

as occupied by a succession of ridges. These have gradually diminish in height from the Atlantic coast of Nova Scotia and New Brunswick to Cape Sable to Cape St. George, thence to Cape North, and through Newfoundland and New Brunswick to the Vermont boundary to the north, and neighbouring peaks and neighbouring mountains rising from 2500 to 4000

feet, as forming a block, and the river courses are in this, the Shickshock about sixty-five miles to the Matane. It is at a distance of about 100 feet. But though a part of the water flows to the south, the Matane country to the south, their channels where above the St. Lawrence have their source a few south through a range twice

the rivers are comparable, the St. Francis, none of any importance, a greater elevation and like the streams of their waters with the strike of number of considerable of the Chaudière an area of about

twenty square miles; St. Francis, Aylmer, Memphremagog, Little Magog and Massawippi are tributary to the St. Francis, and stand at elevations respectively of 890, 795, 634, 500 and about 600 feet, with areas of 12, 9, 37, 8 and 6 square miles. The extreme depth of Memphremagog Lake is stated to be upwards of 600 feet; the outlet is over strata of Siluro-Devonian shales and limestones, dipping at high angles, the strike being parallel with the length of the lake in its northern half. Neither the depth nor the nature of the basins of the other lakes named have as yet been fully ascertained. They all appear, unlike the lakes of the Laurentides, to occupy long and narrow, or trough-like depressions in the valleys, but whether they are rock-basins or drift-dam'd portions of the old valleys remains to be decided by future investigation.

Notwithstanding the general hilly and sometimes mountainous and thickly wooded character of Eastern Canada, there are many fine stretches of agricultural and pastoral lands, most of which are due to the modification the surface has undergone during the formation of the glacial and later deposits of Post-Tertiary Age, which have filled in and obliterated many of the irregularities of the surface of the ancient disturbed and corrugated rock formations.

These Post-Tertiary marine formations appear in all parts of the area in flats and terraced banks up to elevations of 500 feet above the sea, while similar deposits of fresh-water origin occur at elevations of more than 2000 feet.* They are fully described in chap. xxii. Geology of Canada, 1863.

2. THE SOUTHERN-AND-WESTERN AREA.

Adjoining the area to which the foregoing remarks apply, and bounded on the east by its north-western limit, is that which has been referred to as the Southern-and-Western Area. Excepting the isolated trap hills at and in the vicinity of Montreal island, which probably mark the sites of volcanic vents of the Siluro-Devonian period, this area is absolutely devoid of mountains, or even of prominent hills. It presents a broad, level or slightly undulating expanse of generally fertile country, with occasional step-like ridges or rocky escarpments, marking the outcropping edges of some of the gently inclined palæozoic formations which—but in a totally different physical condition—likewise occupy the south-eastern area. One of these escarpments occurs at the outlet of Lake Ontario, where the Birds-eye

* Thunder Cape, in Lake Superior, is strewn with pebbles derived from the palæozoic conglomerates of the region, and a large boulder of Laurentian gneiss was observed near the summit, of the Cape at a height of not less than 1800 feet above the sea level.