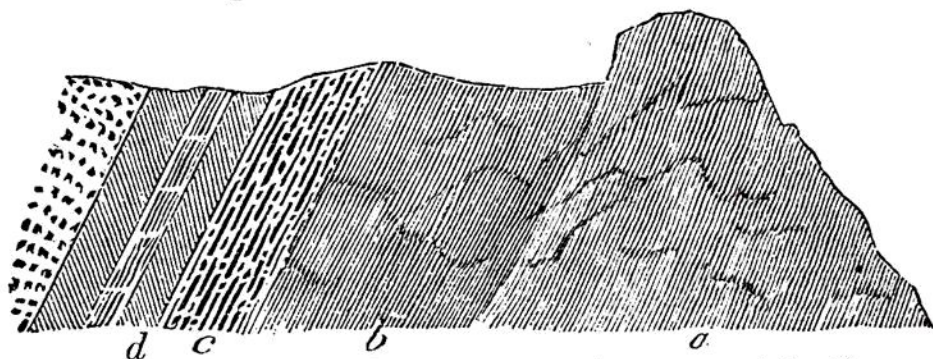
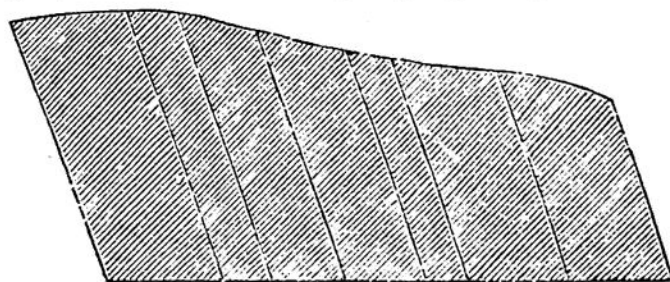


the stratification of granite ; and when this rock is associated with really stratified rocks, and its cleavage is in the same direction as their strata, a circumstance by no means uncommon, it is almost impossible to convince one's self that there can be any difference between the stratification of the one and the cleavage of the other. Generally speaking, however, the lines of cleavage run into and join one another in such a way as to distinguish them from strata. *d c b*, in the following diagram, represent stratified beds ; *a*, a granite rock, having its line of cleavage in the same direction as their strata.



It frequently happens that strata are intersected by lines of cleavage, so as to form an angle approaching more or less to a right angle, as in the accompanying diagram. In the clay



Section of Clay Slate Rock.

slates, this is not an uncommon appearance. We have particularly observed it in Devonshire ; and in an attempt to determine the true stratification, it is sometimes the cause of considerable difficulty and of error ; but by careful inspection the strata may generally be distinguished.

It must often have been observed by all who have walked over an extensive district, that rocks succeed each other in some constant order ; and every one knows that the same rock does not appear at the surface in all places. But, if rocks were placed horizontally, one upon another, the same rock would always appear at the surface. Thus, London is