

Rouge River, but below this place the hill range trends off more to the north-east and a broad plain occupied partly by sand and largely by clay, extends southward to the St. Lawrence. The northern part of this area is traversed by the North River, which between St. Jerome and the town of Lachute has but little current and follows a westerly course till the latter point is reached when it bends abruptly to the south and meets the Ottawa near the village of St. Andrews, near the upper end of the Lake of Two Mountains.

To the south of the North river and east of Lachute a rock ridge formed of the Potsdam and Calciferous rocks comes in and extends eastward for some miles. South of this a broad well terraced valley extends across to the lower portion of the Ottawa, but this area is again traversed by a granite ridge which rises just to the east of St. Andrews and extends eastward for four to five miles. Between these two ridges the depth of clay and gravel is great. At one point several borings have been made, one of which reached a depth of over 120 feet without touching the underlying rock, so that the bottom of this old channel is many feet below the present level of the river.

On the south side of the Ottawa below Ottawa city, the country between the river and the St. Lawrence is generally level or broken by low ridges, sometimes of rock but often of gravel or boulders which have come from the north side of the Ottawa. Over a large part of this area great deposits of clay, overlaid in places by sands and gravels, are seen, and a peculiar feature of these deposits is noted in the fact that while the clays are undoubtedly of marine origin they rarely show marine fossils, while the overlying sands and gravels contain these in immense quantities at very many places. These marine shells however apparently cease west of a line drawn from Smith's Falls to Prescott or have not yet been noticed in the western area, though there is no apparent break in the character of the surface deposits in this direction.

South of the Ottawa also the evidences of an old river channel are very clear. A large number of borings have been made in the last half dozen years both in the vicinity of the river itself and in the area to the south. Some of these are in the course of the east