Exceptionally also simple ocellar organs are found attached to the outer surface of the body and appear as spherical projections.

The lateral line may be converted into a series of ocellar phosphorescent organs, every one of the scales which cover the lateral slime-canal bearing on its outer surface a phosphorescent organ connected with the tissue below by a central perforation of the scale.

We have, therefore, the following six kinds of regular ocellar phosphorescent organs:—

- 1. Regular ocellar simple phosphorescent organs sunk in the body, without pigment coat and without reflector.
- 2. Regular ocellar simple phosphorescent organs sunk in the body, with pigment coat and without reflector.
- 3. Regular ocellar composite phosphorescent organs sunk in the body, without reflector.
- 4. Regular ocellar composite phosphorescent organs sunk in the body, with reflector.
- 5. Regular ocellar simple phosphorescent organs attached outside to the body.
- 6. Regular ocellar organs attached to the differentiated lateral line.

The irregular glandular phosphorescent organs are always found on the head, and besides, sometimes also on the sides of the body (Astronesthes), on the tail (some species of Scopelus, Leydig), and on specially differentiated barbels (Opostomias micripnus, Malacosteus indicus).

These have not been taken notice of by Ussow; they are designated by Leydig as "Leuchtorgane."

Six kinds of glandular organs are met with :-

- 1. Glandular organs scattered irregularly.
- 2. Glandular organs on the lower jaw.
- 3. Glandular organs on the barbels.
- 4. Glandular organs under the gill-cover.
- 5. Suborbital, highly differentiated glandular phosphorescent organs without reflectors, and
- 6. With reflectors.

These may accordingly be with or without reflectors. A pigment coat is, however, invariably present in all the different kinds of irregular glandular phosphorescent organs.