

The position of a stratum is determined by observing its *inclination*, *dip*, and *direction*.

The *inclination* is the angle which the stratum forms with the horizon, and is determined by the quadrant.

The *dip* is the point of the compass towards which the stratum inclines.

The *direction* is the angle which the stratum makes with the meridian, and is determined by the compass. It is always at right angles to the dip.

In making observations of this kind, it is of the greatest importance to distinguish the *general* direction and inclination, from the *partial*. To effect this, we must take the results of a number of particular observations, and compare them together; and those similar angles which are the most numerous, are to be considered as expressive of the general inclination and direction. It sometimes happens, that this general position has also its variations; these must also be attended to and noted. An acquaintance with the shape of a mountain group, will assist us very much in such investigations, as it is intimately connected with the general disposition of the stratification of the masses of which it is composed. It is also of importance to know the fall or declivity of a mountain group, as its direction and inclination are generally conformable, particularly in the older formations, with

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