

tion of the magnetitic ones, and were consequently Archæan. One boulder was of Trenton Limestone, and was glaciated. Looking for glaciation *in situ*, I found it on the limestones at the edge of the water near the entrance to the Royal Military College. The course of the grooves was S. 54 W. magnetic. The direction observed by Sir W. E. Logan was S. 45 W., true meridian, while "other grooves run S. 85 E." Trenton Limestone is the formation on which Kingston is built, and of which it is built. Hence it is called "the Limestone City." In the approach to it, near the Rideau Canal, the Archæan (Laurentian) is seen with the Trenton Limestone lying directly upon it, in the same way as on the Railway from Montreal to Ottawa, near the latter. We have now reached long. $76^{\circ} 25'$ to $29'$, and lat. $44^{\circ} 14'$ to $19'$. In long. $80^{\circ} 54'$, lat. $44^{\circ} 28'$, is the last of the south-easterly grooves (S. 5 E.), according to Logan. In long. $79^{\circ} 33'$, lat. $46^{\circ} 10'$, is Nipissing Lake. Here, and beyond all grooves are, therefore, S.W. Lake Temiscamang, long. $79^{\circ} 26'$ to $30'$, lat. $47^{\circ} 7'$ to $36'$, has glaciation generally S.E. This is the region of divergence, as well as of watershed.

Rimouski Gneisses (E) Archæan.—At the Railway Station, on both sides of the railway, I found and examined Archæan boulders of large size. Some of these were granitic gneisses, identical with those that I found at Ottawa and Kingston. The only place where the rocks of this kind are to be found *in situ* near Rimouski is on the opposite side of the River St. Laurence, which is here 20 miles wide. Glaciation was found by Sir W. E. Logan at Kempt Road, near Metapedia Lake, long. $67^{\circ} 48'$, lat. 48° . Its course was S. 80 E.

I would observe that the lines of glaciation of Pleasant Park, Halifax, extended in a northerly direction on our Admiralty chart, pass through Rimouski at a distance of 310 miles.

Our field of observation thus extends from Cape George, Nova Scotia, long. 62° , to Kingston, Canada, long. $76^{\circ}-25'$ to $29'$, *i.e.* through $14^{\circ} 25'$ long., and from Halifax, lat. $44^{\circ} 34'$, to Rimouski, lat. $46^{\circ} 26'$, *i.e.* through $3^{\circ} 52'$ lat.
