

plain.¹ Furthermore, numerous outliers of Palaeozoic sediments resting on a base-levelled surface occur within the plateau up to points 200 miles from its border. These outliers, however, must obviously lie a long distance within the limit of the Palaeozoic marine submergence, for they consist largely of limestone, an easily eroded rock, and, as far as the geological record shows, have undergone denudation continuously from the Palaeozoic to the present. The outliers, therefore, represent merely the remnants of a much more widely extended Palaeozoic sedimentary cover which prolonged denudation has failed to remove.² Since the Palaeozoic sediments have not been entirely removed it would seem evident that denudation since the Palaeozoic submergence has been largely engaged in stripping off the sedimentary cover and that the present low relief of the Laurentian plateau in its marginal portions at least is pre-Palaeozoic in its origin.

One of the striking characteristics of the early Palaeozoic strata which overlap the Laurentian plateau is the general paucity of clastic sediments; for limestones³ and even coral reefs⁴ rest directly on the smoothly eroded surface of the Pre-Cambrian. If the surface over which the Palaeozoic sea advanced had been deeply weathered, or had possessed a rugged topography, or if the rivers flowing into the sea from the interior of the plateau had possessed steep gradients, great thicknesses of clastic sediments would have been laid down. From the general absence of detrital material it may, therefore, be inferred that not only in the regions where Palaeozoic sediments are found but throughout the whole Laurentian plateau, the pre-Palaeozoic old land possessed an exceedingly low relief.

In those localities within the Laurentian plateau where folded, late Pre-Cambrian rocks occur, these strata are truncated by the present surface of the plateau, indicating that the plateau has been base-levelled since the late Pre-Cambrian sediments were deposited. Moreover, in some of these localities as in the case of the Cobalt series (Huronian) on lake Timiskaming, the Palaeozoic series rest on the truncated edges of the late Pre-Cambrian strata, so that in such places a pre-Palaeozoic base level was evidently well developed.

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⁴ Parks, W. A., *Ann. Rept., Ont. Bureau of Mines*, 1899, p. 188.