fragments of the frustules of the diatom *Ethmodiscus*, which is "quite characteristic of some of the deepest tropical red clays and radiolarian oozes far from land." The 'argiline' beds appear to be formed from the alteration of the lower *Globigerina*-marls. The following correlation is proposed:—

BARBADOS.	TRINIDAD.	
Coral Rocks Bissex Beds	Moruga Series	Pleistocene and Pliocene.
Oceanic Beds		
Scotland Beds $\left\{ \begin{array}{l} \text{Upper} \\ \text{Lower} \end{array} \right.$	San Fernando Beds Nariva Series	Oligocene and Pliocene.

The Oligocene and Eocene beds are of shallow-water origin, and seem to be unconformably covered by the Naparima Marls.

#### CORRESPONDENCE.

# CRYSTALS FROM DECOMPOSED TRAP.

Sir,—Early in the year, in examining some refuse-heaps near Dreghorn, Ayrshire, I found a few crystals which had been weathered out from a decomposed trap. The altered rock is white, and on exposure has fallen into dust, leaving the crystals isolated and perfectly sharp. In some places the rock is particularly white, and the crystals themselves have been reduced to powder. Much of the trap is a hard solid rock, with large conspicuous aggregates of enclosed crystals; every variety from the solid rock to the altered 'white horse' (a local name of white trap) can be obtained. I am informed by Mr. L. J. Spencer, of the British Museum (Natural History), that the isolated crystals are really pseudomorphs of serpentine after augite.

J. Smith.

Monkredding, Kilwinning. December 15, 1898.

### FORAMINIFERAL FLINT FROM SOMALI.

SIR,—The Rev. R. Ashington Bullen, F.G.S., lately lent me some stone implements (labelled as having been collected by Mr. Seton-Karr in Somali, Eastern Africa), for exhibition before the Anthropological Institute, in illustration of my paper on large African stone implements (see Journ. Anthrop. Institute, new series, vol. i, 1898, p. 48). Some of these Somali implements are composed of quartzite, rather ferruginous, gritty, and hard, though the grains are only cemented at their peripheries, and not closely compact; others are of flint, coarse-grained by the visible presence of the minute organisms originally constituting the limestone of which the flint is a more or less perfect pseudomorph, still to a great degree calcareous. Many microzoa, chiefly internal casts of Foraminifera, stand out on the roughly weathered surface, and numerous sections of these organisms are seen in the fractured stone. Some friends have examined the specimens with me, and although at first I suspected small Nummulites to be present, we

cannot find any certain evidence of them. Mr. Frederick Chapman, A.L.S., favours me with the following list of Foraminifera, which he has determined on the weathered surface of the flint on one of the Somali implements:—

Operculina, sp. with rib-like septa, common.

Heterostegina depressa, D'Orbigny, a very good specimen.

Cristellaria, two species, frequent.

Pulvinulina, one specimen.

I agree with Mr. Chapman in regarding the rock as being probably of Miocene or Pliocene age.

T. RUPERT JONES.

### NOTE ON DINOCYSTIS BARROISI.

SIR,-Please allow me a few words in reply to the valuable paper of Mr. F. A. Bather on Dinocystis Barroisi. In his paper "Sur l'étage devonien des psammites du Condroz en Condroz " (Bull. Acad. des Sci. de Belg., 1875, 2e sér., t. xxxix, pp. 658-9), Mr. M. Mourlon mentions, from Mr. Malaise's collection, an "astérie" found near Walcourt in an indeterminate "assise" of the "psammites du Condroz." This fossil is no longer quoted in the list of the fossils of this series, given by the same author in his "Géologie de la Belgique," but it is replaced (t. ii, p. 23) by Agelacrinus, very rare, in the "assises" of Montford and Evieux, the two upper assises of our Psammites du Condroz, and this is supposed by Mr. Bather to be the same as his Dinocystis Barroisi. Now the "astérie" of 1875 is the species found by Mr. L. Bayet, and described by me in my "Fragments paléontologiques" (Ann. Soc. géol. de Belg., 1881, t. viii, Mém., pp. 52-54, pl. iii, figs. 1 et 2), under the name of Protaster Decheni, and for important reasons I believe that the Agelacrinus of 1881 is the same species. Recently, I have learned from Mr. L. Bayet that his fossil was found in the "assise d'Évieux." G. DEWALQUE.

Liège, January 9, 1899.

# THE SUBMERGED PLATFORM OF WESTERN EUROPE.

SIR,—In your January issue Dr. J. W. Spencer takes up the cudgels for Professor Hull on this subject, and treats your readers to a display of quarter-staff argument, by which he seems to hit me very hard, but is really cudgelling figments of his own too fervid imagination, fabrics which have far less substance than the windmills on which the renowned Don Quixote exercised his arms.

Dr. Spencer's communication may, indeed, be described as consisting in part of a discussion of points which I did not call in question and in part of denials of statements which were never made.

He says first that I denied the great subsidence of the continental margins, and a few lines lower (p. 18) that I denied their recent

<sup>&</sup>lt;sup>1</sup> See Geol. Mag., Dec. IV, Vol. V, December, 1898, p. 543.