

When the planes of stratification are parallel to one another in different formations, the stratification is said to be *conformable*: when not parallel, it is *unconformable*.

The stratification in different formations is usually unconformable, as is shown in the position of the azoic and fossiliferous formations, in Fig. 36.

It is hence inferred that the stratified rocks were elevated at different epochs: in other words, those formations which are the most highly inclined, must have been partially elevated before the others were deposited upon them.

These numerous elevations of the strata have produced in them a great variety of cracks, fissures, and slides.

When the continuity of the strata is interrupted by a fissure, so that the same stratum is higher on one side than on the other, or has been slidden laterally, that fissure is called a *fault*, or a *trouble*,—*a slip*,—*a dyke*,—etc.: as *a, a*, in Fig. 39 and 40.

Fig. 39.

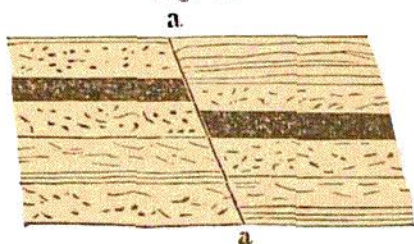


Fig. 40.

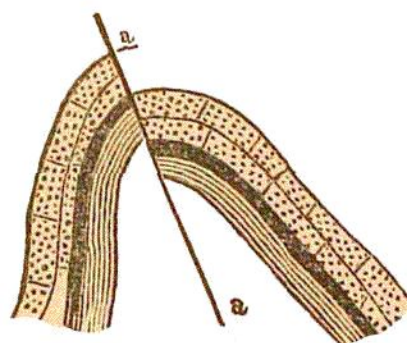
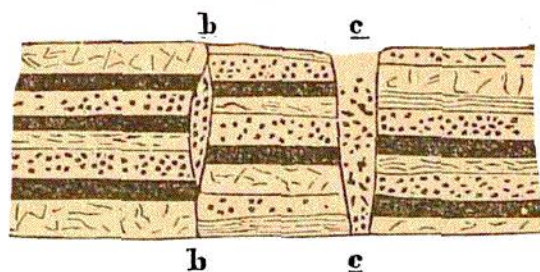


Fig. 41.



A fault is sometimes filled with fragments of rocks, clay, etc., as *b*, in Fig. 41; in which case it occasions great trouble in the working of mines, because, when the fragments are reached, it is impossible to decide whether the continuation of mineral sought is above or below the level, or to the right or left.

There are two kinds of faults, the *transverse*, or those that cross the strata at right angles to the strike, or transversely; and the *longitudinal*, or those that are parallel to the strike. The former