and never secreted a wall and this stage was immediately followed by the disintegration of the whole filament. It was remarkable that in the large amount of Spirogyra collected during October none was found in a fruiting condition, nor were any spores observed. This material was watched carefully throughout the winter in the hope that conjugation might take place later By placing filaments in various culture media, on. attempts were made to induce conjugation by artificial means, but none gave the slightest success. Distilled water proved distinctly toxic, causing plasmolvsis and death. Neither a two nor a four per cent. Knop's solution had any effect. Both a five per cent. and a one per cent. solution of ammonium nitrate were tried, and appeared only to accelerate the death of the filaments. In a culture of Desmids, on five per cent. solution the contrary, the caused luxuriant growth. In the majority of those cultures which contained nothing but Spirogyra; the had died by end March. plants the of On the other hand, in aquaria where there was a large number of forms associated, growth at this time was becoming more and more luxuriant. Quantities of Edogonium, Chætophora and Stigeoclonium, some Anabæna and a little Spirogyra began to appear towards the end of this month. Vaucheria resisted comparatively well the disadvantages of growth under artificial conditions, and was found throughout the winter in various stages of development. Desmids and members of the Protococcace occurred in all the aquaria, the varieties of Scenodesmus being especially plentiful. A number of Diatoms were found either floating in chains or attached to filaments of Cladophora and Vaucheria. They were most abundant at a low temperature.

An aquarium containing a number of Cyanophyceæ collected from the floor of the Conservatory at Mount Royal Cemetery, showed an interesting development.