

or all of the lime has been removed, leaving a siliceous skeleton of the rock. A similar decomposition takes place in some ferruginous limestones, with the result of leaving a yellow skeleton of ochre. Common limestone, having been deposited in water usually containing other substances in suspension or solution, is almost always mixed with impurities, and where the mixture is sufficiently distinct it receives a special name, such as siliceous limestone, sandy limestone, argillaceous limestone, bituminous limestone, dolomitic limestone.

T r a v e r t i n e (calcareous tufa, calc-sinter) is the porous material deposited by calcareous springs, usually white or yellowish, varying in texture from a soft chalk-like or marly substance to a compact building-stone. (See Book III. Part II. Sect. iii. §§ 3, 6.) *Stalactite* is the name given to the calcareous pendent deposit formed on the roofs of limestone-caverns, vaults, bridges, etc.; while the water, from which the hanging lime-icicles are derived, drips to the floor, and on further evaporation there, gives rise to the crust-like deposit known as *stalagmite*. Mr. Sorby has shown that in the calcareous deposits from fresh water there is a constant tendency toward the production of calcite crystals with the principal axis perpendicular to the surface of deposit. Where that surface is curved, there is a radiation or convergence of the fibre-like crystals, well seen in sections of stalactites and of some calcareous tufas (Fig. 108).

O o l i t e—a limestone formed wholly or in part of more or less perfectly spherical grains, and having somewhat the aspect of fish-roe. Each grain consists of successive concentric shells of carbonate of lime, frequently with an internal radiating fibrous structure, which gives a black cross between crossed Nicols (Fig. 27). The calcareous material was deposited round some minute particle of sand or other foreign body which was kept in motion, so that all sides could in turn become incrustated. Oolitic grains of this character are now forming in the springs of Carlsbad (Sprudelstein); but they may no doubt also be produced where gentle currents in lakes, or in partially inclosed areas of the sea, keep grains of sand or fragments of shells drifting along in water, which is so charged with lime as to be ready to deposit it upon any suitable surface. An oolitic limestone may contain much impurity. Where the calcareous granules are cemented in a somewhat argillaceous matrix the rock is known in Germany as Rogenstein. Where the individual grains of an oolitic limestone are as large as