

the accumulation of the strata. For, after the interruption was covered up, sedimentation went on as before, and there is usually an obvious close sequence between the continuous strata. Though it may be impossible to decide as to the relative length of the interval that elapsed between the formation of a given stratum and that of the next stratum which lies upon its eroded surface, or to ascertain how much depth of rock has been removed in the erosion, yet, when the structure occurs among conformable strata, evidently united as one lithologically continuous series of deposits, we may reasonably infer that the missing portions are of small moment, and that the erosion was merely due to the irregular and more violent action of the very currents by which the sediment of the successive strata was supplied.

The case is very different when the eroded strata, besides being inclined at a different angle from those above them, are strongly marked off by lithological distinctions, particularly when fragments of them occur in the overlying deposits. In some of the coal-mines in central Scotland, for instance, deep channels have been met with entirely filled with sand, gravel, or clay belonging to the general superficial drift of the country. These channels have evidently been water-courses worn out of the Coal-measure strata at a comparatively recent geological period, and subsequently buried under glacial accumulations. There is a complete discordance between them and the Palæozoic strata below, pointing to the existence of a vast interval of time.

**Surface-markings.**—The surface of many beds of sandstone is marked with lines of wavy ridge and hollow, such as may be seen on a sandy shore from which the tide has retired, on the floors of shallow lakes and of river-pools, and on surfaces of dry wind-blown sand. To these markings