

from 8 to 10 feet in places near the west side of the pyroxene dyke. Much of the mica seen at the time of our visit in 1901 was in large-sized crystals, some of them measuring 12 x 16 inches but somewhat dark in colour. In places bunches of pyrite came in near the edge of the dyke and when in contact with the mica the latter became rotten and discoloured. The pyrite sometimes passes into a red haematite. Small bunches of pink calcite are found with the mica and both red and green apatite in small amount at a depth of 20 feet which was that of the pit when we examined it. Though a considerable amount of mica was extracted, the mine has since been closed. The occurrence of the pyrite at this place and its injurious action on the mica is an interesting circumstance.

Near the line between the townships of Storrington and Bedford <sup>Opinicon lake</sup> on the north side of Opinicon lake are the Smith and Lacey mines which have been extensively worked at intervals for several years. The mica is of a light amber colour occurring in pyroxene dykes which cut a gray and sometimes rusty gneiss, and is associated with a light green mineral resembling a feldspar, but no pink calcite was seen. The mica appears to occur as fissure deposits near pegmatite intrusions, and a large amount has been taken out, much of it of large size and good quality. At the old apatite mine on the east side of this lake, near the outlet from Crow lake mica was observed. Along the shores of Rock lake also small showings of mica have been reported but nothing has been done in this direction.

On Buck lake, which is about four miles west of Opinicon lake, <sup>Buck lake</sup> there are several mica mines, one of which was worked for a number <sup>Bedford</sup> of years and has been a large producer. This mine is on lot 3, range XII, Bedford, known as the Stoness mine, and belongs to the contact class, the mica being in pyroxene which cuts the grey and reddish gneiss. There are a number of these dykes in the vicinity. Crystalline limestone occurs abundantly on the shore of the lake near the mine and is cut by white pegmatite. The pyroxene in which the mine is located is a light green variety with great masses of pink calcite, through which the crystals are disseminated, sometimes in pockets of large size, and the dump from the mine is largely of this calcite with masses of the light green pyroxene.

The workings were carried on by means of a shaft or slope sunk to the north-west for about 100 feet at an angle of about 30 degrees, the general strike of the gneiss in the vicinity being N. 30° E. A heavy dyke of dark diabase cuts across the gneiss and pyroxene a short distance west of the main opening with a thickness of about 15 feet which was