

on crystallization and the vein is more liable to be in the form of lenses.

The Hanlan Mine, situated on lot 11, in the 6th concession of North Burgess, is probably the best example of a true fissure vein of any amber mica mine in the Province. Here the vein has been mined for a depth of 120 feet, and a length of about 200 feet, without a break in it. The vein is quite uniform in width, averaging about 6 to 8 feet, while in some places it widens out to about 15 feet. The vein matrix, as is usual, consists of calcite and pyroxene, with occasional pockets of apatite. The mica in parts is well crystallized, while in adjacent parts it is quite badly crushed. The wall rock is a mica pyroxene schist, but not enough work has been done cross-cutting this to show whether

25 feet on the vein, mica crystals were found through the apatite. The apatite is soft and granular, thus giving the mica a favorable matrix in which to crystallize out freely. The vein in some places is 10 feet wide, consisting of apatite, calcite and mica. The vein dips at an angle of 50 degrees to the horizontal. On each side of the vein we find a mica pyroxene schist some few feet in thickness, which in turn cuts through the granite gneiss. This belt of mica pyroxene schist can be traced for some distance along the surface, where at different places a little mica has been taken out. The association of the pyroxene rock with the mica veins is very marked over the whole mica area. In fact, it is very rare to find a large, healthy deposit unless it is enclosed by this rock.



FINISHING HOUSE—LACEY MINE, SYDENHAM.

Operated by the General Electric Company.

there is any distinct bedding. In other respects it is quite similar to the corresponding mica pyroxene schist at the Lacey Mine. This vein strikes east and west, cutting the granite gneiss of Laurentian age, and dips to the south at an angle of about 75 degrees to the horizontal.

As an example of a deposit where the apatite predominates in the vein matrix, I shall briefly describe the mine known as the Smith Mine, owned by the Dominion Development & Improvement Company. This mine is situated on the east half of lot 13, in the 5th concession of North Burgess, and was originally opened up as a producer of apatite. After a pit had been sunk about

At the present time the preparation of the mica for the trade has created quite an industry in Eastern Ontario, especially in Ottawa, which is quite favorably situated as the centre of the mica-producing sections of Ontario and Quebec. In Ottawa two of the large consumers, The Laurentide Mica Company (Westinghouse) and The General Electric Company, have built factories in which they employ from 500 to 600 girls in the preparation of the mica for the market. The preparation consists of cleaning or breaking off all the ragged or broken edges of the run of mine crystals, and splitting it down to about one-eighth of an inch in thickness, and grading it to the different marketable sizes.