include mostly large forms, belonging to a biological group of squids (comprising the family of giant squids, Architeuthidæ), the members of which are among the pirates of the ocean, and in their turn fall a prey to the large squid-hunting whales. Illex illecebrosus and Ommatostrephes todarus are northern forms, of great importance on the banks of Newfoundland, and along the coasts of Iceland and Norway, as Gonatus fabricii (see Fig. 98, p. 113) is the squid of the "bottle-nose grounds" in the Norwegian Sea. Todaropsis eblanæ and Ommatostrephes sagittatus extend nearly as far north as the southern borders of the Norwegian Sea.



Fig. 438.

Doratopsis exophthalmica, Chun (3). (From Chun.)

Mastigoteuthis, Grimalditeuthis, and Chiroteuthis are large squids, some of which were captured by the Prince of Monaco around the Azores, Madeira, and Canaries. Grimalditeuthis richardi described by Joubin, proves to be identical with G. bonplandi (see Fig. 440) taken by the "Michael Sars." A new species is described by Chun under the name of Mastigoteuthis hjorti. We succeeded in catching adults as well as larvæ of the Ommatostrephidæ and Gonatidæ; Chun has described the interesting larva of Ommatostrephes (see Fig. 441), taken in the southern

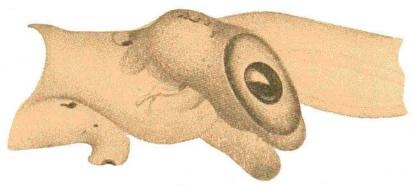


FIG. 439.
Head of Doratopsis lippula, Chun.

section of our Atlantic cruise, in which the two long tentacles are united into a tube.

In the Cranchiidæ we have an entirely different group of wonderful deep-sea forms, which probably undertake extensive vertical migrations; some of these, for instance Corynomma speculator, Toxeuma belone (Fig. 442), and Bathothauma lyromma (Fig. 443), were taken in the Indian Ocean by the "Valdivia."

Among the Myopsidæ I mention first the interesting form Spirula australis (see Fig. 60, p. 81), of which only three specimens had previously been taken: one in the Pacific by the "Challenger," one off North America by the "Blake," and one in the Indian Ocean by the