FACTS

Concerning the Agricultural Conditions—Actual and Potential—of Southern

ALBERTA

CANADA

AND THE FAMOUS BOW RIVER VALLEY

"If wheat cannot be Produced on old land, we must depend on Canada for our supply, for only there is virgin soil still to be found."— *Twentieth Century Farmer (Omaha).*

PRESENTED BY

THE CANADIAN PACIFIC RAILWAY
COLONIZATION DEPARTMENT
CALGARY, ALBERTA,
CANADA
1908

AMERICAN EDITION

THE MODEL SCHOOL HOUSE IN THE IRRIGATION BLOCK

INTRODUCTION

The object in issuing this folder is to place in the hands of the American public facts concerning Southern Alberta, Canada, which will enable that public to, as nearly as possible, form a fairly intelligent opinion of present conditions here, and furnish material from which a fairly intelligent forecast of the country's future, as measured by its past, may be ventured.

There is no country in the world today so largely made up of pioneers and their descendants as is the United States. A little over a century ago, unhampered and unburdened by the traditions and the accumulated wealth of a long line of ancestors, the people of that country, with their heads and their hands, began working out the destiny of a great nation. But while they were lacking in funds this condition was more than made up for in the size and the potential wealth of their country. It was furnishing to its people greater and more varied opportunities for individual initiative than the world had ever known before. And this quality has bred in those pioneers and their children a

spirit of progressiveness that is constantly on the alert where their material advancement is concerned. Having tested the fruits of success the average American is reaching out for those opportunities that will bring more of it, which accounts for the fact that over 93 per cent. of the sales of this company have been made to people from the States.

The Awakening of Western Canada

That the days of their reign in Western Canada might be prolonged, the Hudson's Bay Company did all within their power to paint the country in the most dismal of colors. They blanketed it in a story of snow and ice, and pictured it a land unfit for human habitation. To them the country was a vast treasure house to be guarded from the rest of the world. Had it not been for the advent of the railway, to the world, it would still be shrouded in the cloud of mystery this old monopoly had

drawn about it. But with the railway came people and the truth, and from a wilderness has sprung up a mighty garden.

Following the Hudson's Bay Company, with its centuries-old story of a land of ice and snow, came the ranchers, who for years stood as a barrier to the settlement of Southern Alberta. With their stock knee-deep in the luxuriant grasses of its plains and undulating hills, they told the intending settler that nothing could be grown but grass, and that in certain years not even grass could withstand the prolonged drouth and heat frequently recurring in this province. In the majority of cases these reports had the desired effect, and those who had come to farm either left the province or turned to other lines of work. However, there were a few who required further assurance than the mere statements of those whose interest was opposed to the cultivation and the fencing of the ranges, and as a result small areas were taken up and sown to cereals. The results were astonishing. But in such widely separated and isolated districts were these few successful experimentalists located that their successes were heard of very rarely. However, they were occasionally brought to the light of day and there would then follow a few more successful experiments. Each one had its effect on a friend or acquaintance in the East or across the border, until 1897, when the tide of immigration began to flow in earnest. And like a great tidal wave it has swept everything before it, driving the rancher and his stock back to the foothills, and away from the railroads. Where for years his cattle and horses roamed at will, today the country is cut up into farms which are fenced and are producing annually fine crops.

The United States is now practically settled. Its agricultural lands are more than spoken for, and its citizens are looking to Western Canada as the one spot where good land can still be bought cheaply. The question now being asked by those who wish to avail themselves of the present opportunity is, "How long will these lands be open for settlement at the present prices?" The answer is that it cannot be for long, as the world's available supply of land is rapidly decreasing while values are steadily increasing.

Southern Alberta

None but those who have lived in a new country can realize what is really taking place at this time in the way of settlement in Southern Alberta. There has been nothing in the world to equal it. Immigration to the United States was considered phenomenal, but it started very slowly and it took years for it to reach its present magnitude. It has taken but ten years for the immigration figures of Canada to jump from 5,000 to 200,000 a year. In the settlement of the United States there was the Eastern Hemisphere to draw from. Canada has that and the United States, too, from which to draw and this means a much more rapid settlement here than the latter ever knew.

