

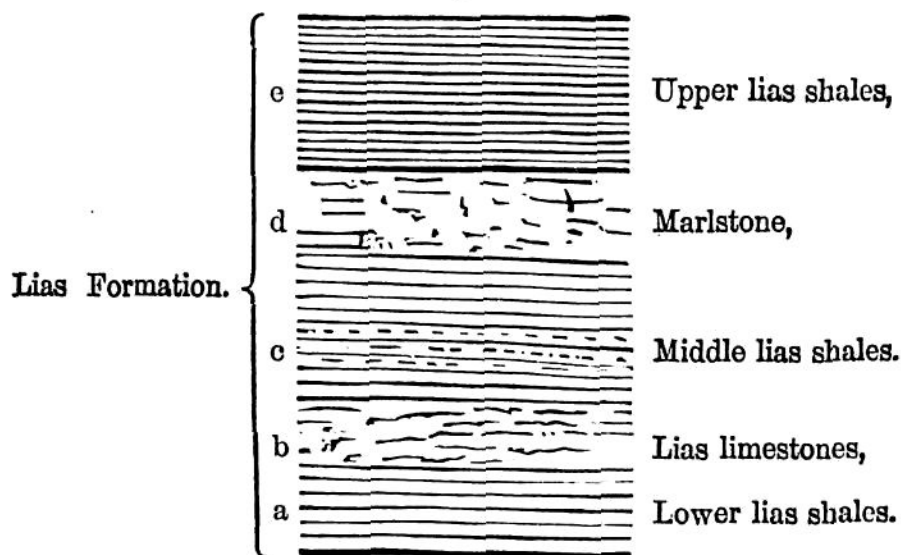
## FORMATIONS.

Each rock, in its most extended sense, consists of several varieties, agreeing together in certain general characters, and occupying such a relative situation with respect to one another as to show that all of them were formed under similar circumstances, and during the same geological period. Such a group constitutes a *formation*. Ex. gr. Cretaceous formation.

This term often embraces several distinct rocks, when there is reason to suppose that they were produced during the same geological period.

Fig. 38 will give an idea of a formation. It represents the *Lias formation* of England, lying below the oolite, and above the triassic formations.

Fig. 38.



The French word *terrain*, and the English word *group*, are nearly synonymous with formation.

A *series* is a natural group of formations distinguished from all others by characteristic organic remains. It is less comprehensive than *system*, which applies to the greater divisions. Thus in Fig. 36 the beds of stratified rocks upon the left hand side, as Alluvium, etc., are *series* of lesser formations, which are not enumerated: but the four great divisions of the same rocks upon the right hand side, as Azoic, etc., are *systems*. Through inadvertence the terms series, formation, and system, are often used as synonymous by geologists.