chrote 0.08 to 0.118 mm. in thickness (composed of vesicular tissue, containing beneath the epithelium a single layer of minute chiasters) of the sterrastral layer, and an inner fibrous layer 0.16 to 0.238 mm. in thickness. Pores in sieves hispidated by cortical oxeas, leading into incurrent chones. Oscules as in *Geodia barretti*, Bowerbank, margins hispidated by cortical oxeas.

Spicules.—I. Megascleres. 1. Somal oxea, 2.84 by 0.044 mm. (B. M.), and from 3.18 by 0.0473 to 3.51 by 0.0276 mm. 2. Cortical oxea, 0.39 by 0.008 mm. 3. Orthotriæne, rhabdome 2.76 by 0.07 mm. (B. M.), and 3.57 by 0.0513 mm., cladus 0.254 mm. long. 4. Anatriæne, rhabdome 4.82 by 0.019 mm. (B. M.), and 6.36 by 0.0197 mm., cladome variable, cladi sometimes extending outwards at right angles from the rhabdome for nearly half their length before recurving backwards, sometimes extending outwards and backwards from their origin; an example of the latter gave the following measurements—cladus 0.063 mm. long, chord 0.09 mm., sagitta 0.059 mm.; one of the former, cladus 0.0315 mm. long, chord 0.0513 mm., sagitta 0.0479 mm., and another, cladus 0.0316 mm. for the horizontal part of its course, 0.0434 for its backwardly directed terminal part, chord 0.083 mm., sagitta 0.0474 mm.

II. Microscleres. 5. Sterraster, 0.071 mm. in diameter (B. M.) and 0.067 mm. 6. Somal chiaster, actines short, cylindrical, truncated at the ends, 0.01 mm. in diameter. 7. Choanosomal chiaster, 0.0237 mm. in diameter.

Colour.—Cream-yellow in the dried state.

Habitat.—Quarnero, Adriatic.

Remarks.—The measurements marked (B. M.) were obtained from a type-slide in the British Museum collection, the others from a large fragment presented me by Professor von Graff. They do not accord very closely, but this is possibly due to the spicules having been obtained from sponges of different size. In its general characters the sponge resembles Geodia barretti, Bowerbank. I received two specimens of Schmidt's type from Professor von Graff; in one of them the cortex is only 1 mm. thick and abundantly furnished with chones, but not traversed by the megascleres or only rarely so, while in the other the cortex is 3 mm. thick, and hispidated by oxeas and anatriænes, which pass in great numbers through its substance, and project nearly 2 mm. beyond the surface; no chones are present in the cortex of this specimen, except those of the oscules, which occur in a shallow depressed area, formed of modified cortex.

Geodia tumulosa, Bowerbank.

Geodia tumulosa, Bowerbank, Proc. Zool. Soc. Lond., p. 628, pl. xlvii., 1872. Geodia gibberosa, Lamarck, Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. ix. p. 362, 1882.

Sponge.—Massive, sessile, tumulose. Oscular areas situated on the ends of the tumulous projections; surface minutely hispidated. Cortex, 1.43 mm. in thickness, con-