taken down to a depth of 1200 metres. In northern waters several species have been taken just at that time of the year when the temperature is highest.

The Aulacanthidæ, the Challengeridæ, the Tuscaroridæ, and the Medusettidæ have silicious skeletons and prefer mainly cold water.





FIG. 389. *Acanthometron pellucidum*, J. Müller. (After Hertwig, from Steuer.)

FIG. 390. Acanthonidium echinoides, Claparède and Lachmann. (From Popofsky.)

The Aulacanthidæ are spherical, the skeleton consisting of numerous isolated hollow needles, some of which radiate from the centre while

other smaller ones are arranged along the surface of the sphere. The great majority of the Aulacanthidæ have been found in the north-western corner of the Atlantic (the Irminger Sea and Davis Straits), and also south of the Cape Verdes, but several species are very widely distributed, for instance Aulographis pandora (Fig. 392) taken in the Mediterranean, Indian Ocean, Pacific, and also in the Atlantic north and south of the Equator. This species occurs between 400 and 1000 metres, and is considered specially characteristic of these depths. One of the best-known species, Aulacantha scolymantha (see Fig. 393), is found, like several other radiolarians, in two races distinguished by their



FIG. 391. .-lcanthostaurus nordgaardi, Jörgensen (400). (From Jörgensen.)

difference in size. One is a pygmy 0.6 to 1.8 mm. in diameter, the other a giant about 3 millimetres in diameter. At Naples, and during the cruise of the "Valdivia," Haecker<sup>1</sup> studied the bathymetrical

1 V. Haecker, "Tiefsee-Radiolarien," Wiss. Ergeb. "Valdivia" Expedition, Bd. xiv. (Jena, 1908).