from the well-known 'marine band' in the Middle Coal-measures exposed on the banks of the River Tame at Dukinfield, Aviculopecten cairnsii, Bolton, from this horizon being named in his honour.

Further afield the Mountain Limestone areas around Castleton, Derbyshire, and Clitheroe, Lancashire, came in for a large share of his spare time, and by his keen perseverance he amassed a considerable collection of interesting forms from both these places.

When he began to seriously take up conchology as his hobby the exigencies of space led him to hand over en bloc his entire collection of geological specimens to the Manchester Museum, an acquisition which was gratefully accepted by the Museum authorities as a very welcome addition.

Though he could never be persuaded to write anything about his varied experiences, he was ever ready to place his wide and practical knowledge at the disposal of his friends.

J. W. J.

## GEORGE ATTWOOD,

## F.C.S., M. INST.C.E., F.G.S., ETC.

BORN 1845.

DIED FEBRUARY 9, 1912.

MR. GEORGE ATTWOOD, J.P., who died on February 9 last at his residence, Stevning Manor, Stogursey, Somerset, was the son of the late Mr. Melville Attwood, F.G.S., etc., mining and civil engineer, and nephew of the late Professor Edward Forbes, F.R.S., Edinburgh, and David Forbes, F.R.S. Mr. Attwood was born at Carlisle in 1845, and educated at Edward VI's Grammar School, Lichfield. He was a member of the Institute of Civil Engineers, the Institute of Mining and Metallurgy, and the American Institute of Mining Engineers; Fellow of the Geological, Chemical Faraday, and Zoological Societies, and of the Society of Arts; a member of the London Chamber of Commerce; and Justice of the Peace for the Province of British Columbia. He commenced his professional career at the age of 16, under his father and Mr. W. W. Palmer, C.E., in California and Nevada, and two years later was appointed assayer, metallurgist, and chemist to the Ophir Company, Great Comstock Lode, Nevada, U.S.A. He constructed and designed large metallurgical, electrical, and water works, aerial tramways and railways in Nevada, California, Mexico, South America, Canada, South and North Africa, and practised as a consulting civil and mining engineer at 56 Moorgate Street, E.C., under the name of Messrs. Attwood & Hopper. Mr. Attwood also found time for considerable literary work, being author of numerous scientific publications and papers on geology, mining, mining plant, metallurgy, assaying, meteorology, microscopic research, etc. He was one of three or four surviving male descendants of an ancient Worcestershire family which came originally from Brittany, whose name 'De Bois' was anglicized into 'Attwood'. Members of the family were knights of the shire as early as 1327. He married first Maria Louise (who died in 1892), daughter of James Tansley, F.S.A., of London, and secondly Charlotte Caroline, daughter of William Burchell, late Under-Sheriff of London.

The late Mr. Attwood was frequently called upon to advise British

mining companies when in some difficulty. This was notably the case in the early seventies with the Emma Silver Mining Company, Ltd., of Utah, U.S.A., floated by Baron Grant, and sold by him for  $\pounds 1,000,000$  sterling. Mr. Attwood was asked to visit the Emma Mine and report upon it. He did so, and what he had to say was distinctly unfavourable. On many subsequent occasions the services of this distinguished engineer were in request, and his reputation was always of the very highest. The mining profession is greatly benefited by the association of such reliable and honourable men as the late Mr. George Attwood.—From the *Mining World*, February 24, 1912.

## MISCELLANEOUS.

A DEEP BORING IN GOTLAND. - A boring recently completed in the grounds of the cement factory at Kopparsvik just south of Visby is of interest, first as the deepest boring yet effected in Sweden, exceeding that at Kiruna by 29 metres; secondly, as passing from the Silurian (Lower Wenlockian) through the Ordovician and possibly Cambrian to the gneiss floor. Started last year by the factory to discover the depth of its clay, the work was ultimately finished by the Geological Survey of Sweden, which will study and publish a report on the cores. The total depth of the borehole is 390 metres (circa 1,275 feet) below sea-level. Clay persisted to a depth of 140 metres, and was followed by 100 metres of pure limestone; then came 40 metres of shales, and, at a depth of 280 metres, sandstone mixed with shales. The gneiss was touched at 386 metres. At intervals below the depth of 200 metres a strong smell of petroleum was noticed. The boring was carried out by the Swedish Diamond Rock-boring Co., Stockholm. We may expect that, in the competent hands of our Swedish colleagues, the cores will give much-needed information as to the passage beds between Silurian and Ordovician in this part of the Baltic.

CROYDON BOURNE.—It is not surprising after the heavy rains of the past three months that the Croydon Bourne reappeared on February 7. The outbreak was predicted by Mr. Baldwin Latham, M.Inst.C.E., who has on fourteen previous occasions, 1877-1910, successfully foretold the time when this 'Woe Water' would break out.

ROYAL SOCIETY.—As announced by the President, Sir Archibald Geikie, in his Anniversary Address delivered on November 30, the Royal Society will celebrate its 250th birthday on July 15 of this year. Although the Society originated from meetings held by certain Natural Philosophers about the year 1645, it was not until July 15, 1662, that the Charter of Incorporation passed the Great Seal and the Society was fully established. Among the original Fellows whose labours and writings dealt to some extent with matters geological, were John Aubrey, Robert Hooke, Sir William Petty, and Sir Christopher Wren. The Society has invited the chief universities, academies, scientific societies, and other institutions in this country, in our Colonial Dominions and elsewhere abroad, to send delegates to the meeting. It has also been arranged to issue a new edition of *The Record of the Royal Society*.