

AND SOCIAL CONDITIONS

WESTERN CANADA





Farming, Ranching and Social Conditions in Western Canada

A series of articles written by practical men on subjects of interest to those looking to better their present condition

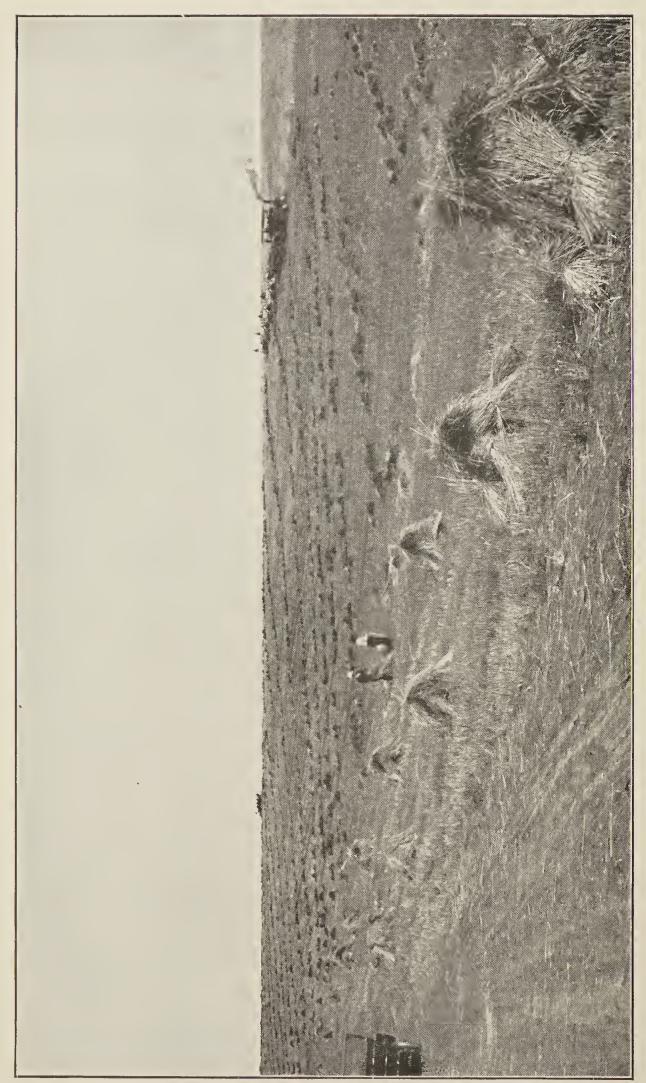
Issued by

GENERAL PASSENGER DEPARTMENT

GRAND TRUNK PACIFIC RAILWAY

WINNIPEG, MANITOBA

FIFTH EDITION, APRIL, 1911



MILES OF WHEAT FIELDS IN SASKATCHEWAN.

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Soil Conditions along the Grand Trunk Pacific BY PROFESSOR THOMAS SHAW

Staff contributor to the "Orange Judd Farmer" publications. Member of the faculty of the Minnesota Experimental Station and Agricultural College. Author of standard text books on "Soils" and an acknowledged authority in agriculture. Formerly professor at the Ontario Agricultural College.

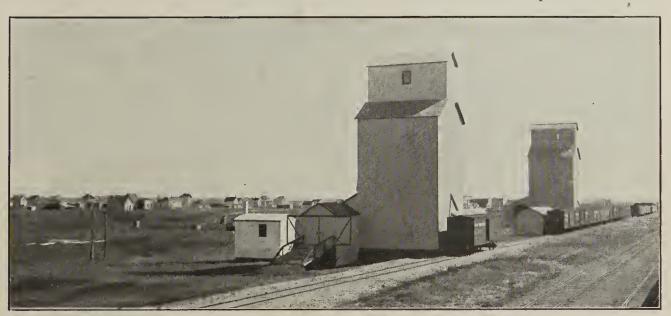
The Grand Trunk Pacific is virtually a continuation of the great transcontinental line which extends from Halifax on the Atlantic to Winnipeg. Beginning, there-

PROFESSOR THOMAS SHAW

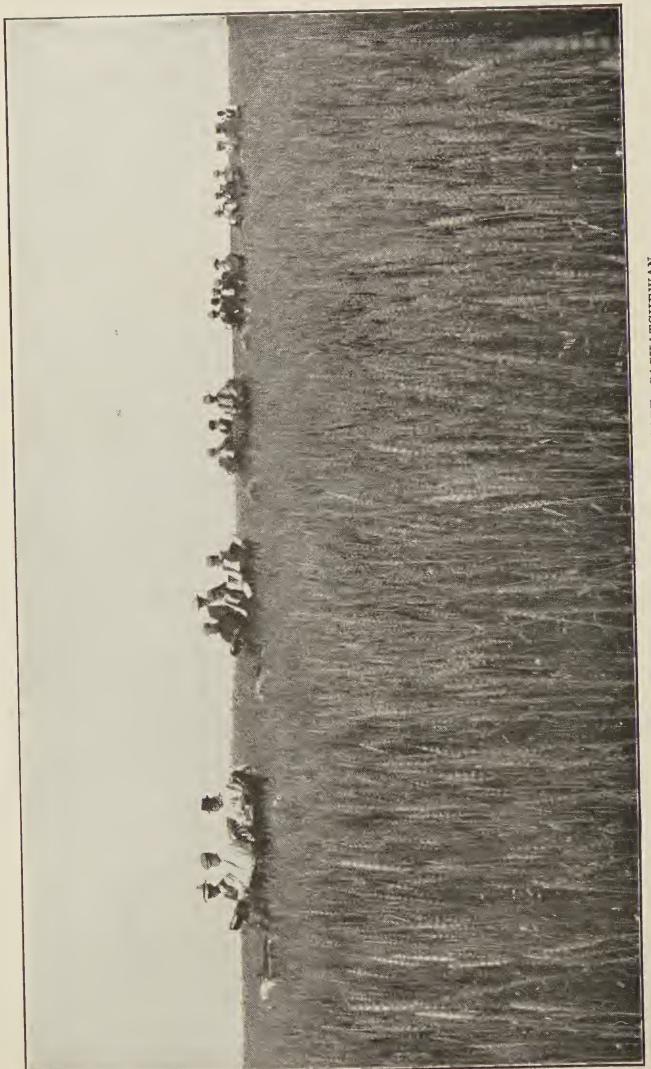
fore, at Winnipeg, it bears a little to the north of west to Edmonton, which it has already entered. From Edmonton it will extend to the north and west until it reaches Prince Rupert on the Pacific. From Winnipeg to Edmonton is 793 miles. It is of the soil and agricultural conditions along this part of the road that this paper will treat.

In addition to the homestead lands are millions and millions of acres that are held by companies and individuals, but now thrown upon the market awaiting purchasers. In some instances these lands are superior in character to some of the homestead lands, but in other instances that is not true of them. Of course, those who

bought them thought them better or they would not have purchased them on speculation, but in this matter their judgment was not always correct. For instance, in some instances they bought land on the comparatively level prairie, destitute of trees, in preference to adjacent lands that were more or less broken and more or less covered with trees, when the latter were possessed of a richer soil and were also better adapted than the former to mixed farming. The individual, therefore, who is seeking a homestead must not hastily conclude that because a farm is open to entry, it is inferior in soil and general adaptation to other



Elevators at Rivers, Manitoba. First Divisional Point west of Winnipeg on the Grand Trunk Pacific Railway.



LAND SEEKERS IN A WHEAT FIELD, NEAR SCOTT, SASKATCHEWAN.



On the Way to the Elevators in Saskatchewan.

farms in the vicinity that can only be obtained by purchase. But, of course, it is true that some farms open to homesteaders are inferior, because of some defect of physical conformation, as for instance the presence of numerous pot-holes or undulations too violent for easy farming.

It would be no exaggeration to say that practically all the land along the entire distance traversed by this road is capable of furnishing homes to those who till them. The lands are of three classes. They may be classed, first, as having special adaptation to the production of grain; second, as having such adaptation to mixed farming of which live stock will form an important feature, and third, as being mainly adapted to the production of live stock only. Of the third class of lands the area is not very large, of the second it is much larger and of the first it is by far the largest. Of course, the land that has high adaptation to the growing of grain may be made to have equally high adaptation to the growing of live stock, according to the way that it is farmed.

For a distance of 20 miles, or about that distance from Edmonton going eastward, the road runs through an area capable of immense production. The soil, largely humus in its composition, is so rich that in some instances the grain lodges on it more or less in moist seasons even after years of tillage. Good crops of both Winter and Spring wheat may be grown upon it. The yield of 100 bushels of oats per acre and 60 of barley is by no means uncommon. This region has the further advantage of being possessed of high adaptation for mixed farming because of the great luxuriance of the grasses, native and cultivated, which it will produce, because of the exceeding size of the roots and the very large yield of the same, and because of the abundance of the protection furnished by the trees which grow on every hand. These lands run all the way from \$12 to say \$30 per acre, according to their distance from Edmonton and from the railway. This area will eventually become a live stock producing country of the first order, and when that time comes the land will readily bring \$100 per acre.

Farming and Ranching in Western Canada

Then follows the Beaver Hills country, which begins at Ardrossan and extends to Tofield, a distance of 23 miles. This area is rolling and more or less broken. It has much good land within it, but its value is somewhat discounted by the presence of an occasional muskeg. It is essentially a country in which mixed farming will be conducted, giving live stock the lead. Beaver Lake, north from the railway, is 12½ miles long and 6 miles broad. Much of this area may be had for the asking.

From Tofield to Wainwright is 87 miles. The country is variable; much of it is brush land. Some is open prairie. Again, there is park land. It is a country for mixed farming in which prominence should be given to the live stock feature. A large proportion of the land is open to entry. When it is called to mind that practically 8,000 homesteads within reasonable distance of the road are awaiting free homestead entry, it should be of considerable interest to those who are seeking homes to know something of the character and capabilities of these lands with reference to the production of crops.

At Wainwright is the Buffalo Park recently established by the Dominion Government at a cost not far short of a million dollars. In this park all the buffaloes owned by the government will be gathered and they will then number nearly one thousand head. One corner of the park is only one mile from Wainwright. There is also much good land about Wainwright which is capable of high production. Some is open to entry and some is held at moderate prices.

From Wainwright to Scott is 97 miles. Not a little of the land in proximity to the railroad is sandy and hilly, being the border of the second prairie steppe. It is brush and tree land and pasture land as well, and has in it many ponds and small lakes. It is adapted only to the growing of live stock. But some distance back from the railroad and beyond the sandy land are wide stretches of good grain lands.

