

Staurostrum polymorphum Ralfs

This species is a common one in all parts of the earth, and in the collections made by the expedition was, in its genus, only second in abundance to *S. punctulatum*. It was found at Teller, in the big lake and in the river at Bernard harbour, and in the swamp at Herschel island. Three- and four-sided forms were about evenly distributed.

Staurostrum polytrichum Pert.

This very spiny desmid was found in small quantity in the material collected from the *Hippuris* swamp at Herschel island. It has not been previously recorded from the arctic regions of America.

Staurostrum punctulatum Bréb.

This was found in larger numbers and in more localities than any other species of its genus. At Teller it occurred in the lagoon lake, the brackish pond, and in the pond between the lake and sea. It was also found at Demarcation point and Collinson point, at Bernard harbour, and on Herschel island.

Staurostrum Reinschii Roy

(Plate IV, fig. 8)

This species is one of those found only at Herschel island. It is common in Europe generally but not in arctic waters. It was not very plentiful. A number of empty semi-cells were found, but very few complete plants.

Staurostrum setigerum Cleve

Like the last species, this also was found only at Herschel island, and it was moderately frequent. It is common in the United States of America and occurs also in Manitoba.

Staurostrum vestitum Ralfs

This is another species collected only from the *Hippuris* swamp at Herschel island. It was a little below average size and about as common as the last species. It is well known in Europe and the United States but is not previously known from arctic America.

Sphaerozosma Corda.**Sphaerozosma excavatum** Ralfs

This filamentous desmid appeared only from Herschel island and was not abundant. It has been previously found in Alaska and is not uncommon in the arctic. Cells slightly below average size.

Spondylosium Bréb.**Spondylosium planum** W. & G. S. West

This is a desmid fairly abundant in the United States and in some parts of Canada but is not frequent in arctic regions. It appeared only in bottom deposits from the lake at Teller, in short filaments of usually not more than eight cells. Not common. Size: 11μ wide, 9μ long.

Hyalotheca Ehr.**Hyalotheca dissillens** (Smith) Bréb.

This species was found only at Herschel island, in the *Hippuris* swamp. It is well known from some arctic regions but not from those of the American continent. The cells of the filaments were of the average size.