arm of the Atlantic which advanced up the St. Lawrence trough and into the Champlain valley long before it reached Montreal or Ottawa. In the later part of Chazy time, however, there was a shallow bay extending as far up the Ottawa valley as Allumette Island, while deeper water existed at the same time about Montreal. At the end of Chazy time the land was tilted, so that the sea was forced to retreat eastward and the interior sea again reached the Ottawa region, this time coming across west of the Adirondacks. In this sea were deposited the Lowville limestone and shale, 125 feet thick at Ottawa. In Lowville time this sea does not seem to have extended very far east of Montreal, and its advance into the region east of that place was accompanied by the erosion of the upper beds of the Chazy.

In Black River time this same sea continued to advance down the St. Lawrence till it broke through into the Atlantic, and in the limestones formed at this time we find a mixture of inland and Atlantic types again.

Although the general facts of the subsequent history of the region are known, the details are still so obscure that no attempt was made to present maps showing the local conditions

Persons interested in a further study of this subject are referred to Prof. Schucher's great work on the Paleogeography of North America, published as a bulletin of the Geological Society of America in 1910.

## MEETING OF BOTANICAL BRANCH.

Held on Jan. 28th at the home of Mr. Geo. H. Clark, the following members being present, in addition to the host: Messrs. Whyte, W. T. Macoun, Michaud, Malte, Campbell, Sirett, Bunting, Carter, Blackader and Groh.

On assembling the company first examined some roots of ginseng which had been collected at Wakefield, Que., and were shown by Dr. Blackader. This plant is rare in the Ottawa district, but some of the members were able to report its former occurrence in localities close to the city.

Mr. Clark spoke briefly about large sets of representative Canadian seeds which have been put up by the Seed Branch, and about certain recent developments in Canadian vegetable seed production.

The subject for the evening was, "A Forest Flora in the Making"; in other words, a report on a botanical survey of a plantation of Scotch and Austrian pines at the Experimental Farm. It was presented by Mr. H. Groh, who made the observations during the past summer. The plantation in question is