In the most fertile part of Southern Alberta, where in days gone by, the buffalo found his richest pasture, the Canadian Pacific Railway Company owns a large tract of land extending for 150 miles east of Calgary, along the beautiful valley of the Bow River. Here, in the past, attracted by the luxuriant growth of native grasses, for which the valley has become famous, came the buffalo in countless numbers to feed. As long as the country was his, it was the favorite hunting ground of the Northwest Indians. When game was scarce, or could be found in no other section, it was always plentiful here.

With the extermination of the buffalo, the country was claimed by the rancher with his cattle that fed and fattened for market in this great pasture. Like the buffalo and the Indian, the rancher has had his day and the farmer with his plow and reaper has come to his own, and he is going to hold it. Where in the past, buffalo and cattle ranged throughout the entire year to-day the valley is dotted with happy homes, surrounded by rich acres that are advancing in value yearly.

Soil

The soil along the Bow Valley, a black sandy loam, underlaid with a good clay subsoil, is rich in the accumulated humus of centuries. This with the silt deposit of ages has produced a soil of great depth and of a richness almost beyond belief. The gently undulating hills and rolling prairies of this valley are devoid of rock, sage brush or cactus, so commonly found in places to the south of it and they are ready for the plow with no expense of $3 to $5 per acre for clearing, which has usually to be met with by settlers in the new lands of the Western and Southwestern States.

The marvellous growth of wild grass (tall bunch grass) with which these hills and plains are carpeted, furnishes indisputable evidence of the soil's fertility.

The subjoined report by Prof. F. T. Shutt, M.A., F.J.C., F.C.S., F.R.S.C., taken at various points along the Canadian Pacific Railway Company's Bow River holdings, is one of which the Canadian Pacific Railway officials are justly proud.

EXTRACTS

"OTTAWA, Ont., Nov. 16, 1906.

"Notes on the character of the soil between Langdon and Gleichen, Alta., on the lands of the Canadian Pacific Railway Company.

"The first examination was made a few hundred yards north of the railway station at Langdon. The surface soil was found to be a black, heavy loam, evidently well supplied with humus (semi-decomposed vegetable matter), and containing such a proportion of clay as to constitute it a 'strong soil.' Technically, it would be classified as a clay loam. * * * The subsoil is a heavy chocolate colored clay. The probabilities are that analysis would show considerable percentages of organic matter and ni-

trogen in this clay—at any rate, for some few inches—as the surface soil, characterized by such rich stores of these constituents, passes without any strong line of demarkation into the subsoil.

"Crossing the railway track, we drove to the Company's (Sec. XV.), and inspected the soil at a number of points upon it and as far south as the Secondary Irrigation Canal 'A.' The surface soil, apparently similar in all respects to that north of the railway track * * * Following east from Langdon along the Blackfoot trail the soil was examined in four places between Langdon and the canal, between Sections 6 and 7, Tp. 23, Rg. 25. The soil throughout was extremely uniform in character. * * * After crossing the ditch an examination was made in N. E. Quarter Section 6, Tp. 23, Rg. 25, where the same heavy, black loam prevailed.

"* * * Driving northeast towards Strathmore an examination was made on Sec. 29, Tp. 23, Rg. 25, and no change of mark could be noticed either in soil or subsoil.

"* * * From Strathmore to Gleichen the route lies southeast, the trail we took running north of Lakes Eagle and Namaka, and in a general sense parallel to the C.P.R. track, though considerably north of it. * * * A moderately heavy black loam was found on Sec. 32, Tp. 22, Rg. 23, with a subsoil of comparatively stiff clay. A further trial pit was made on Sec. 23, Tp. 22, Rg. 23, and revealed a depth of about six inches of black soil, underlaid by a distinctly heavy clay.

"One examination was made east of Gleichen, on a breaking about half a mile from the village. Here there was a depth of fully eight inches of heavy black soil underlaid by a chocolate colored clay.

"Bearing in mind the lighter character of the soil in the neighborhood of Strathmore, it will be observed that the surface soil along the whole route travelled presented a certain well marked uniformity, more particularly noticeable in humus-content (as judged by the color) and depth. This constitutes a distinguishing feature of prairie lands. A more detailed and extended survey might show a greater variation than was noticed, and possibly analysis might disclose differences not otherwise detectable, but as far as our examination allows a judgment, it would appear that the whole area traversed is overlaid by a surface soil rich in humus and plant food and bearing all the signs of a highly productive soil if provided with adequate moisture."

