there must have existed a different condition from that which would produce a saddle-shaped stratification, which requires, as we have seen, a force acting upon the centre of a bed that



Section of fan-shaped strata.

has two ends in a fixed position. A fan-shaped stratification, on the other hand, can only be produced by the action of two forces, one at each end of the bed, while the centre is partly retained in its position. Thus a piece of card, having a weight in the middle, may be raised by the hands at each end, and be made to assume this particular form. From this it would therefore appear, that to produce the stratification observed at Daleberry Camp, the ends of the strata must have been upheaved, probably by some force similar to that which now produces volcanic action.

The basin-shaped stratification is not uncommon in coal districts. Geologists are not agreed as to the cause of this appearance, some attributing it to the elevation of the beds as described in explaining the formation of fan-shaped stratification, while others imagine it to have been produced by the sinking of the central parts. It is not impossible that both



Basin-shaped stratification.

these causes have assisted in producing this peculiar disposition of strata. One thing, however, is certain, that there must have been a great degree of flexibility in the materials.

The task of determining the stratification of rocks in any district will not now perhaps appear so easy as might at first