on their faces in one direction, and exhibit almost never any signs of repeated action along the same or neighbouring planes, we are forced to adopt, as a highly probable view of their origin, one continuous effort of a great force tending to extend, and, consequently inducing tension in, and fracture of, the crust of the globe. It appears no more necessary to suppose many interrupted efforts for a great fault like the Tynedale or Craven faults, of a thousand feet or yards, than for the numerous "hitches" in a colliery of one or a dozen feet.

It is commonly the case that such faults, when viewed on a horizontal plane, range nearly in straight lines, and for considerable, but very variable, lengths. When many faults occur, each producing only a moderate "throw," "shift," or displacement of the strata, their range is usually of only a few hundred yards, or a few miles, when they fall into and are stopped by some greater faults, or axes of movement.

On the contrary, when only a few faults occur in a district, and these have a great effect as to vertical movement, their course is usually of very considerable extent, even to many miles (the Tynedale and Craven faults range from 20 to 40 miles); but these also terminate in other faults or great centres or axes of movement. Faults which cross and appear to displace one another laterally, obey the same law of the angles as when their planes are compared to the surfaces of stratification, and the direction of vertical movements. (*Fig.* 9. *b.*) Faults are the most common of all the forms of disturbed stratification: but, except in particular cases, they are the least influential on the physical configuration of the country. All the rocks which are disturbed by any fault have experienced on one side the same movement, and to the same extent, excepting only those portions which have been subjected to violent pressure; and the bottom of the faults has never been reached, except when they terminate in another dislocation.