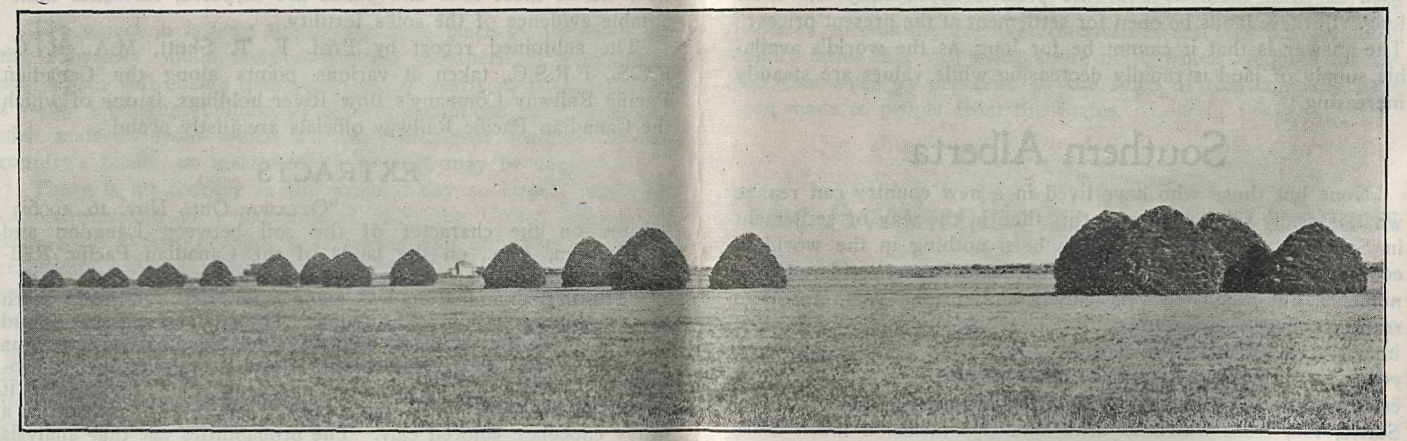
(Signed)
FRANK T. SHUTT,
Chemist.

Dominion Experimental Farms.

The following extracts from a report by Prof. Shaw, Editor of the "Orange Judd Farmer," considered one of the foremost agricultural experts of America, will be of interest:—

"The first foot of soil in Western Canada is its greatest natural heritage. It is worth all the mines in the mountains from Alaska to Mexico, and more than all the forests from the United States boundary to the Arctic Sea, vast as these are.

"And next in value to its heritage is the three feet of soil which lies underneath the first. The sub-soil is only secondary in value to the soil, for without a good sub-soil the value of a good surface soil is neutralized in proportion as the sub-soil is inferior. The worth of a soil and sub-soil cannot be measured in acres. The measure of its value is the amount of nitrogen, phosphoric acid and potash which it contains; in other words, its producing power. Viewed from this standpoint, these lands are a heritage of untold value. One acre of average soil in the Northwest is worth more than twenty acres of average soil along the Atlantic seaboard. The man who tills the former can grow twenty successive crops without much diminution in the yields, whereas the person who tills the latter must pay the vendor of fertilizers half as much for materials to fertilize an acre as would buy the same in the Canadian Northwest, in order to grow a single remunerative crop."



THE KINGDOM OF "ALBERTA RED"

Climate

Many writers in dealing with the climate of some particular district describe it as ideal. When such a climate is actually discovered the country which possesses it will not hold the people that flock there. Of course, no such climate does exist. Human beings, and crops as well, for their own best good, must have a variable climate; an agreeable interchange of sunshine and cloud. Such a climate has Southern Alberta. It is farther south than is London, The Hague, Amsterdam, Cologne, Berlin or Dresden. The sunshine and the rain, the heat and the cold are so distributed as to make a climate that approaches as nearly as may be the ideal.

MID-WINTER BASEBALL.

The baseball picture published in this folder will give some idea of the average Southern Alberta winter. This game of ball was played by the American and Canadian fat men on New Year's Day, 1908. Besides baseball there were two games of football played on the same day and many of the players wore neither coats or vests. While the States have been visited with blizzards this winter that have extended as far south as Dallas, Texas, Southern Alberta had a winter of almost continuous sunshine with no snow or cold weather.

