

organisms indicative of oceanic conditions increased in number. The sea was covered in many places by long broad lines and patches of Oscillatoriaceæ (*Trichodesmium*?), which evidently did not extend much below the surface, not being taken by the tow-net when dragged under the surface. There was a smell from the patches as from a weedy pond. The patches were of a brown or reddish colour, and the threads in some species were arranged in bundles and in other species in round patches. Oscillatoriaceæ had not previously been met with in such abundance. A few specimens of *Pyrocystis*, many specimens of *Peridinium*, and a very elegant organism like it, were also present, and in addition the following were observed:—*Acanthometra*, *Diphyes*, *Rhizostoma*, and other jelly-fishes, larvæ of *Chirodota*, *Sagitta*, larval Annelid with tube, Copepods, *Lucifer*, Zoëæ, and other Crustacea, larval Gasteropods, *Atlanta*, *Styliola*, *Heterofusus* [= *Limacina*], *Theceurybia* [= *Halopsyche*] *gaudichaudi*, larval Pteropods, *Salpa*, *Appendicularia*, and fishes. Sharks, dolphins with pointed noses, porpoises, and a turtle were seen alongside the ship. The porpoises were in great abundance about the ship on September 13; they had a high falcate back fin placed about the middle of the body, blunt snout, and black colour, the belly not being conspicuously lighter in colour. The animals frequently swam in pairs close beside one another. A frigate bird was seen hovering over a shoal of the porpoises, apparently trying to pick up disabled fish.

The surface animals of the Arafura Sea are very slightly pelagic in their characters, being more like those of some bay or harbour. It may be noted that one living *Rotalia* was taken in the tow-net, but not a single specimen of *Globigerina*, *Orbulina*, *Pulvinulina*, or other pelagic Foraminifera was taken in the tow-nets while crossing the Arafura Sea, although these were never absent from the nets in the open ocean.

The Challenger remained at the Arrou Islands from September 14 till September 23, 1874 (for description of the islands see *Narr. Chall. Exp.*, vol. i. pp. 545–552). The following species are recorded in the Zoological Reports as having been obtained in shallow water and on shore at the Arrou Islands:—

AT ARROU
ISLANDS.

CRINOIDEA (Carpenter, Zool. pt. 60).

ANIMALS FROM
ARROU ISLANDS.

Antedon variipinna, Carpenter. Two specimens; obtained also at Station 186.

Actinometra paucicirra, Bell. Three specimens; obtained also at Station 187 and Cape York.

ENTOZOA (Linstow, Zool. pt. 71).

Filaria flabellata, n.sp. Several specimens (parasitic in *Paradisea apoda*).

„ *paradisæ*, n.sp. One specimen (parasitic in *Paradisea apoda*).

ANNELIDA (M'Intosh, Zool. pt. 34).

Glycera sagittariæ, n.sp. One specimen; obtained at no other locality.