This is a much stronger shell than Cithna tenclla, Jeffr., usually is; in form it is much higher in the spire, and narrower in proportion to breadth; the whorls are much more compressed, and the narrow sharply impressed suture is much less deep; the mouth is oval, not round, and the sculpture of the surface is very different from the hyaline gloss and texture of that other. It is unfortunate that the apex, which is so characteristic a feature in Cithna tenclla, is broken in the Challenger specimen.

Dr Gwyn Jeffreys, in his Moll. "Lightning" and "Porcupine," Proc. Zool. Soc. Lond., 1883, p. 111, says that this species is Cithna tenella, Jeffr., var. costulata. That is a varietal name plainly not wanted if my Cithna margaritifera is only a variety. For so reckoning it he assigns no reason. It had probably escaped his memory that it was on his recommendation, with considerable hesitation on my part, that the species was described as new. Published as new it is safer so to leave it. From Pernambuco to the North Pacific is a step which, unbroken, is somewhat long unless one is very sure of one's footing, and as regards that certainty, the fact that when the Pacific shell was under careful examination and full comparison with various forms of Cithna tenella, the final estimate of us both, and of Dr Jeffreys more decidedly than of myself, was that it should be held as distinct, must go for very much.

4. Fossarus, Gray, 1840.

Species.

- 1. Fossarus ambiguus, Linne.
- 2. Fossarus cereus, Wats.

1. Fossarus ambiguus (Linne).

Le Fossar, Adanson, Sénégal, p. 173, pl. xiii. fig. 1.

Helix ambigua, Linne, Syst. Nat. (ed. 12), p. 1251, No. 714.

- " ,, Dillwyn, Catalogue, vol. ii. p. 973, sp. 191.
- " Wood, Index Test., p. 176, pl. xxxv. fig. 188.

Fossarus Adansonii, Philippi, Enumeratio Moll. Sicil., vol. ii. p. 147, pl. xxv. fig. 1.

Helix ambigua, Hanley, Ipsa Linn. Conch., pp. 391, 541.

Fossarus ambiguus, Philippi, Conch. Cab. (ed. Küster), p. 12, sp. 1, pl. i. figs. 1-8.

Fossar Adansoni, McAndrew, Distrib. Moll. N. Atlantic, p. 30.

Fossarus ambiguus, Fischer, Genre Fossarus, Journ. de conch., 1867, vol. xii. p. 256.

- " Weinkauff, Conch. Mittelmeer., vol. ii. p. 267, sp. 1.
- ,, ,, Aradas and Benoit, Conch. Mar. Sicil., p. 181, No. 483.
- " Monterosato, Enumerazione, p. 23.

Station 113a. September 2, 1873. .Lat. 3° 47' S., long. 32° 24' 30" W. Anchorage off Fernando-Noronha. 7 to 25 fathoms. Volcanic sand and gravel.

Station 122. September 10, 1873. Lat. 9° 5′ to 9° 10′ S., long. 34° 49′ to 34° 53′ W. Off Pernambuco. 350 fathoms. Red mud.

Habitat.—Senegal (Adanson); Canaries, Madeira, and Azores (McAndrew); Mediterranean (Philippi).

Fossil.—In the Post-Tertiary beds of Sicily (Philippi).