On comparing the type of *Thecalia macrotheca* presented to the British Museum by G. F. Angas, Esq., with South African specimens of this well-known form, I cannot detect the slightest difference. With the above type Mr. Angas also gave four specimens without any internal cup-like process, which may be the male, if the sexes really be separate, as stated by Messrs. H. and A. Adams, of *Cardita concamerata*. Adams and Angas mention that this cup-shaped appendage is much larger in their species than in the Cape shell. As the size of this is found to vary when a good series of specimens is examined, this difference, which I do not observe, however, in the type, seems to me of little importance. On opening one of the Challenger specimens the cup was found to contain a number of fry. The foot is small, cleft at the bottom, and furnished with a byssus.

Two specimens which have no sinuation at the ventral margin, and lack the internal cup, are probably males. They are rather squarer at the anterior end, and the ridges down the hinder part are finer and one or two more in number.

Carditella, Smith.

Carditella exulata, n. sp. (Pl. XV. figs. 6-6a).

Testa transversa, subquadrata, crassiuscula, valde inæquilateralis, albida, mediocriter convexa, costis radiantibus circa quatuordecim rotundatis, concinne squamulatis instructa. Latus anticum fere perpendiculariter truncatum, posticum latius, rotundatum. Margo dorsi horizontalis, rectus, ventralis late arcuatus. Umbones parvi, acuti, fere terminales. Pagina interna nitida, alba, radiatim sulcata.

This minute species, externally, is very much like the young of Cardita calyculata, but more finely squamulated, and without the slight sinuation in the ventral margin occurring in that species. It is whitish, very inequilateral, squarish-oblong, obliquely or almost perpendicularly truncate in front, rather broad and rounded behind. The dorsal margin is about horizontal and rectilinear, and the ventral very gently arcuate. The beaks are small, acute, and all but terminal. The sculpture consists of about fourteen radiating rounded ribs, of which those on the hinder half of the valves are considerably broader than the rest, and separated by broader and deeper grooves, which do not, however, equal in width half that of the ribs, which are finely and closely scaled throughout. The interior of the valves is glossy, white, and radiately grooved, the grooves corresponding to the external costs. The hinge consists of a single central conical triangular tooth in the right valve, which fits in between two more slender divergent teeth in the left. The lateral teeth are well developed and equidistant.

Length 4 mm., height 23, diameter 2.

Habitat.—Station 135, off Nightingale Island, Tristan da Cunha, in 100 to 150 fathoms. This pretty little species is more oblong and inequilateral than any of the other forms belonging to this genus, all of which are shells of very small size.