

Station 46. May 6, 1873. Lat. $40^{\circ} 17' N.$, long. $66^{\circ} 48' W.$; 1350 fathoms; bottom temperature, $2.3^{\circ} C.$; mud.

Echinus angulosus.

Cidaris angulosa, Leske, 1778, Kl. Add.

Echinus angulosus, A. Agassiz, 1872, Revis. Ech., part 1, p 122.

Simon's Bay; 10 to 20 fathoms.

Echinus elegans.

Echinus elegans (Düb. o. Kor.), 1844, Skand. Ech.

Station 46. May 6, 1873. Lat. $40^{\circ} 17' N.$, long. $66^{\circ} 48' W.$, 1350 fathoms; bottom temperature, $2.3^{\circ} C.$; mud.

Tristan da Cunha; 1100 fathoms.

Station 219. March 10, 1875. Lat. $1^{\circ} 50' S.$, long. $146^{\circ} 42' E.$; 150 fathoms mud.

* *Echinus horridus* (Pl. VI.^a figs. 1-5).

Echinus horridus, A. Agassiz, 1879, Proc. Am. Acad., vol. xiv. p. 203.

Fragments of a large conical *Echinus* were collected in the Straits of Magellan, which I am unable to refer to any of the species already known from that locality. It is readily characterised by its narrow poriferous zone, with its three pairs of pores, distant and placed in nearly vertical arcs on the abactinal surface (Pl. VI.^a figs. 3-5), but so spaced that the two outer pairs form one vertical line, and the inner a second one; on the actinal side the poriferous zone is wider, the arcs are more horizontal, and placed nearer together (Pl. VI.^a fig. 4). Both in the ambulacral and interambulacral areas, the single primary tubercle placed on each coronal plate (Pl. VI.^a figs. 3, 4, 5) forms a most distinct vertical row. On the actinal side the primaries of both areas are nearly of a size (Pl. VI.^a fig. 4), but on the sides of the test, above the ambitus, the ambulacral primaries decrease in size more rapidly than the corresponding interambulacral ones, as they approach the abactinal system (Pl. VI.^a figs. 3, 5). On the actinal side the secondaries are irregularly arranged, and the intertubercular space of the plates is closely packed with miliaries and small secondaries, showing no definite arrangement (Pl. VI.^a fig. 4).

On the sides of the test, however, some of the larger miliaries and secondaries form diverging lines more or less parallel to the horizontal sutures of the plates (Pl. VI.^a figs. 3-5). This linear arrangement of the secondaries and miliaries is most prominent near the ambitus (Pl. VI.^a fig. 3). The primary spines (Pl. VI.^a fig. 2) are remarkable for their length, being even comparatively longer than in some specimens of *Echinus acutus*. The actinostome is comparatively smaller than in any other species of this genus, not as large as the abactinal system, with but slight buccal indentations. The actinal system was