

# DESCRIPTION OF THE MINERALS

OF THE

## LAURENTIAN FORMATION OF CANADA.

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**QUARTZ.**—Quartz is the most common of all the materials of which rocks consist; it is one of the hardest minerals; does not melt in the hottest fire; is affected, but not dissolved, in the acids. A piece of quartz will write easily on glass. It is distinguished from any other mineral it resembles by breaking like glass as easily in one direction as another. It is of various colors, but mostly white, or some light shade of yellow, red or brown. Quartz is often found in six-sided colorless crystals. Sometimes one end of these crystals is attached to a surface of rock, forming brilliant groups. Purple-colored quartz crystals are the amethyst of jewellery; those of light yellow are the false topaz. The agate is another kind of quartz. The material of which quartz is made is called in chemistry Silica. Quartz, when pulverized and mixed with soda, potash, or some other minerals, melts easily and forms a glass. Common glass is made by melting together quartz, sand and soda. Hot water, containing soda or potash in solution, dissolves quartz, and deposits it again on its cooling. The water of hot springs often contain silica, which they have dissolved along with soda and potash; by deposits from such solutions fissures in the rock have been filled with quartz and the break mended. Sand and gravel beds have also, by these solutions, been cemented into the hardest of rocks. Quartz is very often found in the veins of the Laurentian formation; it also forms mountain masses, and then is called quartzite.

**SILICATES.**—A great number of minerals containing a large proportion of silica are called silicate. Of this the feldspar, orthoclase, oligoclase, labrodorite, etc., etc., are among the most important. Feldspar has generally a white or flesh-red color; resembles quartz, but is not quite as hard, though hard enough to