STATION 160. RADIOLARIA (Haeckel, Zool. pt. 40).

Sphærozoum circumtextum, Haeckel. Hexaplagia australis, Haeckel. Theophæna nonaria, Haeckel. Амрнірода (Stebbing, Zool. pt. 67). Parapronoë clausi, n.sp.

Macrura (Spence Bate, Zool. pt. 52).

Sergestes dorsispinalis, n.sp.

, laterodentatus, n.sp.

In addition, the following are recorded in the note-books from the surface and down to a depth of 50 fathoms (March 15 and 16):—Cuboides, Diphyes, Physalia, Sagitta, Alciopa, Cypridina, small species of Saphirina of a beautiful blue colour, Hyalophyllum [=Saphirinella], other small Copepods, Hyperia, larvæ of Euphausia and higher Decapoda, Styliola, Cleodora [= Clio], Atlanta, small fishes of two or three species, and the body of a Cimicid Hemipter (not Cimex lectularia). Physalia, Saphirina, and Saphirinella, were observed for the first time after leaving the Cape.

Willemoes-Suhm writes: "Besides Sergestes, which after Phronima was one of the first warm-water animals met with, there was also the Saphirinid Hyalophyllum pellucidum [= Saphirinella stylifera], a species found in the Atlantic. Styliola and Atlanta became more abundant. The presence of a Hemipterous insect on the surface indicated the neighbourhood of land, and many large Medusæ were floating past the ship. A small species of Saphirina of a metallic dark blue colour (a species not observed in the Atlantic) was very common."

AT MELBOURNE.

The expedition remained at Melbourne from 2 P.M. on March 17 till 6 A.M. on April 1, 1874, refitting the ship and obtaining magnetic and other observations on shore.

C. PACIFIC OCEAN.

Station 161. Station 161 (Sounding 265), Melbourne to Sydney (see Chart 25).

April 1, 1874; lat. 38° 22′ 30″ S., long. 144° 36′ 30″ E.

Temperature of air at noon, 66°3; mean for the day, 64°4.

Temperature of water at surface, 63°.5.

Density at 60° F. at surface, 1 02568.

Depth, 33 fathoms; deposit, Shelly Sand, containing 82.22 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 4 a.m. got up steam. At 6 a.m. weighed anchor and proceeded out of Hobson's Bay. At 7 a.m. passed Gellibrand Lighthouse, and shaped course for the South Channel. At 9.40 a.m. made all plain sail. Proceeded under steam. At noon, rounded Inner Fairway Bay of the South Channel. At 2 p.m. passed Port Philip Heads and shaped