Scott is 224 miles east of Edmonton and 569 west from Winnipeg. For many miles east from Scott and also west along the line of the road and for 30 to 40 miles northward and 100 miles southward is one of the smoothest and most uniform stretches of prairie land to be found in the Canadian West. It is almost entirely free from pot holes, and yet it is sufficiently undulating to drain well. The soil, a dark brown in color, has in it considerable clay and some sand. It is a soil that will stand cropping for a long term of years. The subsoil, a clay of medium open



Turnips weighing from 15 to 20 pounds are common in the fertile valleys of Central British Columbia; in fact, all roots grow to perfection, and the quality cannot be beaten anywhere on the continent.

texture, is admirably adapted to the passage of water downward or upward as it may be needed, owing to the presence or absence of moisture. This land will produce fine crops of wheat, oats, barley, flax and speltz with much certainty, as was attested by the crops of these growing on the land, and good crops of Winter wheat can certainly be grown upon it. It will grow abundantly all kinds of field roots and also potatoes. It has also marked adaptation for field peas and it will undoubtedly grow clover and alfalfa in due time, also timothy, Western rye grass and brome-grass. Much of the land has already been taken by homestead or by



The Capability in Production of other things than Cereals is Illustrated in this Picture.

purchase. Back from the railroad several miles excellent land may be obtained for \$16 to \$18 an acre.

From Watrous to Melville is 129 miles. This part of the road runs through the Touchwood Hills. These hills extend for 20 or 30 miles on both sides of the railway.

The soil on these hills and in the valleys is most excellent. It is black to brown in color and is underlaid with a sub-soil of permeable clay. As the lakes are numerous, this region has pre-eminent adaptation to mixed farming giving much prominence to live stock. The adaptation for growing coarse grains and grasses, also field roots on which to feed them, is of the best. It is questionable if better land for growing alfalfa and the clovers can be found in the Northwest, and yet there is comparatively little settlement. The region has been shunned by the settlers, not-withstanding its picturesque beauty and the kindliness of the soil, because of the labor that would be involved in clearing away the poplar groves. The protection for live stock is of the best. This land can be purchased for about \$8 per acre and the men who make homes on it may look for a rich reward.

Melville is 279 miles east of Winnipeg. This eighteen-month town with 1,500 inhabitants is located in a rich and slightly undulating country. Already the dwellings of this town of gourd-like growth are scattered over a mile of area. Melville

is a division point on the railway. The drive into the country around revealed a soil of loam, strongly reinforced by an ample supply of humus and underlaid with more or less of a chocolate sub-soil rich in lime and probably more or less marly in character. Here, as in other parts of similar soil, the filling of the grain is superb, as witnessed in the triple-grained top kernels of the oat-heads, which is an indication of superlative adaptation to perfect filling of the grain. This splendic soil extends far to the east and west and north and south of this centrally located town, whose future development is assured. The farming land is worth \$12 to \$20 per acre.

Rivers, the first division point of the railway west of Winnipeg, is 142 miles therefrom and 137 miles east from Melville. This portion of the road runs through the valley of the Assiniboin. It enters the same from the west near Victor and emerges therefrom not far from Rea, a distance of about 30 miles. The scenic beauties of this portion of the road are probably not excelled in the Canadian West east of the Rocky mountains. The valley is wide, not less, probably, than one to two miles. The wooded banks are high and slope with more or less abruptness. The pastures and farm steadings and fields of ripening grain blend with the green groves and brushwood of the landscape in a harmony that soothes and pleases the vision. This valley land should furnish an ideal soil for growing alfalfa, as it will be possessed of a subterranean irrigation. Beyond the banks to the north and south fine farming lands abound.

Emerging from the valley, the road runs through a region that has been settled for more than 20 years. The good crops that still grow upon it abundantly attest the great wearing power of the dark loam soil. The comfortable and commodious dwellings sheltered by the poplar groves around them bear silent but eloquent testimony with reference to the character of the homes that will soon be found throughout this country in all its borders.

Rivers is an 18 months town of 800 people and it is built on a gravel plain which has a diameter of four to six miles. A drive out into the country revealed a region with the same dark free-working loam that characterizes all areas in which clumps of poplar and willow trees abound. The crops were good, but showed some signs of wear in the land. How can it be otherwise, since the crops of grain grown on it for more than 20 years have been sold and the straw that produced them has gone up in flame and smoke? Still going eastward, the rich Portage plains are crossed and finally Winnipeg is reached.

While excellent crops of grain may be grown on nearly all the land from Winnipeg to Edmonton, a distance of about 800 miles, the larger portion of it has high adaptation for mixed farming, of which live stock will form a prominent feature as soon as the farmers adopt more sane methods of taking care of the land.

As soon as mixed farming of the character mentioned shall be generally adopted, lands that may now be obtained for from \$8 to \$18 per acre, and even lands now open to homestead, will sell for \$50 to \$100 per acre.

The statement thus made is not extravagant. It cannot be otherwise. In natural fertility these lands fully equal those of the American corn belt. In variety of production they excel them, and yet the latter sell for \$100 to \$200 per acre. In addition to the grain crops now grown of wheat, oats, barley, rye, winter and spring wheat, and speltz, much of the land will grow Winter wheat when properly grown. Eighty per cent of them will grow clover and alfalfa. A still larger percentage will grow field peas, and the entire tillable area will grow good crops of the cultivated grasses, timothy, brome-grass and Western rye grass. Why should not this entire area become a region of happy and prosperous homes?

The Rush to Canada West

One of the factors in the decreased population of American Grain Belt States in the past ten years.—How the Settlers fare in their new homes across the International Lines. From the "Farmer and Stockman," November 24th, 1910.

Lured by lust of land or dreaming of a new home in the Eden of plenty and prosperity, a constant procession of American farmers has been crossing the international line for many years past and winding its homeseeking way westward across the fertile acres of the Canadian provinces of Manitoba, Saskatchewan, and Alberta. Fired by the stories of fortunes turned with the sod in the virgin prairies of the great empire of wheat in the King's domain, men and women and even little children, whose hearts have beat high with the romance of adventuring, have gone forth in the same spirit of conquest that sent the American pioneers westward across the Alleghanies, then the Ohio River, next the Mississippi, subsequently the Missouri and finally over the great barrier of the Rockies, westward always, with a new home nearer the setting sun the constant goal. So history has repeated itself this past decade in the great rush to the new lands of Western Canada. The effect of the rush is evident in the census figures issued the past few months. Iowa, Missouri, Nebraska, Minnesota,—practically every State in the grain belt has furnished its quota of Canadian home-builders. In Iowa no factor in the decreased population of the State has been more prominent or vital than this hegira to the new lands of the last best West-Canada.

The story of how these American grain-belt farmers have sallied westward into Canada and wrested culture from the wilderness, gold dollars from the virgin sod and happiness from the boundless distances is full of romance and spirited adventure. Pioneer tales have always had a lure; there is not a story of Radisson, Boone, Crockett, Lewis, Clark or any of the other pathfinders of the States but is duplicated by the more peaceful but none the less epochal adventurings of the twentieth century pioneers of Western Canada, who are building up homes of culture on the trackless prairies and surrounding them with gold mines of wheat and oats and barley and flax.

To go into a new land a homesteader, taking from the Government its gift of a quarter section of land, to break the sod by ox team, to live the required six months each of three consecutive years and then to secure the coveted patent; to have a half dozen years elapse and then to be counted among the rich and prosperous men of the province, to harvest the crop of 640 or 1,280 or even 2,000 acres of wheat and "chug-chug" for two whole miles past the shimmering golden sea of ripening wheat and to know that the crop will run twenty-five to thirty-seven bushels to the acre and that, minted into dollars, it will pour into the family coffers of the erstwhile immigrant,—all this is romantic and inspiring. Such tales are being told and lived out daily in this new promised land of Canada West.

Last summer a party of agricultural editors from the States made a journey through Manitoba, Saskatchewan and Alberta. Frequently they stopped at the home of, occasionally even they broke bread with, men who had homesteaded or pre-empted their lands less than a half dozen years before and who now reap the

crop from 640 or 1,280 acres and even fill their own private elevators with the yield of their own land. Such things are possible in the States, but when men go together into a new country they inspire one another; they put aside their old conservative ideas and methods and take on something of the boldness and the illimitableness of the land on which they have settled. So it has been with the transplanted American grain-belt farmers. They have given over the ox team; they have in many cases discarded the plow drawn by horses or mules, and in its stead they have their tractors turning four, eight, even a dozen furrows at a time, great trails of smoke marking the slow but sure progress as the sod is broken or the soil turned for another crop. Things are done on a big scale throughout all the West, nowhere more noticeably than in the provinces of Western Canada.

He would be disloyal indeed who would admit that Canada has a better system of homesteading or takes better care of its homesteaders than the United States. And yet the Canadian manner of doing things (from the problem of selfgovernment up, or down, to the problem of self-welfare) frequently stands out as a model on which the American system might well be patterned. Under the existing homestead law in the Dominion of Canada, any quarter section of land vacant and available in the provinces of Manitoba, Saskatchewan and Alberta (excepting those belonging to the Hudson's Bay Company) may be homesteaded by any person the sole head of a family or any male over eighteen years of age who is already or who declares his intention to become a male subject. The restriction of residence differs from that in the United States in that the residence need be only six months of each year for three consecutive years. The residence need not even be on the homestead which is to be patented, but may be on land adjacent (within nine miles in a straight line) which is owned by the prospective homesteader or some member of his immediate family, provided it is in excess of eighty acres. Thus the relatives of some transplanted American grain-belt farmer may file on a homestead and live with the home folks on their land and still fulfil the homesteading residence regulations, provided that the home folks' land be within nine miles of the homestead claim and in excess of eighty acres. A homesteader residing on a homestead is required to break thirty acres of the homestead (of which twenty must be cropped) before applying for patent. When the duties are performed under regulations permitting residence in the vicinity, fifty acres must be broken, of which thirty must be cropped. These restrictions are easy to conform to, and make the lot of the homesteader comparatively easy and comfortable. Moreover, his welfare is looked after in the first few weeks of first arrival by Government-owned and Government-established immigration halls where he may live and cook his food at common stoves and find shelter and companionship in those first trying weeks when he is adjusting himself to his new conditions and environment.

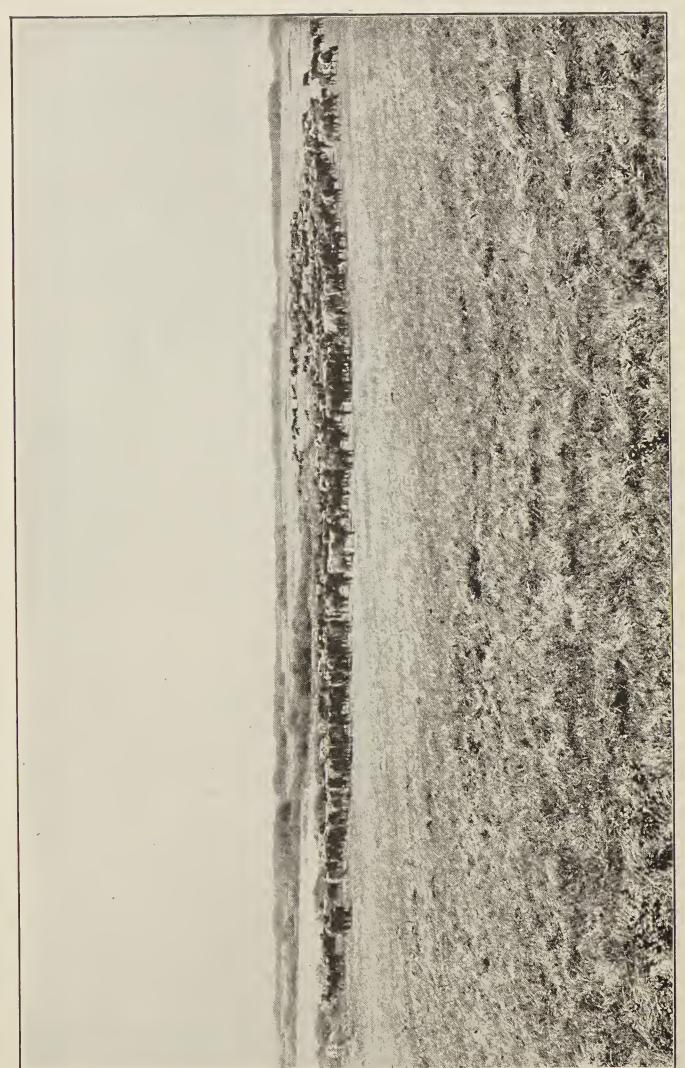
But Canada is not being settled by grain-belt homesteaders alone. There is a constant tide of immigration from European shores. England sends many of her younger sons across the seas to "Our Lady of the Snows." Denmark and Germany add to the recruits, until the foreign element is considerable. But far in the lead are the former farmers of Iowa and Missouri and the other grain-belt States who have turned their backs on \$100 and \$150 land and set out westward to the newer land, to build up values and fortunes anew, to start in on the ground floor, to be independent.

