

faults downthrowing to the east, as most of the proved faults of northern New York are, it is more likely that the surface tilting would be to the west. It would also seem that the streams down the fault scarp would have an advantage over those down the back slope, because of their much steeper grades, and that originally the main tributaries would be westerly flowing streams down the back slopes, but that the streams down the scarp would lengthen at the expense of the others, pushing the divides westward. If now the main streams are at successively lower levels going eastward because of step faulting, these easterly tributaries would have that additional great advantage over those flowing west, and would not only tend to extend themselves at the expense of the westerly streams, but also to work back to, and to tap and lead off portions of the larger streams to the westward. Inspection of the maps shows many such apparent captures of the main streams by the easterly tributaries. If the writer be correct in his belief that these are the main structural features of the region, the assumption of the abnormal easterly tilting of the fault blocks seems unnecessary.

The great and abnormal bends to the northeast which are made by both the Hudson and the Sacandaga, some 15 miles to 25 miles north of the Mohawk line, would seem to be wholly modern and owing to glacial action. As a result of this swerve, no stream of respectable size enters the Mohawk eastward from East Canada creek, the drainage all turning east to the Hudson, while the divide between the streams flowing south to the Mohawk and those passing east into the Hudson, parallels the Mohawk and is distant from it only 15 to 18 miles. These features are excellently shown on the new, small scale topographic map of the State and strongly suggest a morainic divide, and that the Sacandaga formerly came down to the Mohawk in the Amsterdam region. The modern stream which flows northeastward from Gloversville and empties into the Sacandaga at the big bend, would seem to occupy this valley. Obviously a considerable shifting of divides must take place here in the near future, the present arrangement being highly unstable.

Chamberlin long since urged that the preglacial divide or col in the Mohawk lowland, between the drainage east to the Hudson