Colour.—Dark brown. Size of the largest saccular lobe 37 mm. in length by 13 mm. in diameter.

Habitat.—Mauritius.

Remarks.—The specimen on which this species is founded is in the dried state; as we are quite ignorant of the characters of the canal-system, its position cannot be definitely determined. I owe to Mr. Carter's kindness a slide containing mounted spicules of the sponge, but I have not seen the sponge itself. A thick fibrous cortex, such as this sponge possesses, is usually associated with an aphodal or diplodal canal-system.

Genus 4. Xenospongia, Gray.

Xenospongia, Gray, Proc. Zool. Soc. Lond., p. 229, 1858; p. 547, 1867.

"Carter, Ann. and Mag. Nat. Hist., ser. 4, vol. xvi. p. 81 (sep. copy), 1875; ser. 5, vol. ix. p. 357, 1882; vol. xvii. p. 44, 1887.

Tethyidæ (?) in which the cortex in part consists of a felt of spicules, traversed by bundles of strongyloxeas; the oscules occur in linear series at the bottom of superficial grooves.

Xenospongia patelliformis, Gray.

Xenospongia patelliformis, Gray, Proc. Zool. Soc. Lond., pp. 129, 130, pl. xii., 1858.

" Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. ix. p. 357, pl. xii. fig. 32, 1882.

Sponge.—Free, subcircular, patelliform. Lower surface with a thick coat of agglutinated sand grains. Upper surface with a white leathery cortex, formed of felted spicules, traversed by bundles of strongyloxeas, which project as hispidating tufts of nearly equal size; a circumferential series of these tufts surrounds the margin of the sponge. The upper surface is marked with a system of well-defined grooves with raised edges; a single subcircular groove occurs near the apex, diverging branches extend from it down the sides, subdividing once, twice, or rarely three times as they proceed, and terminate just before reaching two circular grooves which lie near the margin of the sponge concentric with it. The oscules occur in a single series at the bottom of the grooves. Smaller circular apertures are arranged in rows outside the grooves; these may be pores.

Spicules.—I. Megascleres. 1. Strongyloxea, 2.8 mm. in length.

II. Microscleres. 2. Oxyaster, centrum not sharply marked off from the actines, which are acutely conical, 0.074 mm. in diameter. 3. Spheraster, minute, with short conical actines, 0.024 mm. in diameter.

Habitat.—Torres Strait.