

have indeed a clew to their relative age; but such evidence carries us but a small way. The gneisses where obviously intrusive are indisputably of eruptive origin, but they alternate with finely schistose bands which sometimes seem to cut them. The bedding or banding of the rocks affords no guide whatever as to sequence. It has been so folded and crumpled that even if it represented original stratification it could probably never be unravelled. But there is every reason to believe that it bears no real analogy to stratification. It may sometimes represent, as already stated, layers of segregation and flow-structure in an original igneous magma, at other times planes of movement in the crushing of already consolidated material. But whatever may have been its origin, it remains now in an inextricable complexity. Here and there, indeed, for short distances some well-marked band of rock may be traced, but the various rock-masses generally succeed each other in so rapid and tumultuous a manner as to defy the efforts of the field-geologist who would patiently map them.

As a rule, only where the earliest type of gneiss has been invaded by subsequently intruded masses can a successful attempt be made to disentangle the confused structure. Successive systems of dikes may thus be traced, and evidence may be obtained that powerful dynamic stresses affected the rocks between some of these intrusions. The dikes have sometimes been crushed, plicated, and disrupted until they have been reduced to isolated patches of schist irregularly distributed among the reconstructed gneiss. And through these involved and complicated masses newer groups of dikes have risen, to be again subjected to mechanical deformation.

The question may occur to the student whether this com-