

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 MEYERS 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

Moscow, which he left in 1888 in order to study Biology under Haeckel at Jena. In 1892 Mr. Bernard published an important monograph on "The Apodidae", his study of these forms leading to papers in the GEOLOGICAL MAGAZINE in 1894 and 1895 on the systematic position of the Trilobites, and on 'the Sandblast' as a method of developing these organisms from the rocks in which they are embedded. In 1894 he began the study of the Recent and Fossil Corals at the British Museum (Natural History), continuing the quarto illustrated Catalogue of the Madreporaria (published by order of the Trustees) originally commenced by the late Mr. George Brook. In this work Mr. Bernard paid much attention to the fossil forms. He continued to work at the corals in the British Museum until 1907. During these thirteen years he prepared five volumes, namely:—

- Vol. II of the Catalogue (begun by Mr. Brook) on the *Turbinaria* and *Astræopora*.
 ,, III, on the *Montiporinae*.
 ,, IV, ,, *Goniopora*.
 ,, V, ,, *Porites* (Indo-Pacific).
 ,, VI, ,, *Porites* (West Indies) and *Goniopora*.

OTHER GEOLOGICAL PAPERS BY H. M. BERNARD.

1893. Trilobites with Antennæ at last. (*Nature*.)
 1894. Systematic Position of the Trilobites. (GEOL. MAG., 1894, p. 230; 1895, p. 280.)
 Systematic Position of the Trilobites. (Quart. Journ. Geol. Soc., vol. 1, p. 411.)
 Trilobites developed by the Sandblast. (GEOL. MAG., 1894, p. 553.)
 1895. The Zoological Position of the Trilobites. (*Science Progress*.)
 1897. Fossil Apodidae. (*Natural Science*.)
 On the Affinities of the Madreporarian genus *Alveopora* with the Palæozoic Favositidae. (Journ. Linnean Soc., Zool.)

He died at 109, West End Lane, London, N.W., on January 4.

PROFESSOR H. G. SEELEY, F.R.S., F.L.S., F.G.S., F.Z.S.,
 F.R.G.S., FELLOW OF KING'S COLLEGE, LONDON.

BORN FEBRUARY 18, 1839.

DIED JANUARY 8, 1909.

WE regret to announce the death of Harry Govier Seeley, Professor of Geology, Geography, and Mineralogy in King's College, London, and member of the Athenæum Club, which occurred early on January 8 at his residence, 3, Holland Park Court, Holland Park Gardens, W. In June, 1907, we published a life of this able and distinguished worker in the GEOLOGICAL MAGAZINE, in our series of "Eminent Living Geologists" (pp. 241-53), accompanied by a portrait and a list of his numerous publications.

In addition to his arduous labours as a professor in King's College, Queen's College, and the Royal Indian Engineering College at Cooper's Hill, he will be best remembered, perhaps, for the wonderful collections he made in the Karroo Beds of South Africa and the resulting exhibition in the Natural History branch of the British Museum of the remarkable skeleton of *Pariasauros* and numerous other Anomodont reptiles, which occupied years of patient