

There are however numerous cases where the resistance is practically uniform on both sides.

In the Mohawk valley region there is no evidence of any recent faulting. The faults are quite typical dip faults, in a district of low dip. Since the Paleozoic rocks there, from the Beekmantown to the Utica, are progressively weaker upward and are all weaker than the underlying Precambrian, it necessarily follows that the faults everywhere show weaker rock on the downthrow side, except where the same formation occurs on both. Owing to the recent uplift of the region, the scarps are coming into prominence, specially where they are crossed by streams. In fact, the utter independence of the faults shown by the streams here, is one of the strong arguments against any recent movement along the fault planes, and for such present day prominence as they have being wholly due to the recent uplift of the region.

Along the Mohawk the faults show great cliffs facing eastward, the valley widely opened in the weak shales on the downthrow side, while constricted and gorgelike in the resistant Beekmantown or Precambrian rocks on the other. Receding from the river, their prominence is at once lost, and the scarp is either not manifest or but feebly marked. Thus the Little Falls fault, a very noted topographic feature at the river crossing, loses this character entirely a short distance south of it and has no great prominence on the north, when the great difference in resistance of the rocks is taken into consideration. Eventually it passes wholly into Precambrian territory and can be no longer traced. While this may be because of the dying out of the fault, there is no evidence that this is the case. If, on the south side, the fault could be followed through the Utica shale belt to where the more resistant overlying rocks appear, these would come in first on the downthrow side, with production of a scarp facing west.

In the Paleozoic limestones along Lake Champlain, which have great thickness, but no marked difference in strength, the fault scarps are in no way conspicuous at the present day; in fact, at low altitudes there are none at all. At higher levels, however, they appear. Thus the Tracy brook fault shows no scarp in that part of its course shown on the map [pl. 12], notwithstanding it