

Section VI.

*Particular account of the distribution of the formations between the Chalk and Oolites, in the several districts occupied by them.**

The reasons which appeared to render it desirable to subjoin to the more general view of these formations already given, a more precise account of their local phænomena, have been already stated in the introduction to this chapter. We shall commence this article with a description of the structure of the Weald of Kent, Sussex, and Surrey; since it is in this tract that the formations in question acquire their greatest thickness and importance.

A. *The Weald.*

This district may be generally described as stretching along the coast of the channel from Folkstone to Beachy Head, and thence extending westwards into the interior as far as the confines of Sussex and Hampshire.

A lofty range of chalk hills, already described in treating of that formation, forms the general boundary of this district, excepting where it is open to the sea; and as the formations within the area make their appearance by emerging from beneath the surrounding chalk, it has been frequently described as a great denudation. It would, however, be highly rash to assume that the chalk at any period actually covered the whole space in which the inferior strata are now exposed, although the truncated form of its escarpment evidently shews it to have once extended much farther than at present.

To the encircling hills of chalk a valley of variable breadth, occupied by the chalk marle and its subjacent clay, succeeds. This valley, through a great part of Kent and Surrey, was anciently known by the name of the Vale of Holmesdale; a name celebrated by the traditionary lines which recorded the successful stand said to have been made in defence of the ancient laws and liberties of the country against the Norman invader.

‘ The Winding vale of Holmesdale
Was never won nor ever shall.’

The inner border of this valley is formed by a second range of hills running round in a line nearly parallel with those of the chalk, which they rival and even surpass in height: these are composed of the green sand formation. At the foot of this second amphitheatre of hills, is a second valley much broader

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