apparently distinct from any known form. It is rather convex, rounded and concave in front of the umbo, where there is a small deepish lunule. It is sculptured with about fifteen flatly rounded radiating ribs, which are absent down each side, and concentric elevated lines of growth. There is a single cardinal tooth in this right valve, and a short, erect, subequidistant lateral on each side; the lower margin is rather strongly denticulated where the ribs terminate, but smooth at the sides where the costæ are wanting.

Lucina (Loripes) desiderata, n. sp. (Pl. XIII. figs. 10-10a).

Testa parva, tenuis, inæquilateralis, alta, postice radiatim impressa, antice profunde lunulata, albida, concentrice tenuissime lirata, liris numerosis sublamelliformibus prope lunulam et marginem dorsalem posticum cristatis. Margo dorsi anticus brevis, valde excavatus, posticus longior, rectiusculus, vel parum convexus. Latus anticum regulariter curvatum, posticum ad terminum impressionis leviter sinuatum. Umbones parvi, acuti. Lunula elongata, lævis, conspicue excavata, areaque postica, angusta, lævis, valde impressa.

This little species is higher than long, somewhat inequilateral, moderately convex, thin, white, and marked with a shallow radiating depression down the posterior side, producing a faint indentation or sinuation in the outline, which, along the lower portion and in front, is regularly circularly curved. The sculptures consists of numerous very fine thin concentric liræ, which, especially towards the ventral margin, become somewhat lamelliform, and towards the lunule and hinder dorsal slope are elevated into small, thin, dentiform projections. The lunule is rather large, smooth, and very deep, and defined by sharp edges. The area is long, narrow, also deepish and circumscribed by acute margins. The beaks are small, sharp, well-curved over the lunule, and considerably in front of the middle. The left valve has two small divergent cardinal teeth, separated by a triangular pit, which receives a corresponding tooth in the right valve. The internal ligament is in a deepish groove just within the dorsal margin behind the teeth. The inner surface, owing to the thinness and semitransparency of the valves, exhibits the concentric ornamentation of the exterior, and towards the lower part is somewhat indistinctly radiately substriated.

Length 31 mm., height 32, diameter 21.

Habitat.—Station 188, south of New Guinea, in 28 fathoms; green mud.

This is a small species, resembling in its radiating depression some of the typical forms of Cryptodon.

Lucina (Loripes?) jacksoniensis, n. sp. (Pl. XIII. figs. 11-11b).

Testa globosa, rotundata, tenuis, subæquilateralis, albida vel dilute fusco tincta, incrementi lineis confertis striisque numerosis tenuissimis sculpta. Lunula parva, haud