

*Temnopleurus toreumaticus*.*Cidaris toreumatica*, Klein., 1734, Nat. Disp. Ech.*Temnopleurus toreumaticus*, Agassiz, 1841, Int. Mon. Scut.

Station 203. October 31, 1874. Lat.  $11^{\circ} 7' N.$ , long.  $123^{\circ} 7' E.$ ; 12 to 20 fathoms; mud.

*Pleurechinus (Temnopleurus)*.*Pleurechinus*, A. Agassiz, 1841, Int. Mon. Scut.*Pleurechinus bothryoides* (Pl. X.<sup>a</sup> figs. 1, 2).*Pleurechinus bothryoides*, Agassiz, 1841, Int. Mon. Scut.

The Challenger collected three small specimens of a Temnopleurid, which I am inclined to refer to the sub-genus *Pleurechinus*, Agassiz (see Revis. Echini, p. 465); they are unfortunately not large enough to compare directly with the typical *Pleurechinus bothryoides*. They show clearly, however, that we may expect to find in the China Seas a species of *Temnopleurus* still retaining the principal features so characteristic of some of the nummulitic species of India, figured by D'Archiac and Haime (Animaux fossiles de l'Inde, see Plate XIII. fig. 7, of *Temnopleurus valenciennesi*), to which the specimens of the Challenger are most closely allied. The outline of the test, even in these young specimens, measuring (the largest) not more than 18 mm. in diameter, is high, resembling already somewhat the globular shape of such species of *Amblypneustes* as *Amblypneustes griseus*, and differing from the other species of Temnopleuridæ in which the outline of the test is quite conical at a corresponding stage. The genital ring (Pl. X.<sup>a</sup> fig. 1) is narrow, compact, slightly pentagonal; the genital plates are of uniform size, with the exception of the madreporic genital, which is somewhat larger and rectangular in outline, the pores covering its entire surface with the exception of the space occupied by the ring of secondary tubercles, which runs along the inner edge of the genital plates, separating them from the anal system (Pl. X.<sup>a</sup> fig. 1). In addition to this edging of secondary tubercles, the genital plates carry from two to three similar tubercles irregularly placed on the plates of a few miliaries. The genital openings are deep crescent-shaped notches, cut out of the outer edge of the plates; the genital plates are united along the anal edge, and a distinct pit in the angle of the sutures between the genital and ocular plates separates the latter from the edge of the anal system. The anal system is covered by an outer row of large triangular plates with smaller slender elongate plates arranged round the anal openings. In the interambulacral area there are two disconnected elliptical pits at the two extremities of the horizontal sutures, separating the coronal plates (Pl. X.<sup>a</sup> fig. 2). The coronal plates carry from one to three large primary tubercles arranged in a horizontal row near the lower edge of the plate, with a somewhat undulating horizontal line of smaller secondary tubercles above that, the