Nor is it possible or advisable in all cases to depend on the homesteading privileges for a home in this new land. Often the only available free lands are far from railroad or settlement. Thousands of homeseekers have found it preferable

to buy their land from the railroads and real estate concerns which control immense tracts,—millions upon millions of acres. It is to the eternal credit of these companies that they have treated the settlers square, met them more than half way, and given them a helping hand in the first months or years of struggle. Land may be bought of the railroad companies on a comparatively small payment down and then on five- or ten-year instalments, depending on whether the purchaser intends to live on the land or simply for an investment.

One of the erroneous ideas which prevails in all too many minds regarding the Canadian West is that it is the home of wheat only. Wheat is king in Saskatchewan and its sister provinces, but there are pretenders to the throne which are making good headway. Splendid crops of oats, barley, flax and rye are raised, while there are islands of fruit and vegetables in the apparently limitless seas of golden wheat. The experiment stations at Brandon and Indian Head have been carrying on a splendid work for many years past, convincing the settlers that Canada need not depend on wheat alone, but that diversified farming can be followed successfully, and a new farm has been established at Scott, Saskatchewan, on the Grand Trunk Pacific line in the celebrated Namping Lake district. Herds of cattle are beginning to dot the provinces; Government-established and Governmentoperated creameries are giving rise to a new and profitable industry; bumper crops of vegetables were raised the past year, and even transplanted shade trees are coming to line the lanes houseward and to break the prairie monotony,—proof that the soil is capable of raising practically anything needed. No better work is being done on the splendid experimental farm at Indian Head than this culture of various fruit and shade trees. With such an example, the day cannot be far distant when the sweep of the prairie will be broken every here and there with restful clumps of trees, adding a variety to what might easily become a monotony of sameness.

There is every reason to believe that the tide of immigration from the American grain belt to the Canadian West will continue. The settlers are not returning. To say that they are is to do the country a grave injustice. There never yet was a country in which the dissatisfied did not exist. They are found in smaller numbers in the Canadian West than in almost any other new country. Some few American settlers have returned, but personal interests, home ties, the call of family have been the causes, rather than a dissatisfaction with conditions or a disappointment over success. The Grand Trunk Pacific, the new national transcontinental railway, carries a never-ending army of homeseekers westward and sends its colonists' coaches back to Winnipeg, empty, to be re-loaded with the hopes and goods of a new consignment of settlers (from over seas or across the line), with faces eager, eyes shining and hearts aglow over the thoughts of a new home in a new land, a fresh start where all men are on the same level and where there is room and prosperity a-plenty for every one who comes.



CATTLE RANCHING IN SASKATCHEWAN, NEAR PUNNICHY.

Animal Husbandry along the Grand Trunk Pacific

BY E. S. BAYARD

Editor of "The National Stockman and Farmer," Pittsburg, Pennsylvania. Famous breeder of Aberdeen Angus cattle and an executive of the National Aberdeen Angus Association. Authority on beef and dairy cattle.

To the stockman who travels from Edmonton to Winnipeg over the new Grand Trunk Pacific line there seems to be many opportunities for successful animal



E. S. BAYARI

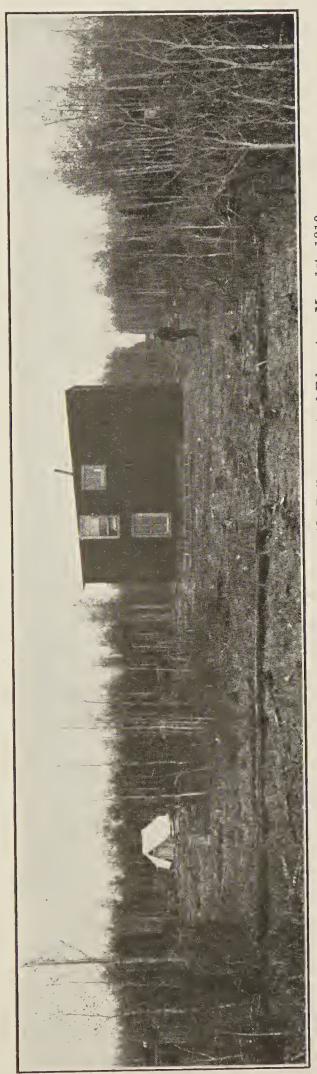
industry. The splendid native grasses, the good grain, the apparently favorable conditions for the growth of alfalfa and other clovers, peas, vetches and barley, and the abundance of water, all look good to a man who is interested in live stock. The condition of the animals running on the native grasses impresses him very favorably.

Wheat seems to be the main object now and on most of the prairie land will probably occupy a leading position for some time to come. But this Grand Trunk territory has a great deal of land that is not now in high favor with the grain grower and will not be until land becomes scarcer and dearer. The valleys, coulees and territory such

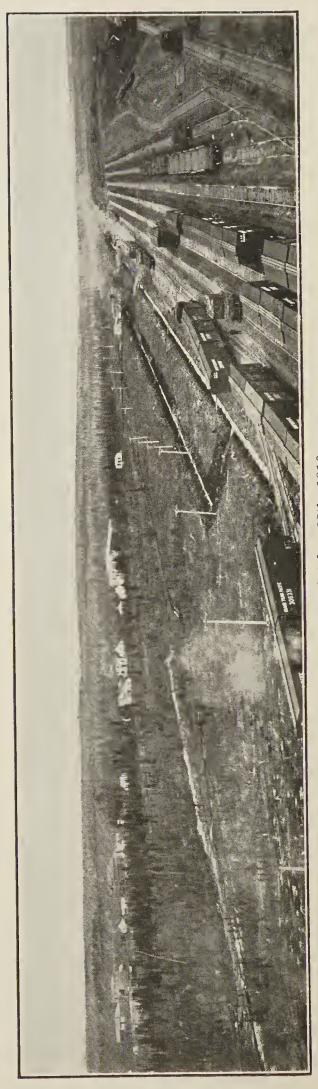
as the Touchwood Hills, with more timber and more lakes than the grain grower wants, furnish opportunities for stockmen which have been neglected to a surprising extent in the rush for wheat land. Considering the good meat markets at Winnipeg and Edmonton, and also among the grain specialists on the line, these cheaper lands look like a "good thing." Horses and cattle can certainly be raised on them now at comparatively slight cost; hogs and sheep will come later, with more fencing and some subduing of the wild land. I was particularly impressed with the opportunities existing in the Touchwood Hills and in some of the coulees, which were being passed over without consideration by prospectors for land. Some day these now cheap lands, judiciously managed in diversified farming and animal husbandry, will be producing great quantities of meats. Here is a combination of grazing land and farming land, with enough of the latter to support in winter as much animal population as the grass will summer—in other words it is well balanced for live stock husbandry.

Opportunities in grain farming force themselves upon those who travel through Canada. The chances for successful animal husbandry are not so obtrusive, yet they are there, and in their presence the observer wonders why the cities and towns and grain growers of Western Canada must bring mutton from Australia and bacon from Ontario. Where the bison lived the year round, and where antelope multiplied and increased, domestic grazing animals will certainly do well. Such has been the case in the United States, at least. With clovers, peas, oats and barley, hogs will prosper, and it seems strange that they are so few. All along this line all meats fetch a good price, because there is little local production in spite of the fact that natural conditions are quite favorable for it. *

HOW TOWNS GROW ALONG THE LINE OF THE GRAND TRUNK PACIFIC RAILWAY.



Edson, first divisional point of Grand Trunk Pacific Railway west of Edmonton, May 1st, 1910.



Edson, October 25th, 1910.

The Qu'Appelle Valley

BY HERBERT QUICK

Editor "Farm and Fireside," Springfield, Ohio, one of the largest and most influential agricultural papers in the United States. He is a leader in the movement to advance the cause of "Systems in Agriculture." Well known as author and lecturer. Prominent in Iowa State politics.

Any one who thinks that Western Canada is an uninterrupted stretch of grassy steppes, on which wheat and nothing but wheat grows, in a monotony of fertility



HERBERT QUICE

as unbroken as the waste of waters of the sea, is partly right and partly wrong. There are wide spaces in which the adobe house of the Russian settler makes so little break in the sea of grass and wheat that it looks uninhabited. There are landscapes so level that the eye aches for something on which to settle as a part differentiated from the whole. And there are, on the other land, hundreds of leagues of park-like country diversified by countless groves of trees, so artful in their arrangement that one can scarcely believe that the nomads of a hundred years ago saw them just as they are now, and that there is really no house and barn and stockyards behind each of them. These regions are home-like

before a home is made in them.

Then there are river valleys, like that of the Qu'Appelle shut in from the plains by bluffs as picturesque as those of the Upper Mississippi, lakes of both strange and lovely peculiarities, highlands islanded in the plain, and about each of these cluster legends which may, perhaps, contain the germ of the literature of this new Scandinavia.

The Grand Trunk Pacific, that startling manifestation of the determination of Canada not to break in two at Lake Superior, passes many of these distinctive regions in its straight slash across the continent from Winnipeg to Edmonton. Not at first, perhaps. For the first hundred miles or so, the region is a typical farming one, and one might be leaving Omaha or Fargo, or Sioux Falls so far as can be told by the landscape. You go to sleep, perhaps, and awake in the interesting Qu'Appelle valley, which stretches from Rivers to Watrous in a long groové, as if some giant had laid his midiron down in a prehistoric golf game, left it until it had become buried, and then picked it up.

The Qu'Appelle River runs along the place where the club lay. The iron itself left a depression sixty miles long, called Last Mountain Lake. And in the crook of the midiron, like a tee piled up by the giant from which to drive off, is a highland region called Last Mountain—lifted above the surrounding country by several hundred feet, clothed with forest, studded with lakes, and with an atmosphere so much its own that settlers feel at once on arriving within sight of it or its sister region, the Touchwood Hills, that they "have got somewhere," and plant their stakes.

