

more resemblance to a dental fragment of *Notidanus* than the Swabian fossil described by Oppel, as far as the latter's figure will enable one to judge. It does not agree with the teeth of *Palæospinax* or any other Liassic Shark I have had the opportunity of studying, and Tate and Blake's determination is very possibly correct; but more satisfactory evidence must still be awaited before there is absolute certainty of the presence of *Notidanus* among the early Jurassic fauna.

A. SMITH WOODWARD.

ENTOMOSTRACA IN THE RHÆTICS.

SIR,—In the GEOLOGICAL MAGAZINE, May, 1886, p. 203, a slight error occurs in Mr. J. S. Gardner's interesting paper, in stating that "the valves of a species of *Cyclas* abound in the Rhætics." This should have been either *Candona* or possibly *Cypris*; the latter may be after all correct, as it is associated with the freshwater aquatic Moss, *Naiadites*. The supposed *Cyclas* has been determined to be *Estheria*, a brackish-water Crustacean, though Sowerby stated it to be *Cyclas*, when my work on Fossil Insects was published. In the Note (2) at the bottom the reference should have been not to the *Estheria* bed in particular, but to the Rhætics in general (in which the former is included), which may be considered to be junction or passage beds between the Trias and the Lias.

P. B. BRODIE.

OBITUARY.

HARVEY BUCHANAN HOLL, M.D., F.G.S.

BORN 28TH SEPTEMBER, 1820; DIED 11TH SEPTEMBER, 1886.

THIS able geologist and palæontologist was son of the late William Holl, Esq., formerly of Worcester. After passing through Dr. Walter's School at Worcester, he entered the Medical College in Birmingham.

During this period of Harvey Holl's career, when he was only about 17 years of age, he became acquainted with Sir Henry de la Beche, and was invited by that distinguished geologist to accompany him in a geological reconnaissance through Devon and Cornwall. It was probably owing to this expedition (which extended over some six months) that young Holl became confirmed in his geological tastes, and for a time was led entirely to abandon his medical studies.

From the good opinion which Sir Henry de la Beche formed of Holl's work in the field, he recommended the youthful geologist to his friend Professor Rogers, of Philadelphia (who was seeking an assistant), and Harvey Holl started off to join his new chief and take a part in the Geological Survey of Pennsylvania. In this interesting region, Holl remained for about three years, and spent a year longer in the United States geologising on his own resources.

Upon his return to England, Holl entered as a student at St. George's Hospital, and successfully passed the Royal College of Surgeons in London. In 1859 he graduated as M.D. at King's College, Aberdeen.

On the breaking out of the Crimean War, Dr. Holl was appointed one of the Senior Civil Surgeons to aid the military staff, which was totally inadequate to the heavy strain laid upon it by the first year's severe trials and sufferings. He remained abroad until the end of the campaign, serving partly in the Crimea, but most of the time in the hospital at Scutari. On his return after the conclusion of peace with Russia, he settled for some years as a medical practitioner in St. George's Square, Pimlico.

Dr. Holl was remarkable for his extremely reserved and retiring habits and formed consequently but few friendships. Yet he was by no means a man of small ability. As a medical practitioner he might have attained great eminence, but he never was ambitious of fame.

An earnest student of Cryptogamic Botany, he has left some forty-seven volumes of carefully collected British Lichens, all arranged and named by himself. He was also a liberal donor to the Botanical Department of the British Museum.

As a geologist and palæontologist, he displayed great power, and his papers always met with high appreciation in the Geological Society. During his field-excursions he had formed a considerable collection of British fossils, among which were numerous species and varieties of the Silurian genera *Beyrichia*, *Primitia*, and their allies, in very perfect preservation. As a good microscopist, clever draughtsman, and careful observer, he willingly and ably co-operated with Professor Rupert Jones in the study and description of the older Ostracoda. Within this year even he warmly assisted in the work, and notwithstanding his declining health, he supplied new sketches and notes of his favourite little fossils.

Dr. Holl was well known among the leading members of the Hereford, Woolhope, Malvern, and Cotteswold Natural History Field Clubs, and was himself frequently present at their meetings and excursions.

Although an excellent palæontologist, he will probably be most widely known and remembered as an able and experienced geologist, and the papers which will best be recollected are those on the Geological Structure of the Malvern Hills, in which area he made great advances on the work of Prof. Phillips; and his memoir "On the Older Rocks of South Devon and East Cornwall," in which he exemplified the excellence in method of his early teacher in Devonian geology, Sir Henry de la Beche.

