

lapse of an interval between them, the relative length of this interval may sometimes be demonstrated by means of fossil evidence, and by this alone. Let us suppose, for example, that a certain group of formations has been disturbed, upraised, denuded, and covered unconformably by a second group. In lithological characters, the two may closely resemble each other, and there may be nothing to show that the gap represented by their unconformability is of an important character. In many cases, indeed, it would be quite impossible to pronounce any well-grounded judgment as to the length of interval, even measured by the vague relative standards of geological chronology. But if each group contains a well-preserved suite of organic remains, it may not only be possible, but easy, to say how much of the known geological record has been left out between the two sets of formations. By comparing the fossils with those obtained from regions where the geological record is more complete, it may be ascertained, perhaps, that the lower rocks belong to a certain platform or stage in geological history which, for our present purpose, we may call D, and that the upper rocks can, in like manner, be paralleled with stage H. It would be then apparent that, at this locality, the chronicles of three great geological periods, E, F, and G, were wanting, which are elsewhere found to be intercalated between D and H. The lapse of time represented by this unconformability would thus be equivalent to that required for the accumulation of the three missing series in those regions where, sedimentation having been more continuous, the record of them has been preserved.

But fossil evidence may be made to prove the existence of gaps which are not otherwise apparent. As has been