

faults in the Mohawk valley was a block of this sort. Apparently the Paleozoic inlier at Wells, Hamilton co., is preserved in a similar trough. In the Precambrian areas to the north, specially in the high Adirondacks, the topography often suggests faulting of this sort. And, as has been shown, cases of this kind are not infrequent between the minor cross faults in the Champlain region.

In addition to the modification in the topography produced by the erection of the fault scarps, the faulting must obviously have affected the drainage. Stream courses would be obstructed by the scarps and the streams turned into parallelism with them, tending to flow along at their bases; and the crushing of the rocks along the fault plane would produce a line of weakness there, which, even after the disappearance of the scarp through wear, would tend to hold the streams there.

Mesozoic base-leveling

This uplift, which terminated the Paleozoic history of the region, obviously renewed the activity of the erosive processes, and the task of cutting down the region toward the new base level thus given it was begun. Though the evidence is not as clear as could be wished, it points to the region having remained at this newly given level for a long time, long enough to permit the wearing down of the major portion to a comparatively even surface at this new stream grade. In other words, it was worn down to a peneplain, above whose general level certain hills of various altitudes arose, none of which exceeded 1000 feet in elevation, which had resisted somewhat the general wearing tendency, mainly because of advantageous situation. The infacing escarpments of the Paleozoic rocks retreated well away toward the margins of the region, till the weak belts reached grade, after which the escarpments would disappear as the stronger rocks slowly came down to the same level; the fault scarps also disappeared, both sides coming down to the general level; the streams which were flowing parallel to the sides of the region, adjusted to the weak rock belts, would accompany these belts in their movement away from the heart of the region; they would also increase in size by the capture of many of the