

The fossiliferous limestones of both of these sections have been alike referred, by Mr. Billings and Mr. Ami, to the Lower Helderberg formation, and of this reference the variety and perfection of the fossils leaves no doubt. But while, in the Maine reports, the associated beds are described and represented as Devonian, the facts here given would seem to indicate that these also are rather to be regarded as Silurian. It is true that the Oriskany formation, to which these beds have been referred, is variously regarded as pertaining to either or both of these systems, but in the sandstones of the Aroostook, described above, not even Oriskany species have been found to occur, the facies of the shells being rather that of the Niagara formation. Moreover, if, as the facts both here and elsewhere indicate, the fossiliferous sandstones are succeeded by the great masses of calcareous slate, which spread so widely over northern Maine and the adjacent portions of Quebec and New Brunswick, and which, at many points, contain Silurian fossils, a considerable thickness of strata must intervene between the fossiliferous limestones and the real summit of the Silurian system in this region. It may be added that an almost exact parallel to the succession as here given in Aroostook County, Maine, is repeated, with abundant fossils, on the shores of Lake Temiscouata, and will form the subject of a forthcoming Report in the volumes of the Geological Survey.

By the above observations it is by no means intended to indicate that no Devonian, or at least no Oriskany beds are to be found in northern Maine. On the contrary, the existence of the latter would appear to have been well established by the occurrence of characteristic fossils at a variety of points, and similar beds have recently been discovered by Mr. W. McInnes, in the Upper Tobique region, in New Brunswick. But that much of what has been so regarded in Maine is really Silurian, seems, from the observations here given, to be placed beyond reasonable doubt. The only beds seen by the writer within the district visited which are certainly newer than Silurian, are a series of soft brownish-red sandstones and conglomerates, which may be seen three or four miles from Presquile, on the road to Ashland, and which repose, with little inclination, upon the highly-tilted Silurian slates, elsewhere abundantly exposed along the same highway. These have also been regarded, in the Maine reports, as Devonian, but it is quite as probable that they are Lower Carboniferous, bearing, as they do, the closest resemblance to the beds of this age seen in the Tobique valley and elsewhere in the Province of New Brunswick.

It is much to be desired that a thorough resurvey of the County of Aroostook should be made, and more ample collections be obtained and examined from the numerous and exceptionally rich fossiliferous strata which it contains.