Idothea, Amphion, Lucifer, Grapsus, small shells, larvæ of Pneumonoderma, Appendicularia. Many fishes, sharks, and whales were seen among the driftwood.

STATION 217.

Moseley writes: "We passed through lines of driftwood, disposed in curves parallel with the shore of New Guinea. In the morning the screw had to be stopped several times for fear of fouling. The logs of wood were comparatively fresh, being covered only with young Balanids and a few Hydrozoa, but only scantily. Among the wood were many whole uprooted trees, some of which were curved in the stem, as are trees which overhang streams. I saw one tree two feet in diameter of trunk. The majority of the pieces were of small wood, branches, &c. The bark was often floating separately. The stems of the leaves of some pinnate palm were abundant, and also stems of a large Arundo, apparently very like the one so abundant on the shores of the Wai Levu in Fiji. The broken-off stem of a reed, which showed fine branches at the upper end, was 14 feet in length and 1½ inches in diameter (2 inches at the knots). Various fruits of trees, &c., were abundant, usually floating confined in the midst of the small aggregations into which the floating timber was almost everywhere gathered. Amongst these seeds were those of two species of Pandanus (the usual littoral species as in Arrou, I think), seeds of Heritiera littoralis and fruits, a Barringtonia, with the fruit also of Ipomaa pes capra, but besides the fruits of these littoral plants were seeds of about forty species of plants most evidently from a higher level more inland. Amongst these were several myrtaceous and leguminous fruits (entada), a Calamus fruit, and seeds of a conifer apparently, also a fruit apparently of a Fagus, and there were lichens on the small pieces of twigs, &c. Very small seeds were as abundant as large ones, in fact more abundant, but it was only discovered too late, when the recall for my boat was hoisted, that the surface scum was full of these small seeds, which were to be obtained in abundance by skimming it with a net. The entire absence of leaves, except those of the palm (for the pinnæ were present on some of the palm leaves) was striking; the leaves evidently drop first to the bottom as vegetable drift floats from a shore, hence that part of a marine geological bed found to abound in leaves with few fruits was probably formed near land, or at least a bed full of fruits and wood without leaves was probably formed at a distance from land. Much of the wood was floating suspended vertically in the water, and most curiously logs and short branch pieces thus floating were often in separate groups apart from the horizontally floating timber. I did not examine these groups with sufficient care. Perhaps the water penetrates and waterlogs wood more easily in one direction with regard to growth than in the other; hence one end becomes waterlogged sooner. fruits and wood were covered with the eggs of some Mollusc and with a Hydroid, and the interstices were filled with Radiolarians, washed into them and gathered in masses, as the Diatoms in the south were gathered in the honeycombed ice. A small Dendrocœlous Planarian, with central mouth, diffuse ovaries, a superior penis, and single generative aperture, was in swarms upon everything, not only upon the dead matter but all over the living