less distinctly radiately substriated. The pallial sinus is broadly curved, and reaches about one-third of the length across the valves.

Length 6 mm., height 5, diameter 3.

Habitat.—Station 1858, east of Cape York, North Australia, at a depth of 155 fathoms; coral sand.

Young shells do not show so much tendency to posterior rostration as those more adult.

Montacuta cylindracea, n. sp. (Pl. XII. figs. 4-4b).

Testa elongata, cylindracea, valde convexa, inæquilateralis, albida, utrinque rotundata, incrementi lineis tenuibus striata, epidermide tenui fibrosa præcipue prope marginem induta. Margo dorsi longior (anticus?) horizontalis, levissime arcuatus, brevior (posticus?) oblique curvatus. Margo ventralis late arcuatus utrinque ascendens. Umbones subacuti, paulo elevati, circiter in \(\frac{1}{4}\) longitudinis collocati. Pagina interna alba, nitida. Cardinis margo aliquanto incrassatus, fossa obliqua ligamentum continente postice munitus. Cicatrix muscularis antica elongata, postica brevior, rotundata.

This species is very elongate and very inequilateral. It is rather cylindrical, rounded at both ends, a little wider in front than behind, and considerably swollen. It is moderately strong for the genus, sculptured with fine concentric lines of growth, whitish, clothed more or less, especially towards the outer margin, with a pale yellowish fibrous epidermis, which is narrowly reflexed within the valves. The longer, or what I consider the anterior dorsal margin, is horizontal and faintly excurved; the posterior, being very much shorter, descends obliquely and is somewhat arcuate. The lower outline is only slightly convex, and ascends rather more abruptly behind than in front. The umbones are moderately acute, a little raised above the hinge-line, and situated at about a fourth of the entire length from the posterior extremity. The hinge-plate is slightly thickened, especially behind the beaks, where there is a shallow oblique pit or socket for the reception of the ligament. The interior of the valves is white and a little glossy. The anterior muscular scar is very long, the posterior shorter, broader, and rounder.

Length 15 mm., height 8½, diameter 7.

Habitat.—North Atlantic, in deep water.

This species is remarkable on account of its cylindrical form, the convexity of the valves, and its comparative solidity.

Montacuta occidentalis, n. sp. (Pl. XII. figs. 5-5b).

Testa transversim ovata, minuta, tenuis, valde inæquilateralis, utrinque rotundata, antice angustior, alba, nitida, incrementi striis minutis sculpta. Margo dorsi anticus