This difference in the distribution of these allied genera seems to be associated with differences in temperature. The eighteen known species of *Phymosoma* are almost exclusively tropical or subtropical forms, occurring only at moderate depths or near shore, and therefore in water comparatively warm. Now, since the temperature of the deep sea is on the whole strikingly low, the almost total absence of forms of *Phymosoma* in these depths may be conditioned by the lack of the requisite warmth. On the other hand, the great majority of the tube-inhabiting forms belonging to the genera *Phascolosoma* and *Phascolion* were found in the waters of the temperate and cold zones, and in the deep sea, while several species of the same genera are also tropical.

In describing the various species I have given references to the more important literature of the subject. In regard especially to the *Gephyrea achæta*, I would mention my recent monograph on the *Sipunculi*.²

Synopsis of the Genera and Species.

A. GEPHYREA CHÆTIFERA.

Genus 1. Sternaspis, Otto.

1. Sternaspis princeps, n. sp.

Genus 2. Echiurus, Guérin.

2. Echiurus unicinctus, v. Drasche.

Genus 3. Thalassema, Gaertner.

- 3. Thalassema faex, n. sp.
- 4. Thalassema baronii, Greeff.

Genus 4. Bonellia, Rolando.

5. Bonellia suhmii, n. sp.

B. GEPHYREA ACHÆTA.

Genus 5. Phascolosoma, F. S. Leuckart (s. str. Selenka and de Man).

- (a) Proboscis with four retractors. Hooks present.
 - 6. Phascolosoma vulgare, de Blainville.
 - 7. Phascolosoma vulgare, var. astuta, nov.
 - 8. Phascolosoma pudicum, n. sp.

¹ We have an exception in the *Phymosoma granulatum* of the Mediterranean, which is most closely allied to the *Phymosoma scolops* of the Red Sea and Pacific and Indian Oceans, and which has doubtless found its way from the Red Sea into the Mediterranean.

² Die Sipunculiden, eine systematische Monographie, unter Mitwirkung von Dr. J. G. de Man and Dr. C. Bülow bearbeitet von Dr. Emil Selenka; in Semper's Reisen im Archipel der Philippinen, Theil. II. Bd. iv. Abth. 1, also separately, Wiesbaden, 1883.