b

th

sc

de

d

tł

channel and descending flow, through the chain of lakes, the main Fish River, and the St. John, back to his starting point, a total distance of over fifty miles, a fact which has made this route a favorite one for summer tourists. To the south of the lakes the land is again high, forming another parallel ridge, as well as a watershed between the two streams connected with these lakes, and the more numerous and larger ones which are tributary to the Aroostook. Through its west branch, however, Fish River approaches the last-named stream so nearly that we again have the curious occurrence of two considerable rivers, tributaries of a common trunk, approaching within a distance of five miles of each other, and yet flowing in different directions and by circuitous channels, a distance of not less than one hundred and ten miles to their actual confluence. In the case of the Aroostook itself, the irregular course of the channel is well illustrated in the fact that while the actual shortest distance from the town of Presquile to Andover, New Brunswick, is only thirteen miles, a traveller by rail, who follows the course of the river, has to traverse more than double the distance to reach the same locality.

If now we pass to the geological structure of the region, it is found that while the rocks exposed along the valley of the St. John above Edmunston, are entirely of slates, as are the beds in the lower part of the valley of the Aroostook—these slates, being quite similar to those which so frequently contain Silurian fossils over various parts of northern New Brunswick—the beds found in the troughs represented by Square Lake and its associated fossiliferous basins, on the one hand, and that of the Aroostook, about Ashland, on the other, are occupied largely by red and grey sandstones, with associated fossiliferous limestones. A similar contrast, also, is exhibited in the attitude of the beds, for while, along the slate-belts, these are commonly found to be greatly folded and disturbed, the Square Lake rocks, and those of the Aroostook, are generally much less folded, or are even horizontal. Such a contrast would at first suggest that the red beds and associated limestones are a newer and unconformable system reposing upon the slates, but this conclusion is seemingly negatived, not only by their stratigraphical relations, but by their contained fossils, and render it probable that the apparent horizontality and comparatively little disturbance along the lines indicated, are the result of these lines being coincident with anticlinal axes, along which the superincumbent strata have been washed away. The facts which led to the belief that all the rocks of the Lake Sedgewick basin, including the red sandstone, etc., as well the limestones, were older than the slates to the north, and therefore Silurian rather than Devonian, were fully detailed in the paper of last year referring to the subject. I may now give some of the additional facts, obtained with the assistance of Mr. W. McInnes, from a study of the district above Ashland, and along the valley of Aroostook River, between the last-named place and Presquile.

An interesting section of rocks is to be seen in the village of Ashland itself. Among these is a bed of limestone, similar in character to the limestones of Square Lake, and apparently holding similar fossils, but from which, owing to imperfect exposures, no recognisable species could be obtained. Above them, to the north, are grey, rubbly shales, while in the opposite direction, on the road to Masardis, and at a distance of about one hundred yards, are grey, buff-weathering sandstones and sandy shales, dipping northward, and holding soft, crumbling, ochreous bands and calcareous layers, which abound in crinoid stems and ribbed shells. Among the forms collected here were an Eatonia and Spirifera, both undetermined, a doubtful species of Atrypa reticularis, fragments of Orthides and other