The Qu'Appelle is a river of mystery, "the river that calls." At its very upper valley-end lies that strange tarn Little Manitou Lake, full to the brim with a water

like that of Hunyadi Janos, and as still and deserted by fish and fowl as the Dead Sea. -The germs of legends already stir in the social soil. One may hear of Indians smitten with leprosy who came across the prairies ages ago, led by the Manitou, or Great Spirit, to bathe in these waters and be healed. A hundred and fifty miles further west along the same railway is a rival medicine-water called Big Manitou, to which it may be inferred the Great Spirit sent the cases most convenient to it. But the strong medicine water is that of Little Manitou. It is so set in its devotion to the salvation of life that it refuses to drown anyone. Try to sink in it, and it spurns you forth and ejects you. Go to Little Manitou with suicidal intent, and it will hold your head out of water while it purges you of your disease.

How the drainings of this astonishing lake—16 miles long, a mile wide, and shut in by picturesque bluffs—can leave unsalted the streams and lakes below, is a problem for the thinking mind; but whatever the answer, Last Mountain Lake, into which the Little Manitou empties, is as clear and fresh as any lake of which you know. And it is as populous as Little Manitou is deserted of fish and fowl. At its head are wide marshes in which the splendid white pelicans and the rare cormorants breed under the protection of the government, and make the navigation of the lake a delight to the eye. About this mid-Canadian Seneca Lake wave wheat fields in season. From the deck of the steamer one can see the binder moving through the yellow wealth growing in the valley which was once the hunting paradise of the Indians. Here was sweet water, juicy grass, plenteous game and a good life.

But the dark hills, held in the crook of the giant's midiron,—they were different. One wonders why these hills were called "Last Mountain." Why not rather "First Mountain?" Perhaps it was because it was the last place the Indians would go. There were trees there—and maybe that made it a bad place for prairie Indians. There must have been deer and elk in plenty there, not to mention the waterfowl in the highland lakes—the descendants of which make it a fowler's paradise still—and the otter and beaver and fisher for trapping; but Last Mountain was a sinister spot, in the opinion of the red men.

So one may well believe that the wise game went into the Last Mountain country when the hunting parties were out, and that the noble red men passed up the beautiful Qu'Appelle valley from the east, along the shank of the golf club. They left Riding Mountain out of sight far to the north, and paddled their canoes up the "River that Calls." One can easily believe that every headland and spur about which the great railway now winds to the delight of the passengers, had its story. Here is where the beautiful girl was buried who refused to be sold to a man she did not love, though the laws of the tribe made her his wife. And here is the spot where the shivering braves heard mysterious voices from the bed of the stream as the ice pressed against its banks—the river calling. There is the place where the young brave, wounded, met the starved lobo wolf in single combat and killed him. Everywhere the age-long highway of the Qu'Appelle had its local legendary lore.

It is an interesting ride, this half a day of hill and valley in the midst of the plains. The broad, fertile bottoms are now dotted with ranch houses, and checkered with fields. The river winds like a vastly bewildered serpent from side to side of its pretty valley, sunk below the silent winds of the prairie, a place of moisture, of trees, of lake-like expansions, of rich farms and of sheltered quiet. Now, as in the olden time, the Qu'Appelle is "the River that Calls."

Social Conditions along the Grand Trunk Pacific

BY PROFESSOR E. E. FAVILLE

Editor "Successful Farming," Des Moines, Iowa. Held chair of horticulture at Nova Scotia Agricultural College. Formerly professor, Agricultural Department Iowa State College, Ames, Iowa.

In the quest of cheap farm lands, the country pierced by the Grand Trunk Pacific in the Canadian West presents opportunities not to be excelled in any part



PROFESSOR E. E. FAVILLE

of Canada. From Winnipeg to Edmonton, a distance of nearly 800 miles, this splendidly equipped line of railway passes through fertile park lands, undulating prairies, through valleys, along the border of lakes and streams, bounded on every side by rich, fertile lands. Nowhere is there to be found arid or unsightly land on either side of this railroad.

We speak of this section of Western Canada in terms of praise because we have found it to be one of the richest agricultural sections on the American continent. It was our opportunity to see and behold bountiful harvests being taken from newly made fields, and to peep into the homes of the new settler where content and

wealth lie down at the door each night; to ride over vast areas of rich lands waiting for the hand of man to evolve them into productive acres, where the door of opportunity swings open wider each year.

Social conditions in a new country are always looked upon askance by those who do not know or have yet to find out the truth. The time was not many years ago when the settler or prospective land buyer "trekked" into a new agricultural section in a "prairie schooner." To be a pioneer in those days meant to submit to hardships. Today, however, the seeker of a new home or of lands goes in a palace car, if you please, amid comfort and luxury. A striking contrast this of today and that of not long ago.

Home building is a part of empire building. It is the foundation of success in all agricultural districts. The content and comfort of the home life in Western Canada are of the highest and most satisfactory types. Isolation in this territory is a thing of the past. Good roads, telephones, improved machinery and the railroads bring the pioneer farmer close to the outside world. This fact is especially true in this newly favored section of which I write. All through this area of over 800 miles are to be found, dotted here and there, thrifty farmers, each adding his quota of success and participating in the prosperity of Western Canada's rapid development.

At different points here and there along the line of the Grand Trunk Pacific from the improved farming sections of Manitoba to the more sparsely settled districts in Alberta and Saskatchewan prosperous towns have sprung up like magic. Within a year or more the population of these towns have increased with great rapidity. That their growth is a substantial one is attested by their many elevators and lumber yards, which bear testimony to the rapid settlement and development of

the agricultural communities. The visitor for the first time is surprised at such a growth and such prosperity and wonders in a casual way if it will continue, but if he goes into the problem a little further he will find that the thriftiness of the new settlers and the productiveness of the soil are the chief causes.

But what of the social conditions of the more sparsely settled districts, in which are to be found many homestead lands not yet taken? In these sections thousands of the best farmers of the states and Eastern Canada are settling and building homes. Most of these new settlers are farmers who have had experience in growing grain crops such as grow in Western Canada, or understand mixed farming as it should be carried on in a new country. Therefore, the new settler becomes at once a successful farmer. Organization is natural with him. He is essentially a home builder and is quick to avail himself of those methods of co-operation that bring the settlers of farm communities closer together in conducting affairs of mutual interest. It means something to be a farmer under such conditions, for agriculture is there in all its glory.

Liberty loving people have all the liberty the heart can desire under Canadian laws. The foundation of the social fabric of an agricultural country may be said to rest on the efficiency of its school system. In this regard Western Canada has a system of education based upon the best that can be obtained from the states and Eastern Canada. Its school system and regulations are second to none. Good high schools or graded schools are found in all the towns. "The little red school-house" is seen in all the organized districts. Any district, not to exceed five miles in length or breadth and having within that area four residents and twelve children, may be organized into a school district, a school-house built and teacher supplied. Thus every boy and girl has a school brought to his or her doorway.

The government is most liberal in its support of higher education. In Winnipeg, Saskatoon and Edmonton are to be found excellent colleges and universities, so that the problem of higher education is solved. The provincial agri-



A Homestead near Edmonton, showing the Old House and the New-The Evolution of Five Years.



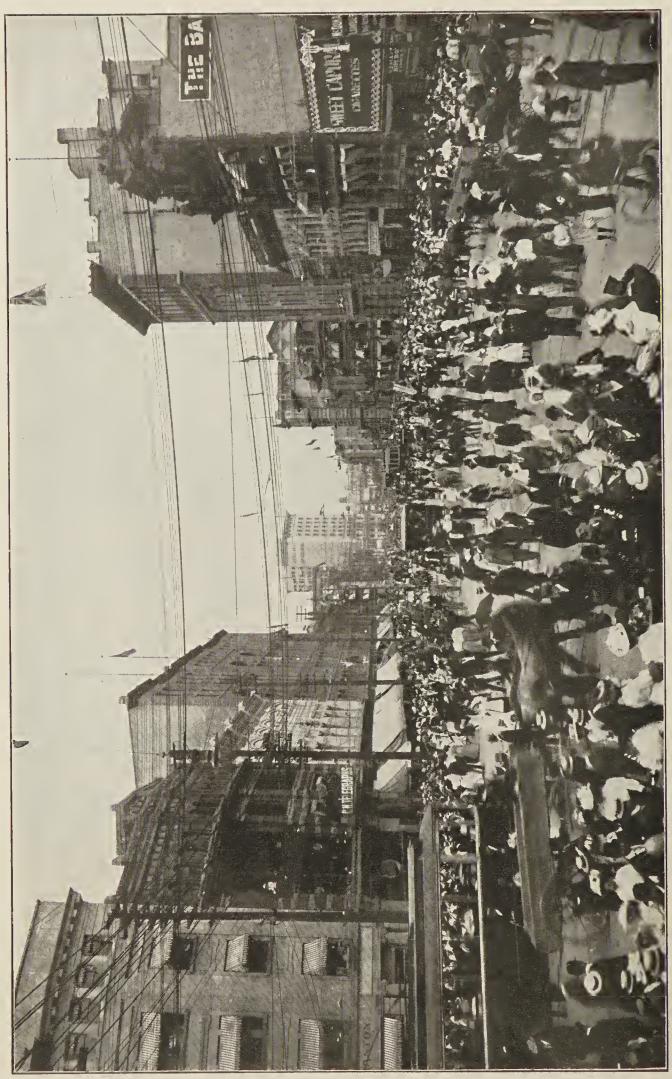
Jasper Avenue, Edmonton, Alberta, 1909.

cultural schools located at Winnipeg and Saskatoon give practical courses in scientific farming, preparing graduates to take up the responsibilities of farm life. Fortunate are those farmers who locate along the line of railway that reaches these important institutions. Thus it will be seen that the question of higher education for the young folks is solved in the beginning.

Church organizations are numerous and there are few spots that can be found, even now, where they are not accessible.

One of the modern, practical and convenient inventions of the age is the telephone. This has been a great factor in lessening the labor on the farm and putting the country in touch with town and city. It is a factor that welds together agricultural communities into closer social contact. It may be noted here as in no other part of the American continent that the Provincial government lends substantial aid in the installing of telephone systems, so that new communities are not long without the aid of the telephone. The main telephone lines in the three provinces are all owned and operated by the government.

The newcomer settling in this favored section will find the social conditions far beyond a pioneer stage. He will find helps on every hand. Instead of his going to the "jumping off place," as is often supposed when thinking of Western Canada, he will find himself surrounded by wonderful opportunities for social advancement in a new country fraught with promise. He will find the social problems working themselves out quickly, and as the large farms become smaller and the population increases, better and better will become the social conditions of this new country. With an organization such as the Grand Trunk Pacific railroad behind the movement for the betterment of farm life, the future of the new settler in his relation to home life and social conditions is assured.



Grain Farming along the Grand Trunk Pacific BY CHAUNCEY P. REYNOLDS

Editor of "The Prairie Farmer," Chicago, Illinois. Fellow at Michigan Agricultural College. Formerly Agricultural Editor "Chicago Daily Drover's Journal."

Some of the most valuable land to be opened up for farming purposes will be found along the line of the Grand Trunk Pacific Railway from Winnipeg to Edmon-



CHAUNCEY P. REYNOLDS

ton, and included in a distance of 793 miles, opening up approximately 15,000,000 acres of valuable agricultural lands.

During the month of August, 1909, it was the privilege of the writer to go over this route in company with a number of Agricultural Editors from the States, making an inspection of the agricultural resources along the line between Winnipeg and Edmonton.

