

Station 354 (Sounding 505), St. Vincent towards Azores (see Chart 6 and STATION 354. Diagram 7).

May 6, 1876; lat.  $32^{\circ} 41' N.$ , long.  $36^{\circ} 6' W.$

Temperature of air at noon,  $72^{\circ} \cdot 3$ ; mean for the day,  $69^{\circ} \cdot 9$ .

Temperature of water:—

Surface, . . . . .	70.0	700 fathoms, . . . . .	42.8
25 fathoms, . . . . .	68.2	800 " . . . . .	41.2
50 " . . . . .	66.2	900 " . . . . .	39.9
75 " . . . . .	64.8	1000 " . . . . .	39.1
100 " . . . . .	63.2	1100 " . . . . .	38.6
200 " . . . . .	58.0	1200 " . . . . .	38.4
300 " . . . . .	53.5	1300 " . . . . .	38.2
400 " . . . . .	49.7	1400 " . . . . .	38.1
500 " . . . . .	46.7	1500 " . . . . .	38.0
600 " . . . . .	44.5	Bottom, . . . . .	37.8

Density at  $60^{\circ} F.$ :—

Surface, . . . . .	1.02729	300 fathoms, . . . . .	1.02669
25 fathoms, . . . . .	1.02704	400 " . . . . .	1.02654
50 " . . . . .	1.02693	600 " . . . . .	1.02627
100 " . . . . .	1.02698	1200 " . . . . .	1.02726
200 " . . . . .	1.02701	Bottom, . . . . .	1.02665

Depth, 1675 fathoms; deposit, Globigerina Ooze, containing 90.58 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 1.30 P.M. took in sail and stopped to sound. At 2 P.M. sounded in 1675 fathoms. Took serial temperatures down to 1500 fathoms. The carbonic acid was determined in water from 400 fathoms, and amounted to 38.7 milligrammes per litre. Passed quantities of gulf-weed. At 4.30 P.M. completed observations, and proceeded under steam. A Mother Carey's chicken was seen on May 7.

Fayal Island distant at noon, 510 miles. Made good 145 miles. Amount of current 3 miles, direction  $N. 41^{\circ} E.$

Surface Organisms.—The following species are recorded from the surface and deep tow-nets at this Station:—

ORGANISMS FROM  
SURFACE-NETS.

RADIOLARIA (Haeckel, Zool. pt. 40).

*Sphaerocozum ovodimare*, Haeckel.  
 „ *quadrigeminum*, Haeckel.  
*Carposphaera infundibulum*, Haeckel (?).  
*Collosphaera polygona*, Haeckel.  
*Hexastylus sapientum*, Haeckel.  
*Hexalonche seleuci*, Haeckel.

*Hexacontium furcatum*, Haeckel.  
*Acanthosphaera acufera*, Haeckel.  
*Haliomma megaporum*, Ehrenberg.  
 „ *tenellum*, Haeckel.  
*Spongechinus cavus*, Haeckel.  
*Rhizosphaera leptomita*, Haeckel.