

Remarks.—There is but a single specimen of this sponge in the collection ; it measures 14 mm. in length by 11 mm. in breadth.

Its resemblance to *Myriastræa clavosa* is so considerable that I should have included it in that species, but for the larger size of the cladome of the anatriæne, and the thickening of the rhabdome of the dichotriæne below the cladal origin. This latter character would not alone appear to be of much importance, but since it appears very early in the development of the spicule, giving to it a striking and unusual appearance, very different from that of the young forms of the corresponding spicule in *Myriastræa clavosa*, I am disposed to set some value on it. The chiasters are also distinguished by slight differences, the actines are usually thicker and fewer in number, reductions to three or even two being frequent ; the tylote terminations are also better developed, and sometimes become subdivided into three or more rounded lobes. The ectosome is 0.3 mm. thick ; the flagellated chambers 0.024 by 0.016 mm. in length and breadth, they are frequently eurypylous ; the apople measures about 0.016 mm. in diameter.

Genus 2. *Pilochrota*,¹ Sollas.

Oscules usually distinct. Pores in sieves leading into radial incurrent canals, which are not constricted on passing through the fibrous layer of the cortex. Ectosome differentiated to form a cortex, which usually consists of a middle collenchymatous layer, an outer thin fibrous layer and an inner thicker fibrous layer. The microsclere is a chiaster.

Pilochrota haeckeli, Sollas (Pl. XIV. figs. 1–8).

Pilochrota haeckeli, Sollas, Prelim. Account, Sci. Proc. Roy. Dubl. Soc., vol. v. p. 189, 1886.

Sponge (Pl. XIV. fig. 1).—Subglobular ; attached to it are numerous foreign bodies, which are most abundant around the oscule.² The oscule is single, oval, and with a smooth, thickened, membranous margin ; it leads into a large cloaca, the sides of which, close to the oscule, are hispid with minute, projecting, oxeate spicules. The surface is rough, the poriferous sieves being situated in pit-like depressions surrounded by non-poriferous ridges, into which the radiating spicules of the interior enter.

Spicules.—I. Megascleres. 1. *Somal oxea* (Pl. XIV. fig. 2), stout, fusiform, usually curved and sharply pointed, 2.07 by 0.046 mm.

2. *Cloacal and ectosomal oxea*, small fusiform, sharply pointed, 0.2 by 0.004 mm.

3. *Orthotriæne* (Pl. XIV. fig. 3), rhabdome conical, stout below the cladome, rapidly attenuating to an almost filiform extremity, extremely sharply pointed or

¹ πῖλος ὁ, felt ; χέρως ὁ χερυτός, the skin.

² In the illustration the sponge is represented with the surface bearing the oscule (which is not shown) turned downwards.