I have introduced this species for the sake of comparison with the foregoing, as they are undoubtedly allied forms. There are several other species of *Leptochiton* which it is unnecessary to refer to here.

The following table has been drawn up to facilitate a comparison between the foregoing species :---

	Angle of Shell.	Lateral Areas.
1. Leptochiton alveolus (Sars).	. Almost semicircular . Angular, 90°	Obsolete Raised, concentrically rugose
2. ,, belknapi, Dall 3. ,, ,, (Challenger		Scarcely apparent
4. " benthus, n. sp 5. " kerguelensis, n. sp.	. Rounded angle, 100°	Slightly raised, rugose in upper portion Scarcely apparent

Surface of Shell.		Arrangement of Tubercles.				
			Jugum.	Pleura.	Lateral Areas.	
1.	Smooth (?)	Close	Even, in no pattern.			
2.	,, (?)	More widely	Quincunx	In series (?)	Irregular	
3.	Smooth	Close	Fairly regular	In series	Irregular	
4.	Striated	More widely and rather small	Irregular	Irregular	Smaller size, and more distant	
5.	33		· None	None	Minute and scattered	

From this table it will be seen that the first three species belong to the same group of forms. Dall hesitated about separating his species from *Leptochiton alveolus*, and he, Boog Watson, and myself, at first referred the two latter to the same species; and it is only after repeated and careful scrutiny that I have finally decided to consider them as distinct.

We are still in the analytical stage with regard to this group, and it is perhaps advisable, at all events for the present, rather to emphasise any distinctions, and with this intent I have described my specimens with as much minuteness as possible. Unfortunately Dall has given us no figure of *Leptochiton belknapi*, but I have little doubt that the Challenger specimens from the Philippines are examples, or, at most, varieties of that species.

Genus Hemiarthrum, Carpenter, MS.

Hemiarthrum, Carpenter M.S., Dall, Bull. U.S. Nat. Mus., 1876, vol. iii. p. 44.

"Valvæ terminales laminatæ, haud articulatæ; laminæ laterales obsoletæ; zona lanuginosa, porifera; branchiæ posticæ."

Hemiarthrum setulosum, Carpenter MS. (Pl. I. fig. 4; Pl. II. figs. 4α-4l). Hemiarthrum setulosum (Carpenter MS.), Dall, Bull. U.S. Nat. Mus., 1876, vol. iii. p. 44. Dall, Proc. U.S. Nat. Mus., 1878, p. 314.