in the act of deposition; others are argillaceous, sandy, ferruginous, dolomitic, or bituminous. By far the larger number of limestones are of organic origin; though owing to internal rearrangement, their original clastic character has frequently been changed into a crystalline one. Under the present subdivision are placed all those limestones which have had a distinctly chemical origin, and also those which though doubtless, in many cases, originally formed of organic débris, have lost their fragmental, and have assumed instead a crystalline structure. (For the organic limestones see p. 244.)

Compact, common limestone—a fine-grained crystalline-granular aggregate, occurring in beds or laminæ interstratified with other aqueous deposits. When purest it is readily soluble in acid with effervescence, leaving little or no residue. Many varieties occur, to some of which separate names are given. *Hydraulic limestone* contains 10 per cent or more of silica (and usually alumina) and, when burned and subsequently mixed with water, forms a cement or mortar, which has the property of "setting" or hardening under water. Limestones containing perhaps as much as 25 per cent of silica, alumina, iron, etc., that in themselves would be unsuitable for many of the ordinary purposes for which limestones are used, can be employed for making hydraulic mortar. These limestones occur in beds like those in the Lias of Lyme Regis, or in nodules like those of Sheppey, from which Roman cement is made. *Cementstone* is the name given to many pale dull ferruginous limestones, which contain an admixture of clay, and some of which can be profitably used for making hydraulic mortar or cement. *Fetid limestone* (*stinkstein*, *swinestone*) gives off a fetid smell (sulphuretted hydrogen gas), when struck with a hammer. In some cases, the rock seems to have been deposited by volcanic springs containing decomposable sulphides as well as lime. In other instances, the odor may be connected with the decomposition of imbedded organic matter. In some quarries in the Carboniferous Limestone of Ireland, as mentioned by Jukes, the freshly-broken rock may be smelled at a distance of a hundred yards when the men are at work, and occasionally the stench becomes so strong that the workmen are sickened by it, and require to leave off work for a time. *Cornstone* is an arenaceous or siliceous limestone particularly characteristic of some of the Palæozoic red sandstone formations. *Rottenstone* is a decomposed siliceous limestone from which most