The following temperature statistics will furnish some idea of Southern Albert's winter weather as compared with points in the States. The readings in this table are from December 20, 1907 to January 19, 1908, both dates inclusive.

	Maximum	Minimum	Mean
St. Paul, Minn.	32.09	12.12	22.11
Madison, Wis.	34.06	18.06	26.06
Davenport, Ia.	37.23	22.09	29.66

	Maximum	Minimum	Mean
Chicago, Ill	38.70	26.10	32.40
Lander, Wyo.	34.14	5.28	20.70
CALGARY, ALTA.	36.25	13.24	24.74

In making a comparison between Calgary and the other cities given, it must be borne in mind that Calgary is over 3,400 feet above the sea and naturally has cooler nights than the cities of the States given here, as they are in a much lower altitude.

A comparison of the maximum temperature for Chicago and Calgary during the month of January, 1908, gives Calgary an average of 37.16 and Chicago 34.11.

From the foregoing comparisons it will be seen that Calgary makes a fair showing with the other cities used in comparison. However, the comparison does not show that there have been less than fifteen cloudy days in Calgary since the first day of October, 1907, up to the 15th of February, 1908.

During the long days of the summer months when crops most need the sunlight to bring them to fruition, the sun is up early and works until 9 o'clock in the evening. The effect of these long hours of sunshine is readily discernible in the rapidity with which crops mature.

Having soil and sunshine in Southern Alberta, all that remains to insure crops in this favored region is moisture. The following meteorological statistics, compiled by the Dominion Government are for twelve years, and show an average rainfall of 19.6 inches for that period.

Year	Inches	Year	Inches
1896	16.05	1902	35.71
1897	20.58	1903	21.98
1898	16.79	1904	11.16
1899	23.01	1905	16.51
1900	15.41	1906	16.14
1901	21.31	1907	16.45

91 BUSHELS OF BARLEY TO THE ACRE AT GLEICHEN

While the foregoing table gives the annual precipitation for the past twelve years, a few comparisons with other districts to the south of the International Boundary will doubtless be of interest to those who are either looking for land here or in the Western or Southern States. And that this comparison may be of the greatest value to the reader, the rainfall for the growing months only—the months that make or ruin the crops—will be taken into consideration.

As the statistics compiled by the United States Department of Agriculture cover the years 1895 to 1904, inclusive, the comparison will be made for those years.

	May	June	July	Aug.	Average
Bismarck, N. D.	2.50	3.25	2.60	1.80	2.54
North Platte, Nebr.	3.00	3.20	2.40	2.40	2.75
Dodge City, Kan.	3.40	3.90	3.50	1.50	3.08
Abilene, Texas	2.10	3.00	2.50	1.00	2.15
San Antonio, Texas	3.40	2.00	2.80	1.50	2.43
CALGARY, CANADA	2.76	4.04	3.51	3.51	3.46

It will be noted from the foregoing table that, with the exception of the month of May, Calgary had a greater average rainfall during the ten years under consideration than

any of the other districts mentioned. But what the figures do not show is that during that period of time, with the exception of Calgary, all of these districts had at least two dry years with their attendant crop failures, and that there were many months in these districts when the rainfall amounted to less than one inch. While these districts to the south were having dry years that killed off the small fruits, the alfalfa and the trees, the Calgary district was blessed with abundant crops.

The open character of the country in this portion of the Province of Alberta, its clear, dry atmosphere, the abundance of sunshiny days, its elevation, from 1,400 to 3,400 feet above sea level, and the fresh breezes that blow across its plains, all tend to make it one of the most healthful countries in the world. There is an entire absence of malaria, and there are no diseases peculiar to the country. The part of the Province referred to has a continental reputation for healthfulness, and it is particularly favorable for persons with a tendency to pulmonary troubles. Many who have lost hope of ever again being blessed with good health, have found it in Southern Alberta.

85 BUSHELS OF OATS TO THE ACRE, EAST OF CALGARY

The winter in Southern Alberta is a season of bright, cloudless days, infrequent and scanty snowfalls, broken by frequent and prolonged periods of warm weather heralded by the "Chinook" wind, so called because it blows over the region formerly inhabited by the Chinook Indians, on the banks of the Lower Columbia River. It is really a wind warmed by the Japan current which hugs the Pacific Coast, and rising into a high altitude, passes high over the snow-capped tops of the sleeping giants to the west of us and descends upon the favored plains of fortunate Alberta, thus giving to it a much higher temperature during the winter months than that enjoyed in the northern or the eastern sections of the United States.

