

lain unconformably by a later part of the same formation. A set of flat rocks of high geological antiquity may, on the other hand, be conformably covered by a formation of comparatively recent date, yet, in spite of the want of discordance between the two, they might have been separated by a large portion of the total sum of geological time. Further examination will usually suffice to show that the conformability in such cases is only partial or accidental, and that localities may be found where the formations are distinctly unconformable. From the centre of the section in Fig. 324, for example, the two groups of rocks might, on casual examination, be pronounced to be conformable. Yet at short distances on either side, proofs of violent unconformability are conspicuous. It sometimes happens that more than one unconformability may be detected in the same section. Thus in Fig. 325, the break between the quartzite (*q*) and Old Red Sandstone (*s*) is to the eye much more violent and complete than that between the sandstone and the overlying gravels and clays (*d*). Yet the interval separating the epoch of the quartzite from that of the sandstone may have been brief, when compared with the vast lapse of time that intervened between the nearly flat sandstones and overlying superficial deposits. It is by the evidence of organic remains that the relative importance of unconformabilities must be measured, as will be explained in Book V.

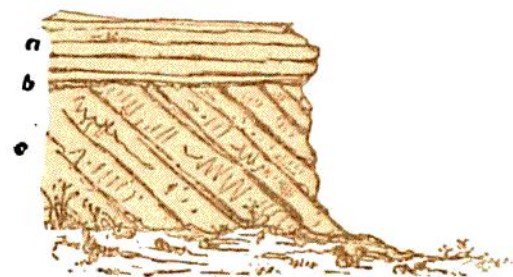


Fig. 323.—Unconformability between horizontal and inclined strata. Inferior Oolite (*a b*) resting on Carboniferous Limestone (*c*); Frome, Somerset (*B.*).



Fig. 324.—Section of local deceptive Conformability.

Paramount though the effect of an unconformability may