

the joints are also irregular; but in the slaty beds of Collyweston, Stonesfield, &c., the contrary is true. The joints are most open in the thick oolites, where they are frequently lined by stalagmitic incrustations, and filled with clay from above, and sometimes terminate in caverns, which, in Yorkshire and Franconia, contain bones of quadrupeds introduced at much later dates.

In certain districts these joints contribute, by weakening the rocks in certain lines, to produce the phenomenon of sliding ground; this is especially the case in the Hambleton hills, Yorkshire, from which, at different historical times, even as late as 1790, great landslips have occurred by the sliding of the clays below the calcareous grit, and the separation of masses of that grit and the superincumbent oolite along the planes of great vertical joints. The main line of these joints is about N. by W., and parallel to the immense natural escarpment of the Hambleton hills.

*Series of Strata.*—On the continent of Europe, the oolitic system, as characteristically exhibited in the Jura mountains, shows less distinctly than in England the minor groups, which furnished to Dr. William Smith the first proofs that England was regularly divided into strata, following one another for great distances on the surface, and sinking in the same direction beneath it. The divisions of the oolitic system, recognised by that distinguished observer, near Bath, are found however to apply with sufficient general accuracy to all European countries; and there is reason to think, the European type will be found applicable even to the flanks of the Himalaya.

Of the five formations which compose the oolitic system in England, the upper or wealden formation is the most local—the lower or lias formation the most extensive: the three intermediate or properly oolitic formations are easily distinguishable in the south of England and the north of France; but in the south of France, and generally in the Jura mountains, from Geneva to Bayreuth, this discrimination is a work of difficulty. Even in England, the three oolitic forma-