

majority of cases, were nearly horizontal. As most sedimentary rocks are of marine origin, and have accumulated on the shallower slopes of the sea-floor, they have generally had from the first a slight inclination seaward; but, save on rapidly shelving shores, the angle of declivity has been usually so slight as to be hardly appreciable by the eye. Slight departures from this predominant horizontality would be caused where sediment accumulated unequally, or where the floor on which deposition took place was of an undulating or more markedly uneven character.

False-bedding, Current-bedding.—Some strata, particularly sandstones, are marked by an irregular lamination, wherein the laminæ, though for short distances parallel to each other, are oblique to the general stratification of the mass, at constantly varying angles and in different directions (*a b c d* in Fig. 192). This

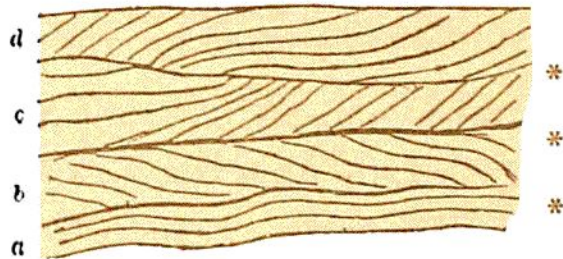


Fig. 192.—Section of False-bedded Strata.

structure, known as false-bedding or current-bedding, points to frequent changes in the direction of the currents by which the sediment was carried along and deposited. Sand pushed over the bottom of a sheet of water by varying currents tends to accumulate irregularly in banks and ridges, which often advance with a steep slope in front. The upper and lower surfaces of the bank or bed of sand (* * in Fig. 192) may remain parallel with each other as well as with the underlying bottom (*a*), yet the successive laminæ composing it may lie at an angle of 30° or even more. We may illustrate this structure by the familiar formation of a railway embankment. The top of the embankment, on which the permanent way is to be laid, is kept level; but the advancing