

and projects on the right side into a long, narrow, and very slightly twisted snout. *Suture* a fine, sharp, deeply impressed line. *Mouth* club-shaped, being oval above, with a sharpish angulation at the upper point, and being produced into a long, rather narrow, but slightly widening canal, which is open in consequence of the oblique cutting away of the pillar-lip. *Outer lip*, which is thin, sharp, and patulous, with a slight contraction on the edge of the canal, leaves the body nearly at a right angle, and advances with a very slight convexity to the keel, above which lies the deep, thin-lipped, U-shaped sinus, whose lower margin lies parallel to, but a little above, the carinal thread; from the keel the lip has an edge which on the front is first convex and then very slightly receding, while on the side it is first convex and then concave to the point of the snout, where its course is very straight. *Inner lip* a thin, porcellanous glaze, spreads a little on the body, from which the spirals are slightly cut away; the lip is a little concave above, then straight, and is early and obliquely cut away on the front of the pillar, where it is slightly prominent, and finally it runs out to the point of the snout as a thin edge bordering the canal. H. 1.47 in. B. 0.48. Penultimate whorl, height 0.24. Mouth, total height 0.8, breadth 0.26.

This species extremely resembles *Pleurotoma staminea*; nor should I be at all surprised if, on a fuller series of specimens being obtained, the two species should be ultimately united; but the four specimens of the former and the three of the present species obtained by the Challenger are constant to one another and easily distinguishable. Besides distinctions which stand out in the description, the form in *Pleurotoma trilix* is slimmer, as if the whorls were more closely twisted; the snout is longer, finer, a little twisted, and is striated to the point; the shell is stronger, the pillar-edge of the front canal where obliquely cut off is a little more contracted; the suture is much more deeply impressed, the apex is a very little larger, and very slightly more pressed down on one side. The sculpture, too, is crisper, sharper, and smaller in the spirals, so as to produce a markedly different texture. In *Pleurotoma staminea*, where an inferior keel faintly appears, it lies much lower than in *Pleurotoma trilix*, in which it lies markedly above the suture.

Like *Pleurotoma staminea*, this species is by the length of its canal excluded from the *Spirotropis* group.

17. *Pleurotoma (Surcula) lepta*, Watson (Pl. XVIII. fig. 7).

Pleurotoma (Surcula) lepta, Watson, Prelim. Report, pt. 8, Journ. Linn. Soc. Lond., vol. xv. p. 391.

Station 157. March 3, 1874. Lat. 53° 55' S., long. 108° 35' E. Southern Ocean, south-west of Australia. 1950 fathoms. Diatom ooze. Bottom temperature 32.1°.

Shell.—High, fusiform, rather tumid, conical, with a produced base and a very long fragile snout, thin, white, with very little sculpture. *Sculpture*: Longitudinals—the whole surface is closely scored with fine striæ in the lines of growth; of these, at irregular intervals of about $\frac{1}{100}$ inch apart or rather more, one rises into greater strength and prominence as a rounded thread; these are stronger and more regular on the earlier