

(PART III.) of a grayish colour, and partly micaceous. The mountains of Rigaud, Belœil, Monnoir, Yamaska, Shefford, and Brome, are essentially granitic trachytes, consisting of light-coloured potash-feldspar, with small grains of black hornblende, or scales of brown or black mica; and usually containing, in addition, some small crystals of yellow sphene (see PART II.) and grains of magnetic iron ore. Much valuable information on the composition of these picturesque and interesting mountains, is given by Professor Sterry Hunt, in the Geological Report for 1859. See also the *Canadian Journal*, Vol. V., p. 426, and the *Revised Report of the Geological Survey*, 1863.

The surface of the St. Lawrence Basin, like that of the Lake area, is also very generally covered by thick accumulations of the Drift and Post-glacial epochs: comprising clays, gravels, and boulders. But the fossil shells, found in the upper part of these, are all of a marine or estuary character. They are referrible to species which still exist in the Gulf of the St. Lawrence, or on the coast of Labrador. These shells occur, not only on comparatively low levels, but at considerable heights also, above the present surface of the sea. Some of the most noted localities comprise the neighbourhoods of Ottawa and Montreal; terraces on the Montreal Mountain: one, nearly 500 feet above the sea-level; Beauport near Quebec, about 120 feet above the sea; and various terraces on the Lower St. Lawrence; the Ste. Anne River, the Matanne, the Metis, &c., in the Gaspé peninsula, at heights varying from 40 or 50, to 245 feet above the present sea-level. It is evident, therefore, that at the commencement of the Post-glacial or present period, the entire or greater part of the St. Lawrence basin must have been deeply submerged beneath the sea.

8. *The Eastern or Metamorphic Basin of Canada*:—This basin, forming strictly, a portion of the St. Lawrence area, is separated from the latter by the great dislocation already described in §§ 5 and 7. It includes the site immediately under and around Quebec, the central and southern part of the Island of Orleans, the south shore of the St. Lawrence from a little west of Point Levis to near the Magdalen River, and all the intervening area to the south (including the greater part of the eastern townships, &c.) as far as the Province boundary. In the more northern part of this region, the strata, consisting of the Calcareous and Chazy formations (united into the Quebec group), are raised along the line of the before-mentioned dislocation into a position apparently above the horizon of the Trenton series. (See the remarks,