lateral and carinal margins run exactly parallel with each other, the lateral one being convex and passing over imperceptibly into the basal margin. The carinal margin is hollowed out. The carinal latera of the two sides meet each other under the middle of the carina. The valve is divided into two parts by a distinct concave ridge, running from the apex to the anterior basal angle of the valve.

Length of the capitulum, about 24 mm.

The short *peduncle* (5 mm.) shows well-developed and large scales. These are placed in six longitudinal rows, each row containing about seven scales.

As I did not wish to sacrifice the full-grown specimen, which has served for the above description of the exterior, I am not able to publish details of the structure of the mouth, &c. To give them from the smaller specimens does not appear to me to be a safe way.

The three Stations where this species was collected are the following:—Station 135, October 16 to 18, 1873; Island of Tristan da Cunha; depth, 60, 75, 100, 150, 550, 1000, 1100 fathoms; bottom—rocky, shells. Station 164A, off Sydney, June 13, 1874; lat. 34° 13′ S., long. 151° 38′ E.; depth, 410 fathoms; bottom, grey ooze. Station 169, off East Cape, Auckland, July 10, 1874; lat. 37° 34′ S., long. 179° 22′ E.; depth, 700 fathoms; bottom temperature, 4°·2 C.; bottom, grey ooze.

Scalpellum antarcticum, n. sp. (Pl. IV. figs. 16-17).

Capitulum covered by membrane, furnished with numerous though very small spines. Valves thirteen. Carina simply bowed, with the umbo at the apex and with a flat roof. Upper latus quadrangular. Umbo of the carinal latus almost at the base of the valve. Peduncle cylindrical, narrower than the base of the capitulum.

This is the most southern species of the genus taken by the Challenger. It is a medium-sized species, and it is represented by a single specimen only.

The capitulum is rather robust, convex. It contains thirteen valves; there is a trace of a fourteenth (the rostrum), but it is too rudimentary to be noticed. The valves are covered by a brown chitinous membrane, which bears numerous very small spines. Between the valves there are very narrow chitinous interspaces.

The scutum is quadrangular, with the umbo at the apex. The whole valve is convex, especially in the undermost part. The occludent margin is arched, the lateral margin also; the basal margin is slightly arched, almost straight; the tergal margin, finally, is hollowed out.

The tergum is triangular, of a greater area than the scutum, with the apex recurved. The occludent margin is slightly arched.

The carina is rather stout. Its umbo is at the apex, and the whole valve is simply bowed. It has a flattened roof, which does not increase very much in width from the