

Surface Organisms.—Young Pleuronectids (*Solea* ?) are recorded by Günther (Zool. pt. 78) from the surface at this Station, and in addition the following are recorded in the note-books:—*Peridinium*, Diatoms, many Acanthometræ and other Radiolaria, Infusoria, Medusæ, *Sagitta*, many Daphnids, Copepods, Cirriped larvæ, Zoëæ, *Appendicularia*, fish eggs, &c.

STATION 322.
ORGANISMS FROM
SURFACE-NETS.

Station 323 (Sounding 473), Rio de la Plata to Tristan da Cunha (see Chart 16, and Diagrams 6 and 22). STATION 323.

February 28, 1876 ; lat. 35° 39' S., long. 50° 47' W.

Temperature of air at noon, 73°·8 ; mean for the day, 72°·3.

Temperature of water :—

Surface,	73·5	600 fathoms,	37·8
25 fathoms,	71·5	700 "	37·0
50 "	69·5	800 "	37·0
75 "	67·5	900 "	37·0
100 "	65·5	1000 "	37·0
125 "	63·5	1100 "	37·0
150 "	61·5	1200 "	37·0
175 "	59·5	1300 "	37·0
200 "	57·5	1400 "	37·0
225 "	55·5	1500 "	37·0
250 "	53·5	1600 "	36·3
275 "	51·5	1725 "	34·8
300 "	49·5	1825 "	33·8
400 "	42·0	Bottom,	33·1
500 "	38·9		

Density at 60° F. :—

Surface,	1·02670	300 fathoms,	1·02579
25 fathoms,	1·02671	400 "	1·02643
50 "	1·02684	800 "	1·02657
100 "	1·02661	Bottom,	1·02641
200 "	1·02616		

Depth, 1900 fathoms ; deposit, Blue Mud, containing 3·04 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 5 A.M. shortened and furled sails, and proceeded under steam to sound and trawl. At 6 A.M. sounded in 1900 fathoms. At 7 A.M. put trawl over and veered 2500 fathoms. Took serial temperatures down to the bottom. The carbonic acid was determined in the bottom water, and amounted to 43·0 milligrammes per litre. At 1 P.M. commenced