

are fairly distinct, the accompanying topography is not, and, hence, sharp lines are impossible, and the boundaries shown on the map are only approximate. The divisions may be named as follows :

- I. *The Northern Plateau*, including the great Upper Silurian Area of the Northwestern part of the Province, with Lower Carboniferous outliers on its margin in places, forming mostly a great peneplain 800 to 1000 feet above the sea.
- II. *The Central Highlands*, of Archaean Felsites and of Granite, bordered by Cambro-Silurian Slates, consisting of irregular ridges, forming the axis of the Province, and culminating in the high hills, 2000-2700 feet above the sea, between the headwaters of the Tobique, Nepisiguit and Miramichi.
- III. *The Eastern Plain*, of Carboniferous bordered by Lower Carboniferous sandstones. This is a peneplain, is highest in its western part and slopes off to the eastward where it is low and level.
- IV. *The Southern Highlands*, also of ridges of Archaean Felsites and of Granites intermixed with Silurian and Devonian rocks reaching heights up to 1400 feet, and merging in Charlotte with the Central Highlands. This may perhaps better be called *The Southern Ridges*.

27.— ON A MARKED BROWSING-EFFECT OBSERVED NEAR ST. STEPHEN.

(Read May 2nd, 1899).

Five miles below St. Stephen, on the peninsula between the St. Croix and Oak Bay, is a high granite hill, called locally Dickie's Mountain. It is notable for the superb view it commands, and is recorded in the Society's Bulletin as the best mapped hill in New Brunswick (Bulletin No. XVII, page 123). The top is largely bare rock, but bears here and there small spruces, many of which attract attention through their unusual form, for they are hour-glass shaped, or at times like two cones, with the base of one resting upon the apex of the other (see the third in the accompanying Figure 3). The lower cone is the most symmetrical, extremely dense, and always approximately of the same height, as the axe introduced into the three figures will show. The upper cone may be absent altogether, or developed in various degrees, and is always loose in structure, and quite like any other spruce. One is at first inclined to ascribe the appearance to clipping by man, or to some growth conditions peculiar to the locality, but it is no doubt a marked kind of browsing effect. The place is a sheep pasture, and these animals probably bite off the young terminal