All along the entire route there is an almost unlimited area of fertile land adapted to practically all phases of agriculture suitable for the Northwestern States or the Western provinces of Canada.

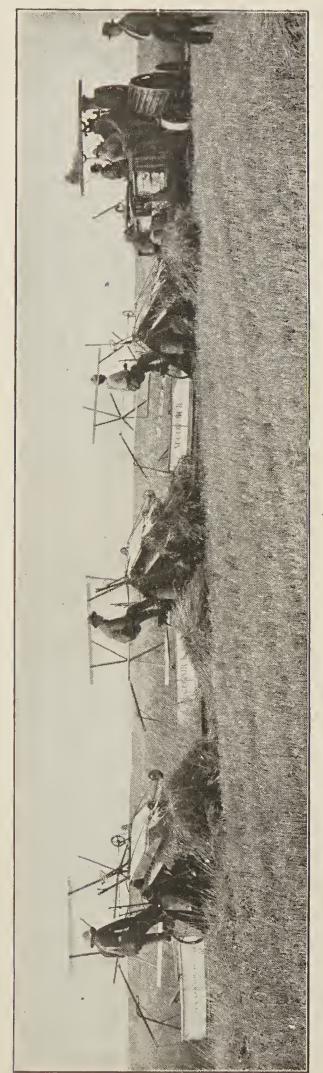
This article will treat of the possibilities of grain growing along this new transcontinental system between the points mentioned, based on a reasonably careful personal inspection of the entire route with frequent stops for purposes of making first hand observations.

From Winnipeg the Grand Trunk Pacific bears a little north of west, through Manitoba, the central portion of Saskatchewan, and into Edmonton, the heart of Alberta. The entire line possesses remarkable opportunities for grain growing and will undoubtedly become one of the most prosperous farming regions in Western Canada.

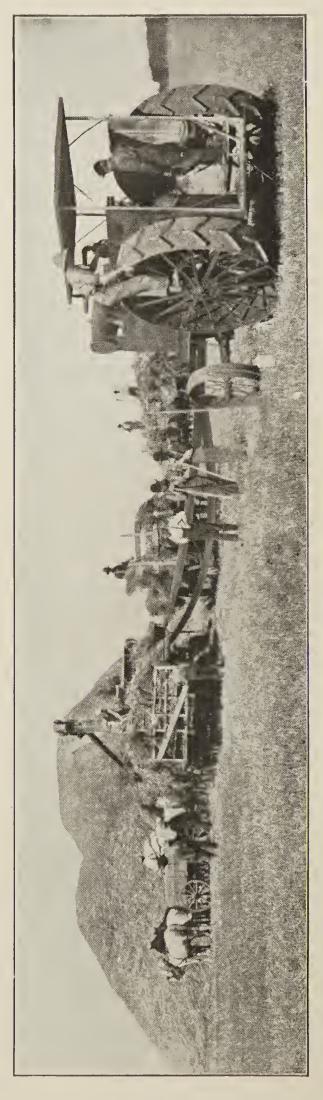
There are three classes of farming possible in this particular territory. First,



3,500 Bushels of Wheat waiting for the Thresher, Saskatchewan.



MODERN METHOD OF HARVESTING NEAR SOUTH SASKATOON, SASKATCHEWAN.



THRESHING WHEAT WITH GASOLINE ENGINE, SASKATCHEWAN.

Grand Trunk Pacific Railway

the grain farming; second, mixed farming; and third, the grazing. For the first few years doubtless grain farming will be the most popular. Eventually, however, it must verge into mixed farming.

Practically all cereals known to Northern latitudes will grow and successfully ripen along this route. These grains include wheat, barley, oats, rye, speltz, flax, and possibly corn, which, while it may not be grown for the seed, can be successfully grown for fodder purposes.

Conditions along the Grand Trunk Pacific are generally suitable for grain growing, including a rich soil, reinforced with a vast quantity of vegetable mold, a sufficiency of rain during planting and growing season, bright sunshiny days during the ripening season, hastening maturity, an absence of rust, due to the dry period at time of harvest, and an apparently total absence of all insect pests.

Spring wheat will grow along the entire line of the Grand Trunk Pacific between Winnipeg and Edmonton. There is no need of discussing this point further, as Spring wheat is regarded as a settled problem in Canada.

Winter wheat is another question. As yet it is impossible to secure a great



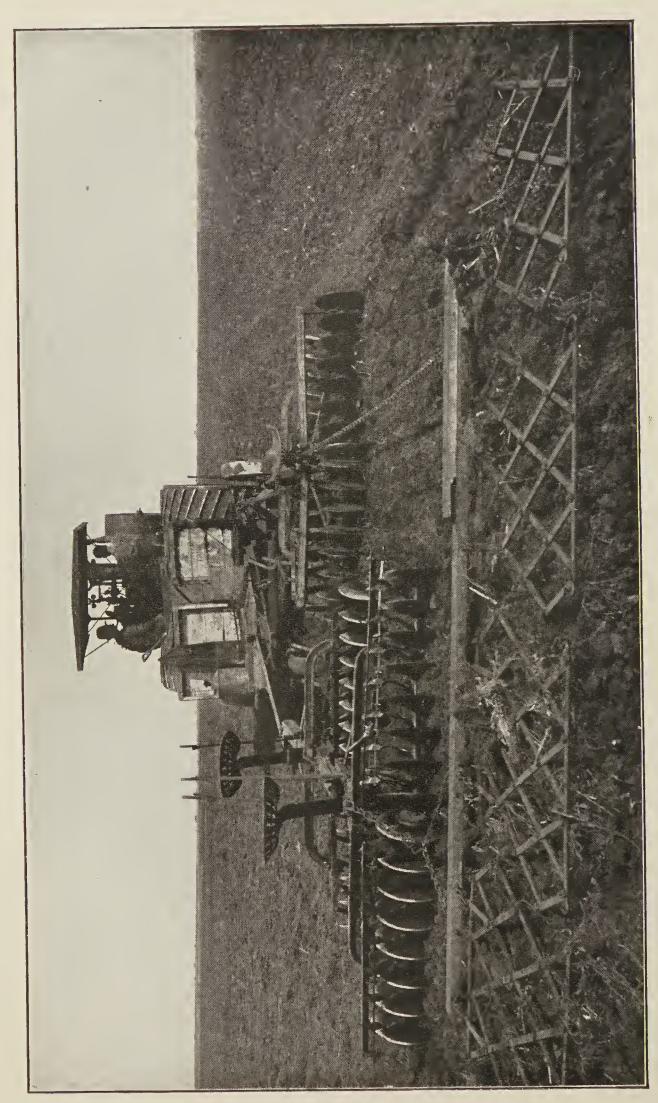
Cutting oats in interior of Central British Columbia, where there are several million acres of mixed farming lands available for the settler, and through which will soon pass the line of the Grand Trunk Pacific Railway.

deal of definite information. Winter wheat can be grown, and has been grown, but to what extent the Winter wheat crop will figure as one of the big cereal crops of Canada cannot be determined as yet. I found one or two places, which will be mentioned later, where Winter wheat is reported as being grown without difficulty.

Beginning with 1903, something of a record has been kept of the Winter wheat growing in Central Canada. Statistics are meager, but the following table summarizes the situation in Alberta for four years ending with 1906:—

Ycar.	Acres.	Bushels.	Avcrage.
1903	3,440	82,418	23.9
1904	8,296	152,125	18.3
1905	32,174	689,019	21.0
1906	43,661	907,421	20.7

The above figures indicate that Winter wheat is not only being grown, but the acreage and yield on the whole gradually increasing.



MODERN METHODS OF BREAKING THE LAND IN SASKATCHEWAN.

Concerning the possibilities of wheat growing along the Grand Trunk Pacific Railway I am going to take the liberty of making an extract from a personal letter to the writer, under date of September 8th, 1909, by Mr. M. A. Carleton, Cerealist in Charge of Grain Investigation, Bureau of Plant Industry, Washington, D. C. At that time Mr. Carleton had just completed an extensive tour of investigation through the Canadian West. Mr. Carleton writes:—

"The possibility of a tremendous increase of wheat production throughout Canada I think is very great. I did not go over the Grand Trunk Pacific Railway, but I have no doubt from my experience in other districts that there is a great field for the cultivation of cereals along that line."

Professor S. A. Bedford, Head of the Department of Field Husbandry, Manitoba Agricultural College, Winnipeg, has a very favorable opinion of the cereal possibilities of this region. In a personal letter to the writer, under date of September 7th, 1909, Professor Bedford says:—

"The Grand Trunk Pacific Railway passes through large areas of the finest grain growing country in the Northwest. Traversing, as it does, the center of the

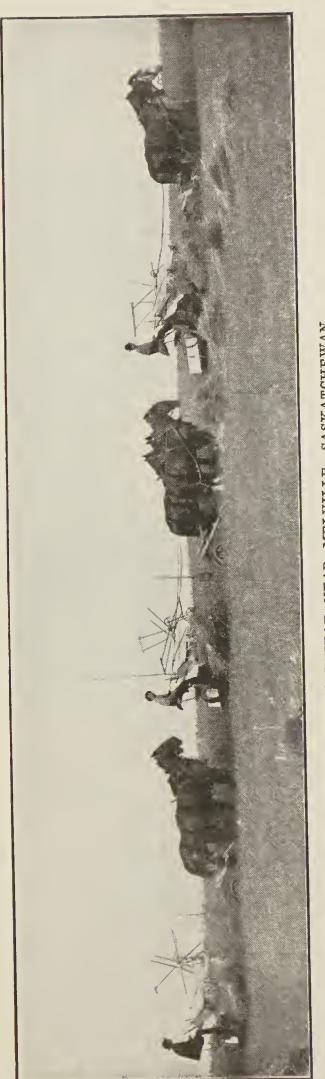


A Rancher's Headquarters near Punnichy, Saskatchewan.

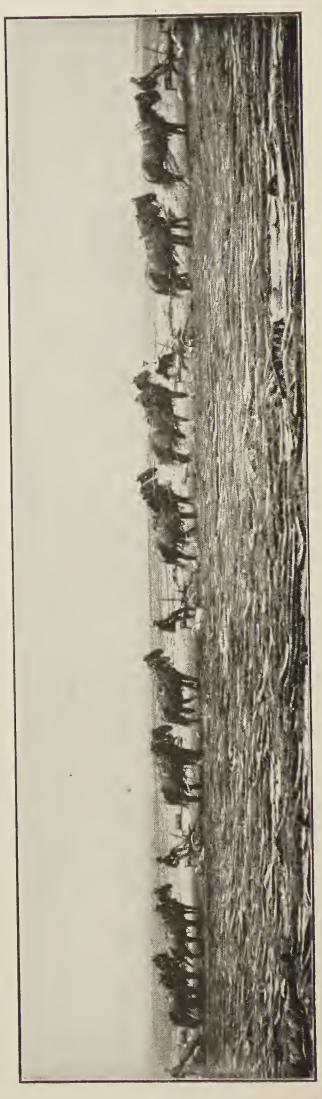
provinces of Manitoba, Saskatchewan and Alberta, it takes in some of the choicest wheat lands of these three provinces. Oats, barley and speltz also give large yields along the line of this railroad. Corn is grown for domestic use throughout Manitoba, Saskatchewan and Alberta, but owing to the enormous wheat yields secured, it has received but little attention up to the present time. Native or squaw corn is grown to some extent for fodder, the yield being generally heavy.

