

JURASSIC PERIOD.

THIS period, one of the most important in the physical history of the globe, has received its name from the Jura mountains in France, the Jura range being composed of the rocks deposited in the seas of the period. In the term Jurassic, the formations designated as the "Oolite" and "Lias" are included, both being found in the Jura mountains. The Jurassic period presents a very striking assemblage of characteristics, both in its vegetation and in the animal remains which belong to it ; many genera of animals existing in the preceding age have disappeared new genera have replaced them, comprising a very specially organised group, containing not less than 4,000 species.

The Jurassic period is sub-divided into two sub-periods : those of the *Lias* and the *Oolite*.

THE LIAS

is an English provincial name given to an argillaceous limestone, which, with marl and clay, forms the base of the Jurassic formation, and passes almost imperceptibly into the Lower Oolite in some places, where the Marlstone of the Lias partakes of the mineral character, as well as the fossil remains of the Lower Oolite ; and it is sometimes treated of as belonging to that formation. "Nevertheless, the Lias may be traced throughout a great part of Europe as a separate and independent group, of considerable thickness, varying from 500 to 1,000 feet, containing many peculiar fossils, and having a very uniform lithological aspect."* The rocks which represent the Liassic period form the base of the Jurassic system, and have a mean thickness of about 1,200 feet. In the inferior part we find argillaceous sandstones, which are called the sandstones of the Lias, and comprehend the greater part of the *Quadersandstein*, or building-stone of the Germans, above which comes compact limestone, argillaceous, bluish, and yellowish ; finally, the formation terminates in the marlstones which are sometimes sandy, and occasionally bituminous.

* Lyell, "Elements of Geology," p. 413.