

compressed air, and a fine ladder-way forms a convenient means of access to all the levels.

The occurrence of the mica crystals, often of immense size is interesting. They are found sometimes in the calcite, sometimes in the apatite; and occasionally the enclosing substance is a mixture of these two minerals. In one of the calcite masses are large crystals of pyroxene of at least six inches diameter. One crystal of mica was removed with a length of over nine feet and a breadth of from four to six feet, the quality of which was excellent. Great numbers of smaller sizes, occur and the output generally is of extra large dimensions, the crystals being in great masses, and some of the individuals weighing several tons.

Of the many smaller dykes which intersect the surface of the knobs in this area, some are soft and filled with small mica scales, others are hard and dioritic, and a passage from one to the other is sometimes exposed on the adjacent lot to the south, where several openings have been made, but here much of the mica, while of fair size, is cloudy or milky and of small value.

The mica zone at the main pit is in places from 12 to 18 feet wide, and is bounded on the south by a hard blackish diorite or a hornblende granite which sometimes assumes a reddish tint. To the east of this main pit are a number of smaller openings, some of them test pits, in a soft micaeous pyroxene in which the mica crystals are often cloudy. About 50 yards to the north are the workings of the old Smith and Lacey mine, which was also a true contact deposit and which for several years produced a considerable quantity of very large mica, but this portion of the property is now filled with water so that the old workings could not be examined. As the present mine is well developed the output should be very great and of superior quality as regards size. It is all shipped to the cutting plant of the company in Ottawa.

Among other mines in this district, most of which are not now or no longer worked, is one on Gould lake, operated by Mr. Fralick of Sydenham. The place was not visited, but the owner says the rock is the usual type of reddish and sometimes garnetiferous gneiss, overlaid in part by crystalline limestone, and cut by basic dykes of pyroxene. The mica occurs for the most part as contact deposits, between the gneiss and the dyke or between the dyke and the limestone, and sometimes in the mass of the pyroxene itself, in the first case along the foot wall in calcite. The vein is somewhat irregular in places, varying, as usual, in productiveness in different parts of the mine. No details as