevis, and part of the Knapdale plateau in Argyllshire.

While prosecuting his operations in the field in Perthshire he made a careful series of soundings in Lochs Tay, Earn, and Tummel, the results of which were published in *The Scottish Geographical Magazine* for May, 1888. His results agree very closely with those obtained subsequently by the Scottish Lake Survey.

But his bent lay clearly towards the economic side of geology, and especially towards the important industry of the Scottish Coalfields. Hence, in anticipation of the new editions of the one-inch maps of the Fife Coalfield, he was entrusted with the task of revising parts of these Coalfield areas and obtaining information regarding mining and boring operations since the date of the original survey. His services in this connection were acknowledged by Sir Archibald Geikie in the two official memoirs which he wrote on the Geology of East and Central Fife. Since then he endeavoured to acquire an intimate knowledge of the development of the Fife Coalfield by gaining access to the journals of recent bores. Indeed, he obtained in a remarkable degree the confidence of those specially interested in this industry, in proof of which it may be mentioned that his opinion regarding the sites of new bores and the interpretation of geological horizons was much sought after in recent years. More recently Mr. Wilson re-examined the Carboniferous area of the Lothians and gave a concise description of the geology of the oil-shale fields, since published in a Survey Memoir.

His early chemical training was of service to the Geological Survey, for at intervals he carried out a series of chemical analyses of volcanic and plutonic rocks, of crystalline gneisses and schists, some of which have been published in *Ancient Volcanoes of Great Britain* by Sir Archibald Geikie, and in the recent memoir on "The Geological Structure of the North-West Highlands of Scotland". Since the institution of a chemical laboratory in the new office of the Scottish Survey, he has made a series of analyses of Carboniferous limestones from the midland valley of Scotland.

J. H.

SIR THOMAS WARDLE, J.P., F.G.S., F.C.S.

Born January 26, 1831. Died January 3, 1909.

Sir Thomas Wardle, who was a silk dyer and calico printer at Leek, and for many years President of the Silk Association of Great Britain and Ireland, was also an active member of the North Staffordshire Field Club, to which he had contributed geological papers. He was best known to geologists as author of *The Geology of the Neighbourhood of Leek, Staffordshire*, 1863. In 1890 he acted as one of the directors on the excursion of the Geologists' Association to North Staffordshire, and conducted the party to the Yoredale Rocks of Butterton Moor, where attention was called to the hard calciferous gritstones, which he regarded as "theoretically the best road-forming rocks" (Proc. Geol. Assoc., vol. xi, p. cxxxii).

HENRY MEYNERS BERNARD, M.A., F.L.S., F.Z.S.

Born November 29, 1853. Died January 4, 1909.

The death of Henry M. Bernard removes from our midst a friend and fellow-worker who will be greatly missed by a large circle of men of science. Mr. Bernard took mathematical honours at Cambridge as B.A. in 1876, and entered the Church, his last charge being a Chaplaincy at