Geological Survey of Canada

GEORGE M. DAWSON, C.M.G., LL.D., F.R.S., DIRECTOR

1900

2 N.W.

N°2. S.W.

67°45' 67°30' 67°15' 67° 66°45' 66°30'

Explanation of Colours and Signs

Recent Deposits

M 3 (a) *Fresh Water*

Pleistocene

M 2 (a) *Even Surface* — *Non-fossiliferous inland deposits* — *Stratified Deposits*

M 2 (b) *Rolling Surface*

M 1 *Boulder Clay*

Glacial striæ

Kames

Forest covered Areas

Old growth

Recent growth

Note: *Heights in feet above mean tide level from Railway profiles thus* 192'
Barometrically ascertained 350'

Note 3.M 1

Note 2.M 2 (a)

Note 1.M 3

Note 2.M 2 (b)

Longitude West from Greenwich.

Compiled and drawn by W^m *McInnes, from Railway, Crown Lands and Geological Survey Plans and from Roe & Colby's map of Carleton County. Hill features and Railway lines added by R. Chalmers and W. J. Wilson.*

1 N.W.

SURFACE GEOLOGY

PROVINCE OF NEW BRUNSWICK

Andover Sheet

Nat. Scale: 1/253,440

Scale: 4 miles to 1 inch

Miles 0 5 10 15

Accompanying Part M Vol. XII (N.S.) Geologically surveyed by R. Chalmers.

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NOTE 1. M 3 (a)

The formations which come under this head are river-flats and peat bogs, and these are of very limited extent here. The former are found in the valley of the South-west Miramichi below Bolestown and along the Nashwaak in the vicinity of Cross Creek. They also occur in the St. John valley, but are too narrow to be shown on the map. All the islands are formed of these fresh-water alluviums. In the Tobique valley, flats of greater width have been laid down at Arthurette and the mouth of the Wapskehegan. The one at Arthurette is really an ancient lake bottom, (see report).

NOTE 2. M 2 (a)

The deposits classed under this note cover by far the largest portion of the area. The surface is, for the most part, uneven or undulating, occasionally rising into hills or ridges, especially in the central and northern parts where it reaches an elevation of 1200 to 1400 feet above the sea. The country is well drained by rivers and brooks. The soil is varied in character, usually deep, and composed largely of stratified materials resting on boulder-clay, or decomposed rock *in situ*. In the valleys of the St. John, Tobique, Southwest Miramichi, and especially in that of the Nashwaak, the land is of good quality for agricultural purposes and thriving settlements are located in these places. Except along these valleys, however, the larger part of the area included in this sheet is still under forest, and is the scene of extensive lumbering operations.

2 S.E. Terraces of great beauty and perfection skirt the St. John River in this part of its course, rising sometimes in a succession of three, four and five steps along its banks. These afford evidences of the former height of the river above its present bed and of the erosion and transportation which the valley-drift has undergone since the glacial period.

NOTE 3. M 1.

Boulder-clay appears to underlie the beds referred to in the above notes, almost everywhere, and comes to the surface in numerous places, but only the larger areas are of sufficient extent to be mapped. The materials constituting this deposit, whether clay, gravel, or boulders, are altogether local. In some places where the boulder-clay is not too stony and where the surface is rolling or uneven, and affords escape for the drainage waters, the soil is good. This appears to be the case in the vicinity of Andover, and along the St. John valley from Flanagan's Hill to Victoria Corners, etc.

The system of striation prevailing here is, generally speaking, from north to south, or from northwest to southeast. But in the valley of the Southwest Miramichi there seems to have been a northeast flow, the watershed between the two large rivers causing the ice to follow the slopes on either side, at least to some extent.

The barometric heights are all based on those of the railway stations; and the courses of strie are referred to the true meridian.