

In the eastern Adirondacks there is some evidence of yet more recent faulting, which may have utilized the already formed fault lines, or constructed new ones, the former seeming the more probable supposition, though it is in general impossible to say which was the case. So far as known to the writer, the evidence for this later faulting is topographic simply, certain prominent fault scarps being difficult of explanation except on this assumption.

These Paleozoic faults are for the most part readily made out in the marginal belts of Paleozoic rocks of the Champlain and Mohawk valleys. They are not so readily discoverable on the north, owing to the very low northward dip of the Potsdam and Beekmantown formations there, the great thickness of both these formations and the northerly slope of the surface in the same direction as the rock dip, giving them great breadth of outcrop; while their various beds are so similar lithologically and so unfossiliferous that precise horizons are not to be made out, in a district of such scanty outcrops. Enough evidence can be obtained however to show that the faults do occur, and that the conditions are quite like those on the south side of the region. The strong probability is that the faults, or rather the faulting, extend clear across the region. Evidence of their presence is frequently forthcoming in the Precambrian areas, but in these it will require the closest sort of areal work to disclose and to map them accurately.

Faults most abound and attain greatest magnitude along the eastern border of the region. Thence westward they diminish in number and in importance, though large faults occur as far west as Little Falls in the Mohawk region, and at Potsdam on the north, and small ones, at least, are found still farther west.

The greater breaks of the region are meridional, trending from a north-south to a northeast-southwest direction. They therefore rudely parallel the strike of the Paleozoic rocks in the Champlain region, while in the Mohawk region, and on the north, they cut it at a high angle, forming what are known as dip faults, the others being called strike faults [fig. 3, 4]. The large majority of them downthrow to the east and with their rude parallelism divide the region into a series of strips, or slices, this slicing apparently characterizing the bulk of the Adirondack region.