

Large acerate spicules.—Either straight or slightly curved, spindle-shaped, tapering from the middle to a sharp point at either end, reaching 1.2 mm. in length and 0.065 mm. in diameter.

Minute acerate spicules.—Of the same form as the large acerate spicules, on an average 0.05 mm. long and 0.0025 mm. thick; scattered without any order in heaps, or isolated amongst the cortical triradiate spicules.

Sagittal triradiate spicules of the cortex.—Lateral rays smooth, sharp-pointed, either straight or slightly curved, either inwards or outwards, forming with the basal ray an angle varying from 90° to 100°; 0.1 to 0.3 mm. long, the proportion between the length and the thickness varying from 20 : 1 to 35 : 1; basal ray straight, tapering from the base to a sharp point, three to five times as short and usually twice as thin as the lateral rays.

Irregular triradiate spicules of the cortex.—All the rays approximately of the same size, reaching 0.07 mm. in length, 0.003 mm. in diameter. Too rare to be of any systematic importance.

Colour.—White.

Habitat.—Off St. Vincent, Cape de Verde Islands; July, 1873.

Ute, O. Schmidt.

Syconidæ, the skeleton of whose strongly developed cortex consists principally of large acerate spicules lying in several layers parallel to the outer surface of the Sponge.

Ute argentea, n. sp. (Pl. I. fig. 3; Pl. IV. fig. 3; Pl. V. fig. 1a-1p).

There is in the Challenger collection only one specimen of this species; it presents an elongated tube, 40 mm. long, with a diameter of 3 mm., becoming rather narrower at either end. The thickness of the walls does not exceed 0.5 mm., that of the cortex reaches 0.25 mm.; the outer surface is smooth, the inner slightly roughened by the apical rays of the gastric quadriradiate spicules. The specimen is bare-mouthed, and like the second species of the genus, *Ute glabra*, distinguished by the silvery lustre of its outer surface. The radial tubes are of cylindrical form; their course, as well as that of the intercanals, can be seen on Pl. IV. fig. 3. The tubar skeleton is non-articulated, and this is the chief character differentiating *Ute argentea* from *Ute glabra*.

Skeleton.—The skeleton of *Ute argentea* is so very complicated, that I prefer to describe it in separate divisions as follows:—

Skeleton of the gastric surface.—This consists of an outer layer of quadriradiate, of an inner layer of quadriradiate or triradiate, and of minute acerate spicules, scattered amongst those just mentioned without any regular order.

Outer quadriradiate spicules.—Basal and lateral rays straight, sharply or rather bluntly pointed, all of the same diameter (0.01 mm.), and usually of the same length (0.25 mm. on an average); basal ray forming with each of lateral rays an angle of 115°; apical ray