Oats do well along the entire distance of the Grand Trunk Pacific line. Barley is a coming crop and will grow luxuriantly. At present production is handicapped because the markets are limited. Bearded varieties are apparently the most popular in the East, while bald varieties seem to do best along the western portion of the line.

Flax is not commonly grown yet, although several excellent fields were observed. Rye is not grown to any extent. So far wheat can be grown just as economically and is more profitable. Speltz can be grown, although very few fields were observed.



HARVESTING WHEAT NEAR MELVILLE, SASKATCHEWAN.



BREAKING THE PRAIRIE NEAR MELVILLE, SASKATCHEWAN.

Going out of Winnipeg along the Grand Trunk Pacific the land is level and generally low for the first few miles. Between Beaudry and Fortier, 37 miles from Winnipeg, the land improves materially and practically all grains are grown, including flax.

From Fortier to Portage La Prairie, 54 miles from Winnipeg, we saw some of the best grain country in Canada. Here we found the Portage plains, and some of the land has been under cultivation for the past 25 years or more. Excellent farm houses and large barns furnish ample evidence of the fertility and wonderful productiveness of the land. The soil is a deep, dark loam.

Traveling on from Portage La Prairie to Barr, the plains present a garden of fertility. There are evidences everywhere of cultivation, and practically all cereals adapted to the region are grown.

From Barr to Firdale, 91 miles from Winnipeg, the country does not appear to be so good. Soil is thin, this being the shore of the first prairie steppe.

At Gregg, about 100 miles from Winnipeg, we began to approach the Carberry plains, fully as rich as the Portage plains, and similar to that region except being slightly rolling. Excellent farm homes were to be seen in every direction and grain was fast approaching maturity. The Carberry plains unquestionably possess a wonderful soil for raising grain.

At Rivers we made a stop and drove into the country. This is the first divisional point from Winnipeg, being 142 miles west. Soil here is a black loam, inclining to chocolate, with a gravel sub-soil. Wheat is the leading crop, yield this year promising from 15 to 25 bushels per acre. Oats will run 25 to 55 bushels and barley from 15 to 25. These yields are scarcely representative of the country or grain in this region, as it was said drought this year hastened premature ripening. The soil about Rivers will unquestionably grow corn if the climate will permit.

From Rivers as far as Uno, 186 miles from Winnipeg, there is excellent farming land and the country is quite well settled. Along the route wheat and oats are the main grain crops.

Beyond Rivers we ran into the Valley of the Assiniboin, and later touched the Qu'Appelle valley. This land is low and of remarkable fertility, as attested by scattered fields of wheat and oats.

Between Welby and Atwater, 251 miles from Winnipeg, the land is only partly cultivated, but it appears to be fairly well occupied. Excellent fields of oats and wheat were seen on every side.

Between Atwater and Melville, the second divisional point, 279 miles west, there is every evidence of a rich soil, with barely a third of it under cultivation.

Melville is located on a gravelly loam soil, with a clay sub-soil. The surrounding country is rich, undulating loam, reinforced with the humus resulting from the decayed vegetable mold of ages. A personal inspection of the grain in this region showed that it was filling superbly. We saw several fields of oat heads with triple grained top kernels, indicating the locality's wonderful adaptation to grain growing.

J. W. Linsey reported that he tried Winter wheat sowing in August, but lost the crop on account of a severe frost in October. He stated, however, that Winter wheat was being grown successfully at Yorkton, 30 miles to the northwest, and considers that the chances of growing Winter wheat in that vicinity are reasonable.

From Melville to Ituna, a distance of 35 miles, land is rolling, but views from the car window indicated that the soil is suitable for growing grain. From this point on to Punnichy, a distance of 37 miles, the country is somewhat wooded, but suitable for cultivation.

The Touchwood Hills begin in this vicinity. Very little settlement here, but indications are that the land is valuable, with the strong possibility that settlers are overlooking exceedingly productive soil in this region simply because they are as yet unwilling to clear the small amount of timber growing upon the land.

In this region we saw the first lake west of Winnipeg visible from the railroad. The shores generally are irregular and very attractive. On the whole this region should prove particularly well adapted to wheat growing.

At Watrous, the third divisional point from Winnipeg, and 408 miles west, the soil is fertile, but somewhat rolling. The land is well taken up in the vicinity of Watrous and much of it is under cultivation. The surface soil is a deep loam, with a clay sub-soil.

Wheat in this region is reported to average about 30 bushels to the acre. Oats range from 40 to 60, and in August presented an excellent appearance. As



A Wheat Field in Saskatchewan.

yet very little barley and flax are grown in this locality. The drive through the country impressed our party with the luxuriant condition of the vegetation.

From Watrous to South Saskatoon, 466 miles west of Winnipeg, the land is level, slightly undulating. Soil is rich and gave every appearance of being highly productive. Much of the land in this region is well cultivated.

Between South Saskatoon and Biggar, a distance of about 80 miles, the country is slightly rolling and more or less covered with poplar. A large per cent of the land is cultivated and excellent crops of wheat and oats were visible.

Between Biggar and Palo land is rolling and somewhat sandy. As yet very little is under cultivation.

Between Palo and Scott the country is comparatively flat, without wood or scrub. Soil in this region is exceedingly fertile and many new settlers are coming into the country. The famous Tramping Lake region lies 30 miles south of Scott.

From Scott our party drove into the country for about 20 miles, making occasional stops. The soil is clay from five to six inches deep, with an open clay subsoil containing a touch of sand. The soil is exceedingly rich in vegetable mold, a condition which is characteristic of the bulk of the soil along the Grand Trunk Pacific Railway.

At Scott the rainfall is reported to be about 18 inches per annum. About 18 or 20 miles south of Scott we dug into the soil some distance and on plowed land found plenty of moisture at a depth of three inches. Rain comes in this region from the middle of May to the middle of July.

Across the drive from the point where we dug into the soil south of Scott, there was a 600 acre field of wheat just approaching maturity that promised an average of 30 bushels to the acre. This land was broken a year ago, sown to flax, and later to wheat.

Between Scott and Wainwright, Alberta, the land is in many places very rolling and somewhat wooded, especially between Vera and Wainwright. Generally a light soil predominates. The probabilities are that this will be a better grazing than grain country. This hilly country is the shore of the second prairie steppe.

From Wainwright to Battle River, the country continues to be rolling. The Battle River valley, with rich, fertile soil, gives every promise of being an excellent grain region. Only a comparatively small amount of land is cultivated.

Rolling land west from Wainwright continues for the most part to the Clover Bar region, which is the beginning of a rich agricultural country surrounding Edmonton, the end of our journey west. Soil in this region is a black loam, with a clay sub-soil.

From Edmonton we drove 20 or 25 miles in a circuitous route. Wheat in this region was reported to yield from 25 to 30 bushels per acre. Oats 40 to 80, and barley 30 to 70. Here we saw some of the finest fields of oats seen in Western Canada.

The trip over the Grand Trunk Pacific from Winnipeg to Edmonton is sufficient to convince anyone of the remarkable possibilities of the country and the openings offered for settlements.

Considering the fact that this railroad was not opened up until September 21st, 1908, and that the division from Scott to Edmonton at the time of our visit had not as yet been opened, it is surprising to note the extent to which the country is already settled. However, the pioneer has merely begun to touch a few of the high places.

The total area of land opened up by the Grand Trunk Pacific, as stated above, involves an area of approximately 15,000,000 acres. Originally there were 7,000 homesteads of 160 acres each. During the present year about 800 have been taken up, leaving about 6,200 homesteads yet available. However, it is anticipated that the branch lines being opened up by the Grand Trunk will bring the available homesteads up to 7,000 again before the end of the coming year.

It would be difficult for any road covering a distance of 793 miles to pass through a country of equal uniformity. The Grand Trunk System is not an exception to the rule. However, the land along the Grand Trunk Pacific Railway is a surprise to the visitor on account of its general uniformity.

There is a wonderful opportunity for grain farming in this region and doubtless this sort of farming will be the most popular with the pioneer. The conditions, however, promise that ultimately grain farming will be succeeded by mixed farming, and upon this fact rests the great hope of agricultural wealth of the entire region.

SYNOPSIS OF CANADIAN NORTHWEST LAND REGULATIONS

- I. Any person who is the sole head of a family, or any male over 18 years old, may homestead a quarter-section (160 acres, more or less) of available Dominion land in Manitoba, Saskatchewan or Alberta. The applicant, who must be a British subject or declare his intention of becoming one, must appear in person at the Dominion Lands Agency or Sub-Agency for the district. Entry by proxy may be made at any agency, by father, mother, son, daughter, brother or sister of intending homesteader, when duly authorized on proper form.
- 2. A widow having minor children of her own dependent upon her for support is permitted to make homestead entry as the sole head of a family.

Duties.—Six months' residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 80 acres solely owned and occupied by him or by his father, mother, son, daughter, brother or sister.

- 3. In certain districts a homesteader in good standing may pre-empt a quarter-section alongside his homestead. Price \$3.00 per acre. Duties.—Must reside six months in each of six years from date of homestead entry (including the time required to earn homestead patent) and cultivate 50 acres more than required on his homestead, which cultivation may be on both his homestead and pre-emption, or either.
- 4. A homesteader who has exhausted his homestead right by already homesteading and cannot obtain a pre-emption may acquire a homestead by purchase in certain districts. Price \$3.00 per acre. Such homesteads may be acquired on any available lands on either odd or even numbered Sections south of township 45, east of the railway from Calgary to Edmonton and the west line of range 26, and west of the third Meridian. Duties.—Must reside six months in each of three years, cultivate 50 acres and erect a house worth \$300.

The entry fee for a homestead is ten (\$10) dollars.

Notes.—The townships in the districts named in the third and fourth paragraph of these regulations have been noted in this list.

VOLUNTEER LAND GRANT WARRANT

A grantee or substitute being a British subject may homestead two adjoining quarter-sections. If entry is not applied for on or before 31st December, 1910, the right will lapse. Settlement duties same as those to be performed by ordinary homesteader.

A grantee may also obtain entry the same as an ordinary homesteader, but his residence on the homestead cannot be counted in connection with the land grant, nor can the grantee live on the land grant and do residence thereon for a homestead in the vicinity until he has earned title to the land grant. This, however, does not debar him from putting a six months' residence in each year on the homestead itself and in accordance with the regulations, if he is in a position to do so.

SETTLERS' FREIGHT RATES

Low rates for settlers' effects apply from Eastern Canada and many United States points to Winnipeg and West.

The following is a summary of the Customs and Freight regulations:-

CUSTOMS REGULATIONS

The following is an extract from the customs tariff of Canada, specifying the articles that can have free entry:

Settlers' Effects, viz.:—Wearing apparel, household furniture, books, implements and tools of trade, occupation, or employment; guns, musical instruments, domestic sewing machines, typewriters, live stock, bicycles, earts, and other vehicles, and agricultural implements in use by the settler for at least six months before his removal to Canada, not to include machinery or articles imported for use in any manufacturing establishment or for sale; also books, pictures, family plate or furniture, personal effects, and heirlooms left by bequest; provided, that any dutiable articles entered as settlers' effects may not be so entered unless brought with the settler on his first arrival, and shall not be sold or otherwise disposed of without payment of duty until after 12 months' actual use in Canada.

