STATION 228.

Station 228 (Sounding 366), Admiralty Islands to Yokohama (see Chart 31 and Diagram 16).

March 29, 1875 ; lat. 19° 24′ N., long. 141° 13′ E.
Temperature of air at noon, 81°·3 ; mean for the day, 79°·3.
Temperature of water :—

Surface,	80·2	400 fathoms,	42·6
25 fathoms,	79·0	500 ,,	40·1
50 ,,	77·4	600 ,,	38·9
75 ,,	75·0	700 ,,	38·0
100 ,,	71·5	800 ,,	37·4
125 ,,	68·3	900 ,,	36·9
150 ,,	64·8	1000 ,,	36·4
175 ,,	61·3	1100 ,,	35·9
200 ,,	58·0	1200 ,,	35·4
225 ,,	55·2	1300 ,,	35·3
250 ,,	52·4	1400 ,,	35·2
275 ,,	49·8	1500 ,,	35·2
300 ,,	47·7	Bottom,	35·2

Density at 60° F. :—

Surface,	1·02582	200 fathoms,	1·02566
25 fathoms,	1·02586	300 ,,	1·02542
50 ,,	1·02592	400 ,,	1·02530
100 ,,	1·02584		

Depth, 2450 fathoms ; deposit, Red Clay, containing only a trace of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 5.20 A.M. got up steam. At 6 A.M. proceeded under steam. At 8 A.M. shortened and furled sails. At 9 A.M. sounded in 2450 fathoms. At noon obtained serial temperatures down to 1500 fathoms. Although the ship seemed to have actually passed over the supposed position of Lindsay Islands, as laid down in the charts (position marked as doubtful), no land was visible. At 1.45 P.M. completed temperature observations and made sail. Black and white terns and boatswain birds were observed.

Distance at noon from No Sima lighthouse, 932 miles. Made good 61 miles. Amount of current 17 miles, direction N. 17° W.

ORGANISMS FROM SURFACE-NETS.

Surface Organisms.—The following are recorded in the note-books (March 29 to 31) :—Oscillatoriaceæ, *Peridinium* (three species), many specimens of *Pyrocystis* (two species), Diatoms, Rhabdospheres, Coccospheres, *Gregarina*, *Globigerina*, *Hastigerina* abundant, *Pulvinulina*, Radiolaria abundant (especially *Aulosphæra*), *Tintinnus* and other Infusoria, Medusæ, Siphonophoræ (many forms), oval red Cœlenterate larvæ with