

## STATION 164E.

At 9.30 A.M. got up steam. At 11 A.M. shortened and furled sails. At 11.30 A.M. proceeded under steam to sound. At 1 P.M. sounded in 2550 fathoms, but the line carried away. At 2 P.M. obtained serial temperatures down to 1500 fathoms. At 4.30 P.M. made all plain sail. At 7.30 P.M. got up steam, and at 8 P.M. shortened and furled sails, and proceeded under steam. The following birds were observed about the ship:—*Diomedea exulans*, *Diomedea melanophrys*, another albatross very like the last but with a darker bill, Cape pigeons, a few prions, and a black bird resembling *Procellaria æquinoctialis* observed in the south.

Distance at noon from Cape Farewell, 936 miles. Made good 43 miles. Amount of current 27 miles, direction S. 20° E.

ORGANISMS FROM  
SURFACE-NETS.

**Surface Organisms.**—The following species is recorded from the surface at this Station:—

CEPHALOPODA (Hoyle, Zool. pt. 44).

*Taonius suhmi* (Lankester), n.sp.

In addition, the following are recorded in the note-books:—Many Foraminifera (*Globigerina* and *Pulvinulina*, *Pulvinulina micheliniana* especially abundant, along with *Globigerina bulloides*, var. *triloba*; the sarcode of *Pulvinulina*, after dissolving away the shell, showed no traces of symbiotic Algæ, but contained many oil-globules); Acanthometræ and other Radiolarians; *Diphyes*, *Abyla*, and other Siphonophoræ *Sagitta*, Annelid in transparent tube (young *Sabella*); *Cypridina* and many other Crustacea; Gasteropod and Pteropod shells; *Salpa*.

## STATION 165.

**Station 165** (Sounding 280), Sydney to New Zealand (see Chart 27 and Diagram 11).

June 17, 1874; lat. 34° 50' S., long. 155° 28' E.

Temperature of air at noon, 59°·5; mean for the day, 59°·1.

Temperature of water at surface, 64°·5; bottom, 34°·5.

Density at 60° F. at surface, 1·02638; 50 fathoms, 1·02626; bottom, 1·02613.

Depth, 2600 fathoms; deposit, Red Clay, containing 6·54 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

Under steam all night. At 7.55 A.M. stopped and put dredge over, and veered 3500 fathoms. At 11 A.M. sounded in 2600 fathoms. At 2 P.M. commenced heaving in dredge, which came up at 4.30 P.M. nearly empty. It had been to the bottom, but the fine ooze was completely sifted out; a few specimens were found adhering to the net. The carbonic acid was determined in water from 50 fathoms, and amounted to