Settlers arriving from the United States are allowed to enter duty free stock in the following proportions: One animal of neat stock or horse for each 10 acres of land purchased or otherwise secured under homestead entry, up to 160 acres, and one sheep for each acre so secured. Customs duties paid on animals brought in excess of this proportion will be refunded for the number applicable to an additional holding of 160 acres, when taken up.

The settler will be required to fill up a form (which will be supplied him by the customs officer on application) giving description, value, etc., of the goods and articles he wishes to be allowed to bring in free of duty. He will also be required to take the following oath:

I,, do hereby solemnly make oath and say that all the goods and articles hereinbefore mentioned are to the best of my knowledge and belief entitled to free entry as settlers' effects under the tariff of duties of customs now in force, and that all of them have been owned by myself for at least six months before removal to Canada; and that none of the goods or articles shown in this entry have been imported as merchandise for any use in a manufacturing establishment or as a contractor's outfit, or for sale, and that I intend becoming a permanent settler within the Dominion of Canada, and that the "Live Stock" enumerated in the entry hereunto attached, is intended for my own use on the farm which I am about to occupy (or cultivate), and not for sale or speculative purposes, nor for the use of any other person or persons.

FREIGHT REGULATIONS

I. Carloads of Settlers' Effects, within the meaning of the settlers' tariff, may be made up of the following described property for the benefit of actual settlers, viz.: Live stock, any number up to but not exceeding ten (10) head, all told, viz.: Cattle, calves, sheep, hogs, mules, or horses; Household goods and personal property (second-hand); Wagons or other vehicles for personal use (second-hand); Farm Machinery, Implements, and Tools (all second-hand); Soft-wood Lumber (Pine, Hemlock, or Spruce—only) and Shingles, which must not exceed 2,000 feet in all, or the equivalent thereof; or in lieu of, not in addition to, the lumber and shingles, a Portable House may be shipped; Seed Grain, small quantity of trees or shrubbery; small lot live poultry or pet animals; and sufficient feed for the live stock while on the journey. Settlers' Effects rates, however, will not apply on shipments of second-hand Wagons, Buggies, Farm Machinery, Implements, or Tools, unless accompanied by Household Goods.

- 2. Should the allotted number of live stock be exceeded, the additional animals will be charged for at proportionate rates over and above the carload rate for the Settlers' Effects, but the total charge for any one such car will not exceed the regular rate for a straight carload of Live Stock.
- 3. Passes.—One man will be passed free in charge of live stock when forming part of carloads, to feed, water, and care for them in transit. Agents will use the usual form of Live Stock Contract.
- 4. Less than carloads will be understood to mean only Household Goods (second-hand), wagons or other vehicles for personal use (second-hand), and (second-hand) Farm Machinery, Implements, and Tools. Less than carload lots must be plainly addressed. Minimum charge on any shipment will be 100 pounds at regular first-class rate.
- 5. Merchandise, such as groceries, provisions, hardware, etc., also implements, machinery, vehicles, etc., if new, will not be regarded as Settlers' Effects, and, if shipped, will be charged at the regular classified tariff rates. Agents, both at loading and delivering stations, therefore, give attention to the prevention of the loading of the contraband articles and see that the actual weights are way-billed when carloads exceed 24,000 pounds on lines north of St. Paul.
- 6. Top Loads.—Agents do not permit, under any circumstances, any article to be loaded on the top of box or stock cars; such manner of loading is dangerous and absolutely forbidden.
- 7. Settlers' Effects, to be entitled to the carload rates, cannot be stopped at any point short of destination for the purpose of unloading part. The entire car load must go through to the station to which originally consigned.
- 8. The carload rates on Settlers' Effects apply on any shipment occupying a car weighing 24,000 pounds or less. If the carload weighs over 24,000 pounds the additional weight will be charged for. North of St. Paul, Minn., 24,000 pounds constitutes a carload, between Chicago and St. Paul and Kansas City or Omaha and St. Paul a carload is 20,000 pounds. From Chicago and Kansas City north to St. Paul any amount over this will be charged extra. From points in Eastern Canada via Chicago, 24,000 pounds is the minimum carload weight. From points south and east of Chicago in the United States only five horses or heads of live stock are allowed in carloads, any over this will be charged extra; carload 12,000 pounds minimum.
 - 9. Minimum charge on any shipment will be 100 pounds at first-class rate.

QUARANTINE OF SETTLERS' STOCK

Settlers' stock, when accompanied by certificates of health signed by an Inspector of the United States Bureau of Animal Industry, to be admitted without detention; when not so accompanied, they must be inspected. Inspectors may subject any cattle showing symptoms of tuberculosis to the tuberculin test before allowing them to enter. Any cattle found tuberculous to be returned to the United States or killed without indemnity. Sheep for breeding and feeding purposes may be admitted subject to inspection at port of entry, and must be accompanied by a certificate, signed by a Government inspector, that sheep scab has not existed in the district in which they have been fed for six months preceding the date of importation. If disease is discovered to exist in them, they may be returned or slaughtered. Swine may be admitted, when forming part of settlers' effects, but only after a quarantine of thirty days, and when accompanied by a certificate that swine plague or hog cholera has not existed in the district whence they came for six months preceding the date of shipment when not accompanied by such certificate, they must be subject to inspection at port of entry. If diseased, to be slaughtered, without compensation.

A SYNOPSIS OF WESTERN CANADA'S STRIKING PROGRESS IN 1910

The table of statistics herewith presented should prove of great interest to all industrial, financial and commercial concerns all over the country.

Beginning with twelve of our Western cities, we have the following astonishing growth:

1901	1908	1910
Brandon 5,620	11,282	13,500
Calgary 4,091	25,000	46,000
Edmonton	20,000	27,500
Fernie		6,000
Lethbridge 2,072	6,020	13,000
Medicine Hat 1,570		5,300
Moose Jaw	10,100	15,000
Portage la Prairie 3,091	6,269	7,500
Prince Albert		8,000
Regina 2,249	10,000	17,000
Saskatoon 113		15,000
Winnipeg42,340	118,252	150,000

These cities in 1910 spent \$33,617,132 on new buildings.

THE RUSH OF IMMIGRATION INTO WESTERN CANADA FOR THE YEAR 1910

From Great Britain and Ireland 59,790	
From other countries	5
From United States 103,799	3
———	_
Total	1

In the last five years, ending March 1, 1910, immigrants brought into the country cash and settlers' effects as follows:

British, Cash\$ 37,546,000
British, Settlers' Effects
United States, Cash
United States, Settlers' Effects 110,082,000
Non-English-Speaking, Cash
Total\$326,080,220

It is estimated that Western Canada has 171,000,000 acres of wheat lands.

Total arable land in the three provinces, 357,016,778 acres, less than sixty per cent of which is under cultivation.

The West exported 3,229,500 barrels of flour, and 175 tons of Manitoba poultry. The Province of Saskatchewan doubled its dairy output.

Over \$10,000,000 worth of horses was received in the West during 1910.

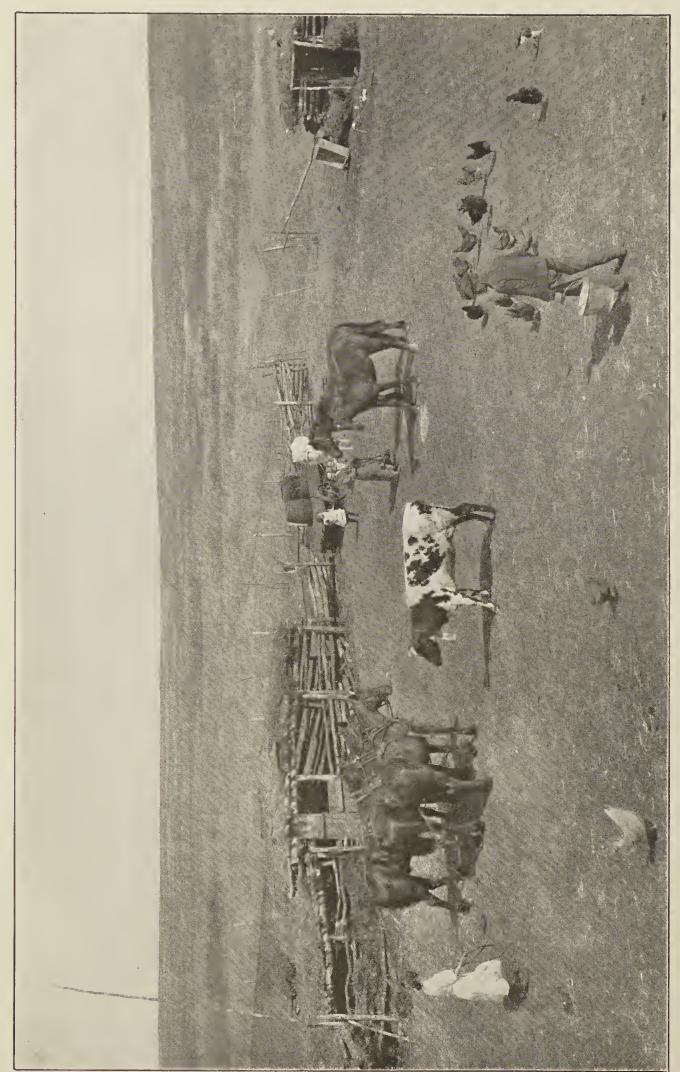
The total wheat crop for 1910 was considerably over the 100,000,000 mark.

Although the wheat crop claims first place in the West, the day is not far distant when mixed farm products will run a close second.

In 1910, according to a carefully compiled report in the Winnipeg Free Press-

The Cattle crop produced	\$9,568,611.00
Hogs	1,538,620.64
Sheep	194,190.25
Butter and Cheese	
Potatoes, Roots and Hay	7,818,000.00
Poultry from Manitoba	45,033.10

Making a Grand Total of\$21,612,610.30 other than grain, or not far from half of the value of the wheat crop.



THE HAPPY HOMESTEADER, NEAR WAINWRIGHT, IN SUNNY ALBERTA.

The year 1910 was a record year in the live stock movement. The receipts of cattle exceeded all previous years by 20,000 head.

The average of butchers' cattle was the highest in five years. The price of export cattle was \$10.00 per head greater than in 1909. The money received for cattle exceeded that of 1909 by \$2,245,288.

An outstanding feature of the trade was the enormous increase in the butchers' cattle and feeders going to the East. The trade in butchers' cattle to the Eastern markets, from nothing in 1906, rose to 39,845 head in 1910.

The increase over 1909 was 16,036 head.

The increase in feeders was even more remarkable. In 1909 the number of feeders East was only 7,666, while in 1910 it was 32,191, an increase of 24,525.

There was a marked decrease in export cattle, the number exported being only 48,511 head, as against 72,356 head in 1909. This decrease is, however, somewhat misleading, as a considerable number of the cattle that went East as butchers, would in ordinary years have been exported, but the demand from the East was so insistent, and the prices offered so high, that in view of the somewhat slack tone of the British market, men with cattle to sell favored the markets nearer home. The consumption of local butchers' cattle showed an increase for the year of about 3,000 head, and a new feature of the trade was the collecting in Manitoba of over a thousand head of oxen, which were shipped to Western farms.



