The pedicellariæ of Aceste are few in number and large; those found in the odd ambulacral area on the abactinal side belong to the large-headed type (figured on Plate XLIII. fig. 25; Pl. XLIV. fig. 46). Those of the test are somewhat larger, but differently shaped, and end in a short single-pointed blunt hook (Pl. XLIV. fig. 45).

Station 8. February 12, 1873. Off Gomera, Canaries. 620 fathoms; sandy mud and shells.

Station 272. September 8, 1875. Lat. 3° 48′ S., long. 152° 56′ W.; 2600 fathoms; bottom temperature, 1.0° C.; radiolarian ooze.

Station 323. February 28, 1876. Lat. 35° 39′ S., long. 50° 47′ W.; 1900 fathoms; bottom temperature, 0.0° C.; grey mud.

Brissus.

Brissus, Kl., 1734, Nat. Disp. Ech.

In the list of the Spatangoids of the Hamburg Museum given by Bolau, he retains the specific names adopted by Agassiz and Desor, while adopting at the same time some of the generic subdivisions lately proposed. It is evident from the contradictory views of recent writers, both in fossil and recent species, that to make a satisfactory revision of the Brissina far more material is required than at present exists in any single museum.

*Brissus damesi, n. sp. (Pl. XXX.ª figs. 15, 16).

It is with considerable hesitation that I refer to the genus Brissus small specimens collected by the Challenger at Station 75, off Fayal. The peripetalous fasciole, which in the adult specimens of the genus is so well marked, does not exist at all in a specimen measuring 9 mm. in length, while, as we know in other Spatangoids such as Brissopsis, it is already at a corresponding stage remarkably well developed. In a specimen measuring 23 mm. in length, this fasciole is most indistinct, and can only with difficulty be traced from its imperfectly developed and disconnected portions; but where found, they occur in the usual path of this fasciole. The subanal fasciole, on the contrary, is well developed in the larger specimen and well blocked out in the smaller one; the anal edge of the fasciole is especially broad but smaller than in Brissopsis unicolor. It is possible that this may prove to be the young of a Brissoid not yet described, but judging from the changes due to growth in Metalia, I do not venture to do anything beyond calling attention to the interesting points which the study of small specimens of Brissus would clear up; as it is evident that Spatangoid genera of an ovoid form with narrow ambulacral petals nearly flush with the test, and with an indistinct or no peripetalous fasciole, as in Brissus, and a subanal fasciole, are closely allied to Brissus, of which they represent the permanent embryonic state.

Compared to a specimen of Brissus unicolor of the same size, 23 mm., this species