1. In several forms one may observe an exaggeration of the first exception cited above, that is to say, rudimentary condition, in consequence of the concealment of the eyes under organs which completely cover them. All such organisms are burrowers, like the Naticidæ and Bulloidea referred to above.

- A. Diphyllidia.<sup>1</sup>
- B. Several species of Terebra.<sup>\*</sup>
- C. Certain Olividæ: Agaronia,<sup>3</sup> Olivella,<sup>4</sup> Ancillaria.<sup>5</sup>
- D. Bulla.<sup>5</sup>

2. It is well known that the eyes of pelagic animals have a tendency to become very perfectly developed, or, on the contrary, to become rudimentary, and to disappear. As an example of the former specialisation, one might cite Heteropods among Molluscs, *Alciope* among Annelids, &c. As to the second direction, we have already seen the tendency to atrophy exhibited by Gastropods, *c.g.* in *Phyllirhoe* cited above. But the tendency to become rudimentary may become still more marked.

A. In certain pelagic Nudibranchs, such as *Glaucus* (where the eye is situated on the central nervous system, and has become quite microscopic).<sup>6</sup>

B. Among "Pteropods," several forms (such as *Pneumonoderma*, *Clione*) exhibit the rudiment of an eye which does not appear to be any longer functional. Certain forms of *Clio* (*Creseis*) still possess two pigmented spots, bearing several minute refractive bodies. The other forms no longer exhibit any trace of an organ of vision.

C. In Janthina, the older authorities, Lesson, Rang, d'Orbigny, assert the presence of eyes, but they are not agreed even in regard to the position of these organs. On the other hand, all the other authorities, Quoy et Gaimard, Delle Chiaje,<sup>7</sup> Clark,<sup>8</sup> the brothers Adams,<sup>9</sup> Gwyn Jeffreys,<sup>10</sup> von Jhering,<sup>11</sup> Bouvier,<sup>12</sup> and myself, are agreed on this point, that no organs of vision were to be found in any of the different forms examined.

<sup>1</sup> Siebold, loc. cit., p. 316; Souleyet, loc. cit., Mollusques, pl. xxiv. E, figs. 16, 17.

<sup>3</sup> Woodward, loc. cit., p. 117.

<sup>4</sup> Fischer, Manuel de Conchyliologie, p. 599.

<sup>5</sup> A. and H. Adams, The Genera of Recent Mollusca, t. i. p. 112.

<sup>6</sup> Bergh, Anatomiske Bidrag til Kundskab om Acoliderne, K. Dansk. Vidensk. Selsk. Skriv., t. vii. (1864) p. 265; Vayssière, Observations sur l'anatomie du Glaucus, Ann. Sci. Nat. (Zool.), sér. 6, t. i. p. 15, pl. x. fig. 6, s.

<sup>11</sup> Vergleichende Anatomie des Nervensystemes und Phylogenie der Mollusken, p. 108.

<sup>&</sup>lt;sup>2</sup> Woodward, A Manual of the Mollusca (1856), p. 111; Bronn (Keferstein), Die Klassen und Ordnungen des Thierreichs, Bd. iii. p. 1046; Bouvier, Système nerveux, morphologie générale et classification des Gastéropodes Prosobranches, Ann. Sci. Nat. (Zool.), sér. 7, t. iii. p. 822.

<sup>&</sup>lt;sup>7</sup> Descrizione e notomia degli Animali senza vertebre, pl. 67, 68.

<sup>\*</sup> On the Janthinæ, Scalariæ, Naticæ, Lamellariæ, and Velutinæ, Ann. Mag. Nat. Hist., ser. 2, vol. xi. p. 48.

<sup>&</sup>lt;sup>9</sup> The Genera of Recent Mollusca, t. ii. p. 85. <sup>10</sup> British Conchology, vol. iv. p. 82.

<sup>12</sup> Contributions à l'étude des Prosobranches Pténoglosses, Bull. Soc. Malacol. France, 1886, p. 81.