This very interesting form is rather compressed, fragile, broadly ovate, rounded in front, narrower and somewhat pouting posteriorly. It is very inequilateral, minutely granulated, striated by concentric lines of growth, dirty whitish, exhibiting traces of a pale earth-coloured epidermis, which is somewhat reflexed within the valves. are about equal in size, bent a little to the right at the posterior end, and gape somewhat at both extremities, especially behind. The front dorsal margin is slightly convex, very long, and only a little oblique, the posterior being very much shorter and rather straight at first, then, descending in a slight curve, joins the obliquely up-curving and slightly sinuated ventral margin at an obtuse point, which is most conspicuous in the left valve. The umbones are small, acute, slit at the apex, and situated at about one-third of the entire length from the hinder end. The cartilage-receiver is more or less ovate, directed obliquely towards the anterior ventral edge, and supported by a shelly ridge. transverse free ossicle is moderately thick. The interior of the valves is whitish, a little pearly, exhibits the concentric lines of growth, and one or more radiating lines from the beaks down the posterior side, and apparently more conspicuous in the left valve than The pallial sinus is moderately deep, reaching rather more than one-third across the valves, and is sharply rounded at the end.

Length 37 mm., height 28, diameter 13.

Habitat. - Station 321, off Monte Video, in 13 fathoms; mud.

The types described by d'Orbigny were collected a little farther south, near San Blas, in North Patagonia.

Lyonsia, Turton.

Lyonsia formosa, Jeffreys (Pl. VI. figs. 3-3b).

Lyonsia formosa, Jeffreys, Proc. Zool. Soc. Lond., 1881, p. 930, pl. lxx. fig. 1.

Habitat.—Station 8, off Gomera, Canaries, in 620 fathoms; sandy mud and shells. (For further distribution, see Jeffreys, loc. cit.)

The Challenger specimen is oblong and somewhat quadrate, having two distinct ridges radiating from the umbones, one to the ventral margin at a point a little behind the middle, and the other to the posterior lower extremity, the former being rounded and subnodose and the latter even, rather acute, and bearing a series of granules rather larger than those on the rest of the surface. Both ends are gently curved, and the lower outline is a little sinuated on each side of the subcentral carina. Behind the posterior keel the valves exhibit about seven slender feeble radiating ridges, each with a row of granules along the top, which are similar to those upon the carina. Within the valves there are seven corresponding faint furrows which have a subpunctate appearance.