ORGANISMS FROM SURFACE-NETS. In addition, the following are recorded in the note-books:—Diatoms, Radiolaria, Diphyes, Sagitta, larvæ of Annelids, Themisto, Phronimids, larvæ of Squillids, Decapod larvæ (Nauplii and Zoëæ), Appendicularia, larvæ of Ascidians.

A fine tow-net put over the stern of the ship in the harbour on June 10 and 11 procured Foraminifera (Globigerina, Cristellaria, and Rotalia, the last two genera having been evidently washed up from the bottom by tidal currents), Acanthometræ, Sagitta, many Copepods, larvæ of Cirripeds, Lucifer, young Lamellibranchs, larvæ of Ascidians in the tailed condition and in the egg (which Murray thought might be the larvæ of Appendicularia, seeing it was also present in the net, while Willemoes-Suhm thought they were the larvæ of Ascidia).

STATIONS 163c to 164c.

Stations 163c to 164c, off Sydney (see Chart 26 and Diagram 11).

June 12 and 13, 1874.

At 6 a.m. on June 12 got up steam, and at 7.30 a.m. weighed anchor and proceeded out of the harbour through the West Channel. At 11.10 a.m.,  $14\frac{1}{2}$  miles from the shore, sounded in 85 fathoms, deposit Hard Ground, shells, bottom temperature  $62^{\circ}\cdot2$  (Station 163c). At noon,  $18\frac{3}{4}$  miles from shore, stopped and sounded in 120 fathoms, deposit Green Sand (Station 163d). At 1 p.m.,  $23\frac{1}{2}$  miles from shore, stopped and sounded in 290 fathoms, deposit Green Sand (Station 163e). At 2.15 p.m.,  $30\frac{1}{2}$  miles from shore, stopped and sounded in 650 fathoms, deposit Green Mud, containing 47.32 per cent. of carbonate of lime, bottom temperature  $40^{\circ}\cdot8$  (Station 163f). At 4.30 p.m.,  $39\frac{1}{2}$  miles from shore, stopped and sounded in 950 fathoms, deposit Green Mud, containing 48.15 per cent. of carbonate of lime, bottom temperature  $36^{\circ}\cdot5$  (Station 164). At 5.30 p.m. made sail. During the night it blew hard from E. and N.N.E.

At 6 a.m. on June 13 got up steam, and at 6.45 a.m. shortened and furled sail and proceeded under steam. Sounded in 1200 fathoms, deposit Green Mud, containing 46.59 per cent. of carbonate of lime (Station 164a). At 8.30 a.m. proceeded to the W. At 9 a.m. observed land ahead. At 11 a.m. stopped and sounded in 410 fathoms, deposit Green Mud, containing 50.31 per cent. of carbonate of lime (Station 164a). At 11.45 a.m. put over trawl, which came up at 2 p.m. with a few specimens. At 3 p.m. sounded in 400 fathoms, deposit Green Mud, bottom temperature 40°0 (Station 164c). Obtained serial temperatures down to the bottom, and lowered dredge, which came up at 5 p.m. with numerous specimens.

Distance at noon from Cape Farewell, New Zealand, 1088 miles. Made good 16 miles. Amount of current 33 miles, direction S.