never seen in this discussion (on climate) any reference to the planet Mars, he ought to have added, that it had not occurred to him to look out "Mars" in the index to "Climate and Time."

O. F.

THE PILSEN PERMO-CARBONIFEROUS BEDS.

Sir,—In the extremely interesting paper on the Permo-Carboniferous beds of Bohemia which appears in the current number of the Geological Magazine, Dr. O. Feistmantel appears to rely very strongly on the announcement which he says was made by Dr. Anton Fritsch at the last meeting of the British Association that he considered the Nürschan Gas-coal horizon as a passage-bed from Carboniferous to Permian. Now when Dr. Fritsch exhibited his splendid series of specimens before the Geological Section, it was evident that he avoided carefully expressing any statement of opinion as to the exact age of the beds whence they came. A member then rose and asked Dr. Fritsch whether he considered the Pilsen Gascoal series as Carboniferous or Permian, or whether he looked upon them as passage-beds. The only answer elicited from the cautious palæontologist was that it was not yet time to settle the matter, and that more work was required before the question was ripe for decision. In fact, he declined to give any clue as to what his views on the subject might be. THE QUESTIONER HIMSELF.

8 March, 1877.

THE TERM "CHLORITIC MARL."

SIR,—In the review of Cambridgeshire Geology, by the Rev. T. G. Bonney, in your last Number, your reviewer takes exception to the use in that work of the term "Chloritic Marl" as applied to the Phosphatic Nodule-bed at the base of the Chalk-marl in Cambridgeshire and elsewhere. From this it would appear that there is some doubt about the proper use of the term, and I should be very glad to hear from your reviewer what he considers the true typical Chloritic Marl. The question of nomenclature is so important that I feel sure your readers will not regret the use of a small portion of your valuable space in clearing up a doubt which seems to exist on this subject.

H. George Fordham.

ODSEY, ROYSTON, March 5th, 1877.

OBITUARY.

JAMES SCOTT BOWERBANK, F.R.S., F.L.S., F.G.S.,

PRESIDENT OF THE PALÆONTOGRAPHICAL SOCIETY. BORN JULY 14, 1797 DIED MARCH 8, 1877.

It is with no ordinary feelings of regret that we record the loss of the Founder and President of the Palæontographical Society.

James Scott Bowerbank was born in Bishopsgate, London, in 1797. He succeeded, in conjunction with his brother, to his father's distillery, in which business he was an active partner until 1847. From his youth he exhibited a strong attachment to Natural History pursuits, especially to Botany. When of age, he joined the Mathematical Society of Spitalfields, and remained a member until its incorporation with the Royal Astronomical Society in 1845. Here he

became acquainted with many scientific men, and earnestly entered upon a course of Natural Science studies, which were steadily continued, although he was actively employed in a business demanding constant and careful attention for at least twelve hours daily. His pursuit of science was a labour of love, for at that period but little favour was bestowed either upon science or its votaries.

During the years 1822, 1823, and 1824, he delivered courses of public lectures on Botany, and later, in 1831, on Human Osteology.

About 1836 he formed, with F. E. Edwards, Searles V. Wood, John Morris, Alfred White, and N. T. Wetherell, "The London Clay Club; the members of which devoted themselves to the task of examining the fossils of the London Clay, and making a complete list of the species.

In 1847, after the reading of a paper by Prof. Prestwich, at the Geological Society, "On the Structure, etc., of the London Clay," Bowerbank joined in the discussion, and in the tea-room, after the meeting, solicited the leading geologists present to support him in establishing a Society for the publication of undescribed British fossils. Buckland, De la Beche, Fitton, and others who were present, gave him their names, and thus originated the Palæontographical Society.²

In 1840 Bowerbank published a separate work, entitled: "On the Fossil Fruits of the London Clay," still the only publication in which these interesting remains have been described and figured.

In 1842 Dr. Bowerbank was elected a Fellow of the Royal Society. He contributed upwards of thirty papers to the various learned Societies, to the Annals Nat. Hist. and the Microscopical Journal. His scientific collections were most extensive, comprising fossils from every geological horizon, many of which are figured in the various Monographs of the Palæontographical Society.

From 1844 to 1864 Dr. Bowerbank was in the habit of receiving once a week, at his residence in Park Street, and afterwards at Highbury Grove. On these occasions every youthful geological student found in him a willing instructor and a sincere and kind friend. The treasures of his Museum, the use of his microscopes, and his

personal assistance, were at the disposal of every one.

Since his retirement to St. Leonard's, Dr. Bowerbank rarely visited London; only a few of his scientific friends have therefore been able to keep up a personal intercourse with him. Mr. Dinkel writes, "For the last six or nine months I have been with him daily, but there is little to mention save his fervent desire to finish his great work on Sponges. He employed almost all his time upon it, and begged me to remain till all the plates were executed. We reached the last plate, and when half of it was drawn, he became sadly depressed, and so weak that the finishing was postponed from day to day till his death. There will be no difficulty, however, in completing the work."

¹ See Geol. Mag. 1875, p. 571.

² Extract of letter from Prof. Prestwich, F.R.S.

³ It will be interesting to our readers to learn that, in 1864, Dr. Bowerbank's magnificent collection was purchased for the British Museum, and now forms part of our National treasures.