Of the characters given by MacLeay, the following show the Caesirid nature of his species. Semi-pellucid test, with viscera showing through; muscles only (?) near apertures, and crossing at right angles and not obliquely, as in Boltenia for example; branchial meshes irregular (as compared with Boltenia and Dendrodoa); a renal organ-"diaphanous longitudinal ponch" containing "two blackish nodules"-present and on right side; and left gonad above intestinal loop. Two characters given by MacLeay do not agree with those of Caesirids. These are the 4-lobed oral aperture and the absence of a liver. In this species the oral aperture has three lobes on each side, and of these the posterior is the most prominent, after that the anterior, while the middle one is relatively small. In a certain state of contraction, the middle lobe is distinguished with difficulty, and the four atrial lobes are at the same time equally indistinct. This is sufficient to explain MacLeay's description of the "branchial orifice" as quadrified and the "anal orifice" "apparently without rays." While MacLeay states that his species "has no liver very distinct," the structure that he described and figures as the heart is doubtless the liver. The latter is well depieted (although not named) in position, form, and shade, in his figure 4.

In favour of the identification of MacLeay's species with $C.\ crystallina$, we have the general shape, the size, the character of the surface, the presence and character of the sualk, and the positions of the two apertures. Also the two vascular processes (one is broken) which pass into the stalk, are represented in his figure 4. He states, however, that "the branchial ponch has about fourteen folds," whereas $C.\ crystallina$ has been described as having only ten. The condition of MacLeay's specimen apparently did not permit of accurate determination of the number. Nevertheless, in support of MacLeay's view as to the indefiniteness of the number, we have in this species what appears to have been overlooked, namely that there are in reality more than ten folds. In fact there are fourteen rows of infundibula, and therefore fourteen folds. The most dorsal and most ventral of the left side entirely lack longitudinal bars, which renders them insignificant in comparison with the others, which possess from three to four. On the right side the most ventral is without bar and the most dorsal with one only. The formula of one specimen is:—

Left. Dors. 0 (0) 0 (4) 0 (4) 0 (4) 0 (3) 0 (3) 0 (0) 0 Vent.

Right. Dors. 0 (1) 0 (4) 0 (4) 0 (4) 0 (4) 0 (3) 0 (0), 0 Vent.

Another point worth noting is that MacLeay refers to the branchial folds being transverse in position rather than longitudinal, and this is indeed their position.

In view of these facts there can be no reasonable doubt as to the identity of MacLeay's species. The name he has given must, therefore, replace Möller's name *chrystallina*.

The position of the testes in this species deserves consideration. Both Van Name (1912, p. 495) and Oka (1914, p. 444) figure them as grouped along the anterior half or two-thirds of the ovary. The latter also describes a new species (Molgula redikorzevi) similar to this one, except that the testes are separated from the ovaries and lie, those of the right side is the testes are separated from the ovaries and lie, those of the right side is the testes are separated from the ovaries and lie, those of the right side is the testes are separated from the ovaries and lie, those of the right side is the testes are separated from the ovaries and lie, those of the right side is the testes are separated from the ovaries and lie, those of the right side is the testes are separand in redikorzevi (p. 67) on the right side from the anterior end of the ovary around the anterior end of the renal organ and below it, and on the left side in, below, and on the inner side of the intestinal loop. I have found that in one large and nine small specimens from Bernard harbour, the testes are almost invariably at or near the anterior end of the ovary, but tend to extend down in front of the renal organ on the right and the intestinal loop on the left. In one specimen on the left side they are on the outer side of the oviduet, that is ot

SB.