

STATION 284.

Phronimids, Stomatopod larvæ, *Euphausia*, many Pteropods, *Salpa*, *Appendicularia*, and many small fishes.

STATION 285.

Station 285 (Sounding 430), Tahiti to Valparaiso (see Chart 38 and Diagram 19).

October 14, 1875; lat. 32° 36' S., long. 137° 43' W.

Temperature of air at noon, 62°·8; mean for the day, 62°·2.

Temperature of water:—

Surface,	65·0	400 fathoms,	42·8
25 fathoms,	63·8	500 "	41·0
50 "	63·4	600 "	39·5
75 "	63·0	700 "	38·4
100 "	61·8	800 "	37·7
125 "	60·0	900 "	37·0
150 "	57·5	1000 "	36·6
175 "	55·0	1100 "	36·3
200 "	52·3	1200 "	36·1
225 "	49·8	1300 "	35·9
250 "	46·8	1400 "	35·8
275 "	46·2	1500 "	35·7
300 "	45·2	Bottom,	35·0

Density at 60° F.:—

Surface,	1·02621	300 fathoms,	1·02550
25 fathoms,	1·02600	400 "	1·02556
50 "	1·02609	800 "	1·02553
100 "	1·02600	Bottom,	1·02575
200 "	1·02581		

Depth, 2375 fathoms; deposit, Red Clay, containing 26·25 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 4.15 A.M. shortened and furled sails, and at 5 A.M. proceeded under steam. At 5.30 A.M. sounded in 2375 fathoms. At 7 A.M. put trawl over and veered 2900 fathoms. Obtained serial temperatures down to 1500 fathoms. The carbonic acid was determined in bottom water, and amounted to 45·6 milligrammes per litre. At 1 P.M. commenced heaving in trawl, which came up at 3.45 P.M. with several specimens, several quarts of dark chocolate-coloured clay, and large numbers of manganese nodules, sharks' teeth, earbones and fragments of other bones of Cetaceans, pumice-stones, and angular and rounded pebbles, apparently ice-borne. The specimen of the deposit procured in the sounding-tube