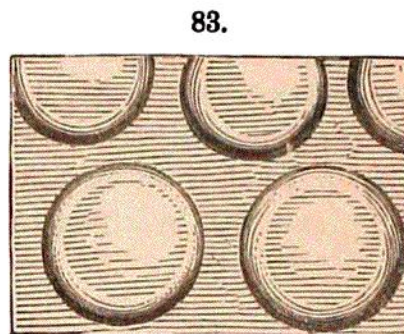
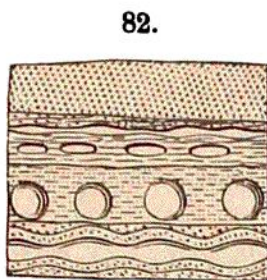
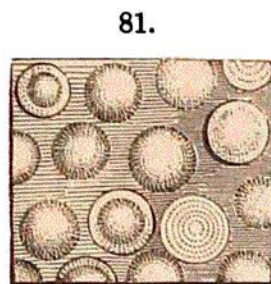


banks, and is common among the old limestones of the world. Calcareous concretions are most common. Those of pyrite, limestone, and quartz are also common; and many other minerals take the concretionary form. Nodules of flint or chert in rocks are often concretions, and frequently have a fossil as a center.



The consolidation of a concretion is sometimes followed by further drying from the outside inward, and in this process the interior often becomes much cracked, as in Figs. 72, 73; and the cracks may be afterward filled with calcite or some other material, and make *septaria*, the name alluding to the division or septation of the interior. These septaria concretions occur at times in very large flattened forms, even one to three feet in diameter, when they are sometimes popularly called petrified turtles, from the resemblance to the back of a turtle in the divisions; the more beautiful kinds are often sawn into circular slabs and polished for table-tops.

Solidification *from fusion* often produces concretions in the mass which sometimes consist of more or less distinct concentric layers of different minerals, or, it may be, of a single mineral. Fig. 84 illustrates this structure in a granite-like rock, the "orbicular diorite" of Corsica. The *pudding-granite* of Craftsbury, Vt., contains large black, ovoidal concretions, consisting chiefly of black mica.

Concretions are also made by growth *radially* from a center, but this kind is of inferior geological importance. The process makes attached spheres and hemispheres, radiately fibrous or columnar within. An example—in a reversed position, in order to exhibit the interior structure—is shown in Fig. 76.

Spheres and irregular spheroids or balls in rocks, when hollow within and lined with crystals, are not concretions, but instead *geodes*; and any cavity so lined, whatever the shape, takes this name. Geodes are often quite large, as in the Keokuk limestone of Iowa and Illinois, where they have been supposed to occupy the centers of sponges that were at some time hollowed out by siliceous solutions, like the hollowed corals of Florida, and then lined with crystals

