

(e) *Elevation.* This formation never rises into hills of any height. In the Weald, where alone it possesses sufficient thickness and extent to give any character to the general form of the surface, that surface is an uniform broad vale.

(f) *Thickness.* We possess no data for estimating its thickness, beyond those which may be deduced from the consideration of its superficial extent. On this ground we may safely assign to it in the Weald of Kent more than 300 feet. In the Isle of Wight it appears not to exceed 100.

(g) *Inclination* We have no particular observations to make concerning the inclination of its strata, which appears to be always parallel to the superstrata of green sand and chalk.

(h) *Agricultural character.* This formation presents to the agriculturist a soil of pale, cold, and retentive clay, naturally covered with woods, and requiring a large capital, combined with superior skill, attention, and activity, to convert it to any other purpose.

(i) *Phænomena of springs, &c.* The aluminous chalybeate spring, analysed by Dr. Marcet, in the Isle of Wight, appears to have its origin in this formation.

Section V.

IRON SAND.*

In arriving at this, the lowest of the formations which intervene between the chalk and oolites, we become released from the difficulties which still partially obscure the history of some of those strata of which we have lately treated. We are able to trace and identify the present series throughout the island.

This formation may be best studied in the neighbourhood of Hastings. In different counties it has received the name of *Carstone* and *Quern stone*. It is not possible to assign the synonyme employed in the geological works of Mr. Smith, since from an erroneous identification of the strata in different districts, he has attached different names, and attributed different geological positions, to this formation. It forms the micaceous brick earth of the midland counties in his description; but in the Weald he ascribes this to the Folkstone clay, and confounds this sand with that which underlies the coral rag.

(a) *Chemical and external characters.* This formation is composed of a series of strata, in which sand and sandstone

* Chiefly by the Rev. W. D. Conybeare.