

has been treated in some detail in the foregoing pages, but a concise summary of it may well find a place here.

The Potsdam is confined mainly to the north and east sides of the region. It comes around into the Mohawk region, but is thin there and fades out to a vanishing point about midway of the valley. It does not appear at all on the west side of the territory. It is thickest on the northeast, in Clinton county, and there alone is any great thickness of its peculiar, basal portion to be found. To the south and west the formation thins by disappearance of this base, and it would seem therefore that deposition must have commenced on the northeast and advanced progressively westward and southward, so that by the close of the Potsdam the northeastern district had undergone large submergence, whereas on the southwest the shore line was yet outside of the present Precambrian margin, and the amount of subsidence had been trifling; that is, that there existed a large, unsubmerged area on the south and west at the close of Potsdam time.

The formation was laid down on a comparatively even floor of older rocks, whose evenness was mainly due to previous protracted wear on it while a land surface; but, in spite of the *comparative* evenness, the floor shows much minor irregularity, whose amount seems to increase with increasing thickness of the overlying Potsdam. All the workers on the north and east sides of the region have observed and commented on the irregularity of the floor, which sometimes amounts to some hundreds of feet. In the Mohawk valley region the floor seems to have been exceedingly even and flat, much more so than on the north. Since the former was barely, or not at all submerged by the Potsdam sea, while the latter was early invaded by it, the one did and the other did not experience subaerial erosion during Potsdam time, this furnishing an obvious reason for greater smoothness in the former, though it may not be the whole reason.

The upper division of the Potsdam would seem plainly to be a marine sand deposit. Quite likely this is true of the middle division also, though it is not so certain because of lack of fossils. It seems possible that the basal portion, which is developed only on the northeast, may represent a flood plain deposit under conditions of climatic aridity. The red color and the undecayed char-