

The main faults of the region run across it with a general n.n.e.-s.s.w. course, but they curve repeatedly, and a given fault seldom holds a given direction for any great distance. In nearly all cases the dropped block is on the east, and the raised block on the west side of the fault plane. The resulting topography must have consisted of relatively narrow platforms terminated westward by cliffs of varying height, depending on the throw of the fault concerned, rising to the level of the next platform above, the whole with a general n.n.e.-s.s.w. trend. Thus seems to have been produced for the first time the considerable and rather abrupt difference in level between the Adirondack region and the Champlain valley. The eastern Adirondack region was thus given a considerable elevation, with a rapid, steplike fall to the eastward and a gentler and steadier slope to the west.

Some few of the faults downthrow to the west instead of the east, producing between such a fault and the next easterly throwing fault to the westward a depressed block or valley with steep inclosing walls on both sides.

In addition to the main faults are a multitude of minor ones grading down to the merest slight slipping along the joint planes. Many of these are cross faults of considerable magnitude, making large angles with the main ones, and cutting up the main platforms into a series of segments at various levels.

It is likely that most of these faults date from the time of the Appalachian uplift of the late Paleozoic. A beginning may have been made by the Taconic disturbance.

Paleozoic igneous activity

Initiated possibly by the disturbances which effected the elevation of the Taconic mountain range, though more likely of late Carboniferous date, came renewed igneous action. Here again all traces of surface volcanic action, if there was such, have been removed by subsequent wear, and the only signs of the activity which remain are the old, lava-filled channels of ascent, the dikes, together with a few larger masses, which paused before reaching the surface and crowded out a place for themselves by squeezing