

without heads, flexed outwards and arranged *en fleur-de-lis*; pappiform, or sometimes many-rayed with rays straight and capitate. Anchoring spicules all smooth, stout and terminating respectively in heads of *four* equally stout recurved spines or hooks."

In 1875 Carter happened to discover among the treasures of the British Museum "a glass jar containing two small specimens of the veritable *Rossella antarctica* dredged up by Sir J. Ross in 300 fathoms  $74\frac{1}{2}^{\circ}$  S. lat.," longitude not given.

"The general form of this sessile or fixed sponge was sack-like (compressed) with the upper end truncated and open and the lower one conical and closed. External surface uniformly cribellate and monticular, covered by a thin layer of spicular lattice-work and surrounded by three forms of projecting spicules:—viz., (1) stout linear smooth nearly straight fusiform acerate spicules, finely pointed at each end, constituting an erect beard round the aperture; (2) anchoring spicules which increase in number, size, and length towards the lower or conical end; (3) crucially headed or veil spicules projecting chiefly from the monticules over every part of the external surface but the aperture, consisting of a shaft whose pointed or inner end is fixed in the sarcode of the body, and whose free or outer one is terminated by four long arms spread out horizontally so as to intercross with those of its neighbours, and thus form a general veil-like covering separated from the body by the length of the shafts between the body and their heads respectively; shaft smooth or only microtuberculate over the imbedded end, arms more or less flexuous, fine-pointed, parting from the head of the shaft at different angles, covered almost throughout with minute spicules closely approximated, amongst which here and there is a much larger spine curved and inclined outwards or from the head of the shaft."

Among the seven other forms of spicules which Carter has described from the body of the sponge the following are especially noteworthy:—

"(1) Very minute sexradiate rosettes with numerous straight capitate rays, and (2) sexradiate rosettes with thick sparsely spined arms, whose inflated ends support four or more indistinctly capitate rays; rays microspined, thick at first, then becoming finely attenuated and terminating in a hardly perceptible capitate inflation; rays at first straight and parallel like the prongs of a dinner-fork, becoming more or less divergent towards their extremities."

In his systematic review published in the year 1875,<sup>1</sup> Carter placed the genus *Rossella* along with *Crateromorpha* in a group called the Rosettifera within his family of the Sarcobactinellidæ.

The characteristics which Marshall<sup>2</sup> in 1876 assigned to the genus *Rossella* ran thus:—"Monozoic, root-tufts springing from papilla-like hillocks on the parietes, dermal skeleton composed of five-rayed spicules. In *Rossella antarctica* a peristomal spicular wreath (whether present in the other species is doubtful)."

*Character of the Genus.*—Thick-walled, ovoid or cask-shaped goblets, with a superior,