the two kinds of radiating striæ, the one visible in certain positions to the naked eye, the other microscopic. I know of but one or two other species so finely sculptured.

Dosinia anus, Philippi, and Dosinia subrosea, Gray, both likewise from New Zealand, are more strongly lirate, the former being the most coarsely sculptured of all. In Dosinia anus the pallial sinus points below or at the lower end of the anterior scar, in Dosinia subrosea at the middle of the scar, and in Dosinia lambata it is directed still more upward. The great difference in the sculpture at once distinguishes Philippi's species from the present, and Dosinia subrosea, besides being rather more strongly lirate, is different in form. It is a broader shell with the beaks less prominent above, and has a more distinct posterior dorsal angle. All three species have a microscopic radiating sculpture, but that of Dosinia lambata is the finest.

Dosinia histrio (Gmelin), var.

Dosinia histrio (Gmelin), Römer, Monog. Dosinia, p. 33, pl. vi. figs. 2, 3.

Habitat.—Station 187, near Cape York, in 6 fathoms; also Flinders Passage, in 7 fathoms; and at Station 189, Arafura Sea, in 25 to 29 fathoms.

The specimens from the first of the above localities are entirely white, and very closely and delicately concentrically lirate. They are perhaps a trifle higher in proportion to the length than is usual. The following are the measurements of two specimens.

Length 33½ mm., height 33½, diameter 19.

Length 30 mm., height 30, diameter 18.

This species has received several names from various authors. It is the Venus australis of Quoy and Gaimard, the Artemis variegata of Reeve, Artemis livata and lenticularis of Sowerby, and perhaps the Artemis scabra of Philippi.

The specimens from Station 187 and Flinders Passage resemble the variety Artemis lirata.

Dosinia mira, n. sp. (Pl. I. figs. 3-3e).

Testa alba, cretacea, tenuis, parum inæquilateralis, transversim rotunde ovata, mediocriter convexa, concentrice dense lirata et lamellata, lamellis tenuissimis, angustis, irregulariter plus minusve interruptis vel abruptis, interstitiis radiatim substriatis. Lunula cordata, modice profunda, in medio prominens, tenuiter lamellato-lirata. Umbones valde incurvati, mediocriter prominentes, paulo ante medium siti, apicibis nitidis, striatis. Margo dorsi anterior valde obliquus, vix curvatus, posticus rectiusculus, minus descendens. Ventris margo late regulariterque rotundatus. Area dorsalis inconspicua, angusta, haud excavata, in medio prominens, utrinque sulco haud profundo, inconspicuo