

## CHAPTER II.

### BEDS BETWEEN THE CHALK AND OOLITE SERIES.



#### Section I.

(a) *Introductory view.*\* Viewed on the large scale, the interval between the chalk and oolites may be described as occupied by a series principally consisting of beds of siliceous sand, which probably have an aggregate thickness in the greater part of their course of not less than 1000 feet, and form that extensive sand tract which is universally to be traced beneath the escarpment and inferior termination of the chalky ranges.

In the southern counties, where this series is exhibited in the most complete manner, its subdivisions are clearly ascertained; but in the midland and north-eastern, they have not as yet been so well determined.

Where the series is fully developed, the sandy beds are found to be divided into two groupes, separated by an intermediate bed of clay; the upper sandstone being distinguished by the general occurrence of numerous interspersed specks of a greenish substance, probably coloured by oxide of iron, and the lower by a deep ferruginous hue derived from the abundance of brown oxide of iron they contain: hence the former is usually called the Green Sand Formation, and the latter that of Iron Sand; occasionally, however, some of the upper beds assume the same ferruginous appearance.† Interposed be-

\* By the Rev. W. D. Conybeare.

† The occasional occurrence of the green particles in other beds, particularly in the chalk marle, and the ferruginous character of some of the beds of the upper or green sand formation, has been an occasion of deceiving even experienced observers who have confined their examination to a single point; but when the field of observation is more extensive, and the great and continuous ranges of these upper and lower sands, are traced from their sections on the coast through the interior, particular attention being paid to the course and character of the intermediate clay, their family and relations will be clearly ascertained. These observations principally refer to the Weald countries.