

considerably, being more or less lunately curved, semi-circular, bent into a loose spiral, or sometimes resembling very much a pair of cow's horns; extremities greatly attenuated. On one or two occasions a larger form was observed, which agreed very closely in characters with these smaller ones. The frond was lunately curved, varying to sigmoid or spiral; distance between the extremities about 30 times the breadth; upper margin very convex, lower very concave; no central inflation; tapering gradually to an acute point at the extremities; contents granular. Diam. 0.0038 mm. (= 0.000155"). Habitat, Lake Ontario, Fig. 2.

In one gathering a fine living specimen was noticed which in most of its characters seemed to approach more nearly to *Clos. parvulum*, Naegl., than any other, though in some respects it resembled *Clos. Venus* as described by Wood. In size however it differed from both of these. The diameter was found to be 0.0186 mm. (= 0.00074"), and the length about 8 times as much. The measurements given by Rabenhorst for *Clos. parvulum* are diam. max. 0.00026"—0.00062", and length 6-8 times as much; and according to Wood the diameter of forms referred by him to this species is 0.0008". *Clos. Venus* has a diameter of 0.0004", and is 8-12 times longer than broad. The general appearance of the form was very similar to that of *Clos. parvulum* as figured by Wood, and as the actual size of any species can hardly be regarded as fixed within narrow limits, it has been referred to *Clos. parvulum*.

Another interesting form which is nearly always present approaches in some respects the description of *Clos. setaceum*, but is not accurately described in any work at my command; accordingly I propose for it the name *Clos. filiforme*, with specific characters as follows:—

*Closterium filiforme*, n. sp. Frond very slender, greatly elongated, each extremity being a colourless beak as long, or nearly as long, as the body; filiform, cylindrical, smooth, not lunately curved, belly not inflated, gradually attenuated towards the apices, which are rounded and slightly curved downwards; vacuoles 3-8 in each limb in a single series. Breadth 0.0062 mm. (= 0.00025"), length 0.4154 mm.—0.62 mm. (= 0.0166"—0.025"), or say 60-100 times the breadth. Habitat, Lake Ontario, Fig. 3.

*Clos. Griffithsii* has also been observed. Other Desmids were *Staurastrum gracile*, *Staur. punctulatum*, and a species of *Cosmarium*, probably *Cos. cucumis*.