## NOTES ON MANITOBA.

## NOTES ON THE PHYSICAL PHENOMENA OF MANITOBA AND THE NORTH-WEST TERRITORIES.

From Observations made during Explorations in 18y2, 1875, and 1879. BY JOEN MACOUN, M.A.

The region to which the following romarks will mainly apply is bounded on the south by parallel of Lat. $49^{\circ}$; on the north by parallel of Lat. $60^{\circ}$; on the east by meridian $95^{\circ}$; on the west by the line of the Rocky Mountains. An area, in round numbers, of 667,600 square miles.

For many years this vast region was almost a blank on our maps -little was known of it, either by Englishmen or Canadians, beyond the fact that furs were obtained therefrom. It was not so, however, with the Americans. More than twenty years ago they recognized its value, foretold its great future, and even described it as the prospective granary of the world.

In 1857, Capt. Palliser was commissioned by the British Government to examine the country south of the 54 th parallel. Commencing his examination at the international boundary, in the vicinity of the Red River, he made a few traverses and reached Fort Ellice late in season. Proceeding up the right bank of the Qu' Appelle to its head, he crossed the South Saskatchewan and proceeded northward to Carlton, where he wintered. In June, 1858, he turned to the southwest and spent the summer on the Great Plains, wintering that year at Rdmonton. In the following spring he again proceeded south to the boundary, but afterwards passed to the west into British Columbia.

He reported in very favorable terms of the northern portion of the country that he had traversed, but of the southern portion he spoke much less favorably-alleging that running water was very scarce; that no wood was to be seen except in the river valloys; and, that owing to the enormous herds of buffalo which covered the plains at that time, feed in many places was poor.

As far as public opinion was concerned the only immediate result of this exploration was that a certain district in the north became

