

acres each and locate ten millions of a farming community—computing five persons to a family located on every 160 acres.

Although crops are found to mature and yield a bountiful harvest in nearly every part of this great area, the tract is dotted with patches of small extent, as in every other country, where it will require the hand of industry to produce a paying return. In many of these sections drainage is required; and other tracts that are, in the face of such great areas of easily worked land, considered unproductive, will in the future be converted to good account, as pastures for herds of cattle or large flocks of sheep.

With the two exceptions named these patches of high and low lands, this great stretch of country is one expanse of prairie, in some parts low and level and in others undulating, but in all sections a fertile soil awaiting the labor of millions of people who are at present dragging out a precarious existence in the crowded and unhealthy cities of the east.

The extreme fertility of this expanse of country is attributable to three or more causes. In the first place scientists have concluded it is for the most part of vegetable formation, the accumulation of decaying vegetable matter for ages in the distant past. Added to this the ashes of frequent and periodically recurring prairie fires destroying trees, shrubs, and grasses in their march, and but for which the country would be as well timbered as the eastern Provinces, and there is sufficient to form the depth and richness of soil peculiar to the country. The remains of animals roaming over the country for past centuries have also added their quota to give the surface its great depth and exceeding richness. The operations of the numerous small animals to be found in the prairies of the muskrat and squirrel species in burrowing through the surface, have done much to mix the soils and render them as productive as they are. Throughout the length and breadth of this area, the surface is for the most part

a black loam, sandier on the higher ground than in the valleys and basins of rivers, resting on a tenacious clay varying in depth from two to one hundred feet. Scientists agree that nitrogen is the principal element of fertility in soil, and while this in most of the richest fields of England does not exceed 0.26 per cent. experiments made from surfaces taken at Brandon, Selkirk and Winnipeg find an average of 0.41, or nearly double that of England.

The large percentage of silica found by analysis proves beyond a doubt that the soil is par excellence adapted to the growth of wheat.

The native grasses on these prairies are said to be upwards of 40 varieties, and all abundant in foliage. These grasses unlike the growth of the eastern Provinces, are comparatively free from clumps or stems; or, in other words, each clump or stem is well decorated with leaves, in many cases from ten to twenty against the two or three of the eastern product. To the well informed, observing agriculturist, the importance of this cannot be over estimated. It at once indicates that the native growth is easily digested, exceedingly nutritious, and supplies the fattening element, for which grain has to be fed in the eastern Provinces.

The chief varieties of these grasses are known as top or cedar, pea grass or wild vetch, the beaver hay, the Scotch grass—a great favorite, and the upland hay. It is scarcely necessary to add these vary in size and growth the coarser being found in the lower districts, and the finest of June grass at the greatest elevation.

## MANITOBA'S GROWTH.

### A Marvel in Itself.

Nothing, we fancy, to the careful reader can more satisfactorily show the development of a country from year to year than its growing trade with the outside world, as that trade is invariably in proportion with the rate

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