

to be learned from such sections of local irregularity, one of the most useful is the reminder that the inclination of strata may not always be due to subterranean movement. In Fig. 203, for example, the lower strata of shale and sandstone are nearly horizontal. The upper thick sandstone (*b'*) has been cut away toward the left, and a series of shales (*a'*) and a coal-seam (*c'*) have been deposited against and over it. If the sandstone was then level, the shales must have been laid

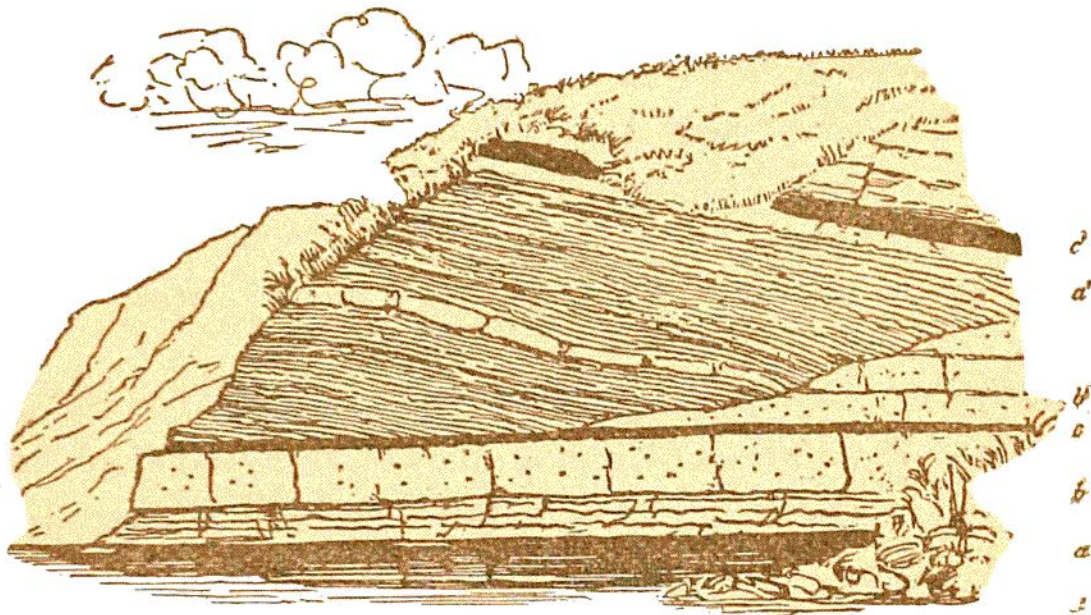


Fig. 203.—Contemporaneous Erosion with inclined and horizontal deposits, in Coal-measures, Kello Water, Sanquhar, Dumfriesshire.
a, a', shales and ironstones; *b, b'*, sandstones; *c, c'*, coal-seams.

down at a considerable angle, or, if these were deposited in horizontal sheets, the earlier sandstone must have accumulated on a marked slope. As deposition continued, the inclined plane of sedimentation would gradually become horizontal until the strata were once more parallel with the series *a b c* below. A structure of this kind, not infrequent in the Coal-measures, must be looked upon as a larger kind of false-bedding, where, however, terrestrial movement may sometimes have intervened.

In the instances here cited, it is evident that the erosion took place, in a general sense, during the same period with