

Anticosti group. If, however, the structure which we have described on Lake Temiscouata be the true one, the counterpart of these beds is perhaps to be found in the conglomerates and succeeding slates, more or less silicious, which occur between Black Point and Pointe aux Trembles, and of which the fossils indicate a low zone in the Silurian system. In northern Maine silicious and felspathic slates have also been described as rising from beneath the Silurian rocks on the Allegnash and Fish rivers, as well as south of Presquile, but these are much finer-grained and more nearly resemble some of the beds which, upon the Beccagumic River in Carleton county, N.B., have been found to contain a Cambro-Silurian fauna. It is interesting also to notice that in northern Maine, as in southern New Brunswick, there are, in association with undoubted Silurian rocks, extensive beds which may be a portion of the same system, altered by contact metamorphism. The most noticeable of these are fine-grained micaceous and gneissic sandstones, with some interbedded slates, which are found on the shores of Umsaskis Lake of the Allegnash River, and which, alike in their texture, in their peculiar purplish or lilac colour, and in the abundance of what are probably imperfectly formed crystals of staurolite, bear the closest possible resemblance to strata found in various parts of New Brunswick, as on the St. Croix River in Charlotte county and in portions of York county. (See Geol. Survey Reports, 1871, 1882-4.)

Contact
metamorphism.

Intrusive
quartz-
porphyry.

In these latter instances the alteration is evidently connected with the proximity of great masses of intrusive granite; and so, in northern Maine, not far from the micaceous and gneissic strata are found extensive tracts of what is also evidently intrusive rock, here consisting, however, chiefly of a rather fine white-weathering quartz-porphyry, which in some places becomes granitoid, and in others epidotic and amygdaloidal. Too little, however, is known of the relations of these beds to enable us at present to speak with any confidence as to their true position.

Age of
Division III.

Division III. of southern New Brunswick, as indicated by its organic remains, may be regarded as the equivalent of the Niagara formation, and consists chiefly of sandstones of grey, greenish and purplish colours. Their equivalents in the north would evidently seem to be found in the rocks of Pointe aux Trembles and the Tuladi River on Lake Temiscouata, the very similar beds of the Stegas River, New Brunswick, and those of the Aroostook Valley, in Maine, the similarity being marked both in their lithological characters and in their contained fossils. In accordance with this view, the underlying conglomerates of Burnt and Black Points, together with the shales which immediately succeed them, may not improbably be regarded as representing the Oneida, Medina and Clinton groups.

Age of Black
and Burnt
Point rocks.