

ing of the ice sheet or at a somewhat later period, small local glaciers appeared high up on the mountain sides which, grinding away at their beds, with this *bergschrand* action at work on their sides, excavated the amphitheaters. But, while the ridges have thus been ice-sculptured, it is wholly unlikely that they were produced by glacial action. The ice found the ridges and valleys when it entered the region and merely left them somewhat modified. Some of the back slope cliffs strongly suggest fault scarps. One for example, suggests a fault across the ridge crest which has dropped its southern portion and produce the cliff and terrace outline. There is but a single sort of rock in that ridge, a resistant quartz syenite gneiss, so that the topography can not be accounted for by varying rock resistance. The sudden manner in which many of the ridges are chopped off at the south is very indicative of faulting. If faults are present, they are cross faults, since the main ones parallel the ridges. It is an exceedingly difficult matter to determine just how large a share the faults have had in determining the present situation and character of the ridges.

Streams

The working out of the varied history of the Adirondack streams is a matter of the future. No one has yet had opportunity to give the problem the thorough and exhaustive study that it requires. Furthermore, it is a difficult problem, owing to the great age of the land area, the several oscillations of level which it has experienced, the difficulty of determining the controlling factors in the Precambrian district, and the many changes produced in the drainage by the action of the ice sheet.¹

The general drainage of the present day runs radially outward from the main axis of elevation, and in part these streams seem the lineal descendants of the original consequent streams. Since

¹No attempt will be made in this paper to discuss the Pleistocene history of the region, since little connected work has hitherto been done on it, and because Professor Woodworth is now at work on the problem. Much information may be gained from papers by Brigham and Ogilvie. Geol. Soc. Am. Bul. 9:183-210; Jour. Geol. 10:397-412.