

Outremont. This rock is a nepheline syenite, and contains so much nepheline that if a little of it be finely powdered and boiled with acid for a few minutes it will pass into a mass of thick jelly.

The final outburst of volcanic energy on the part of Mount Royal is represented by the swarm of narrow dykes or walls of igneous rock which cut not only through the limestones of the region but also through the rocks of both of the former eruptions just referred to. These, although erupted during the final stage, are not all absolutely identical in age; in fact, in the excavation made for the reservoir on Peel Street some seven distinct sets of dykes, each cutting across, and therefore more recent than the previous ones, could be seen. These dykes are composed of a variety of rocks; all of them are very rare and found in but few other places in the world.

Now, although detailed study of these rocks requires some special knowledge of the methods of modern petrography, no study of the region can be made until the necessary materials for it have been collected. The collection of such materials, in itself an occupation by no means devoid of interest, might easily be undertaken by members of the Society, and the collections, if carefully labelled and deposited in the Society's Museum, would always be available for detailed study. Such a detailed study is now being undertaken by Dr. Harrington and the writer, who would be glad to examine and describe any carefully collected material.

It is from the dykes of the third eruption that collections of the greatest value can be made, especially where these are exposed from time to time in cuttings and excavations which are subsequently filled in again, and the exposures thus rendered inaccessible. In collecting specimens from such dykes, the width of the dyke, measured across it, that is, at right angles to its dip, if it be not vertical, should be noted, as also the direction in which