

During 1875 and 1876, in his Monograph of the Silico-fibrous Sponges, parts iii.–vi.,¹ Bowerbank ascribed no fewer than fourteen new species to his genus *Farrea*. These he names *Farrea gassioti*, *Farrea pocillum*, *Farrea fistulata*, *Farrea lævis*, *Farrea parasitica*, *Farrea valida*, *Farrea spinosissima*, *Farrea spinifera*, *Farrea spinulenta*, *Farrea aculeata*, *Farrea robusta*, *Farrea inermis*, *Farrea perarmata*, and *Farrea irregularis*. Since, however, the description of these new species was usually based only on a small fragment without characteristic form, and withal more or less macerated and injured, it is impossible, in most cases, to determine (notwithstanding the perfect figures given under a magnifying power of 36 or 80 diameters) to which species the fragment in question properly belongs. It is much to be regretted that, in almost all these Bowerbankian species of *Farrea*, the free spicules of the dermal system were not preserved or are not sufficiently clearly figured, and accordingly the words used by Bowerbank at the close of the introduction to the monograph referred to must be employed; he says:—"When the expansible dermal system is present, wholly or in part, in specimens under examination, we are enabled to establish specific characters of external form and structural peculiarities of the most satisfactory description, but when that important portion of the organic structure of the sponge is absent the characters derived from the form and surface of the rigid skeleton are necessarily provisional, and can maintain their places in its description only until a specimen in a natural and perfect state can be procured." Since Bowerbank, moreover, lays the very greatest weight on the width of the axial canals and regards these—as his generic diagnoses "fibres canaliculated, canals continuous" indicate—as at least essentially in a condition of perfect continuity, whereas, as Carter has already observed, in the skeletal framework of the Hexactinellida, the axial canals of the individual hexradiate spicules are at first unconnected, while the width depends chiefly on the condition of the skeleton as regards maceration or solution, it is conceivable that the specific characters and differential features given by Bowerbank have often little value.

The two types indicated by Bowerbank (*loc. cit.*, p. 272) as *Farrea gassioti*, and *Farrea pocillum* agree so thoroughly in form, size, and structure that it is really only the different breadths of the central canal of the network of beams that form the difference. But this distinction is seen to be insignificant when it is observed that, even according to Bowerbank's own statement, some greatly macerated specimens of *Farrea gassioti* have the central canals remarkably wide and clear. Further, in the case of the two specimens of *Farrea pocillum*, which have the soft parts dried and richly provided with the included isolated spicules, and which were accordingly, without doubt, secured as fresh specimens, the canals are especially delicate, and in some places even almost imperceptible. Moreover, the great similarity in form, size,

¹ *Proc. Zool. Soc. Lond.*, 1875, 1876.