rule, one of the spaces anteriorly contains a group of small ova (Pl. VI. fig. 2, *ov*), with nucleus and nucleolus. In the smallest ova observed the nucleus is very distinct, and of a more or less rounded form—with a large nucleolus. The yolk outside the former is minutely granular, and sometimes, to judge from the preparations, does not quite fill the egg-capsule. As the eggs increase in size the yolk-granules become somewhat more distinct, the nucleus being large and rounded, and the nucleolus a highly refracting circular body of considerable size. Moreover, as they increase they tend to move away from the smaller ova, and indeed bulge outwards on the opposite side. The largest ova, of which, as a rule, there is but one, are much more coarsely granular, and present only a nucleus with minutely granular contents, the nucleolus having disappeared or having become very indistinct. The capsule surrounding each of the eggs is definite and tough, and the eggs are further enveloped by a common layer, which in all probability is allied to the follicular layer in fishes and other types, and this dips between each, apparently enclosing the ova in separate chambers. The ova are probably extruded through the oviducts with the pigment in their walls, and it is noteworthy that, as Mr. Harmer has specially pointed out to me, no pigment is visible in young individuals in which the ovaries are not yet functional. There is thus an approach to the condition in *Loxosoma* in this respect, for the latter has oviducts for conveying the ova into the vestibule. The same may be said with regard to *Phoronis*, though in this the so-called nephridia lie on the other side of the intestine.

The comparatively large size of these ova recalls the condition in the Arctisca, in which the great ova produce embryos about a third the size of the adult.

Oviducts and Pigment.—On the ventral surface are two large and conspicuous pigment-spots, which as already mentioned closely resemble eyes (Pl. III. fig. 1): they indeed give a most peculiar and characteristic aspect to the animal when viewed from the ventral surface. These are placed a little in front of the anterior margin of the post-oral lamella, and in ordinary preparations are more or less covered by the buccal disk. They are circular or irregularly rounded, and of various shades of brown or reddish-brown, with occasionally a tinge of violet. In ordinary views from the exterior these organs show a pale centre surrounded by a broad margin of pigment, so that the former assumes the aspect of a lens (Pl. VI. fig. 2, *od*). In section the hypoderm in the central region is hollowed more or less deeply, and its wall presents a finer, columnar arrangement of its cells, and, in addition, it is almost, if not quite, transparent. Moreover, an aperture exists in the centre, as already mentioned. In shape the ducts have the form of a blunt cone, the apex of which abuts on the modified hypoderm, while its base rests on the small anterior ova. The pigment-cells form a thick layer; their inner pale portions projecting internally, so that their resemblance at first sight to an optical apparatus is remarkable; yet Dr. Marcus Gunn, who kindly examined them in a special manner, could discover no refractive mechanism.