

PLATE LXXI.

Pachystomias microdon.

Fig. 25. Head in profile, natural size, drawn from a spirit specimen.

a, Anterior suborbital phosphorescent organ; *b*, posterior suborbital phosphorescent organ.

Fig. 26. Suborbital phosphorescent organs *in situ*. × 2.

a, Anterior; *b*, posterior suborbital phosphorescent organ.

Fig. 27. Vertical section of the anterior suborbital phosphorescent organ. × 20.

a, Pigment coat; *b*, reticulate gland; *c*, layer of light-reflecting spicules; *d*, radial gland-tubes; *e*, outer skin, the margins of which can be drawn some distance over the surface of the phosphorescent organ.

Fig. 28. Vertical section of the posterior suborbital phosphorescent organ. × 25.

a, Granular outer surface; *b*, nervus phosphorius; *c*, layer of light-reflecting spicules; *d*, radial gland-tubes; *e*, outer skin, the margins of which can be drawn some distance over the phosphorescent organ.

Fig. 29. Anterior suborbital phosphorescent organ. × 50.

Light-reflecting layer of spicules seen from the surface. The external reticulate part of the gland communicates by these oval holes with the internal radial part.

Fig. 30. Section of the anterior suborbital organ shown in fig. 27. × 350.

a, Pigmented partition-membranes; *b*, gland-tubes.

Fig. 31. Section of the posterior suborbital phosphorescent organ shown in fig. 28. × 200.

a, Nervus phosphorius; *b*, light-reflecting layer of spicules traversed by numerous nerves and blood-vessels; *c*, termini of the radial gland-tubes; *a*, thick partition membranes with nerves and blood-vessel; *β*, gland-tubes.

Fig. 32. Longitudinal section of a compound phosphorescent organ from the lateral row. × 40.

Fig. 33. Section of the compound phosphorescent organ shown in fig. 32. × 400.

a, Pigment coat; *b*, light-reflecting membrane; *c*, granular layer with large cells in it (ganglion cells); *d*, radial gland-tubes.