

tions, as expressed by the arrows. The emergence of strata at the surface is called by miners their *outcrop* or *basset*.

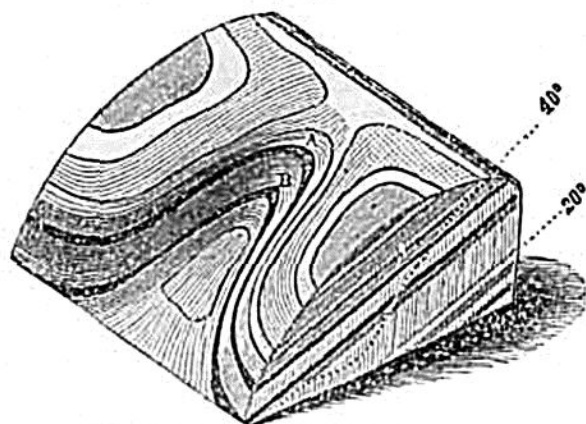
If, instead of being folded into parallel ridges, the beds form a boss or dome-shaped protuberance, and if we suppose the summit of the dome carried off, the ground plan would exhibit the edges of the strata forming a succession of circles, or ellipses, round a common centre. These circles are the lines of strike, and the dip being always at right angles is inclined in the course of the circuit to every point of the compass, constituting what is termed a qua-quaversal dip—that is, turning each way.

There are endless variations in the figures described by the basset-edges of the strata, according to the different inclination of the beds, and the mode in which they happen to have been denuded. One of the simplest rules with which every geologist should be acquainted, relates to the V-like form of the beds as they crop out in an ordinary valley. First, if the strata be horizontal, the V-like form will be also on a level, and the newest strata will appear at the greatest heights.

Secondly, if the beds be inclined and intersected by a valley sloping in the same direction, and the dip of the beds be less steep than the slope of the valley, then the V's, as they are often termed by miners, will point upwards (see fig. 74), those formed by the newer beds appearing

in a superior position, and extending highest up the valley, as A is seen above B.

Fig. 74.



Slope of valley 40°, dip of strata 20°.

Thirdly, if the dip of the beds be steeper than the slope of the valley, then the V's will point downwards (see fig. 75), and those formed of the older beds will now appear uppermost, as B appears above A.

Fig. 75.



Slope of valley 20°, dip of strata 50°.

Fourthly, in every case where the strata dip in a contrary direction to the slope of the valley, whatever be the angle of inclination, the newer beds will appear the highest, as in the first and second cases. This is shown by the drawing (fig. 76), which exhibits its strata rising at an angle of 20°, and crossed by