

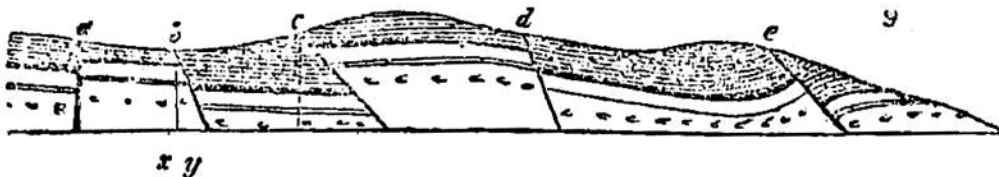
pushed outwards, so that the strata usually lying uppermost in the group are actually, for a short distance, undermost (*e*).



Faults.

Besides these, other forms of disturbed stratification demand attention; especially those in which the continuity of the strata is broken, and the divided parts placed at different levels. This interruption and dislocation of the strata commonly happens along a plane approaching to the vertical, which is usually marked by a rude and irregular fissure. This fissure, whether empty or in any manner filled (with fragments of the bordering rocks or other substances), is called "*a fault*," and locally "*a dyke*," "*a trouble*," "*a gall*," "*a slip*," &c.

The most simple and frequent case of faults is represented in the annexed vertical section (No. 9.) at the letter *a*, the strata lying nearly level, the fault vertical, the dislocation moderate in amount, and no particular bending of the rocks near it. In *b* the fault deviates



from the vertical by the angle $x b y$, and is said to have an underlay; the strata are considerably depressed, and in such a manner that a perpendicular dropped from *b* would fall clear of the edges of the depressed beds; not as in *c*, which represents a rare and exceptional case, so rare, indeed, that a clear example of it with a considerable depression of beds never occurred to the author, among very numerous instances studied in all classes