Chelyosoma macleayanum Brod. and Sow.

See HARTMEYER (1903, p. 269) and VAN NAME (1912, p. 591) for description and literature.

Station 22, 2 specimens.—Station 23, 11 specimens.

This well known species is a characteristic arctic circumpolar form, but is usually found in very small numbers. The specimens here reported show the usual large size that is attained by this species in the arctic, as compared with the subarctic. All but two of the specimens were from 16 to 37 mm. long. Their growth has been studied (lluntsman, 1921).

Molgula septentrionalis Transfedt

For literature references on this species see VAN NAME, 1912, p. 178, and Redikorzew, 1916, p. 91.

Aberdare channel, east of Alger island, Franz Josef land, June 1991, Baldwin-Ziegler expedition, U.S. Nat. Mus. No. 6639, 1 specimen.

This species has previously been recorded from Spitsbergen, as well as from other points in the Atlantic portion of the arctic from Novaya Zemlya (Redikorzew, 1916, p. 94) to Hudson bay (Huntsman, 1922).

Cystingia griffithsii MacLeay

1825. Cystingia griffithsii, MACLEAY, p. 541.

1842. Clavelina chrystallina, Möller, p. 95.

Pera, Molgula, s. Caesira crystallina, auct. var.

Station 23, 5 specimens.—Station 37 b, 14 specimens.—Station 41, 4 specimens.—Station 43 a, 1 specimen (test only).

In 1825 MacLeay described three species of Ascidians that had been collected by W. N. Griffiths at Winter island in Fox channel on Capt. Parry's second arctic voyage. Two of these are well known aretic forms (Boltenia and Dendrodoa). The third, which he called Cystingia griffithsii, has not since been recognized among arctic or other material of Ascidians. It has been considered as belonging to the family Tethyidae (Cynthiidae), and to be near the genus Fungulus. Hartmeyer has, however, (1903, p. 188) called attention to the fact that an organ of this species described and figured by MacLeay resembles the renal organ of Caesirids (Molgulids). As this form was obtained in the same general region as that explored by the Canadian Arctic Expedition, it seemed probable that Cystingia might be found in the material brought back by that Expedition. After working over that material, I turned to MacLeay's figures and description of Cystingia, and it was at once apparent that MacLeay's Cystingia griffithsii was none other than a somewhat unusual specimen of the now well known Caesira (Molgula) crystallina, first described by Möller in 1842 from Greenland.

MacLeay's description and figures were not sufficiently clear and accurate to have prevented error concerning the systematic position of this species. The unusual structure of the stalk of his single specimen has perhaps contributed to the failure in the identification of his species with *C. crystallina*. One of the specimens collected by Johansen has a similar stalk, with the attached area and "roots" along one side instead of being, as is usual, at the distal end. Individuals with intermediate conditions were also brought back by Johansen.