Calcabrina plicata (O. Schmidt).

Corticium plicatum, O. Schmidt, Spong. Algiers, p. 2, pl. iii. fig. 11, 1868.

Sponge.—Incrusting, intergrown with a calcareous Alga. Surface very irregular, with depressed conical elevations and papillæ.

Spicules.—1. Tetractinose asters, the actines usually conical, oxeate, simple, seldom dichocladose; length of an esactine 0.06 mm. 2. Microrabds, irregularly spined, 0.0083 mm. in length.

The microrabds are accumulated in a dense layer beneath the outer epithelium. So numerous are they as to render the papillæ of the surface greyish-white, while the sponge as a whole is of a pale yellow colour.

Habitat.—Algiers.

Genus 3. Corticella, n. gen.

Corticidæ containing polyactinose as well as tetractinose asters.

Corticella stelligera (O. Schmidt).

Corticium stelligerum, O. Schmidt, Spong. Algiers, p. 25, pl. iii. fig. 6, 1868.

Sponge.—An irregular crust, growing on Caryophylla cæspitosa. Pores scattered.

Spicules.—1. Tetractinose aster, the three esactines are each about 0.33 mm. in length, the ecactine not quite 0.1 mm. 2. Strongylaster, actines slender, long, four to six in number, and one or two shorter, reduced to tubercles; diameter, 0.05 mm. 3. Aster, with six to twelve short actines with wavy outline, 0.02 mm. in diameter. This spicule occurs in great numbers, along with the tetractinose aster (No. 1), in the outer skin of the sponge.

Colour.—White. Size, about 5 mm. in thickness.

Habitat.—Sebenico and Algiers.

Genus 4. Rhachella, n. gen.

Corticidæ (?) characterised by polycladose calthrops.

Rhachella complicata (Carter).

Samus complicatus, Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. vi. p. 61, pl. v. fig. 27, 1880.

Sponge.—Excavating.

Spicule.—Microscleres. 1. Cladocalthrops, with actines repeatedly dichotomising actinome 0.084 mm. in length, protocladus 0.051 mm., deuterocladus very short, trito-