Heteropegma as an independent genus, since it seems to play in the Family of Syconidæ the same part as Leucetta (s.m.) amongst the Leuconidæ, and this latter genus now contains four very good species. The agreement in the plan of organisation of both these genera is striking, and at first sight it would appear very likely that the genera Leucetta and Heteropegma form an independent branch in the genealogical tree of the Heterocæla, and consequently ought to be regarded as representatives of a new family. Still, in order to render this hypothesis plausible, it would be necessary—in view of the peculiarities of the internal organisation of Heteropegma nodus gordii (Pl. IV. fig. 1a)—to prove that the canal system of Leucetta has been developed from that of Heteropegma not by invagination of the inner surface between the radial tubes, but by the further ramification of the radial tubes themselves. Of course the possibility of such a transformation is not excluded; at any rate both are at present to be distributed in different families, the more so as there exists a form (Leucetta imperfecta, n. sp.) which on valid grounds can be regarded as a connecting link between the genera Leucetta and Leuconia.

The genus includes provisionally but one species:-

Heteropegma nodus gordii, n. sp.

5. Amphoriscus, Hæckel¹ (sensu mutato)

Syconidæ with non-articulated tubar skeleton, the supporting spicules of whose comparatively thin cortex are either triradiate or quadriradiate, or both triradiate and quadriradiate associated together.

I include in this genus the following species:—

Amphoriscus stauridia, H.	Amphoriscus oviparus, H.
urna, H.	synapta, H.
cyathiscus, H.	sycilloides, Sch.
cylindrus, H.	(?) atlanticus, R.
chrysalis, S.	poculum, n. sp.
glacialis, H.	elongatus, n. sp.
testiparus, H.	flamma, n. sp.

With regard to the systematic position of Sycyssa huxleyi, characterised by Hæckel amongst others also as having a non-articulated tubar skeleton, one can frame only conjectures. As described by Prof. Hæckel, this very strange form stands quite isolated.

¹ Prodromus, p. 238.