

also under a magnifying power of ten and twenty diameters, in his pl. xxi. figs. 8, 9. In the course of his paper he describes the one piece in the following words:—"An irregular network, more or less bent, with subquadrate meshes, sometimes crossed by oblique threads," while, with regard to the other he said:—"The meshes of the network are on nearly the same plane, and of a more regular square form, with a short pointed spiculum projecting from one side of each decussation of the threads like the teeth of a harrow."

Some years later Bowerbank also communicated the results of his examination of the same object. He considered the two skeletal fragments which had been described and separated by Owen to be parts of one and the same sponge. The harrow-like network of siliceous beams represented by Owen in his figs. 8 and 9, with its regular quadrate meshes and pointed teeth projecting perpendicularly from the crossing points, he regarded as the *dermal skeleton*, under which only the irregularly formed inner body skeleton was said to have lain. After more precise examination of both parts by the aid of stronger magnifying powers, Bowerbank saw that the beams of the fragment regarded by him as belonging to the inner body skeleton were completely perforated by a manifest axial canal, and were richly covered externally with fine spines, while the beams of the (dermal) skeletal network which formed quadrate meshes appeared solid and smooth. Only the teeth projecting at right angles to the knob points appeared rough. Bowerbank, moreover, drew attention to the fact that the rough teeth stand at right angles to the plane of that quadrate network not only on its outer side, but on both surfaces.

To this form, the body and dermal skeletons of which he had examined in the above two fragments, Bowerbank gave the generic designation *Farrea*, in honour of the fortunate possessor of that specimen of *Euplectella cucumer* in whose root-tuft the forms were found, and he added to this the specific name of *occa* on account of the great similarity of one of the specimens to a harrow.<sup>1</sup> In his Monograph of the British Spongiadæ (part i. p. 204, 1864), Bowerbank referred his *Farrea occa* to the sponges with a "canaliculated siliceo-fibrous reticulate symmetrical skeleton," the "fibres" of which being "composed of concentric layers of solid silex, with a continuous central canal," and he added:—"The fibres in *Farrea occa* are rather coarse, abundantly tuberculated, and the mode of reticulation is rectangular." The inner body skeleton referred to in this latter description is figured in pl. xv. fig. 277, and in the description of the plate is referred to as "simple fistulose siliceous fibre, spinulated"; while the solid and smooth network of beams which, in Bowerbank's opinion, belongs to this sponge and constitutes its dermal skeleton, is figured on pl. xxi. fig. 311, and in the description of the plate is referred to as a "quadrilateral siliceo-fibrous network showing the double series of entirely spined spicular organs projected from its angles."

<sup>1</sup> Lat., *occa*.