

among the schistose rocks of the Erzgebirge. It was shewn that in passing from Bohemia through Saxony, to the north-westward, gneiss, mica schist, and clay slate districts are successively traversed. After leaving the clay slate near Stollberg, we reach in a very short time the *Rothliegende* of the Chemnitz valley, or the new red sandstone. We thus pass from Silurian to Permian strata in a few steps, and were we not better informed, would not imagine that the vast interval of the Carboniferous period interposed betwixt them. If, instead of taking the route from Annaberg to Chemnitz, the traveller had kept more to the westward, through Schneeberg and Wiesenburg to Zwickau, he would, after leaving the clay slates, have passed over the upturned edges of graphitic schales, kieselschiefer and grauacke sandstones and slates, and at last have encountered the steam and bustle and waste heaps of busy collieries, telling of the wealth of mineral fuel beneath. But neither in the neighbourhood of Zwickau would he find any outcroppings of Carboniferous strata. These are overlapped and concealed by the *Rothliegende*, which extends over their edges to the Grauacke.

We have already seen that entirely similar rocks to those which so closely border on the Carboniferous in Saxony, exist in our Eastern Townships, and especially in Durham, Acton and Upton, and we have maintained that among these rocks the more recent are to be found to the north west, and not to the south-east. If this is the case, there are reasons for suspecting that carboniferous rocks may succeed them on the north-west, and may be hid beneath sand, clay, and newer horizontal strata. In Saxony, as we have seen, similar transition rocks are succeeded by carboniferous strata, and this is also the case in Rhenish Prussia, Belgium, Pennsylvania, and elsewhere. We may suppose, indeed, that Devonian strata may intervene to the westward, but even in this case, there might still be some space left before reaching the Laurentian, in which coal measures might be secreted. The very fact that there exists in the valley of the St. Lawrence an area of several thousand square miles in which few rock outcrops are observable, and whose geology is consequently more or less problematical, ought alone to render us cautious in accepting the conclusion that carboniferous strata cannot possibly exist beneath it. There are, moreover, numerous points in this area at which springs occur, yielding carburetted hydrogen. These have been mentioned in the "Geology of Canada," from which it appears