Owing to these winds the snow that falls usually lasts but a day or two, and is generally followed by warm, bright days and dry, hard roads. In fact, there is so little snow in Southern Alberta that sleighing is quite a precarious pastime, which more often than otherwise terminates in a ride over the bare ground.

Is it any wonder that a country that has the soil, moisture and climate of Southern Alberta is attracting settlers from all over the world?

WATER-WELLS

Anywhere within this company's tract of land in the Bow River Valley, an abundance of good water may be obtained by driving a well from 50 to 80 feet.

Wheat is King

In North America there are three, just three, great life-sustaining crops, and these crops are wheat, corn and grass. Permanently banish any one of these great crops from the continent and it would shake its foundations loose. To permanently banish all three of these crops would mean to depopulate the continent and render it as valueless to man as is the desert of Sahara.

Three great man and beast-sustaining crops—and the greatest of these is wheat. Wheat is as much greater than grass as man is superior to the beasts of the field or of the forest. It is said in Holy Writ that man shall not live by bread alone—but the ancient writer did not say that man cannot live by bread alone—for not on this round globe of ours is there grown another substance that furnishes to man so complete and so well balanced a ration as does Wheat. Wheat builds up and nourishes the human body, and it feeds the brain as no other vegetable or animal substance grown upon the earth is able to do.

In the days that are gone the people in the southland said that "Cotton is King!"—a pretty sentiment, but, alas, a myth. Upon the declaration that "Cotton is King," the people of the Southland attempted to establish an Inde-

pendent Nation, and the result of that attempt was "The Lost Cause," one of the saddest tragedies of recorded time.

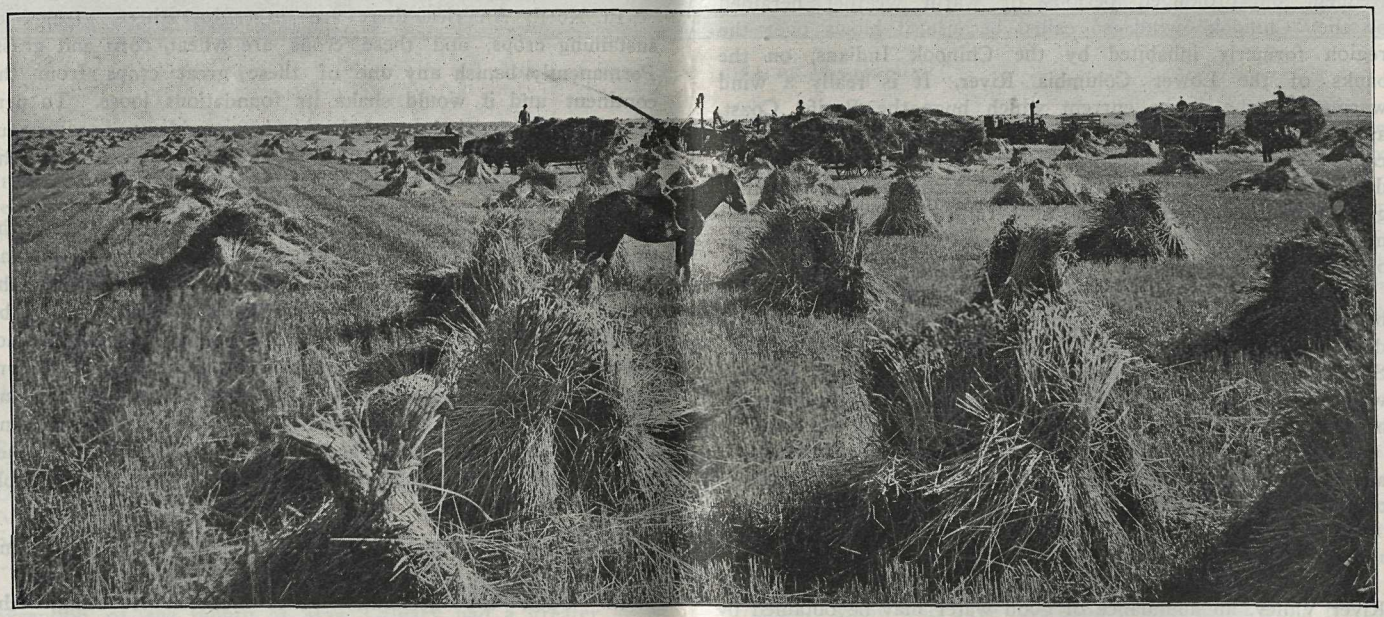
At a later time, and further north, the good people there abiding declared that "Corn is King!" Another beautiful sentiment, but like many pretty things in fiction, it is not true. If the beasts were nature's capital creation, corn might be king; but while man lives and reigns it never can be king. If raiment were more than food, cotton might be king. If beef and pork and mutton were more than human genius corn might be king. Wheat is King. Wheat was, it is, and it will be King, so long as man is man. And the wheat-producing regions of the earth are and ever must be the granary of man. Blessed above all other places of the earth are those sections that grow an excellent quality of wheat.

