

Density at 60° F. at surface, 1.02631 ; bottom, 1.02580.

STATION 138.

Depth, 2650 fathoms ; deposit, Red Clay, containing 26.22 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 7.30 A.M. shortened and furled sails, and got up steam to sound. At 8 A.M. proceeded under steam, and at 9 A.M. sounded in 2650 fathoms. Obtained serial temperatures at intervals of 50 fathoms down to 500 fathoms. At 11.30 A.M. completed temperature observations, and at 11.45 A.M. made all plain sail.

Distance at noon from Cape of Good Hope, 519 miles. Made good 135 miles. Amount of current 10 miles, direction S. 38° E.

DIATOMACEÆ.—The following species of Diatoms were observed by Mr. Comber in the deposit from this Station (see also Murray and Renard, Deep-Sea Deposits Chall. Exp.) :—

ORGANISMS FROM
THE DEPOSIT.

Nitzschia marina, Grunow.

Coscinodiscus lineatus, Ehrenberg.

„ *lentiginosus*, Janisch.

„ *atlanticus*, Castracane.

„ *curvatulus*, Grunow.

Coscinodiscus centralis, Ehrenberg, var.

„ *elegans*, Greville.

Hemidiscus cuneiformis, Wallich.

Actinoptychus splendens, Ralfs.

The siliceous organisms in this deposit do not make up more than one or two per cent. of this Red Clay, and more than half the Diatoms belong to *Coscinodiscus lentiginosus*, a species common in the Antarctic Diatom Ooze.

Surface Organisms.—The following species is recorded from the surface (attached to a floating spar) on October 24 :—

ORGANISMS FROM
THE SURFACE.

CIRRIPIEDIA (Hoek, Zool. pt. 25).

Lepas anatifera, Linné.

The specimens of *Lepas anatifera* were extremely large, and among them the common Atlantic *Idothea* was found.

Station 139 (Sounding 229), Tristan da Cunha to Cape of Good Hope (see Chart 16 and Diagram 6). STATION 139.

October 27, 1873 ; lat. 35° 35' S., long. 16° 9' E.

Temperature of air at noon, 54°.3 ; mean for the day, 53°.6.