

and west stretch of the Nation river. The holes were sunk only to the rock in most cases, through clay with occasional thin deposits of sand or gravel. The deepest of these was 210 feet, and in the township of Plantagenet on the north bank of the Nation, and in Alfred about two and a half miles east, two holes were sunk to the underlying Utica, to depths of 180 and 186 feet. On a line extending westwardly along what is known as the Brook in the direction of Eastman's Springs a number of similar holes have been bored, the depths of which ranged from 100 to 150 feet, following a fairly direct line. The most easterly of these was put down at Caledonia Springs to a depth in the clay of 132 feet. Beyond this to the north-east the country is flat and clay covered in the direction of L'Orignal at which point presumably this ancient channel reached the river. Recently in the area south-east of Ottawa city, near Ramsay's Corners, a boring has been made which passed through 186 feet of clay and 18 feet of underlying gravel to the Lorraine shales.

This line of excavation may be the continuation of that already described for the Carp valley, since in the eastern portion of the Carp area there are great deposits of clay, gravel and sand which extend beyond the Rideau a few miles south of Ottawa in the direction of the deep borings just referred to. The old channel should cross the Rideau not far from the centre of the township of Gloucester and extend towards the Mer Bleue, since rock escarpments appear a short distance north of that place in the direction of the Ottawa, and rock ledges are seen to the south in the direction of Bear Brook on the line of the Canada Atlantic Ry.

On the lower Ottawa between Grenville and Lachute the surface is generally flat. Deposits of clay, covered in places with a great thickness of sand, occur in the area between the bold escarpment of the crystalline rocks and the river, and near the line of the Grenville canal the accumulation of boulders over the surface is very great. The whole area for some miles is heavily drift covered, and great masses of ice must have discharged immense loads brought from the high lands to the north and north east in this direction. These accumulations of boulders are found at intervals over a large extent of country south of the Ottawa, some of the blocks being of immense size. Near Vankleek Hill