mass of smaller grains. See another rock, less coarse, with grains white, pink, and black. See still another with grains all nearly alike. See one rock nearly a uniform white; another, bluish; another, reddish; another, nearly black. See one rock with numerous black shining scales; another, with smoky scales; another, with silvery scales. Now, all these differently colored constituents of the rocks are so many different *minerals*. Rocks are composed of minerals. Some rocks have two minerals; some, three; some, four; and some, only one. The particular name of a rock depends on the minerals in it. As soon as we know the minerals, we can call the name of the rock. Now, sit down and take a lesson in minerals.

Do you see this white flint rock, composed throughout of one kind of mineral? That mineral is Quartz. It is the hardest of all the common minerals. Try to scratch it. You see the point of steel makes no impression on it. But it leaves a black mark. The Quartz wears away the steel. When one of these bowlders is thus composed entirely of Quartz, its name is Quartzite. There are many Quartzites, as there are many Smiths and Joneses. Let us learn the other part of the name. Look at these uniformly colored quartzites-white and gray. You see one is composed of distinct grains; this is a Granular Quartzite. One has the grains almost completely melted together or confluent; this is a Vitreous Quartzite. One contains pebbles; this is a Conglomeritic Quartzite, or simply a Conglomerate. Another has some of its pebbles red; this is a Jaspery Conglomerate. You will find quartzites exceedingly abundant; and you will find grains of quartz in many other rocks than quartzites. In fact, quartz is most abundant of all minerals.

Conglomerates always excite curiosity—especially if the pebbles are of different bright colors. Two large masses of conglomerates of different sorts lie on the campus of the University of Michigan—souvenirs of two graduating classes. One is a jaspery conglomerate from the north shore of Lake Huron. It weighs six tons. The plum pudding, as big as