Aegæonichthys appelii.

Aegæonichthys appelii, Clarke, loc. cit., pl. vi.

## D. 5. A. 4. C. 8. P. 17.

The cephalic spine consists of a tuft, one-sixth as long as the fish, with a swollen muscular base and a hemispherical head, from which spring three or four long branched tentacles; the shaft is covered with minute spines. Greyish, mottled with light and splashed with dark brown.

The hemispherical head of the cephalic spine is described as a capsular gland, the front of which is covered with a silvery or nacreous integument, with an aperture in the centre communicating with the interior and surrounded by a black ring. It is evidently the same structure which I have described in *Ceratias bispinosus*, and adapted for the same function. It is phosphorescent, and probably illuminates the play of the tentacles which serve to allure other creatures.

## Ceratias, Kröyer.

Pediculates without ventral fins and with two gills and a half only; no pseudobranchiæ. Head very large; body and tail short; eyes small. Mouth large, with the mandible projecting. Jaws armed with a series or narrow band of depressible teeth of various lengths. Skin with dermal scutes or spinelets. The spinous dorsal fin reduced to one or two spines, which are generally modified into tentacles, and sometimes provided with an accessory luminous apparatus. The soft dorsal and anal short.

The species may be arranged in the following order :----

I. Two cephalic spines—Ceratias (Diceratias) bispinosus.

II. One cephalic spine.

A. A second spine on the back, with lateral caruncles; no vomerine teeth— Ceratias (Ceratias) holbölli.

B. No spine on the back; with caruncles.

- 1. Caruncles placed at a distance from the soft dorsal.
  - a. Two caruncles only; no vomerine teeth—Ceratias (Mancalius) uranoscopus.
  - b. Three caruncles; vomerine teeth ?—Ceratias (Typhlopsaras) shufeldti.

2. Caruncles placed immediately in front of the soft dorsal.

- a. Terminal cephalic joint very short—Ceratius ( \_\_\_\_\_ ) carunculatus.
- b. Terminal cephalic joint long—Ceratias (Cryptopsaras) couesii.