To those who had the pleasure to know him, and were able to penetrate beneath his ordinary reserve, he will be remembered as a genial and pleasant comrade, full of scientific information, and lasting in his attachment to his friends.

Dr. Holl was elected a Fellow of the Geological Society in 1862, and having about this time relinquished his practice, he removed to Tower Lodge, The Link, Malvern, where he again took up his favourite geological studies, and in 1863 communicated a paper to the British Association "On the Metamorphic Rocks of the Malvern Hills."¹

¹ Brit. Assoc. Report, 1863 (part 2), pp. 70—73.

In the same year he also read a paper before the Geological Society of London, "On the Correlation of the several Subdivisions of the Inferior Oolite in the Middle and South of England."¹

From Malvern Dr. Holl removed to Elderslie House, London Road, Worcester, and thence to Little Perdiswell, Worcester, where he resided until about the end of 1884, when, for the sake of his health, he removed to Cheltenham, living first at 3, Oriol Villas, and lastly at 1, Derby Villas where he died after three weeks' illness, resulting from heart disease.

Besides those already named, the following additional papers are credited to Dr. Holl, namely:—

3. On the Geological Structure of the Malvern Hills and adjacent District. *Quart. Journ. Geol. Soc.* 1864, vol. xx. p. 413, and vol. xxi. 1865, pp. 72-102. *Phil. Mag.* 1864, vol. xxviii. p. 243.
4. On the Pre-Cambrian Rocks of Central England. *Brit. Assoc. Rep.* 1865, vol. xxxv. (Sect.), pp. 59-62; *Geol. Mag.* 1865. Vol. II. pp. 563-565.
5. *Goniophyllum pyramidale*, Hisinger. *Geol. Mag.* 1866, Vol. III. pp. 430-431.
6. On the Geological Position of the Crystalline Rocks of the Malvern Hills. *Woolhope Field Club Trans.* 1866, pp. 273-274.
7. On the Older Rocks of South Devon and East Cornwall. *Quart. Journ. Geol. Soc.* 1868, vol. xxiv. pp. 400-454; *Phil. Mag.* 1868, vol. xxxvii. p. 158.
8. Notes on Fossil Sponges. *Geol. Mag.* 1872, Vol. IX. pp. 309-315, and 343-352.
9. The Epitheca in Fossil Sponges. *Monthly Microsc. Journ.* 1872, vol. viii. pp. 141-142.

He was also joint-author with Prof. T. Rupert Jones, F.R.S., of the following papers, viz. :—

1. Notes on the Palæozoic Bivalved Entomostraca. No. VI. Some Silurian Species (*Primitia*). *Ann. and Mag. Nat. Hist.* 1865, vol. xvi. pp. 414-425.
2. Notes on the Palæozoic Bivalved Entomostraca. No. VIII. Some Lower Silurian Species from the Chair of Kildare. *Op. cit.* 1868, pp. 54-62.
3. Notes on the Palæozoic Bivalved Entomostraca. No. IX. Some Silurian Species. *Op. cit.* 1869, pp. 211-229.
4. Notes on the Palæozoic Bivalved Entomostraca. No. XX. On the Genus *Beyrichia* and some New Species. *Op. cit.* 1886, pp. 337-363.
5. Notes on the Palæozoic Bivalved Entomostraca. No. XXI. On some Silurian Genera and Species. *Op. cit.* pp. 403-414.

MISCELLANEOUS.

MEMORIAL TO DR. THOMAS DAVIDSON, LL.D., F.R.S.—Thursday was the first anniversary of the death of Dr. Thomas Davidson. The proposed memorial to his memory in the Brighton Museum will take the form of a life-sized medallion in marble, framed in alabaster. The work has been undertaken by Mr. T. Brock, A.R.A., through the kind offices of Mr. Edward Armitage, R.A., an old friend and former fellow Art student of Dr. Davidson's in the ateliers of Paul de la Roche. Mr. Armitage has contributed £20 to the "Davidson Memorial Fund," and his advice and assistance have been of great service to the Committee and Hon. Secretaries.—*Brighton Herald*, Oct. 16, 1886.

¹ *Quart. Journ. Geol. Soc.* vol. xix. (1863), pp. 70-73.