

PLATE LXX.

Sternoptyx diaphana.

Fig. 15. The fish seen from the side, natural size ; drawn from a spirit specimen.

a, Ventral luminous organ ; b, anterior, c, posterior lateral luminous organs ; d, anal membrane ; e, submaxillary phosphorescent gland.

Fig. 16. Submaxillary phosphorescent gland, seen *en face*. $\times 4$.

a, Mouth.

Fig. 17. Ventral luminous organ, seen from below. $\times 2$.

a, Ventral fins.

Fig. 18. Ventral luminous organ, longitudinal section, parallel to the median plane of the fish to the side of the mid rib. $\times 2$.

a, Central canal ; b, parabolic cups.

Fig. 19. Ventral luminous organ, outer surface. $\times 20$.

a, Projecting mid rib ; b, pigment-mantle.

Fig. 20. Transverse section of the anterior end of the ventral luminous organ. $\times 100$.

a. Projecting cartilaginous mid rib ; b, cartilage thread ; c, crystalline spicules arranged longitudinally so as to reflect the light ; d, pigment-mantle ; e, main canal ; f, parabolic, paired organs, the apertures of which are covered by a transparent cornea-like membrane ; g, transparent connective tissue surrounding the phosphorescent tissue.

Fig. 21. Transverse section through the anterior end of the ventral luminous organ. $\times 50$.

a, Pigment-mantle ; b, light-reflecting layer of spicules ; c, transparent connective tissue ; d, phosphorescent tissue ; e, transparent outer skin.

Fig. 22. Postero-lateral luminous organ, seen from the outside. $\times 30$.

Fig. 23. Longitudinal section of the postero-lateral luminous organ. $\times 50$.

a, Spicules forming a light-reflecting layer ; b, pigment-mantle ; c, large highly stainable cells at the entrance of the luminous sac ; d, gland-tubes.

Fig. 24. Transverse section through the hemiparabolic reflectors of the postero-lateral luminous organ. $\times 50$.

a, Spicules forming a light-reflecting layer ; b, pigment-mantle ; c, transparent connective tissue ; d, gland-tubes.