

STATION 271.

Station 271 (Sounding 413), Sandwich Islands to Tahiti (see Chart 38 and Diagram 19).

September 6, 1875; lat. $0^{\circ} 33' S.$, long. $151^{\circ} 34' W.$

Temperature of air at noon, $78^{\circ} \cdot 3$; mean for the day, $77^{\circ} \cdot 3$.

Temperature of water :—

Surface,	78·7	180 fathoms,	52·2
10 fathoms,	77·0	190 "	51·6
20 "	76·2	200 "	51·0
30 "	76·2	300 "	46·5
40 "	76·2	400 "	42·9
50 "	76·2	500 "	40·7
60 "	76·2	600 "	39·5
70 "	74·5	700 "	38·7
80 "	68·8	800 "	38·2
90 "	63·2	900 "	37·7
100 "	59·4	1000 "	37·2
110 "	57·0	1100 "	36·7
120 "	56·0	1200 "	36·3
130 "	55·3	1300 "	36·1
140 "	54·7	1400 "	35·9
150 "	54·1	1500 "	35·7
160 "	53·4	Bottom,	35·0
170 "	52·8		

Density at $60^{\circ} F.$:—

Surface,	1·02661	400 fathoms,	1·02577
25 fathoms,	1·02625	800 "	1·02591
50 "	1·02638	1975 "	1·02594
100 "	1·02622	Bottom,	1·02587
200 "	1·02588		

Depth, 2425 fathoms; deposit, Globigerina Ooze, containing 81·27 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 4.30 A.M. shortened and furled sails, and got up steam to sound. At 5.30 A.M. sounded in 2425 fathoms. It is to be noted that in this and the previous sounding there was a greater abundance of carbonate of lime organisms than might be expected at such great depths, and this seems to be connected with the large number of pelagic Foraminifera and Pteropods found on the surface in this locality in the equatorial and counter equatorial streams. At 7.30 A.M. put over trawl. Obtained serial temperatures down to 1500 fathoms. At 1 P.M. commenced heaving in trawl, which came up at 4 P.M. with numerous specimens. At 4.30 P.M. made all plain sail.

Venus Point, Tahiti, distant at noon, 1020 miles. Made good 94 miles. Amount of current 41 miles, direction $S. 81^{\circ} W.$