Measurements.

Antero-posterior diameter of globe (from cornea to centre of cephalic ganglion) = 0.25 mm. Transverse diameter of globe = 0.22 mm. From centre of ganglion to pigment on free surface of ganglion = 0.1 mm. From pigment on ganglion to anterior surface of vitreous = 0.05 mm. Thickness of cornea = 0.002 to 0.003 mm. Thickness of sclerotic in front = 0.02 mm. Thickness of sclerotic at posterior end of pigment = 0.006 mm. Thickness of pigment-layer = 0.004 to 0.01 mm. Diameter (long) of ganglion-cell = 0.012 to 0.02 mm. Diameter of nucleus of ganglion-cell = 0.006 mm. Diameter of pigment-granule = 0.5 mm.

Family ALCIOPIDÆ.

British zoologists have few opportunities of becoming acquainted with these forms, which, moreover, are so delicate, that unless very great care is taken in collecting, the spirit-preparations are unsatisfactory. Those in the present collection are unfortunately in an imperfect state and much softened.

The genus Alciopa was established by Audouin and Milne-Edwards¹ in 1833 for a species (Alciopa reynaudii) about an inch and a half long, procured by Reynaud somewhere in the Atlantic during the voyage of the "Chevrette." They supposed that the dorsal and ventral pigment-glands (segmental organs) were branchial in function. Their figure in outline resembles Greeffia (Nauphanta). Delle Chiaje² next (1842) gave three somewhat indefinite figures of two species from the shores of Sicily, viz., Najades cantrainii and Alciopa candida. Krohn⁸ then (1845) described the latter and Milne-Edwards' form, and added a new species (Alciopa lepidota), also from Sicily. De Quatrefages,⁴ in 1850, gave some interesting observations on Alciope candida (which he called Torrea vitrea) and its eyes. The same form was subsequently (1862) described by A. G. Costa⁵ under the name of *Liocapa vertebralis*, and Delle Chiaje's other species (Najades cantrainii), under the title of Liocapa vitrea.⁶ He further constituted a new genus, Rhynchonerella.⁷ Hering, in addition to the foregoing, described in his inaugural dissertation three new species from Messina. A young form was discovered by R. Leuckart in one of the Firolidæ at Villafranca in 1855, and Claparède and Panceri probably found the same species in Cydippe in the Gulf of Naples.

In the voyage of the frigate "Eugenie" Kinberg⁸ describes five new species, viz., Kronia angelini (China), Kronia auroræ (St. Helena), Alciopa atlantica and Alciopa

7 Op. cit., ii.

⁸ Oversigt o. d. K. D. Vid. Sels'. Forhandl., 1861, No. 4, p. 243.

¹ Annél, p. 214, pl. v. figs. 6-11. ² Descriz. e notom., &c., Tav. 155, figs. 14, 18, and 21.

³ Archiv f. Naturgesch., Bd. xi., 1845, p. 141, Taf. vi., and Bd. xiii., 1846, p. 36.

⁴ Ann. d. Sci. Nat., sér. 3, t. xiii., 1850, p. 34, pl. ii. figs. 16, 17.

⁵ Annuario del Museo, &c., i., ii., and iv.

⁶ Op. cit., ii. A full bibliography is to be found in R. Greeff's excellent paper.