

magnetite and titaniferous iron of the basalts, diabases, etc., and the occasional separation of the ore in the layers of segregation-veins in these rocks are familiar illustrations. Large included masses of these and other ores are sometimes available for mining (ante, p. 129).

3. Subsequently introduced ores are distinguished by the contrast between their contents and structure and those of the rocks through which they pass. They have been deposited, subsequent to the consolidation of these rocks, in cavities previously opened for their reception. In certain rocks (limestones, dolomites, etc.) intricate channels and large irregular caverns have been dissolved out by the solvent action of underground water; in other cases, fissures have been formed by fracture, or the rocks, exposed to great compression, have been puckered up or torn asunder, so that irregular spaces have been opened in them. Metallic ores and crystalline minerals introduced by infiltration, sublimation, or otherwise, into the cavities formed in any of these ways, may be grouped, according to the shape of the cavity, into veins or lodes, which have filled up vertical or highly-inclined fissures, and stocks, which are indefinite aggregations often found occupying the place of subterranean cavities.

The first two of these three types of ore deposits do not require special treatment here. The stratified type has the usual character of sedimentary formations (Book IV. Part I.); the crystalline type forms part of the structure of schistose and massive rocks (Book II. Part II. Sect. vii. §§ 2 and 3; and Book VI. Part I. § i.); the third type, however, from its economic importance and its geological interest, merits some more detailed notice.