It is the product of three separate intrusions; first, a normal essexite, without olivine, was intruded and this was followed by a nordmarkite magma composed principally of coarsely crystalline microperthite (albite-orthoclase) with a small amount of ferromagnesian minerals, mostly augite. Lastly, a body of pulaskite was thrust in between the essexite and the nordmarkite. It differs from the nordmarkite in having a porphyritic structure and in having hornblende instead of augite as the characteristic bisilicate. Each of these three intrusions was accompanied by a set of dykes. The same foliated structure as described at Brome is here also in evidence.

BROME MOUNTAIN.

Brome mountain is a laccolith with an area of 30 square miles, and it is the largest of the Monteregians. It is rudely circular in form and the central portion is a nearly level basin 2 miles wide by 2·5 miles in extent, with an absolute altitude of 500 feet, or 50 feet above the country level. Surrounding this basin is a nearly continuous rim of hills which rise 600 to 1,000 feet higher; the highest point on the mountain is thus 1,500 feet above the sea. In this case there were three igneous intrusions: the first was an essexite magma with about 90 per cent of plagioclase, varying from labradorite to bytownite, with a little nephelite; the second was composed of nordmarkite, which also contains about 90 per cent of feldspar, a kryptoperthic intergrowth of albite and orthoclase; the third intrusion was the smallest and proved to be a tinguaite, "a porphyritic rock having a green matrix and a few phenocrysts of light grey colour"; it contains nephelite, orthoclase, sodalite, and aegerite. There were relatively few dykes following these invasions.

The rocks exhibit a foliated and incipient schistose structure parallel in direction with the foliation of the surrounding sediments, and this is thought to have formed during a late stage in the folding of the Appalachians. This mountain is only 2·5 miles south of Shefford and from the similarity in the order and composition of the intrusions, Dresser[1] concludes that on the whole "it

[1] Summary from Report on the Geology of Brome Mountain, Quebec. Dresser, J. A., Can. Geol. Surv., Ann. Rept., Vol. XVI, Part G, 1906.