other, in such manner as to allow of the partial consolidation of one bed, before it is covered by a deposition of the materials of another; and a rock is said to be *stratified*, when it presents the appearance of such divisions. The chalk cliffs, and the sandstone quarries in the south-east of England, afford excellent illustrations of this structure. The original direction of these layers must have been more or less horizontal, for this obvious reason, that in their fluid, or semi-fluid state, they would find their own level, and spread over the surface of the basin into which they flowed; and although they might partake of the inequalities of the depression in which they were deposited, yet this cause would not affect their general distribution. The strata when accumulated in very thin layers, resembling the seams formed by the leaves of a closed book, are termed *laminæ;* and this character very commonly prevails in fluviatile or river deposits: thus the shales, clays, and sandstones, of Tilgate Forest are laminated, and often bear the impress of the waters which have meandered over them (see pages 42, 43). The contemporaneous beds formed in the same oceanic basin, however they may maintain a general character over very extensive areas, must nevertheless vary considerably. At the present moment, the rivers flowing from different latitudes into our existing seas, must necessarily be producing in the same marine basin accumulations of a very dissimilar character; and the geographical