[Feb.

It is in the latter locality that the ferruginous chlorite, of which the analysis is quoted above, is found. It not only occurs in the amygdaloidal varieties of other localities, but, according to Naumann, it is also a constituent of many compact melaphyres. The following translation is from Naumann's Lehrbuch (I, 600) and is descriptive of the peculiarities of the melaphyres. It will be seen at once that it in every particular applies to the melaphyres of Portage Lake. "The principal characteristic of these rocks is " founded, on the one hand, on the decided nature of the felspa-" thic constituent, which when distinctly developed, has always " been recognized as labradorite, and on the other hand on the cir-" cumstance that pyroxene is very seldom present in recognizable " crystals, or grains, and usually cannot be determined mineralogi-" cally. The melaphyres generally appear as micro- or crypto-" crystalline rocks and only sometimes have arrived at a distinctly " granular development. A third peculiarity is recognizable in " the tendency which these rocks have to the formation of air-" cavities and amygdaloidal structure, on which account the mela-" phyres are very frequently developed as amygdaloids or spilites. " In the amygdules, which sometimes reach a considerable size, " and then appear as geodes of varied constitution, the following " minerals are mostly found :---calcspar or brown-spar, and many " varietics of the species quartz (chalcedony, carnelian, jasper, " quartz, amethyst, agate) as also a mineral resembling chlorite or " green-earth which usually forms the periphery of the amygdules " like a shell or rind. A similar, soft and green-coloured mineral " is also often disseminated in the rock in grains and indistinct " crystals. The zeolites which are so frequent in the amygdaloidal " basalts, belong to the more rare occurrences in melaphyres pro-" perly so called. If we now add to these characters the com-" plete absence of quartz in the form of a rock constituent, the " predominating reddish-brown to reddish-grey colour of the mass " of the rock, which sometimes runs into greenish-grey, dark-" green and black, and the frequent occurrence of rubellan or " mica, we shall have tolerably exhausted the general petrographical " peculiarities of the melaphyres." Dr. T. Sterry Hunt, in his valuable paper on lithology, refers to this class of rocks as requiring a distinctive name, but he seems unwilling to adopt that of Since, however, Von Buch, Naumann and Senft* melaphyre.

^{*} My objection to retaining the name of melaphyre is based upon the fact that these authors apply the name to different rocks. Brongnart, who invented it,