

*Of the Forms of Strata.*

The most perfect form of a stratum, is that in which the two planes are accurately parallel, but it is the most rare. They are more commonly inclined in different ways; so that a bed terminates at length, in one or more directions, or in all, by a thin edge; while it may also present surfaces so frequently and unequally inclined or undulated, as to be of various degrees of thickness throughout.

The thickness of a stratum may vary from one of many yards to that of paper; and it is obvious that the thinner cannot easily be very extensive. The extent of surface which any one may cover is equally various: it may amount to many miles; but, in these cases, it is traced rather by comparing detached parts, than by a continued view of the whole. That comparison is made by means of the consistent mineral nature of all the parts, the resemblance of the organic contents, where these are present, the correspondence and nature of the other strata with which they are in contact, and the similarity of position which they possess towards the perpendicular.

Thus it is anticipated that a stratum may be inclined to the horizon; but, in fact, they are rarely quite horizontal. The deviation from the horizontal position constitutes the inclination of a stratum; and the true inclination is evidently the greatest angle which a line taken on that plane forms with the perpendicular; the dip implying, further, that point of the compass towards which it is directed. As, in consequence of the inclination of a stratum, its edge must somewhere appear at the surface of the earth, an imaginary line has been contrived to represent it, called the direction of the stratum, drawn at right angles to the line of