STATION 281.

Depth, 2385 fathoms; deposit, Red Clay, with very many crystals of phillipsite formed in situ at the bottom, containing only a trace of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 5 a.m. shortened and furled sail, and proceeded under steam to sound. At 5.40 a.m. sounded in 2385 fathoms; the sounding-tube brought up no trace of the bottom. Put over trawl and veered 2900 fathoms. At 10 a.m. obtained serial temperatures down to 1500 fathoms. The carbonic acid was determined in water from 200 fathoms, and amounted to 43°2 milligrammes per litre. At 1 p.m. commenced heaving in trawl, which came up at 3.30 p.m. with several specimens. The bag contained about two gallons of Red Clay, between two and three bushels of manganese nodules, slabs of volcanic tufa covered with manganese, over a hundred sharks' teeth, and six tympanic and three petrous bones of Cetaceans. The enamel of one of the Carcharodon teeth was over four inches in length along the edge, and was as large as, if not larger than, any of the specimens of Carcharodon megalodon procured in Tertiary deposits from different parts of the world. Made sail.

Distance at noon from Tubuai Island, 75 miles; from Rurutu Island, 61 miles. Made good 82 miles. Amount of current 24 miles, direction S. 23° W.

Animals from Trawl.

The following species are recorded in the Zoological Reports from the trawl at this Station:—

Monaxonida (Ridley and Dendy, Zool. pt. 59).

Esperella biserialis, n.sp. One specimen; obtained also at Station 291, 2250 fathoms. Cladorhiza abyssicola, Sars, var. linearis, nov. Three specimens; obtained also at Station 274 (var. rectangularis).

" similis, n.sp. One specimen; obtained at no other locality. Axinella profunda, n.sp. One specimen; obtained also at Station 241.

HEXACTINELLIDA (Schulze, Zool. pt. 53).

Dictyocalyx gracilis, n.g., n.sp. One specimen; obtained at no other locality.
Only species of the genus.

Dictyonine. One specimen.

HOLOTHURIOIDEA (Théel, Zool. pt. 13).

Oneirophanta mutabilis, n.g., n.sp. Obtained also at Stations 146, 157, 160, 241, 244, 299, and 325. Only species of the genus.

Isopoda (Beddard, Zool. pt. 48).

Arcturus abyssicola, n.sp. One specimen; obtained also at Station 184 (?).