PLATE IX.

Structure of the Eye.

Fig. 1. Surface view of membrane limiting the "ommateum" below; *a*, perforations for the nerve fibres arranged in groups of four, corresponding to each retinula; *n*, nuclei.

Fig. 2. Semidiagrammatic section through the eye of *Serolis schythei*; *c*, corneal lenses; *n*, nuclei of Semper; *v*, vitreous body; *r*, retinula cells; *p*, pigmentiferous connective tissue corpuscles; *h*, hyaline cells; *s*, rhabdom.

Fig. 3. Single element of the eye of *Serolis cornuta*, depigmented and isolated by teasing; *r*, rhabdom; *r'*, its posterior filiform prolongation; *h*, hyaline cells; *n*, their nuclei.

Fig. 4. Single element of the eye of *Serolis cornuta* to show the pigment sheath surrounding the rhabdom (*r*).

Fig. 5. Single element of the eye of *Serolis schythei*; *r*, rhabdom; *h*, hyaline cell.

Fig. 6. One of the hyaline cells; *n*, its nucleus.

Figs. 7, 8. Transverse section through the upper part of the retinula of *Serolis schythei*; *r*, rhabdom; *p*, pigment.

Figs. 9–15. A series of figures to show the varying form of the rhabdom in *Serolis cornuta*.

Figs. 16, 17. Transverse section through the upper part of the retinula of *Serolis cornuta*; *r*, rhabdom; *p*, its pigment sheath.

Figs. 18, 19. Two isolated retinula cells of *Serolis schythei*; *r*, rhabdomere.

Fig. 20. Series of transverse sections through retinula of *Serolis schythei*; *a*, nervous rods below membrane; *b*, lower end of retinula cell just above the pigmented membrane; *c*, retinula cells at the level of the nucleus (*n*); *d*, four retinula cells surrounding the hyaline cell (*h*); *e*, upper extremity of the retinula cells; (*y*), rhabdomere.