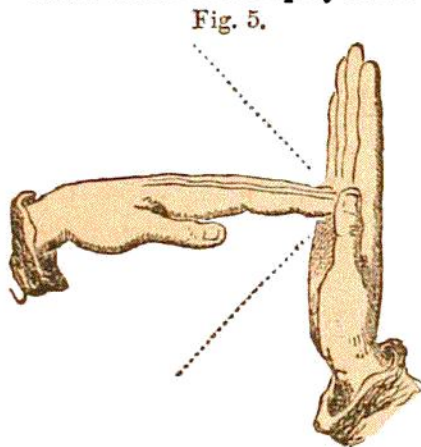ness, since strata are sometimes as thin as laminæ. But strata can, and laminæ can not, be easily split apart. A stratum marks some pause or change in the deposition; but the laminæ were formed rapidly between the pauses. Hence the latter are more closely compacted together, and generally the rock will break more easily in any other direction than in that of its laminæ.

Inclination of strata.—The angle which the surface of a stratum makes with the plane of the horizon is called its *inclination* or *dip ;* and the direction of its upturned edge is called its *strike* or *bearing.*

Of course horizontal strata have neither strike nor dip. The exposure of a stratum at the surface is called in the language of miners its *outcrop* or *basseting.* An *outlier* is a detached ledge or mass of strata.
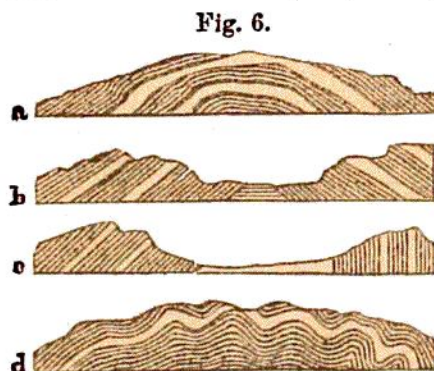
As a general fact, the newer or higher rocks are less inclined than those below. The highest are usually horizontal; while the oldest are often perpendicular. But this is not an universal rule.

The instrument employed for ascertaining the dip of a stratum, is called a *clinometer.* The inclination may be determined by the eye either by itself, or with the help of the hands situated as in Fig. 5. The person must stand opposite the strata, and placing the hands in the range between the eye and the rock, notice the position of the planes when compared with the lines of reference. Each dotted line incloses with either hand an angle of 45°. The strike may be determined with a compass.

Fig. 5.

Axes.—The line along which the strata dip in opposite directions is called an *anticlinal line,* or *anticlinal axis.* In Fig. 6, *a* represents a simple anticlinal; *b* and *c* show the contour of the surface when denudation has removed the ridge, and *d* represents a *complex* anticlinal. In some instances the strata have been folded together on a vast scale, and in such a manner as to bring some of the newer rocks beneath the older. Fig. 7 is a section of this character. Originally the strata were probably folded, as is shown by the curved lines passing from 1 to 1, 2 to 2, and so on. But their upper parts

Fig. 6.