

of an immense and powerful mass of quartz, extended in the shape of an inter-stratified bed, and constituting an irregular layer, easy of being worked out.

A cropping out, designated as the "Barbeau Vein," is now in process of examination on Lot 53, by means of a trench terminating in a tunnel, which penetrates into the solid rock. Other croppings, of white quartz, also shewed themselves on this same lot, at the extreme end of which is the site of a Ten-Stamp Quartz Crushing Mill, to be driven by steam power, which is now in course of construction by your Company.

Having calcined and pulverised about 50 lbs. of quartz, taken from the property of Mr. Louis Barbeau, and having afterwards washed it with care, I obtained for result, by this mechanical assay, several very fine particles of gold. I have been assured, that quartz is frequently met with in the Concessions behind the property of Mr. Louis Barbeau.

Gold in alluvion has been successfully sought after in the *Chaudiere*, at the confluence of that river with several of the gold bearing streams. It is particularly at the Devil's Rapids, where the river suddenly takes a bend and flows from east-northeast to west-southwest, that gold has been abundantly found, in the cavities and fissures, and in the cracks of the clayey schists. These rocks stretch in parallel ridges in the direction above mentioned; they crop up above the level of the river, at low water, at which times it is possible for the *habitans* to break and search them to the depth of several feet. The fissures and cracks of these schists are filled with argillaceous gravel, in which is deposited gold in alluvion, and, during last summer, I was an eye-witness to the extracting of several dollars worth therefrom.

It is below the lode mentioned in one of the progress reports of the Canadian Geological Survey, known as the "O'Farrell-Vein," that deposits of alluvion gold exist, and they extend along the river for more than a mile. I have always been assured that gold has been found in great quantity and large nuggets in the vicinity of this lode, the cropping out of which (now broken away) has produced very rich specimens.

I am convinced that certain sections of the *Chaudiere* River may be worked with profit, during the season of low water, by such companies as would make the necessary outlay for preparatory works, and would provide themselves with a sufficient equipment and material for thoroughly exhausting their resources.

Between the Devil's Rapids and the confluence of the *Gilbert* River, several streams fall into the *Chaudiere*. Near one of these, called "Bolduc Creek" on Lot 59 A of the first range northeast, some surface working has exposed to view a mass of mineral, formed by an agglomeration of quartz, schist and calcareous gravel, having the appearance of a lode, running from northeast to southwest. A mechanical assay of 20 lbs. of quartz taken from the "Frechette-Michaud-Vein" gave me for result a few fine particles of gold. This same lode was the subject of another examination, undertaken by Mr. Longtin, in the Concession St. Charles.