

It may be said, therefore, that the rudimentary character of this "eye" consists—

1st, In the disappearance of the refractive media.

2nd, In the disappearance of pigment.

3rd, In the change of structure in the nervous elements.

### TROCHIDÆ.

#### 2. *Trochus infundibulum*, Watson. Station 146; 1375 fathoms.

This *Trochus*, drawn out from its shell (Pl. I. fig. 3), at once exhibits a characteristic which distinguishes it from all other animals of the same genus and of the same group; the head bears on each side of the mouth (*a*) a large labial palp (*b*), analogous to the tentaculiform appendages of *Ampullaria* and *Jeffreysia*.

Otherwise the head is formed as in other species of *Trochus*. The tentacles (*c*) are strong and still long, though a little contracted.

The eye is by no means rudimentary. It is situated at the base of the tentacle, on the outer side, and is borne on a short stalk. Neither in size nor form is it distinguished from the corresponding organ in the other allied species. Finally, it is much pigmented. It is thus situated and formed like that of the littoral *Trochus*.

The foot (*g*) and the epipodium also exactly resemble the corresponding parts in the littoral species.

As in the latter, the epipodium includes an anterior portion formed by a cervical lobe (*h*) and a less prominent posterior epipodial line extending to the operculum, and bearing five tentacles (*i*). These last are large and rather long. This epipodium is therefore similar to that seen in all the Trochoids, and, as in these, its pedal nature cannot be doubted.

The pallial cavity (*e*) scarcely differs from that of the littoral species of *Trochus*. The gill is well developed, and is exactly similar to that of species found in lesser depths. So also with the hypobranchial gland, the osphradium, and the kidney. The anus (*f*) opens a little farther forward than is usual among known species.

It would be interesting to find out whether other species of the same genus, or of the same group, obtained from great depths, possess the same labial palps as *Trochus infundibulum*. With this end in view I have examined (1) *Trochus rhina*, (2) *Turbo transenna*.

#### 3. *Trochus rhina*, Watson. Station 75; 450 fathoms.

This species possesses no appendages corresponding to the labial palps of *Trochus infundibulum*. Its structure is analogous to that of littoral species. The eyes are pigmented and well developed; the gill is normal.