

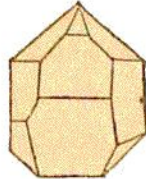
with other substances, under other names; as *amethyst*, when it is colored purple: *Rose*, *Smoky*, and *Ferruginous*, when pink, blackish, and yellowish red; *Chalcedony*, and *Agate*, when there are several colors exhibited in the same specimen, generally arranged fantastically; *Jasper*, when it is bright red. Figs. 42 and 43 represent the most common form of quartz crystals. Quartz is the most abundant of all minerals; there are but few rocks in which it is not the predominant ingredient. All the forms of quartz are absolutely insoluble in water, acids and most liquids, except hydrofluoric acid, a substance that does not appear ever to have been concerned in the formation and alteration of mineral substances.

Fig. 42.



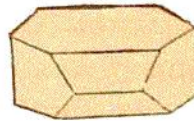
Quartz Crystal.

Fig. 43.



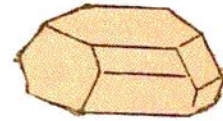
Quartz Crystal.

Fig. 44.



Crystal of Orthoclase.

Fig. 45.



Crystal of Albite.

*Feldspar* is a generic term, embracing several silicates of alumina and an alkali. The most common variety is the *potash-feldspar*, or *Orthoclase*, Fig. 44, which is a double silicate of alumina and potassa. The *soda-feldspar*, or *Albite*, Fig. 45, a double silicate of alumina and soda, differs from orthoclase but little in appearance, except in its crystalline form. Both species have a beautiful pearly lustre. The *lime feldspar* or *Labradorite*, a double silicate of alumina and lime, has a still more brilliant luster. Other species of feldspar are given in the table upon page 51. It is important to be able to distinguish these species, since particular rocks are characterized by the kind of feldspar most common in them.

*Mica* is also a generic term, including many species. They are divided into two classes according to the inclination of their axes of polarization to each other—in the common mica, *Muscovite*, inclining at a large angle; and in the others at a small angle. Muscovite occurs in plates, which scale off in very thin laminae. It is commonly called *isinglass*; and is well known from its