

F.—PLACIPHOROIDEA.

Plaxiphora, Gray.

Dall subdivides Gray's genus *Plaxiphora* (*Placiphora*, Carpenter and Dall) into three subgenera in addition to the genus proper, viz. (a.) *Fremblya*, H. Adams; (b.) *Euplaciphora*, Shuttleworth; and (c.) *Guildingia*, Carp. They all agree with the genus proper in having the insertion plates regular, ribbed behind; numerous slits in the anterior valve, one in the intermediate and none in the posterior valve, and small eaves. In *Plaxiphora* the teeth are slightly propped; there is a small sinus, and the sutural laminae are joined; swollen ribs; girdle hairy, with regular pore-tufts. The type is *Plaxiphora carmichaelis*, Gray (= *Plaxiphora setiger*, King, from Patagonia). In *Fremblya* the teeth are excurved, the sinus broad and shallow, girdle as above, the outbending of the teeth being the distinctive character. The type is *Fremblya collei*, H. Adams, from Australia. In *Euplaciphora* the teeth are sharp, the sinus broad, deep, and spongy, the girdle with crowded hairs, but without pores. Type, *Euplaciphora petholata*, Sow., from South Australia. In *Guildingia* the teeth are sharp, very long, and smooth; the sinus broad, deep, spongy; the girdle encroaches on the valves, with pore-tufts and emarginate posteriorly. Type, *Guildingia obtecta*, Carp., from New Zealand, Mus. Cuming, No. 45.

As I have not the opportunity of critically examining these subgenera, I shall, for the present at all events, refer all the three species collected by the Expedition to the genus *Plaxiphora*. Carpenter admitted that a main distinction between this genus and *Euplaciphora* lay in the absence of sutural tufts in the girdle of the latter, but he described in his MS. *Plaxiphora simplex*, n. sp., as *Euplaciphora*, although, as is shown on Plate III. fig. 13 b, sutural tufts are present; and in the type-species of *Plaxiphora*, *Plaxiphora carmichaelis*, the numerous scattered tufts only imperfectly take on a sutural arrangement.

The species of this genus are confined to the Southern Hemisphere.

Plaxiphora carmichaelis (Gray)

- Chiton carmichaelis*, Gray, *Spicilegia Zool.*, 1828, p. 6, and Wood, *Index Test.*, Suppl., 1828, p. 1, pl. i. fig. 10.
 „ *setiger*, King, *Zool. Journ.*, 1830–1831, vol. v. p. 338, and Sowerby, *Conch. Illust.*, 1841, No. 95, fig. 17.
 „ *fremblii*, Broderip, *Proc. Zool. Soc. Lond.*, 1832, p. 28, and Sowerby, *Conch. Illust.*, 1841, No. 95, fig. 4.
 „ *viramosus* (?), Quoy and Gaimard, Durville, *Voy. "Astrolabe," Zool.*, 1834, vol. iii. p. 378; *Atlas*, pl. lxxiv. figs. 12–16.
 „ *setiger*, Deshayes, Lamarck, *Hist. Nat. Anim. s. vert.*, 1836, vol. vii. p. 513.
 „ „ Reeve, *Conch. Illust.*, 1842, vol. ii. p. 10, pl. cxxxi. fig. 4, and *Conch. Icon.*, 1847, pl. ix. fig. 48a; var. β , fig. 48b (= *Plaxiphora fremblii*).