

Depth, 2800 fathoms ; deposit, Volcanic Mud, containing only a trace of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.) STATION 193.

At 4 A.M. daylight, observed Bird Island. At 8.40 A.M. stopped and sounded in 2800 fathoms. Obtained serial temperatures down to 1500 fathoms. The carbonic acid was determined in water from 400 fathoms, and amounted to 40.0 milligrammes per litre. At 11.45 A.M. proceeded. At 2.40 P.M. observed a water-spout. At 6.15 P.M. stopped and sounded in 100 fathoms, no bottom. At 6.50 P.M. proceeded. At depths of 600 and 400 fathoms Mr. Buchanan got samples of a milky white water, the colour being due to the presence of white particles which showed no structure under the microscope. This white matter disappeared when treated with acid, apparently with effervescence. In this connection, the Governor and other gentlemen at Banda said that in the months of July and August the water had frequently a milky white appearance.

Distance at noon from Goonong Api Island, 69 miles. Made good 86 miles. Amount of current 11 miles, direction N. 52° W.

Surface Organisms.—The following species are recorded from the surface between Arrou and Banda Islands :— ORGANISMS FROM SURFACE-NETS.

COPEPODA (Brady, Zool. pt. 23).

*Eucalanus attenuatus* (Dana).  
*Hemicalanus orientalis*, n.sp.  
*Undina vulgaris*, Dana.  
*Scolecithrix danæ* (Lubbock).  
*Euchæta prestandræ*, Philippi.

HETEROPODA (Smith, Zool. pt. 72).

*Pterotrachea* n.sp. (?)

FISHES (Günther, Zool. pt. 6).

*Priacanthus* sp. (?)

The tow-nets on September 27 and 28 procured a large number of things, including the following :—*Peridinium*, *Pyrocystis*, large green Algæ (*Halosphæra*), *Globigerina*, *Orbulina*, *Pulvinulina*, *Sagitta*, many Crustaceans, *Atlanta*, *Oxygyrus*, many Pteropods, *Appendicularia*.

Stations 194 and 194A (Soundings 327 and 328), off Banda Islands (see Chart 33). STATIONS 194 AND 194A.

September 29, 1874.

Temperature of air at noon, 80°·8 ; mean for the day, 80°·9.

Temperature of water at surface, 83°·0.

Depth, 200 and 360 fathoms ; deposit, Volcanic Mud.

At 5.35 A.M. observed Banda Islands on the starboard bow. At 10.20 A.M.