the Aphrocallistidæ—which he placed in the order of the Corallispongia between the families Dactylocalycidæ and Euplectellidæ; and he characterised it as follows:— "Sponge tubular, tubes closed with a reticulate lid; parietes formed of agglutinated siliceous spicula, with round horizontal lateral pores; inner surface strengthened with clustered longitudinal bundles of elongated spicula."

The generic diagnosis of Aphrocallistes ran thus:—"Sponge tubular, closed with a lid, with smaller lateral tubular branches, which are generally open at the ends." The remark contained in the first description given in 1858, to the effect that the skeleton of Aphrocallistes beatrix is "calcareous," Gray now speaks of as a mere "slip of the pen," and particularly notifies that it should have been called "siliceous."

A figure of several of the forms of spicules, together with a portion of the reticulate framework of siliceous beams belonging to *Aphrocallistes beatrix*, occurs in Wyville Thomson's communication on the vitreous sponges, where special attention is called to the peculiar spicular form, "which consists of a lengthened shaft, ending in a small expansion, from which spring four equal branches, each terminated by a little knob."

In his paper on *Holtenia*,² Wyville Thomson refers not only to *Aphrocallistes beatrix*, Gray, but to a second species, *Aphrocallistes bocagei*, Wright MS. (p. 713). As a very frequently occurring spicule of *Aphrocallistes* he describes a "regular sixrayed star, with the principal axis longer than the transverse rays and one half of it feathered."

In 1869 Bowerbank referred Aphrocallistes beatrix, Gray, to his genus Iphiteon, and named it Iphiteon beatrix. This generic name—Iphiteon—Bowerbank has, it is true, ascribed to Valenciennes, but upon no other ground, it would seem, than that he found the form in the Museum of the Jardin des Plantes, Paris, noted on the labels as Iphiteon panicea, Valenciennes. Bowerbank has characterised this genus by the following diagnosis (loc. cit., p. 76):—"Skeleton siliceo-fibrous, fibres solid, cylindrical, reticulations symmetrical, areas rotulate, confluent."

Perceval Wright has described and figured a second species of the same genus, under the name of Aphrocallistes bocagei. Various specimens of this form, brought from the Cape Verde Islands, were preserved in the Museum of Lisbon, in the British Museum, and in his own collection, and had also been dredged by Wyville Thomson during the "Porcupine" Expedition, off the south-west coast of Ireland, in deep water. The short but clear description given by Wright runs as follows:—"Sponge fistulous, erect, branching somewhat irregularly; skeleton siliceo fibrous, more or less symmetrically radial; radii short and stout on the outer surface of the skeleton, forming a series of hexagonal spaces, which are nearly all of the same dimensions, central umbo of the ray giving origin on its inner surface, often on both surfaces, to a long spine. These spines,

¹ Ann. and Mag. Nat. Hist., ser. 4, vol. i. p. 123, 1868.

³ Proc. Zool. Soc. Lond., p. 75.

² Phil. Trans., vol. clix. pp. 701-720.

⁴ Quart. Journ. Micr. Sci., January 1870, pp. 77-79.