

part of each day at this point. After finding the first specimens, I went on the following day; but, although I laboured for several hours, I did not succeed in obtaining a single specimen. On a subsequent occasion I was more fortunate, but yet the fossils are very rare. The state of preservation of these shells is pretty good, and they may be referred to two species: one is a Brachiopod, like *Discina rugata*, but rather larger than the one figured by Sir R. I. Murchison, in his 'Siluria.' This shell, in the typical district, ranges from the Wenlock to the Ludlow beds; and, according to this evidence, these beds must rank higher than has been hitherto supposed. The others may be referred to *Modiolopsis*, and the species much resembles *M. orbicularis*, which ranges from the Caradoc or Bala to the Llandovery Rocks. The occurrence of this shell seems to confirm the opinion held by Professor Harkness, that these beds are of the same age as the Caradoc Sandstone.

This discovery is of some importance, as it points towards data on which the age of the beds may be decided. I have therefore thought it my duty to lay it before the Geological world as soon as possible.

I am, Sir, &c.,

D. J. BROWN.

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MISCELLANEOUS.

ILLUSTRATIONS OF TRILOBITES.—We have received from Mr. E. J. Hollier, of Dudley, a lithographic plate of Trilobites of the natural size, characteristic of the Wenlock Shale and Limestone of Dudley, drawn from specimens in Mr. Hollier's collection. There are 28 figures of various species, from the great *Homalonotus delphinocephalus* to the minute *Cyphaspis megalops*. But although interesting to local collectors, and also because they represent actual specimens, their execution is not equal to that of the figures given by Mr. J. W. Salter, in his monographs for the Palæontographical Society, and hardly does justice to the excellent specimens in Mr. Hollier's cabinet, which they are intended to represent.

OBITUARY.

SAMUEL P. WOODWARD, Ph.D., A.L.S., F.G.S., Assistant-Palæontologist in the British Museum, and Examiner in Natural Sciences to the Council of Military Education, was born September, 17, 1821. He was the second son of the late Samuel Woodward, of Norwich, well known to geologists and antiquaries as the author of a 'Geology of Norfolk' (1833), 'Synoptical Table of British Organic Remains' (1830), a 'History of Norwich Castle' (posthumous, 1847), and various papers in the 'Archæologia' of the Society of Antiquaries. Shortly after his father's death, he was temporarily employed (in 1838) in the library of the British Museum, and in 1839 succeeded Mr. Searles Wood as Sub-curator of the Geological Society of London, and was elected a Member of the Botanical Society and an Associate of the Linnæan. In 1845, he was appointed Professor of Botany and Geology in the Royal Agricultural College, Cirencester, and was one of the founders of the Cotteswold Naturalists'

Field-club. In 1848 he was made first-class Assistant in the department of Geology and Mineralogy in the British Museum. He published but one independent work, a 'Manual of Recent and Fossil Shells,' of which the first part appeared in 1851, and the two following in 1853 and 1856. It has been used or recommended as a text-book by nearly every Professor of Natural History and of Geology in Great Britain; while in America it has obtained a very extensive circulation. The small Geological Map of England, published by the Society for the Diffusion of Useful Knowledge, was prepared in 1843 by Mr. Woodward, under the superintendence of Sir R. I. Murchison; and Professor Owen acknowledged his assistance in the Invertebrate portion of his 'Palæontology.' Dr. Woodward contributed several important papers to the 'Quarterly Journal of the Geological Society,' 'Proceedings of the Zoological Society,' 'Recreative Science,' 'Annals and Magazine of Natural History,' &c. The article 'Volcanoes' in the 'Encyclopædia Britannica,' the scientific reviews in the 'Critic' of 1860, and the 'Athenæum' reports of proceedings in the Geological Section of the British Association from 1841 to 1856, are amongst his minor contributions to Geological literature.

These Memoirs exhibit the vast acquaintance with the recent forms of Mollusca possessed by their author, and afford strong evidence of the philosophical cast of his mind, and his talent in determining the zoological relations of obscure organisms. One of his most remarkable achievements in this line of research was his determination of the true affinities of the extinct family of Rudistes, published in the 11th volume of the 'Quarterly Journal of the Geological Society;' and the Society showed its appreciation of the merits and value of his memoir on that subject by awarding him the proceeds of the Wollaston donation-fund in the year 1854; and again in 1857, on this account, and to assist him in his researches in the class Radiata.

He was a Member of the Council of the Geological Society from 1859, and had recently been appointed one of the Examiners in Geology and Palæontology to the University of London.

Although his published works may, for a man of his acknowledged merit and position in the scientific world, appear to be small, they represent only a portion of the original work that he performed: many of the results he arrived at must unhappily have died with him, but others remain in the form of carefully prepared manuscripts, which his brothers entertain the hope of publishing. It may be a matter of surprise that he did so little in making known the results of his investigations; but for the last twenty years of his life he suffered from chronic asthma, which eventually became so distressing as to awaken the sympathies of all, and caused many to marvel at the energy he displayed in research and conversation during intervals of release from pain.

An attack of acute bronchitis, which occasioned the rupture of an artery in the lungs, was the immediate cause of his death, at Herne Bay (whither he had gone in the hope of benefit to his health), on the 11th of July.