

Ianthina, *Carinaria* (see Fig. 122, p. 154), *Pterotrachea* (see Fig. 123, p. 154), and *Glaucus*, which were taken in abundance in the southern section of our Atlantic cruise.

Cephalopoda.

Of the large group of Cephalopoda (squids and cuttle-fishes) previous expeditions obtained very few in their small tow-nets, those captured being generally taken in the bottom trawls, and it was uncertain whether they lived at the bottom, or in intermediate depths, or near the surface. It has long been recognised, however, that many Cephalopoda are true pelagic animals, and in the sixties of last century Japetus Steenstrup applied the term "Decapodes pelagici" to the group *Ægopsidæ*. The Prince of Monaco not only captured Cephalopods in his pelagic trawls, but also obtained them from the stomachs of whales which he shot, his material being reported on by Joubin.¹ During the "Valdivia" Expedition the large vertical nets captured a wealth of new forms belonging especially to small types, and Chun in his narrative draws attention to the remarkable Cranchiidæ and the little *Spirula*. Chun has recently published the first part of his report on the "Valdivia" collections of Cephalopoda, dealing with the *Ægopsidæ*.²

It was a special pleasure to me that Chun undertook to describe the Cephalopoda obtained during our Atlantic cruise, and his report, which has just been completed, is available for this preliminary record of the results. His determinations are given in the list on pp. 595-597, and comprise 43 species in all, 3 or 4 of which are new to science, besides some larval forms, the identity of which is uncertain.

The Cephalopoda are generally divided into two groups according to the number of tentacles, those with ten arms or tentacles being termed Decapoda, and those with eight tentacles Octopoda; the Decapoda are subdivided into *Ægopsidæ* and *Myopsidæ*. The *Myopsidæ* and all the Octopoda have a membrane covering the eye, but in the *Ægopsidæ* this is perforated.

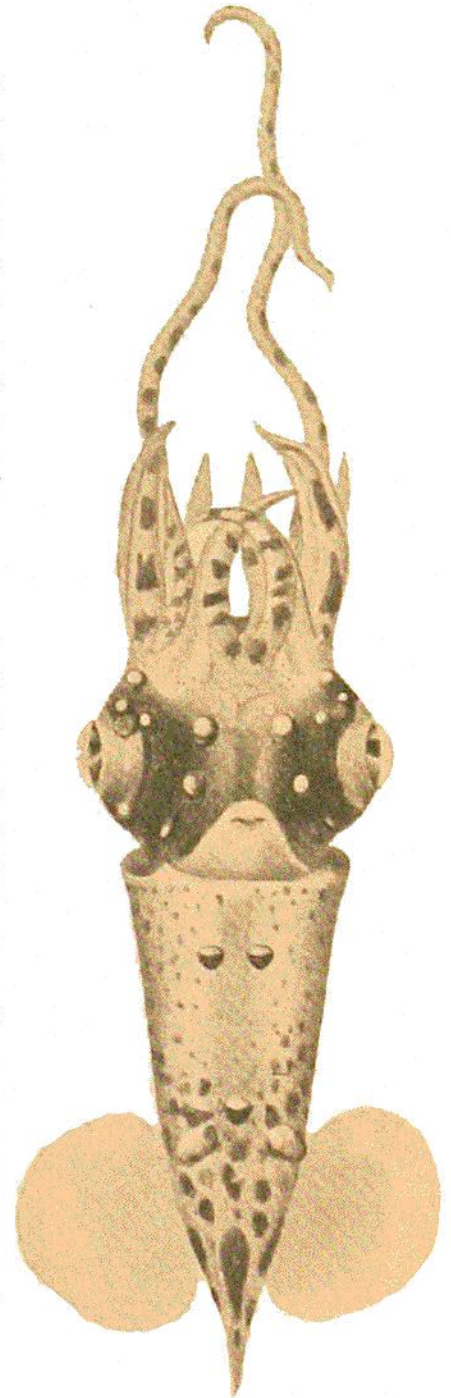


FIG. 434.
Pterygioteuthis giardi, Fischer (†).
(From Chun.)

¹ Joubin, "Céphalopodes provenant des campagnes de la Princesse-Alice," *Campagnes scientifiques du Prince de Monaco*, Fasc. xvii., 1900.

² Chun, *Wiss. Ergeb. "Valdivia" Expedition*, Bd. 18, 1910.