

intercalation of shorter ribs. The surface is also crossed at intervals by fine concentric lines of growth. In the interior of dorsal valve the loop is simple and short, and rendered annular by the union of oral processes. Shell structure perforated by canals. Brachial appendages united by a membrane and divided into three lobes, the shorter central one is spirally coiled. Length 38, width 25, depth 22 mm.

*Habitat.*—*Ter. cancellata* was dredged abundantly by the Challenger Expedition on April 2, 1874. Station 162, off East Moncœur Island, Bass' Strait, in a depth of 38 to 40 fathoms; sea bottom; sand. Mr Dall states that it occurs off West Australia. This *Terebratulina* attaches its peduncle chiefly to different species of mollusca, such as *Pecten*, *Cardium*, *Arca*, &c.; to several species of univalves, spines of *Cidaris*, stones, &c.

*Observations.*—This fine species strikingly recalls some specimens of the Cretaceous *Terebratulina defrancii*, as some Mediterranean examples of the recent *Terebratulina caput-serpentis*, the Cretaceous *Ter. striata*. When young, *Ter. cancellata* is longitudinally spindle-shaped and oval, but aged examples show more of a straight front. Some of the specimens dredged by the Challenger Expedition have much exceeded in size, those figured by Koch, in Küster, by G. B. Sowerby, and L. Reeve. Its colour is also peculiar, being darker than the other species of recent *Terebratulina*, and more especially so in some specimens than in others. There exists likewise in some exceptional specimens a median depression in the anterior portion of the smaller valve, commencing at about the middle of the valve and extending to the front.

*Terebratula* or *Terebratulina* (?) *dalli*, n. sp. (Pl. II. fig. 15, a).

Shell small, thin, longitudinally oval, globose, glassy, and semitransparent, slightly depressed anteriorly. Ventral valve uniformly convex, a little deeper than the dorsal one. Beak small, slightly incurved, and truncated by an incomplete foramen, laterally margined by a small deltidial plate. Surface covered with fine radiating raised striæ, with shorter ones interpolated between some of the larger ones at various distances from the beak. Loop short and simple. Length 8, width  $5\frac{1}{2}$ , depth 4 mm.

*Habitat.*—One example only of this species, without the animal, was dredged by the Challenger Expedition near Yeddo, off Japan, at Station 237. June 17, 1875. Lat.  $34^{\circ} 37'$  W., long.  $140^{\circ} 32'$  E. Depth, 1875 fathoms. Bottom temperature,  $1^{\circ}7$  C. Mud. Associated with *Discina atlantica*.

*Observations.*—I regret that but one dead specimen of this very pretty little species should have been obtained, the loop was imperfect, but it seems to have been short as in *Terebratula* or *Terebratulina*. The striæ which cover the shell surface are distinctly observable, both valves are, likewise, very convex. I am not acquainted with any recent form with which it can be assimilated. I have much pleasure in naming this small and interesting species after Mr W. H. Dall of the United Coast Survey, whose ably conducted