

erosion surface of different slope and origin. This has its rise in the very resistant character of the Precambrian rocks when compared with the overlying Paleozoics, specially in districts where the Potsdam sandstone is thin or is absent, as it is on the west and south. During a cycle of wear, these weaker rocks are stripped away from the underlying Precambrian, whose old erosion surface thus reappears, and tends to maintain itself for a time, owing to its extraresistant character [fig. 8]. Thus is produced a considerable strip of Precambrian rocks on these two sides of the region, with an even hilltop line, which comes to this level, rather than to that of the Cretaceous peneplain. It, however, slowly rises to meet, and insensibly merges into that.

Quite a number of monadnocks, as residual hills which are not worn down to the general peneplain surface are called, exist in the region, their summits reaching a few hundred feet above the general hilltop level. They are not sufficient in number to obscure the general level, though they do somewhat disguise it.

In the same districts the later base level is also indicated by the rather broad valleys and their comparatively uniform levels. It is also observable that, in passing toward the heart of the region, the valleys are deeper cut, in other words, that the vertical interval between the two plains increases, indicating that the Cretaceous peneplain was tipped when elevated, and that the uplift was greatest on the northeast, so that it is now canted considerably to the west and slightly toward the south.

In the eastern Adirondacks the above features can not be satisfactorily made out [pl. 16]. There is little concordance in the summit elevations, so that either the district was not reduced to a Cretaceous peneplain, or else that surface has been dislocated, and given varying altitude, by subsequent movements. Possibly both may be true, and there is some evidence which points to the dislocation having actually taken place.

Recent uplift has affected the entire Adirondack region, in common with a much larger area, and this uplift has been greatest on the northeast. It has amounted to at least 400 feet at the south end of Lake Champlain, and at least 550 feet at the north end, and to 250 feet or more at the east end of Lake Ontario. And these are minimum figures, which must likely be much increased when the entire movement is taken into consideration.