

HETEROPODA (Smith, Zool. pt. 72).

ARROU ISLANDS.

Cardiopoda placenta (Lesson). Obtained at no other locality by the Challenger.
Recorded from Pacific and Atlantic Oceans.

TUNICATA (Herdman, Zool. pt. 38).

Diplosomoides molle, n.g., n.sp. One specimen; obtained at no other locality.

In the foregoing list 27 species are enumerated, of which 6 are new to science, including representative of 1 new genus; 5 of the new species were not obtained elsewhere.

Surface Organisms.—The following are recorded in the note-books as having been taken in the tow-nets in the neighbourhood of the Arrou Islands:—Diatoms of various forms, *Vorticella* abundant on the Diatoms, *Pyrocystis*, *Peridinium*, Oscillatoriaceæ, small *Globigerina* with spines (the first taken in the tow-net since leaving Raine Island), *Acanthometra*, *Diphyes*, Echinoderm larvæ, *Sagitta*, *Cypridina*, *Saphirina* and other Copepods, Hyperids, *Thysanopoda*, *Lucifer* in immense numbers, Zoëæ and other larval Crustacea, small Lamellibranch and other shells, *Atlanta*, *Styliola* and other Pteropods, *Salpa*, *Appendicularia*, and many fish eggs. Shoals of fishes were seen, and *Rhizostoma* and other jelly-fish were observed floating past the ship.

ORGANISMS FROM
SURFACE-NETS.

Station 191 (Sounding 323), Arrou Islands to Banda (see Charts 31 and 32, STATION 191. and Diagram 14).

September 23, 1874; lat. 5° 41' S., long. 134° 4' 30" E.

Temperature of air at noon, 81°·8; mean for the day, 80°·1.

Temperature of water:—

Surface,	82·2	500 fathoms,	41·5
100 fathoms,	67·5	600 „	40·5
200 „	51·5	700 „	39·8
300 „	46·0	Bottom,	39·5
400 „	43·2		

Density at 60° F. at surface, 1·02496.

Depth, 800 fathoms; deposit, Green Mud, containing 13·95 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 5 A.M. got up steam. At 7.30 A.M. weighed anchor and proceeded under steam out of Dobbo Harbour. At 9.30 A.M. sounded in 48 fathoms. At 10.10 A.M. stopped