

confined to the colder regions of the southern hemisphere, although two of the species extend as far to the northward as the East Indies and Natal.

“This species (fig. 141) has a general resemblance at a first glance to the small Mediterranean variety (*affinis*) of *Cidaris papillata*,<sup>1</sup> but the radioles are thinner and much shorter, and differ wholly in their sculpture; the shell is even more depressed; the secondary tubercles are more distant; and a very regular series of short club-shaped rays seated on miliary granules are interposed in the rows between the spines of the second order. The ovarial openings are extremely minute, and are placed close to the outer edge of the ovarial plates. The upper part of the test is quite flat, the flat space including not only the ovarial plates and the plates of the periproct, but the first pair, at least, of the plates of each interambulacral area. Articulated to the primary tubercles of these



FIG. 141.—*Goniocidaris canaliculata*, A. Agassiz. Stanley Harbour, Falkland Islands. Twice the natural size.

latter are two circles of radioles, the inner more slender and shorter, the outer stouter and longer, but both series much larger than radioles usually are in that position on the test.

“These special spines are cylindrical, and nearly smooth, and they lean over towards the anal opening, and form an open tent for the protection of the young, as in *Cidaris nutrix*, a species presently to be described, but at the opposite pole of the body. In this species the eggs are extruded directly into the marsupium; and I imagine, from the very small size of the ovarial openings, that when they enter it, they are very minute, and probably unimpregnated. In the examples which we dredged at the Falkland Islands, the young were, in almost every case, nearly ready to leave the marsupium; we were too late in the season to see the earlier stages, young in the same marsupium are nearly all of an age, some somewhat more advanced than others. The diameter of the test is from 1 to 1.5 mm., and the height about 0.8 mm.; the length of the primary spines

<sup>1</sup> *Dorocidaris papillata* of A. Agassiz.