

great lakes were united into one vast fresh-water sea, held back, on the east, by an elevation of the gneissoid belt of the Upper St. Lawrence or perhaps by a huge glacier-barrier extending in that direction, as explained on a former page.

7. *The St. Lawrence Basin*:—This Basin is separated from the Basin of the Lakes, just described, by the gneissoid band, which, passing southwards from the Lac des Chats on the Ottawa, crosses the St. Lawrence at the Thousand Isles, and forms the Adirondack region of New York. On the other hand, it is cut off from the Eastern or Metamorphic Basin (although, strictly considered, this forms an isolated central portion of its area) by the great dislocation alluded to under §5, above. This dislocation, accompanied both by a great upheaval and the manifestation of active metamorphic forces, runs from near the northern extremity of Lake Champlain to Québec, and from thence along the north shore of the Island of Orleans, and down the river and gulf, as far as the coast of Gaspé, which it enters near the mouth of the Magdalen River. The area of the St. Lawrence Basin thus includes the peninsula between the gneissoid belt, the lower Ottawa, and the Upper St. Lawrence, together with a large extent of the south shore of the latter river, and all the north shore from the Ottawa to the Gulf, except a small portion (including the chief part of Québec) lying within the above mentioned line of dislocation. It may be considered to include, also, the extreme eastern and southern parts of Gaspé; the Island of Anticosti, and the Mingan Islands. Towards the western part of this area, more especially in the peninsula just west of the junction of the Ottawa and St. Lawrence Rivers, the Potsdam and Calcareous formations (Map: Nos. 3 and 4) are well displayed, together with the Chazy and Trenton limestone beds (Nos. 5 and 6). The latter occur also largely on the eastern side of the Ottawa, as around Montreal, &c.; whilst the Utica and Hudson River formations extend more particularly along each bank of the St. Lawrence up to (and on the north, beyond) Québec—apart from the small area, immediately around Québec itself, cut off by the before-mentioned dislocation. At the Falls of Montmorenci, the Trenton, Utica, and Hudson River divisions occur in force; and the latter runs along the north side of the Island of Orleans. These formations occur also in the small outlying basin of Lake St. John on the Upper Saguenay. The Trenton limestones form likewise some isolated patches on the north shore of the Gulf, as at the Seven Islands, the Straits of Belle Isle, &c.; whilst the