mouth of the shell, therefore placed in its main axis; it is usually quite hidden in the dark phæodium, which occupies the oral half of the shell-cavity, whilst the capsule lies in the aboral half. The large nucleus of the central capsule and its double membrane present the same characters as in the other Phæodaria.

## Synopsis of the Genera of Castanellida.

No long radial main-spines (in addition to the constant short bristles of the shell-surface).		Mouth smooth,		705.	${\it Castanarium.}$
		Mouth dentate,		706.	Castanella.
Long radial main-spines scattered between the short constant bristles of the shell-surface.	Main spines simple.	Mouth smooth,	•	707.	Castanidium.
		Mouth dentate,	*	708.	Castanissa.
	Main spines branched.	Mouth smooth,		709.	Castanopsis.
		Mouth dentate,		710.	Castanura.

Genus 705. Castanarium, Haeckel, 1879, Sitzungsb. med.-nat. Gesellsch. Jena, Dec. 12, p. 5.

Definition.—Castanellida without radial main-spines, with a simple smooth mouth.

The genus Castanarium is the simplest form of all the Castanellida, and may be regarded as the common ancestral form of this family. The simple spherical shell has a smooth, toothless mouth and no larger radial spines; it is densely studded with the simple, radial bristles, which are common to all Castanellida. The shell therefore is very similar to those species of the Astrosphæride Acanthosphæra, which represent the subgenus Rhapidococcus (compare above, p. 210, Pl. 26, fig. 3); it differs from the latter in the possession of the shell-mouth, which is absent in all Sphæroidea.

## 1. Castanarium darwini, n. sp.

Pores regular, circular, hexagonally framed, three times as broad as the bars. Radial bristles half as long as the radius.

Dimensions.—Diameter of the shell 0.3 to 0.4, of the pores 0.03.

Habitat.—South Atlantic (east of Patagonia), Station 318, depth 2040 fathoms.

<sup>1</sup> Castanarium = Shell similar to a chestnut, Castanea.