

would require far greater space than could possibly be placed at our disposal. Our readers must, therefore, be content with a few random, imperfect notices and condensed extracts, of the principal important parts; and these we shall endeavour, without reference to dates, to confine to the geographical characteristics of the valley of the St. Lawrence on the one hand, and the north shores and islands of Lake Huron on the other, — the investigations setting at rest the supposed existence of coal, — the more promising examination of the "Canadian Gold Region" of the Chaudière, — the analyses of various minerals and mineral springs, &c.; and though last, not of least importance to an agricultural people, the analyses of various soils from different parts of both sections of the Province.

Giving precedence to the *geographical characteristics* of the valley of the St. Lawrence, we proceed to state in the words of the Report,\*;

Between Montreal and Quebec the valley of the St. Lawrence has a general north-east course, and presents a flat surface on each bank of the river. On the north-west side this surface extends in breadth a distance varying from twelve to twenty miles, to the flank of a wide-spread, hilly, but not very elevated country, occupied by syenitic gneiss, interstratified with crystalline limestones, being a continuation of the metamorphic formation existing on the Ottawa. On the south-east side the plains exhibit a width of thirty to forty miles, and, with the intervention of a few moderate undulations in one or two places, reach the foot of a range of mountains which stand on a breadth of twenty-five to thirty miles. This range is the continuation of the Green Mountains of Vermont, which, after entering Canada, lose much of the bold character they possess farther south, though they still offer, in the district under description, two or three isolated peaks attaining the height of about 4000 feet

above the level of the sea. The opposite sides of the mountain belt run very nearly parallel to one another, and a valley, or continuous line of valleys, bounds it on the south-east side, with a gently-rolling surface by no means so even as the plains on the north-west, but presenting few extraordinary swells or abrupt protuberances. The breadth of this valley may be from fifteen to twenty miles; and to the south-east the land gradually rises into a more mountainous tract, extending to the Province line, which runs upon its ridge from the sources of the Connecticut River to those of the Chaudière.

These ranges of mountain and valley are parallel to one another and to the St. Lawrence, and the whole coincide with the strike of the formations constituting the district. The streams conveying the waters of the area to the great river, are first the Richelieu and the Yamaska, the main trunks of which run in a direct continuation of the valley of Lake Champlain; and next the St. Francis and the Chaudière, about eighty miles asunder, the lower part of each of which makes a straight section across the measures, including the rocks constituting the mountain range, while their upper parts drain the line of valleys beyond. The upper part of the St. Francis and its tributary, the Massawippi, flowing in opposite directions along the foot of the mountain range, occupy about eighty miles of the line in the general strike of the formations, and join at Lennoxville, after being supplied by several transverse tributaries, which take their sources in the southern mountains. — The Chaudière, springing in these mountains, overlaps the upper part of the St. Francis, flowing in an opposite course, and more southern but parallel line for some distance below Lake Megantic. It then turns up northward, and is joined by the Rivière du Loup, which flows across the measures in the same direction as the lower part of the Chaudière, and further on it meets another tributary called the Famine. This tributary is in the same relation to the rocks of the country as the upper part of the St. Francis and the Massawippi. Flowing in the strike, it takes its source to the eastward, in a level tract, which is also the source of the Mitaywaquon and constitutes part of the valley of the

\* See Report for 1847-8, p 6 et seq.