

This territory is watered by four streams, which are the main tributaries of the *Chaudiere*, and by numerous creeks which, at several periods of the year, become swollen and torrentuous. The principal streams are the *Gut-luume* or *Des Plantes* River, on the right bank of the *Chaudiere*, and the Rivers "Mill" and *Le Bras* on its left bank.

The lands on which rest the auriferous alluvion are constituted of schist and argillaceous gravel, crossed in many places by veins of quartz, some of which seem to conform to the general stratification of the locality, while others divide the strata with a dip differing from that of the beds of gravel.

It is mainly in the mica-schists and gravel of the Upper Silurian formation, that these quartz veins exist in great number, and here and there crop out, though, for the most part, hidden under layers of vegetable mould or alluvion, of variable thickness.

The progress reports made by the Government Geological Survey of Canada, as well as those of several geologists and mineralogists, among others that of Professor Henry Wurtz, have supplied full and valuable information as to the geological formation of this country; and their deductions relative to the future of the Canadian gold mines are replete with encouragement.

Having been appointed, at the close of last year, to examine the auriferous region of the *Chaudiere*, and to report upon the facts established and the results obtained since 1863, I embodied my observations in the report which I had the honor to address to Sir W. Logan, on the first of February last. It is only such of those observations and impressions as relate to the Seignory of Rigaud-Vaudreuil that I propose to sum up in the following pages, adding thereto the information gathered during my recent exploration, in this present month of August, though I was limited to the short space of fifteen days through want of time and motives of economy.

On approaching the Seignory of Rigaud-Vaudreuil we cross the River *Des Plantes*, near its confluence with the *Chaudiere*. The *Des Plantes* has its source in the northern part of this territory: it flows in two branches, which reunite at Lot 73 in the Concession St. Charles. Its principal branch flows from northeast to southwest in the Concessions St. Gaspard and St. Charles, and in the first range northeast of the Seignory; while the direction of the other, which flows down from the Concessions Frazer, is from southeast to northwest, through the Concession St. Charles.

Some years ago, above and near the Little Fall, after several explorations of an encouraging character, Dr. James Douglas, whose enterprising efforts greatly contributed to the discovery of gold in Lower Canada, undertook the working of the mines with very satisfactory results as to the quantity of gold obtained. Since that time the *habitans* have been constantly searching for the precious metal in the bed of the river, at times of low water, and they have always found gold in greater or lesser quantity, in proportion to the importance of their efforts.