

STATION 229.

Temperature of water :—

Surface, . . . . .	78·5	400 fathoms, . . . . .	44·2
25 fathoms, . . . . .	75·7	500 „ . . . . .	40·3
50 „ . . . . .	73·3	600 „ . . . . .	38·5
75 „ . . . . .	71·0	700 „ . . . . .	37·7
100 „ . . . . .	69·0	800 „ . . . . .	37·2
125 „ . . . . .	66·9	900 „ . . . . .	36·7
150 „ . . . . .	64·8	1000 „ . . . . .	36·3
175 „ . . . . .	62·5	1100 „ . . . . .	35·8
200 „ . . . . .	60·4	1200 „ . . . . .	35·3
225 „ . . . . .	58·3	1300 „ . . . . .	35·2
250 „ . . . . .	56·2	1400 „ . . . . .	35·2
275 „ . . . . .	54·1	1500 „ . . . . .	35·2
300 „ . . . . .	52·0	Bottom, . . . . .	35·2

Density at 60° F. :—

Surface, . . . . .	1·02613	200 fathoms, . . . . .	1·02055
25 fathoms, . . . . .	1·02590	300 „ . . . . .	1·02507
50 „ . . . . .	1·02594	400 „ . . . . .	1·02528
100 „ . . . . .	1·02580		

Depth, 2500 fathoms; deposit, Red Clay, containing only a trace of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 3.15 A.M. shortened and furled sails, and got up steam. At 5.15 A.M. stopped, and at 6 A.M. sounded in 2500 fathoms. At 7 A.M. put over trawl. At 10 A.M. obtained serial temperatures down to 1500 fathoms. The carbonic acid was determined in water from 300 fathoms, and amounted to 34·0 milligrammes per litre. At 2 P.M. commenced heaving in trawl, but at 5.30 P.M. the weights only came up, the rope having parted just below the weights, and the trawl and 500 fathoms of rope were lost. Lord Campbell shot on the wing an albatross (*Diomedea brachyura*), and other albatrosses, petrels, prions, boatswain birds, and phalaropes were seen.

Distance at noon from No Sima lighthouse, 772 miles. Made good 44 miles. Amount of current 4 miles, direction N. 45° W.

DIATOMACEÆ.—The following species of Diatoms were observed by Mr. Rattray and Mr. Comber in the deposit from this Station :—

*Navicula multicosata*, Grunow.  
*major*, Kutzing (fresh water).  
*radiosa*, Kutzing (fresh water).  
*Nitzschia marina*, Grunow.  
 „ *scalaris*, W. Smith.  
*Triceratium seychellense*, Grunow.

*Hemidiscus cuneiformis*, Wallich.  
*Ceratanulus turgidus*, Ehrenberg.  
*Coscinodiscus leptopus*, Janisch.  
 „ *anguste-lineatus*, A. Schmidt.  
 „ *excentricus*, Ehrenberg.  
 „ *denarius*, A. Schmidt.