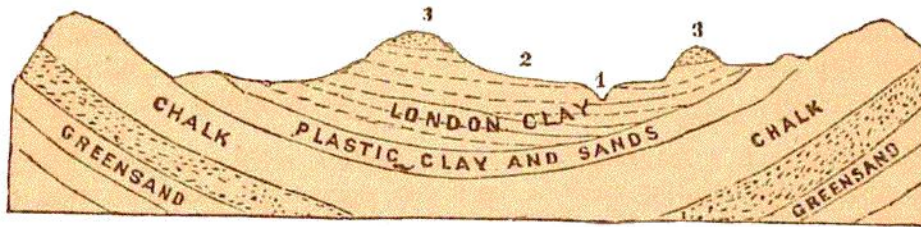


Fig. 57.



1. River Thames.

2. London.

3. Marine sands.

The Tertiary rocks are in general distinctly stratified, and the strata are usually horizontal. But in some cases, as at the Isle of Wight and upon Martha's Vineyard, they are inclined at a large angle.

The Tertiary rocks are mostly of mechanical origin : nevertheless, several beds are the result of chemical precipitation ; as gypsum, limestone, and rock salt.

The varieties of rocks composing the Tertiary strata are concretionary, tufaceous, argillaceous, and silicious ; or limestone, marl, plastic clay, silicious and calcareous sands, green sands, gypsum, lignite, rock salt, and buhrstone.

## 2. Alluvium.

Much of this deposit consists of materials which have resulted from the comminuting, rounding, and sorting action of water, and hence the name from *alluvio*, an inundation, or *alluo*, to wash.

Alluvium is divided lithologically into two sections ; *Drift*, and *Modified Drift*, or Alluvium proper. Chronologically, it is divided into four periods : 1. The *Drift Period* ; 2. The *Beach Period* ; 3. The *Terrace Period* ; and 4. The *Historic Period*, or the present system of life and action.

### 1. Drift.

Owing to the diversity of opinion that has prevailed respecting the origin of this deposit, it has received various names, such as *diluvium*, *boulder formation*, *erratic block group*, etc. . The term *diluvium* is objectionable, because it implies that its origin was the deluge, or some deluge, the very point to be proved. *Drift* is a better term, because short and free from hypothetical allusions.