Cambric times, was checked and replaced by the contrary tendency during Lorraine times, a tendency which has, in the main, persisted to the present.

Helderberg submergence. On the south and west of the Adirondack region the Lorraine rocks are successively overlain by the Medina, Clinton, Niagara, Salina and Waterlime deposits. These are more likely to have overlapped on the west side of the region than elsewhere. On the south they thin and disappear in going eastward, showing that they are approaching a shore line in that direction, and that the lower Mohawk region was not receiving deposit during most of the interval. Then ensued a change at the extreme east, a considerable depression being formed there, in which marine limestones accumulated, whose fauna entered the basin through some connecting channel with the eastern sea. These rocks do not extend westward as far as the upper Mohawk region, showing that that district did not participate in the depression, or else that a barrier was formed there, separating the eastern basin from that to the west, waterlime conditions persisting in the latter after they had been brought to an end in the former. From Albany these rocks extend far south into the Appalachian region, as deposits in a long, trough-shaped basin. As to the northern limits of that basin, we are in ignorance, the deposits having been swept away by erosion; but, since it is known that the present line of the St Lawrence was also depressed during that time, deposits of that age occurring on St Helen's island, near Montreal, it is rendered quite likely that the Champlain and upper Hudson valleys were also involved, forming a channel which furnished a connection with the outer sea by way of Montreal. If such were the case, the subsequent removal of the deposits has obliterated all the evidence on which a demonstration might be based. There was some connecting channel with the outer sea; there may have been more than one; the line suggested would furnish a natural route.

Summary of early Paleozoic oscillations of level. The evidence which is given by the distribution, character and thickness of the several Paleozoic formations which were deposited on, and around, the Adirondack region, as to the oscillations of the land surface,