

oval bulb of a black colour. It receives only a slender branch (o) from a large nerve (N N) which is distributed to the papilla of the tentaculum, and appears to be appropriated exclusively to the sense of touch. The bulb, with the eye attached to it, is represented, in this figure, as half retracted within the tubular sheath of the tentaculum (ss;) but it can exercise its proper function only when fully exposed, by the complete unfolding and protrusion of the tentaculum. This eye contains within its choroid coat, a semi-fluid and perfectly transparent substance, filling the whole of the globe; and Muller also discovered at the anterior part, another transparent body, having the shape of a lens.\* A structure very similar to this was found to exist in the eye of the *Murex tritonis*, with the addition of a distinct iris, perforated so as to form a pupil; a part which had also been observed, together with a crystalline lens of very large size, in the *Voluta cymbium*, by De Blainville.† Thus, the visual organs of these Gasteropoda appear to possess every requisite for distinct vision, properly so called. Experiments are said to have been recently made, both by Leuchs, and by Steifensand,‡ in which a snail was repeatedly observed to avoid a small object presented near the tentaculum; thus affording evidence of its possessing this sense.

The accurate investigation of the anatomy of the eyes of insects presents considerable difficulty, both from the minuteness of their parts and from the complication of their structure; so that notwithstanding the light which has recently been thrown on this interesting subject by the patient and laborious researches of entomologists, great obscurity still prevails with regard to the mode in which these dimi-

\* Muller thus confirms the accuracy of Swammerdam's account of the anatomy of the eye of the snail, which had been contested by Sir E. Home (Phil. Trans. 1824, p. 4,) and other writers.

† Principes d'Anatomic Comparée, i. 445.

‡ Quoted by Muller; *ibid.* p. 16. These results also corroborate the testimony of Swammerdam, who states that he had obtained proofs that the snail could see by means of these organs.