

A magnifying glass, which need not cost more than twenty-five cents will be found useful in examining the smaller grains. Determine whether a scratch can be made on one of the larger feldspar faces with the point of the blade of a pocket knife. Can the quartz be so marked? Break a piece, an inch or two in diameter, off a boulder or get a chip at a granite worker's or at a quarry. Find whether a grain of quartz, on a thin edge or corner of such a chip, will scratch a piece of ordinary window glass. Try a grain of feldspar in the same way. Get chips from a coarse-grained granite—the grains in boulders are frequently one-quarter inch or more in diameter—and see if the quartz will scratch the feldspar and *vice versa*. Pebbles of quartz, white or light gray in color, often an inch in diameter, are quite common in gravel pits and along the shores of lakes and streams. Get such a pebble. Make sure that it is quartz by trying your knife on it. Draw it across a piece of glass. Break it by a blow from a hammer on an anvil or on a large boulder. Are the surfaces of the pieces into which the pebble breaks similar to those of the grains of quartz on the face of a freshly broken specimen of granite?

Compare the general appearance of quartz with that of any common metal—iron, steel, or copper; a knife blade will do. It will be admitted that the quartz is more glass-like than metal-like in aspect. While its color is usually white or gray, it occurs, at times, in bluish grains in granite. Pebbles of quartz are sometimes reddish. Metals possess an aspect or lustre which is known as metallic; while substances such as quartz are said to have a non-metallic lustre. What is the lustre of feldspar and mica?

If one looks carefully among the boulders in almost any neighborhood he will find that some of them contain grains or pieces of feldspar half-an-inch or more in diameter. With a