

## GENERAL EXCURSION TO CHELSEA.

The first General Excursion of the year was held on May 30th, to Chelsea, the most favourite resort of all. Nearly 200 members and friends attended the outing. President Attwood was in charge and he had with him an unusually large number of Leaders. After enjoying the afternoon in roaming the woods, in search of specimens, or making observations on natural objects, the whole party met again in the grove at 5 o'clock, and listened to interesting talks by many of the prominent members of the Club.

Dr. H. M. Ami, who was one of the first Leaders called upon, in speaking of the geology of Chelsea said, in part: "We are standing on ground which is the meeting place of the two extremes in the geological scale. This locality is situated where the earliest rock-formations that we know of, constituting the earth's crust, are in close contact with the most recently deposited in the last phase of the history of this part of our continent. The former consists of highly metamorphosed and hard crystalline rocks, making up part of the original crust of the earth; the latter, of comparatively soft sands, gravels, clays and boulder clays, constituting the soil and land surfaces generally, which are tilled by the agriculturist of to-day. The former holds minerals of great economic value:—mica, felspar, iron ores, marbles, asbestos, graphite, molybdenite, and other materials used in the arts and manufactures, not to speak of rocks, such as granite, gneiss, dolomite, etc. The older rocks are ascribed to the Laurentian and Huronian systems in geology, whilst the more recent ones are referred to the Pleistocene or Post-Tertiary (sometimes called the Quarternary) system. Chelsea Station stands on the edge of a terrace, or old sea beach, estimated at 365 feet above present tide level (the datum point) on the St. Lawrence at Three Rivers. Salt water shells, well known as living or recent species in the salt waters of the Gulf and River St. Lawrence below the Island of Orleans, were obtained in a gravel pit a few hundred yards north of Chelsea Station and are exhibited as evidence of the marine origin of the sands and clays from which they were obtained. Scratched pebbles (glaciated) of the district, revealed the presence of a sheet, or mantle of 'till,' laid down by the Labradorian glacier. It was a land ice-mass, possibly two or three thousand feet in thickness at the maximum period of refrigeration of this part of the continent and no organic remains have been detected in the Labrador formation which constitutes the lowest of the three series forming the Pleistocene system as developed at this locality."