

(3.) *Colloid*, as a jelly-like though stony substance, deposited from aqueous solution. The most abundant mineral in nature which takes the colloid form is silica. Opal is a hardened colloidal condition of this substance. Chalcedony, doubtless originally colloidal silica, now unites the characters of quartz and opal, being only partially soluble in caustic potash and partially converted into a finely fibrous, doubly-refracting substance.

(4.) *Amorphous*, having no crystalline structure or form, and occurring in indefinite masses, granules, streaks, tufts, stainings, or other irregular modes of occurrence.

A mineral which has replaced another and has assumed the external form of the mineral so replaced, is termed a *Pseudomorph*. A mineral which incloses another has been called a *Perimorph*; one inclosed within another, an *Endomorph*.

*Essential or accessory, original or secondary minerals.*—A mineral is an essential ingredient when its absence would so alter the character of a rock as to make it something fundamentally different. The quartz of granite, for example, is an essential constituent of that rock, the removal of which would alter the petrographical species. A mineral is said to be accessory when its absence would not change the essential character of the rock. All essential minerals are original constituents of a rock, but all the original constituents are not essential. In granite, such minerals as topaz, beryl, and sphene often occur under circumstances which show that they crystallized out of the original magma of the rock. But they form so trifling a proportion in the total mass, and their absence would so little affect the general character of that mass, that they are regarded as accessory, though undoubtedly original and often important