

not have been suspected by the geologist, had not the evidence of great convulsions been clearly exposed in the escarpment of the valley of the

Fig. 326.



The Coomb, near Lewes.

Ouse, and the numerous chalk-pits worked at the termination of the Coomb. By the aid of these we discover that the ravine coincides precisely with a line of fault, on one side of which the chalk with flints (*a*, fig. 327) appears at the summit of the hill, while it is thrown down to the bottom on the other.

Fig. 327.



Fault coinciding with the Coomb, in the Cliff-hill near Lewes. Mantell.

a. Chalk with flints.

b. Lower chalk.

In order to account for the manner in which the five groups of strata, 2, 3, 4, 5, 6, represented in the map, fig. 320, and in the section, fig. 321, may have been brought into their present position, the following hypothesis has been suggested:—Suppose the five formations to lie in horizontal stratification at the bottom of the sea; then let a movement from below press them upwards into the form of a flattened dome, and let the crown of this dome be afterwards cut off, so that the incision should penetrate to the lowest of the five groups. The different beds would then be exposed on the surface, in the manner exhibited in the map, fig. 320.*

* See illustrations of this theory, by Dr. Fitton, Geol. Sketch of Hastings.