

ten months. The addition to the population is estimated at about 2,500. About one half of the crop is estimated to have been destroyed by grasshoppers, but as they were not known to have deposited their ova, a period of exemption may be hoped for.

Great progress was made by the Mennonites. In 18 months, 18 villages or doris were established each having from 8 to 18 large well-built and well-furnished houses, besides isolated farm houses. The Mennonites who arrived in 1875, settling west of Red River near the Boundary Line, had already commenced to lay with vigor the foundations of a prosperous settlement. The fact that this colony has settled on absolutely treeless plains, makes the experiment one of peculiar interest. Settlement of the French Canadians from the United States had

begun. A settlement of Icelanders was established on the west shore of Lake Winnipeg, who have been followed by several hundred more this present year. This colony numbers over 1500 souls. Nearly 10,000 Half-breed and other Claims were disposed of by the Commissioners appointed for that purpose.

The subject of tree planting is one of the most important for the prosperity of the great North West, and a bill for its encouragement was submitted to Parliament. It is estimated that, by forest culture, apparently worthless prairie lands may in 20 years be made very valuable. Fresh water in quantity was found by the Geological Survey at Forts Carleton and Pelly, at 30 feet below the surface, and Mr. Selwyn the Director of the Survey, is of opinion that it will be found in almost any part of the Western plains.

Geological Survey.

Explorations and surveys were made in the coal fields of Nova Scotia, in the iron ore and apatite bearing regions of Ontario, and the extensive and almost unknown mineral regions between Georgian Bay and Hudson's Bay. An extensive exploration was made by the Director and Prof. Macoun through the Peace River Pass, and north easterly to Lake Athabasca. During the last six months of 1875 the Director and his staff gave a large portion of their time to the collection of specimens of the mineral resources of the Dominion for exhibition at the Centennial. About 2,000 specimens were collected, including samples of every useful mineral or mining product hitherto discovered in Canada.

NOVA SCOTIA.

The work in Nova Scotia was under the direction of Mr. Charles Robb, C.E. and consisted of explorations and surveys in Cape Breton in order to complete the investigation of the Sydney coal fields. The area examined was 82 miles long by 13 wide, bounded on three sides by the Atlantic, and on the south by the underlying rocks of the interior of the island. In this area the rocks fall into three classes—Carboniferous Lame Stone, Millstone Grit and Coal Measures. Taking the average of the sections measured, the number of seams in these measures is 21 of which six are three or more feet thick, and the total average thickness of the coal is 46 feet. Besides the coal in this region numerous beds of clay iron stone occur, deposits of bog iron ore and of Hematite—this last specially adapted for the manufacture of Bessemer pig iron—an unlimited supply of

limestone, but of rather dark colour; flag stones five or six feet across and three to four inches thick, grindstones, building stones, agatite for ornamental purposes, white and tinted marbles; extensive deposits of gypsum; and brick and fire clays, some of them nearly pure white.

NEW BRUNSWICK

In New Brunswick, Prof. L. W. Bailey and G. P. Matthew, Esq., were employed in completing a geological map of Queen's and Sunbury Counties, and in determining the age and relations of the beds of argillite rocks, extending along the southern border of the coal field. Their attention was then directed to the County of Charlotte, and geological maps of these counties were made. Mr. R. W. Ellis, B.A., continued his boring operations with the diamond drill in Queen's County. On reaching a depth of 326 feet 9 in. the boring was stopped, the directors of the company in charge being persuaded efforts to obtain coal were useless. A new company having been organized, boring was recommenced about two miles further south, and a depth of 329 feet 8 inches reached. The non-occurrence of lower beds of coal in the Newcastle area has been thoroughly established, but it is probable that thick seams of coal may be found in the centre of the basin, the boring having been all done in the northern and southern edges. The iron ore deposits of Carleton Co., N.B., were surveyed in detail by Mr. Ellis in the summer of 1875. The ore is found in a series of hills, with an average height of about 300 feet above the wharf at Woodstock. These are found on both sides of the