

differences in character and age of the rocks which it crosses. But though cleavage is so persistent, it is not equally well developed in every kind of rock. As already explained (p. 533), it is most perfect in fine-grained argillaceous rocks, which have been altered by it into slates. It is often well developed in felsites and other igneous rocks, which then furnish good flags or even slates. It may be observed at once to change its character as it passes from fine-grained rocks into others of a more granular or gritty texture. Occasional traces of distortion

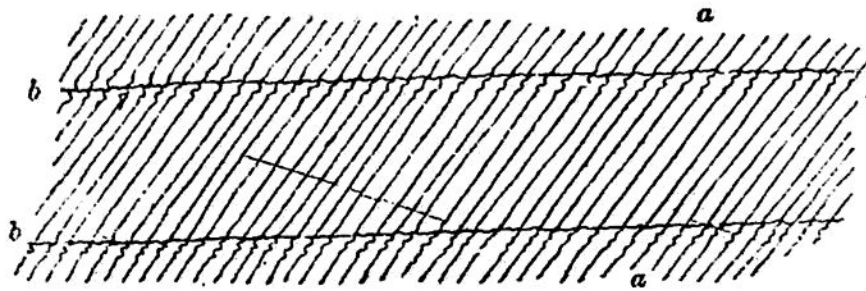


Fig. 258.—Cleaved strata, Wiveliscombe, West Somerset (B.). Showing the cleavage-lines *a a* slightly undulating at the partings of the strata *b b*.

or deviation of the cleavage-planes may be observed at the contact of two dissimilar kinds of rock (Fig. 258).

A region may have been subjected at successive intervals to the compression that has produced cleavage. The Silurian rocks of the southwest of Ireland were upturned, and probably cleaved, before the deposition of the Old Red Sandstone, which has in turn been well cleaved.³ Evidence of the relative date of cleavage may be obtained from unconformable junctions and from conglomerates. An uncleaved series of strata, lying upon the denuded edges of an older cleaved series, proves the date of cleavage to be intermediate between the periods of the two groups. Fragments of cleaved rocks in an uncleaved conglomerate

³ De la Beche, "Geol. Observer," p. 620.