Amusium.

10. Amusium lucidum, Jeffreys. Station 78; 1000 fathoms.

11. Amusium meridionale, Smith. Stations 146, 158 and 302; 1375, 1800 and 1450 fathoms respectively.

These forms have no pigmented ocelli. It must be noticed that they live at much greater depths than the above-mentioned *Pecten*; the difference can therefore be easily explained.

The absence of pigmented ocelli confirms the observation made by Dall about *Amusium dalli*, Smith.¹ Dall affirms, however, that this form has only a single gill on each side; the species which I have examined have two branchial plates of recurrent filaments similar to those of *Pecten*.

I have examined a certain number of Pelecypoda, which presented nothing remarkable, and have therefore led to only negative results. Such are—

12. Myrina coppingeri, Smith. Station 184; 1400 fathoms.

The arrangement and form of the gills exactly resemble those of the allied littoral forms (Mytilidæ) already known.

13. Venus mesodesma, Quoy and Gaimard. Station 135E; 1000 fathoms.

The gills are normal, and the labial palps very small, as in the littoral species of the same genus.

LUCINACEA.

14. Cryptodon moseleyi, Smith. Station 133; 1900 fathoms.

The mantle is quite open ventrally, as in the other Lucinacea. The margin of the two lobes (circumpallial muscle) is very thick in its anterior portion, and the interior surface of this margin is tuberculated and papillary. This is probably what Semper² has called "mantle-gills" (Pl. II. fig. 4, j).

As in *Lucina*, the anterior adductor muscle does not come into contact with the circumpallial muscle, but is separate from it, and is carried back to some distance inwards (Pl. II. fig. 3, l).

The two lobes of the mantle are only united at a single point (r), and consequently only form one pallial (anal) aperture, as in *Ungulina*, instead of two, as in *Lucina*. This aperture (k) is absolutely sessile, and does not form a siphon, properly so called.

The foot (d), even taking the rather feeble contraction into account, is short, and

¹ Report on the Mollusca, Bull. Mus. Comp. Zoöl., vol. xii. p. 210.

² Die natürliche Existenzbedingungen der Thieren, Bd. i. p. 208, fig. 48, a; Animal Life, pp. 169, 170.