

course of the river. A torrent of this power does not circulate between perpendicular banks of clay and sand without attacking them and consuming them little by little. It suffices also to-day to throw a glance over these shores to see them continually wasting and disappearing in the current.

The river, then, is changing its course. Its direction will in time be modified, and that on a great scale. New windings will be made; for it is only by them that the current will diminish and the erosive power of the water will cease to be greater than the power of resistance of the clay. The river will thus attain a *régime* of stable equilibrium. Will it recover in these successive displacements some portions of its ancient bed? The thing is quite possible. However, with regard to the Gorrie falls, it is more than probable that it will never be seen again. The river passes now at a level much too low on the north-west to believe that it will remount to the notch of granite from whence it precipitated itself formerly. The general tendency of the water at the present moment seems to be to deviate towards the north-west.

This St. Alban landslide is one of the most terrible geological phenomena which have taken place in our province for many years. I know nothing which can be compared with it, either for the extent of the surface affected, or for the volume of earth which has been swept away by the river. In estimating at 600,000,000 or 700,000,000 cubic feet of earth carried away by the river, one rests quite within the bounds of truth.

At the moment of the cataclysm the river spread a thick, heavy semi-fluid sediment, on which the large trees were carried quite straight, standing up, just as they were carried down to the shores. Masses of dry sand, falling from the elevated parts of the cliffs, bore down on the surface of this

down by the water, of which they had nearly the density, and distributed to the different points of the shore. It is there that one sees them still, from St. Alban as far as the stream. At a time when the water has drawn back, these spheroids have been dried by the sun. The exterior crust has been cracked, and finally the mass of



PHOTO. No. 2.

sand has fallen down in such a fashion as to be nothing more than a regular cone, the height of which depends on the dimensions of the clayey mass which has formed it.

The water of the St. Anne River is still absolutely undrinkable. It will have to remain yet a very long time in the same state, seeing the work of erosion which is incessantly going on in the new bed of the river.

I forego from estimating, even approximately, the number of trees which have been broken down, or which are scattered all along the river. All the coves, all the deep waters, are covered with them, without counting the phenomenal number of those which have been swept to the edge of the water and thrown in the stream.



PHOTO. No. 1.

sediment. There they acted like sponges, imbibing from the most fluid part, whilst the most viscous of the clay formed externally an impermeable and very resisting crust, an inch thick, isolating the one from the other, the sand in the centre and the water on the exterior. These heterogeneous agglomerations were carried

P. W. St. George, city surveyor, of Montreal, who visited the scene of the St. Alban landslide, says: "The accounts given in the newspapers convey no adequate idea of the upheaval. The whole of the sand, which rested on a bed of clay covering the district, has slid right off to a depth of 150 feet, carrying with it all the forest, houses, etc., that were on its surface, and the water has cut a course through a hill 250 feet high. A large tract of country that lay to the north of the river has slid right across the latter, and, coming in contact with the south shore, has caused it to also slide down. A house which was inhabited by Samuel Gauthier, a farmer, his wife, his brother and fifteen-year-old son, has been carried about three-quarters of a mile down the river, and the occupants have never been seen since; they have simply been buried under the mass of

earth that has slid down. The next farm to Gauthier's was tenanted by a man named Prosper Darveau, who, with his wife, was returning from looking after a sick cow in the stable when the slide took place. He said it was about six o'clock in the evening: the night was quite still, but very, very dark,