

CHLOROPHYCEAE.

ISOKONTAE.

VOLVOACEAE.

Gonium Müll.*Gonium pectorale* Müll.

This alga was found only in the big lake at Bernard harbour and in small numbers. Very few of these were perfect 16-celled colonies, most of them having had one or two of the cells injured and killed by some means before reaching maturity. It is fairly plentiful in some parts of the lake, but it is not common in these arctic collections and does not appear to be generally found in arctic regions.

Eudorina Ehrenb.*Eudorina elegans* Ehrenb.

This was the only member of the Volvocaceae which was common in algal collections. It occurred in the plankton and other collections from the lake at Teller and from Bernard harbour. It was also present in the brackish pond at Teller, and in collections from the *Hippuris* swamp at Herschel island, from Chantry island, and from Cape Bathurst.

Volvox (L.) Ehrenb.*Volvox aureus* Ehrenb.

Only one specimen of this beautiful alga was observed. It was in the material from the *Hippuris* swamp at Herschel island. Diameter of coenobium 300 μ ; daughter cells, antheridia, and oogonia absent. It is not common in arctic regions.

PALMELLACEAE.

Gloeocystis Näg.*Gloeocystis Infusioformis* (Schränk) W. & G. S. West (Plate III, fig. 5)

This alga was by no means common, only a few cells being found in any one collection. It occurred in the big lake at Bernard harbour, at Chantry island, and at Cape Bathurst. I cannot find any previous record for the North American continent or arctic regions for this species. Size, with integument, 60 μ in diameter; cell 21 μ .

AUTOSPORACEAE.

Oocystis Näg.*Oocystis solitaria* Wittr.

This was the only species of this genus and occurred in plankton and bottom deposits of the lake at Teller. It was also present in much less quantity at Bernard harbour.

Nephrocystium Näg.*Nephrocystium obesum* W. West

(Plate IV, fig. 17)

This was only once observed, three plants being found in the plankton at Bernard harbour, July 3, 1916. It is the first record for the American continent and for the arctic.

Tetraëdron Kütz.*Tetraëdron enorme* (Ralfs) Hansg.

This species appeared in small numbers in the material from the *Hippuris* swamp at Herschel island and was not observed elsewhere. It has not been previously recorded from the arctic regions of America.