Steel Bridge over the Pembina River, Alberta.

A trainload of settlers' effects on the line of the Grand Trunk Pacific Railway.

THE SETTLER'S TWELVE COMMANDMENTS

WHEAT RAISING IN A NUTSHELL

(Copyright, Canada, 1910, by Saskatoon Board of Trade.)

- I. Break the land one to two inches deep; but as shallow as possible. Turn the sod right over so that the grassy side is lying flat down.
- 2. Breaking should be done before the end of June, and, if possible, by the middle of that month. This is highly important, as late breaking will not produce profitable crops.
- 3. All such early breaking should be back-set during the later summer after the sod has rotted. In back-setting, the sod is simply put back into its original position, the grassy side up, and about one or two inches of earth brought up with the plow to cover it. Disc and harrow immediately after back-setting.
- 4. Frequently the newcomer does not arrive till late in June. In the case of breaking done late in June, plow DEEP—say four inches—and DO NOT BACK-SET; but merely disc thoroughly, and then harrow. The more cultivation, the better.
- 5. It is sometimes impossible to back-set Extra-Heavy land. In this case the land should be treated as per FOURTH commandment, whether it is early or late breaking.
- 6. In spring, harrow and sow as soon as the frost is out of the ground sufficiently to allow the seeder to go down the proper depth. Follow the seeder with a land packer, and the packer with a harrow. The use of the land packer will add at least five bushels per acre to the crop.
- 7. Depth to sow: Scrape back the surface of the ground with the hand so as to ascertain the depth of the moisture from the surface. Adjust the seeder so that it will sow in the top of the moisture—not above it, nor deep into it, but just in the top of it.
- 8. Sow the Best, thoroughly-cleaned seed obtainable, and nothing else. Pay for the Best—and get it.
- 9. After harvesting the first crop, the land should either be plowed, disced and packed in the fall; or, where the soil is clean, the stubble may be burned off, in the spring, the land disced without plowing, and a second crop sown, as per SIXTH commandment.
- summer-fallowing should start after the SECOND crop is taken off. Plow the summer-fallow as soon as possible after seeding the other land you are cropping. Never leave this plowing till after June. Experience has proved that one early plowing is better than two. Weeds absorb moisture. Keep down weeds by cultivation, and so conserve the moisture in your summer fallow. In the spring fallowing put in your crop as per SIXTH commandment.
- 11. After cutting first crop from summer-fallow, allow the land to lie till the following spring—then, simply burn off the stubble, disc up the surface and put in second crop as per SIXTH commandment. This second crop, if so put in, should be almost as good as the first summer-fallow land EVERY THIRD YEAR.
- 12. Sow a bushel and a half on new breaking and on summer-fallow, and a bushel and a quarter on stubble. Before sowing, all seed should be treated for Smut.

SENATOR E. J. MEILICKE, Dundurn, Sask.

Hon. W. C. SUTHERLAND, Speaker Provincial House, Saskatoon, Sask.

COMMISSIONER F. MACLURE SCLANDERS, Saskatoon Board of Trade. The year 1910 was a record year in the live stock movement. The receipts of cattle exceeded all previous years by 20,000 head.

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COMMISSIONER F. MACLURE SCLANDERS, Saskatoon Board of Trade.

DOMINION LAND OFFICES

J. BRUCE WALKER, Commissioner of Immigration, Winnipeg, Man.

DISTRICT.	NAME OF AGENT.	POST OFFICE ADDRESS.
Battleford	W. R. Ridington	Battleford, Saskatchewan.
Edmonton	K. W. Mackenzie	Edmonton, Alberta.
Red Deer	W. H. Cottingham	Red Deer, Alta.
Humboldt	Alex Norquay	Humboldt, Saskatchewan.
Saskatoon	D. L. Bettschen	Saskatoon, Saskatchewan.
Wetaskiwin	Business transacted at Edmo	onton.
Yorkton	J. E. Peaker	Yorkton, Saskatchewan.
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Land settlers' certificates entitling bona fide settlers to special fares on the Grand Trunk Pacific Railway will be issued by the following:

CANADIAN GOVERNMENT IMMIGRATION AGENTS IN THE UNITED STATES

M. V. McInnes, 176 Jefferson Avenue, Detroit, Michigan.
James Grieve, Auditorium Building, Spokane, Washington.
W. H. Rogers, 125 W. Ninth Street, Kansas City, Missouri.
E. T. Holmes, 315 Jackson Street, St. Paul, Minnesota.
Geo. A. Hall, 125 Second Street, Milwaukee, Wisconsin.
C. J. Broughton, 4th Floor Merchants Loan and Trust Building, Chicago, Illinois.
W. V. Bennett, 215 Board of Trade Building, Omaha, Nebraska.
J. M. Maclachlan, Box 626, Watertown, South Dakota.
C. Pilling, Clifford Block, Grand Forks, North Dakota.
George Aird, 3rd Floor T. T. Building, Indianapolis, Indiana.
H. M. Williams, Gardner Block, Toledo, Ohio.
C. A. Laurier, Marquette, Michigan.
Benj. Davies, Dunn Block, Great Falls, Montana.
Thos. Hetherington, 2nd Floor, Tremont Building, Tremont Street, Boston, Massachusetts.
J. S. Crawford, Syracuse Bank Building, Syracuse, New York.

LIST OF PRINCIPAL GRAND TRUNK RAILWAY SYSTEM AGENTS

Alexandria Bay, N. Y.	Cornwall BrosTicket Agents
Battle Creek, Mich	L. J. Bush Passenger Agent, G. T. Station
Bay City, Mich	Fred. C. Wherrett Passenger Agent, G. T. Station
Boston, Mass	E. H. BoyntonNew England Passenger Agent, 256 Washington St.
Buffalo, N. Y	.H. M. MorganCity Pass'r and Ticket Agt., 285 Main St. (Ellicott Sq. Bldg.)
Chicago, Ill	.C. G. Orttenburger, City Pass'r and Tkt. Agt., 301 S. Clark St., cor. Jackson Blvd.
Cortland, N. Y	D. P. Drewery Traveling Passenger Agent, 6 Burgess Block
Detroit, Mich	.Geo. W. WatsonCity Passenger and Ticket Agent, 118 Woodward Ave.
Grand Rapids, Mich	C. A. JustinCity Passenger and Ticket Agent, G. T. R. Station
Hamilton, Ont	C. E. MorganCity Passenger and Ticket Agent, 11 James St. North
Kansas City, Mo	Gay W. NormanTraveling Passenger Agent, 327 Sheidley Bldg.
Kingston, Ont	.J. P. Hanley Ticket Agent
Lansing, Mich	.C. N. HarwoodPassenger Agent, G. T. Station
Lewiston, Me	F. P. Chandler G. T. R. Station
London, Ont	R. E. RuseCity Pass. and Tkt. Agt., cor. Richmond and Dundas Streets
Los Angeles, Cal	W. H. Bullen
Milwaukee, Wis	Crosby Trans. Co396 East Water Street
Minneapolis, Minn	W. J. Gilkerson Traveling Passenger Agent, 713 Metropolitan Life Bldg.
Montreal, Que	J. Quinlan District Passenger Agent, Bonaventure Station
Mt. Clemens, Mich	Caspar CzizekCity Passenger and Ticket Agent, 12 South Gratiot Avenue
New York, N. Y	F. P. DwyerGeneral Agt. Passenger Dept., Railway Exchange, 290 Broadway
Niagara Falls, N. Y	W. J. Hamilton
Ogdensburg, N. Y	Geo. S. Meagher Ticket Agent, 55 State Street
Ottawa, Ont	Percy M. ButtlerCity P. & T. A., Russell House Blk., cor. Sparks and Elgin Sts.
Pittsburg, Pa	W. RobinsonTraveling Passenger Agent, 506 Park Building
Port Huron, Mich	F. H. Potter Ticket Agent, G. T. R. Station
Portland, Me	C. E. Tenny
Quenec, Que	Geo. H. Stott C. P & T. A., cor. St. Anne and DuFort Sts., and Ferry Land-
Coginary Mich	ing, Dalhousie St.
Saginaw, Mich	Hugh E. Quick
San Flancisco, Cai	J. H. BurgisGen. Agent Pass. Dept., First Ave. and Yesler Way
Sharbrooke One	C. H. FossCity Passenger and Ticket Agent, 2 Wellington Street
Toronto Ont	A. E. DuffDistrict Passenger Agent, Union Station
Vanconver. R. C.	H. G. Smith City Passenger and Ticket Agent, 527 Granville St.
Victoria, R. C.	W. E. Duperow
Winnineg Man	W. J. QuinlanGeneral Agent Passenger Department, 260 Portage Ave.
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European Traffic Department

F. C. Salter, European Traffic Manager, 17-19 Coc.	kspur Street, London, S. W., England
Antwerp, BelgiumP. A. Clews	ng General Agent, 19-21 Canal des Brasseurs
Birmingham, Eng Morison, Pollexfen & Blair	
Genoa, Italy A. Valotta	Agent, Via St. Lorenzo II
Glasgow, Scotland J. M. Walker	General Agent, 75 Union Street
Liverpool, Eng Wm. Cuthbertson	
London, S.W., EngF.G. English	General Agent, 17–19 Cockspur Street
London, E.C., Eng F. G. English	General Agent, 44-45-46 Leadenhall Street
Paris, France Pitt & Scott	Ticket Agents, 47 Rue Cambon
Sheffield, Eng J. W. Dawson	Agent, No. 7 Haymarket



LAND SEEKERS ON THE LINE OF THE GRAND TRUNK PACIFIC RAILWAY.
Out of this Party of 189, 185 Purchased Land on which they have Since Settled.

An Announcement

The Grand Trunk Pacific Railway has no land for sale, other than townsite lots. In the interests of its colonization work solely, the Grand Trunk Pacific has collected particulars regarding available lands for purchase for the convenience and ready reference of those interested in Western Canada, but who do not wish to acquire lands by the homestead method.

It is designed that all communications concerning any of these lands shall be directed to the General Passenger Agent, Grand Trunk Pacific Railway, Winnipeg, or to any of the district or local passenger agents of the Grand Trunk System, who will endeavor to furnish such further information as required and will advise as to the district or location in which the requirements of the settler correspondent may be satisfied; also bring the buyer and seller in contact when desired.

Pains will be taken to find a suitable location for actual settlers intending to purchase farms along the line of the Grand Trunk Pacific. Pamphlet L-2 contains list of lands furnished purchasers, and those desirous of homesteading may also have free upon application to Grand Trunk System agents Pamphlet L-1, showing lands available and other information.

It is anticipated that the territory penetrated by the Grand Trunk Pacific Railway, which is the most fertile section of Western Canada, will fill up rapidly, so that many of the lands now available will be purchased shortly and prices fluctuate so that it behooves the prospective settler to get in touch with the existing conditions as to lands for purchase and free homesteads. The latest information concerning any particular location will be cheerfully furnished as promptly as possible upon application to agents shown on preceding pages of this publication.

W. P. HINTON, General Passenger Agent, Grand Trunk Pacific Railway, Winnipeg.