

the Grand River
to Grand Falls.
occupied by rocks
due to the Quebec
seventy miles. As
on rocks of this
which comprises
land suitable for
of access can be

Miramichi Rivers
part very rocky,
striking features.
; so that except
the Main South-
Rivers is worth-
the country of the
valuable timber,
especially in the
Miramichi and its
the bare rock.
work, explorations
of the Tobique
limited, further
can be obtained.
was paid to the
traces of several
ditions of their
acement for the
urther reference
omic Minerals.

is age is very
superficial area.
ex being placed
dron Lakes on
northern side of
about 210 miles,
and a direct line
ing for sea area
miles belonging

to this System will not fall far short of 10,000. It includes the greater part of the counties of Westmorland, Queens, Sunbury and Gloucester, a large portion of York and Northumberland, and the entire county of Kent in so far as known. Throughout the greater part of the country under discussion, the strata lie in a nearly horizontal attitude, rarely reaching an angle of 10° , but generally forming low undulations with angles of from 1° – 4° . The surface of this large area is generally low and level or broken by ridges of moderate elevation. There is, however, a slight dip of the beds towards the waters of the Gulf of St. Lawrence, and from the general outline and structure of the formation, it would appear to have, at one time, formed a long sheltered and shallow bay, a western prolongation of the great Carboniferous basin which extended as far eastward as the Island of Cape Breton, and stretched from Gaspé on the north to the ridge of the Cobequids, in Nova Scotia, on the south. In the counties of Sunbury and Queens, the thickness of this formation has been determined by boring, but no efforts in this direction have yet been attempted in its eastern portion, and it is quite probable that it will be found to increase in thickness as we approach nearer the productive measures of Nova Scotia. Some color is lent to this supposition also from the non-occurrence of those ridges of older rocks (Lower Carboniferous and Devonian), which are found in the western portion about the head of the Grand Lake and on the Canaan River. The rocks resemble those already described in the Report of 1872-3 in the Grand Lake coalfield. Grey sandstone, shales and conglomerates predominate, but in the vicinity of the Gulf purple beds are seen like those exposed about the shore of Grand Lake, in Queens county. The boundary of the formation has been traced on its northern side from the Main South-west Miramichi near Boiestown, to the shore of the Bay of Chaleur, below Bathurst. The entirely unsettled state of a great part of the country, with its generally low and often swampy character, renders detailed observations very difficult. The Interecolonial railroad, however, affords a very fair section from Bathurst to Moncton, but the ordinary carriage roads disclose very rarely any rock exposures.

On the Interecolonial going south from Bathurst, exposures, though not very plentiful, are yet quite sufficient to determine the character of the formations. Leaving the Nipisiguit River where the red beds of the upper part of the Lower Carboniferous are seen resting on the granite we find, at the crossing of the Red Pine Brook, layers of reddish-purple sandstone and shale which probably are transition beds between the Lower Carboniferous and the Millstone Grit. Purple beds thence extend at intervals for several miles southward till we pass Red Pine station. These are presumably basal beds of the Millstone Grit

Probable
greater thick-
ness of the for-
mation near
the Gulf shore.

Bathurst to
Newcastle.