

gests the possibility that the larger part of the formation on the north was deposited in a closed or nearly closed basin.

Beekmantown formation. By the close of Potsdam time the sea had encroached for a considerable distance on the present northern and eastern portion of the Adirondacks, but there was yet a large land area remaining in the heart of the region which on the west and southwest extended somewhat beyond the present surface limit of the Precambrian rocks in these directions. During Beekmantown time submergence was in progress on all sides of the Adirondacks, but it was most rapid, and to greatest amount on the northeast and diminished to the south and west, the rocks having treble the thickness in the lower Champlain valley that they have along the Mohawk. On the extreme west the amount of subsidence was but slight and little deposit took place.

The Beekmantown rocks are in large part peculiar, and except for the fact that they are clearly water-deposited rocks, the precise conditions under which they were deposited are difficult to understand. In the upper portion of the formation are many pure limestone beds, often containing numerous fossils, and so far as these are concerned the formation seems clearly a marine limestone. These beds seem to be limited to the east and north sides of the region and to be wholly lacking on the south and west. The bulk of the formation everywhere is made up of beds of sandy dolomite. The sand is mostly rather coarse and is embedded in a fine mosaic of crystalline dolomite. There is little mud in the formation and fossils are either wholly lacking or else exceedingly rare. The sands imply vigorous water action, sufficiently so to transport them to their present resting place and to wash away all fine mud. Yet the sand forms less than 25% of the whole formation, the bulk being dolomite, along with some calcite. The nature of the deposit would suggest a chemical, rather than an organic origin for this material, since the waters must have been shallow, and this would imply estuarine or closed basin conditions of deposit, stream waters holding lime