among inclined strata may, in most districts, be conveniently grouped into two series, one running in the same general direction as the dip of the strata, the other approximating to the trend of the strike. They are accordingly classified as *dip-faults* and *strike-faults*, which, however, are not always to be sharply marked off from each other, for the dip-faults will often be observed to deviate considerably from the normal direction of dip, and the strike-faults from the prevalent strike, so as to pass into each other.

A dip-fault produces at the surface the effect of a lateral shift of the strata. This effect increases in proportion as the angle of dip lessens, but ceases altogether when the beds are vertical. Fig. 266 may be taken as a plan of a dip-fault (*ff*) traversing a series of strata which dip northward at 20°. The beds on the east side look as if they had been pushed horizontally southward. That this apparent horizontal displacement is due really to a vertical movement, and to the subsequent planing down of the surface by denuding agents, will be clear, if we consider what must be the effect of the vertical ascent or descent of the inclined beds at a dislocation. The part on one side of the fracture may be pushed up, or, what is equivalent, that on the other side may be let down. If the strike of the beds be supposed to be east and west, then a horizontal plane cutting the dislocated strata will show the portion on the west or upthrow side of the fault lying to the north of that on the east or downthrow side. The effect of denudation has usually been practically to produce such a plane, and thus to exhibit an apparently lateral shift. This surface displace-

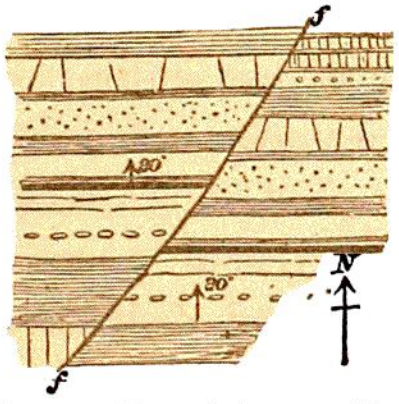

Fig. 266.—Plan of strata cut by a Dip-Fault.