

to consider are: Do these strata presently form the floor of the lake, or have they within the lake area been removed by some vast erosive force acting at a recent period? In other words, is the lake the result of a synclinal depression or of erosion, or both? Again, is the apparent parallelism in the outcrops of the formations due to successive, gradual, permanent elevations of the land from the Laurentian period onward, each elevation stretching farther south than its predecessor, or is it due to a great erosive force which exposed in succession the upturned edges of the different strata, and as a farther result produced Lake Ontario?

In Michigan, again, the Carboniferous area which there at one time was the centre of depression, is even more conspicuous in its relations to both the surrounding geological features and the adjacent lakes. Here, on every side, there is a regular series of formations whose outcrops, after making every allowance for estimations, appear each in proper geological succession within the other, and in Michigan, form, as it were, irregularly concentric areas around the Carboniferous. Again, the contours of the shores of Lakes Michigan, Huron and St. Clair, and of Lake Erie at its western end, present the same idea of arrangement around the same central area. The interesting questions arising are: Were these formations originally laid down here with this more or less concentric arrangement which in Michigan they presently possess, or have they in recent or earlier times been the subject of some denuding force, which has given them this peculiar arrangement, and which probably has also aided in the creation or enlargement of the adjacent lakes? Again, as certain of these formations were evidently originally more or less continuous across the area now occupied by Lakes Huron and Michigan, has some vast erosive force created these lakes by removing the strata where they occupied the lake area, or do the strata underlie the waters of these lakes as a result of a depression, or, are there here the effects of both denudation and depression?

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