

proximity to the Great Lakes, we are enabled to compete successfully, in point of climate, with all those States of the Union which I have enumerated.

I find from a Table printed in Mr. Olcott's interesting work, that records have been preserved of not less than 48 experimental crops of the Chinese Sugar Cane, raised during the year 1857, within the area referred to, and that of these the great proportion reached maturity, and were cut down in good condition, although some failed; no doubt, owing to the very unfavourable season, the mean temperature of the whole year being 3° , and that of the summer months 2° below average—the rains during these months being usually protracted and severe—and the frosts having set in unusually early. Even in the State of Maine, the most northerly and most unfavourably situated of all, the experiment was successful. These facts set at rest the question as to the adaptation of our climate to the growth of the plant, and it is unnecessary that I should say a word more on this part of the subject.

SOIL AND MANURES.

It is equally unnecessary to dwell upon the subject of Soil, for it is well known that the soils of Western Canada, are unsurpassable for the growth of all kinds of cereals. With reference to the Sorgho, however, all accounts agree in giving the preference to soils which contain a considerable proportion of carbonate of lime, and where this is naturally deficient, frequent liming is recommended. But in this respect, the soils of the Western Province are most specially adapted to the growth of this plant. As I had the honour of pointing out to the Society on a former occasion, the sub-soil clays overlying the Niagara Limestones, embracing the area comprehended between the Niagara and Grand Rivers, contain not less than 15 per cent of carbonate of lime, while those in the neighbourhood of London, (and which may be taken as an exponent of the constituent elements of the clays of the whole Western District,) contain nearly 30 per cent. On the other hand, the soils of the more easterly portion of the country are preferable as being warmer, dryer and lighter, and less heavily charged with vegetable detritus, which, however, favorable to the luxuriant growth of the plants, is deleterious in so far as the production of sugar is concerned.

The description given by Mr. Hunt of the soils covering the uplands on the East side of the Grand River, from Galt downwards for about 20 miles, approaches most nearly to that which has been found most favorable for the growth of these plants. With careful cultivation they will most probably succeed on all our soils, but where a choice is to be had, land of a medium quality, between a black loam and a pure sand or gravel, calcareous, and of moderate richness, is to be preferred. Good drainage is, of course, indispensable; and where means of artificial irrigation can be obtained, it will be found advantageous in the early stages of growth.