very much smaller lacunar channels take their origin, and from these again smaller ones; and here again the lacunæ are surrounded by the flagellated chambers (Pl. LI. fig. 1a).

In Stylocordyla stipitata, var. globosa, the inhalent canals are also, at any rate near the surface of the sponge, represented by a system of lacunar channels surrounded by the flagellated chambers (Pl. L. fig. 1).

We have in no case found the inhalent canals breaking up into a system of finer and finer canals, of which the ultimate ramifications end each in a single flagellated chamber. This, however, is probably due to the insufficiency of the time and material at our disposal, for such a condition is described by Vosmaer in *Trichostemma (Polymastia) hemisphæricum*, and, judging from other accounts, of which, however, none are very definite, would appear to occur also in some other Suberitidæ. That it does not occur in all the Clavulina we have already shown; for in *Latrunculia* we have found the lacunar condition as above described, and Poléjaeff informs us that *Suberites domuncula* also is "characterised by an entire absence of special cameral canaliculi."

(4) The Flagellated Chambers.

The flagellated chambers appear, from our researches, to be nearly always globular or subglobular in form in the Halichondrina, and either globular or oval in the Clavulina. In size they vary from about 0.024 to about 0.058 mm. in average diameter.

The following table of measurements and forms as observed by us in eighteen species may be of use in showing the relative sizes and shapes of the chambers in the different groups:—

Species.						Average Diameter of Flagellated Chambers.		Form of Flagellated Chambers.
Halichondria panicea,						0.0336 mm.		Subglobular
Petrosia hispida, .				•		0.0000		Globular
Reniera sp.,			•			0.024 ,,		Globular
Esperella gelatinosa, .						0.0000 "		Subglobular
Esperella fusca,					- 5	0.0288 "		Subglobular
Esperella lapidiformis,			•	7.0		0.0288 "		Subglobular or oval
Esperella murrayi, .						0.0240 "		Subglobular
Esperiopsis challengeri,						0.0432 ,,		Subglobular
Myxilla nobilis,						0.048 ,,		Subglobular
Hymeniacidon caruncula,		2	1500			0.024 ,,		Subglobular
Phakellia ventilabrum, var. connexiva, s 0.0384 ",						Subglobular		
Axinella (?) paradoxa,				74		0.0336 "		Globular
Raspailia tenuis, .			•			0.0336 ,,		Oval or subglobular
Suberites caminatus, .		0				0.0336	(but variable)	Oval or subglobular
Stylocordyla stipitata, var.	alob	08a.				0.0336 "	(/	Subglobular or elongate
Tentorium semisuberites,						0.058 ,,		Oval
Spirastrella massa, .						0.0288 ,,		Subglobular
Latrunculia apicalis, .		2		1981	50.020	0.0336 ,,	5	Subglobular

¹ Sponges of the "Willem Barents" Expedition, 1880-81, p. 13.

² Zool. Chall. Exp., part xxxi., Report on the Keratosa, p. 80.

³ It is of especial interest to have succeeded in finding the flagellated chambers in this sponge, as both Vosmaer and