

cavities of rocks, especially in the minute interspaces between the component grains or minerals. Subterranean channels, frequently several feet or even yards wide, have been gradually filled up by the deposit of mineral matter on their sides (see the Section on Mineral Veins). The cavities formed by expanding steam in ancient lavas (amygdaloids) have offered abundant opportunities for deposits of this kind, and have accordingly been in large measure occupied by secondary minerals (amygdales), as calcite, chalcedony, quartz and zeolites.

In the subjoined list of the more important rock-forming minerals, attention is drawn mainly to those features that are of geological importance; the physical, chemical and microscopic characters of these minerals will be found in a text-book of mineralogy or petrography. Reference is therefore made here to features of more special significance to the geologist, such as modes of occurrence, whether original or secondary; modes of origin, whether igneous, aqueous, or organic; pseudomorphs, that is, the various minerals which any given mineral has replaced, while retaining their external forms, and likewise those which are found to have supplanted the mineral in question while in the same way retaining its form—a valuable clew to the internal chemical changes which rocks undergo from the action of percolating water (Book III. Part II. Section ii. §§ 1 and 2); and lastly, characteristics or peculiarities of weathering, where any such exist that deserve special mention.

1. NATIVE ELEMENTS are comparatively of rare occurrence, and only two of them, Carbon and Sulphur, occasionally play the part of noteworthy essential and accessory constituents of rocks. A few of the native metals, more