

16. *Turritella carlottæ*, Watson (Pl. XXX. fig. 5).

*Turritella carlottæ*, Watson, Prelim. Report, pt. 6, Journ. Linn. Soc. Lond., vol. xv. p. 222.

Station 162. April 2, 1874. Lat. 39° 10' 30" S., long. 146° 37' E. Off East Moncœur Island, Bass Strait. 38 to 40 fathoms. Sand and shells.

Station 167A. June 27, 1874. Lat. 41° 4' S., long. 174° 19' E. Queen Charlotte Sound, New Zealand. 10 fathoms. Mud.

*Shell*.—High, narrow, conical, thin, translucent, with fine ruddy spiral threads, a slightly impressed suture, and an angular flattened base. *Sculpture*: Longitudinals—there are fine, thread-like, close-set curved lines of growth. Spirals—there are two principal, two secondary, and very many minor spirals; but the relative value of these varies a good deal; they are little raised, but distinct. The base is covered with fine crowded spirals, of which those near the edge are stronger than the rest. The microscopic system of spirals is fine, sharp, and distinct. *Colour* yellowish ashy white, with a suffused ruddy brown on the upper part of the whorls, and a stronger shade of the same colour defining the more important spirals. The colour becomes altogether paler up the spire, and the apex is white. *Spire* very perfectly conical; but the profile lines are interrupted by the impressed sutures. *Apex* small, rounded, smooth and glossy, consisting of 1½ embryonic whorls; the next whorl is slightly angulated, after which the regular sculpture begins. *Whorls* 15, very slightly convex on the sides, contracting gradually upwards into the suture; towards the bottom of the whorls the contraction into the suture is shorter, straighter (*i.e.*, less convex), and more rapid; they are of very gradual and regular increase. Towards the upper part of the spire the curve of the profile line of each whorl becomes increasingly stronger. The base is flat, very slightly conical, sharply angulated, and not contracted at the edge. *Suture* very slight, but well defined. *Mouth* small, angularly rounded, a little higher than broad. *Outer lip* is a little drawn in and advancing on the edge of the base, descends straight to the lower outer angle, is flat across the base, and a little patulous in front of the pillar-point. The generic sinus in the outer lip is parabolic in form. *Inner lip*: there is not (though the specimens are full-grown) even a glaze across the body nor round the base of the pillar; but on older specimens this may probably exist. *Pillar* is a little concave, rather direct, with a thin rounded edge. *Epidermis* is a very thin and delicate calcareous membrane, obviously not extraneous; it adheres to the top of the spirals and stretches across their furrows. It is sparsely cleft by minute gaping rents in the direction of the lines of growth, and the microscopic sculpture of the shell is traceable in it, but rather on its under than its upper surface. H. 0·95 in. B. 0·28, least 0·25. Penultimate whorl, height 0·15. Mouth, height 0·16, breadth 0·14.

This species has some resemblance, both in form and sculpture, to *Turritella knysnaensis*, Krauss, but it is narrower, suture less impressed, whorls not so convex; the embryonic apex is very like, but in the Challenger species it is a little more swollen and depressed.