

Station 101 (Sounding 172), St. Vincent to St. Paul's Rocks (see Chart 12 and Diagram 7). STATION 101.

August 19, 1873; lat.  $5^{\circ} 48' N.$ , long.  $14^{\circ} 20' W.$

Temperature of air at noon,  $80^{\circ} \cdot 8$ ; mean for the day,  $78^{\circ} \cdot 5$ .

Temperature of water:—

Surface, . . . . .	$79^{\circ} \cdot 2$	300 fathoms, . . . . .	$43^{\circ} \cdot 3$
25 fathoms. . . . .	$72^{\circ} \cdot 6$	400 „ . . . . .	$40^{\circ} \cdot 8$
50 „ . . . . .	$62^{\circ} \cdot 5$	500 „ . . . . .	$39^{\circ} \cdot 7$
75 „ . . . . .	$58^{\circ} \cdot 8$	600 „ . . . . .	$39^{\circ} \cdot 5$
100 „ . . . . .	$56^{\circ} \cdot 2$	700 „ . . . . .	$39^{\circ} \cdot 4$
125 „ . . . . .	$54^{\circ} \cdot 1$	800 „ . . . . .	$39^{\circ} \cdot 3$
150 „ . . . . .	$52^{\circ} \cdot 2$	Bottom, . . . . .	$36^{\circ} \cdot 4$
200 „ . . . . .	$48^{\circ} \cdot 3$		

Density at  $60^{\circ} F.$  at surface, 1.02635.

Depth, 2500 fathoms; deposit, Blue Mud, containing 6.22 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 6.30 A.M. shortened and furled sails, and got up steam to trawl. At 7 A.M. put trawl over. At 9 A.M. sounded in 2500 fathoms. At 1.30 P.M. lowered cutter to ascertain surface current. Obtained serial temperatures down to 800 fathoms. The carbonic acid was determined in the surface water, and amounted to 45.5 milligrammes per litre. At 3.30 P.M. cutter returned. At 4 P.M. commenced heaving in trawl, which came up at 5 P.M. with a number of specimens. At 5.10 P.M. proceeded as requisite, obtaining error of Fox dipping-needle. At 7 P.M. proceeded under steam.

St. Paul's Rocks distant at noon, 952 miles. Made good 99 miles. Amount of current 33 miles, direction N.  $44^{\circ} E.$

The following species are recorded in the Zoological Reports from the trawl at this Station:—

ANIMALS FROM  
TRAWL.

HYDROIDA (Allman, Zool. pt. 70).

*Cryptolaria diffusa*, n.sp. Obtained at no other locality.

HOLOTHURIOIDEA (Théel, Zool. pt. 13).

*Psychropotes semperiana*, n.g., n.sp. One injured specimen; obtained also at Station 133, 1900 fathoms.

ANNELIDA (M'Intosh, Zool. pt. 34).

*Buskiella abyssorum*, n.g., n.sp. Several fragmentary specimens; obtained also at Stations 106 and 333, 1850 and 2025 fathoms. Only species of the genus.