As to the quality of wheat grown in Alberta let William D. Jackson, a former president of the Chicago Board of Trade, speak:—

"The samples of red and white winter wheat from Alberta have been submitted to our large millers, to Chief Grain Inspector Smiley, to the expert buyers of our elevators, and unofficially to the grain committee of our board. It was the judgment of all that the wheat was exceptionally fine, and would grade number one in this market, which commercially, is an almost unknown quality. Many here were aware that experiments in growing winter varieties of wheat had been made in the great Canadian North-West, but few were aware of the results. The samples excited a good deal of interest, and several parties expressed a desire to own land producing such a quality of grain."

It is not so many years ago that a small party of Russian immigrants settled in Kansas. They were from the Provinces of Turkie and Kharkoff, Russia. They brought with them from their native land a small quantity of seed wheat that they sowed in the land of their adoption. While the seed took kindly to the new soil and became a popular variety, it changed within three years from a hard to a soft wheat and has been given the name of Kansas "Turkey Red."

In looking for seed wheat suitable to the climate of Southern Alberta, "Turkey Red" was selected as the wheat best fitted for this country. A carload of it was imported, it was sown and a new variety of wheat was brought forth. Instead of the soft "Turkey Red" of Kansas, the wheat grown here, under different climatic conditions, developed into a No. 1 hard, and has been given the name of "Alberta Red." That it is a superior quality of wheat is attested by the fact that wheat grown in Southern Alberta from this seed, in competition with winter wheat from all parts of the United States, received the highest award, the gold and the bronze medals at the Portland Exposition held in 1905.



THE LAST CHAPTER OF THE HARVEST

GRASS FINISHED BEEF IN THE BLOCK

While the Portland Exposition established the superior quality of "Alberta Red" winter wheat it, of course, could not place its seal of approval upon the quantity of wheat produced upon an average acre of Southern Alberta soil. That was a task that had to be handled by the Provincial Government of Alberta. The Government crop bulletins of Alberta for 1905 and 1906 give the average annual yield of winter wheat for the whole province as 22.19 bushels an acre.

The same bulletins give the average annual yield of winter wheat in the Calgary district as 28.81 bushels an acre.

Average yields never do a country justice, because the short crop of the poor, shiftless farmer cuts down the average yield of his more wide-awake and prosperous neighbor. And average yields are particularly unfair to Alberta, where not alone is the average greatly reduced by incompetent farmers, largely so through their ignorance of conditions and their calling, but because the country is new and much of the wheat is put in on first breaking and poorly prepared ground.

Thirty to fifty bushels of wheat an acre is no uncommon yield in Southern Alberta, and forty bushels to the acre is very common.

Agnes Dean Cameron, writing of "Alberta Red" in the Philadelphia "Saturday Evening Post," says:—

"It is not at all unusual for the farmer in Western Canada to pay for the land with the first crop and put buildings

all over it with the second. Never in the world's history have the cultivators of virgin soil attained such a success at the outset."

In making the foregoing statement, Miss Cameron knew precisely what she was writing about. Before writing her story she had been out in Western Canada and had made a most thorough and searching investigation of conditions in the home of "Alberta Red," and not being an Alberta woman her statement will doubtless carry more weight with the public than would a statement made by an interested resident of the province. Paying for a farm in Alberta with the first crop is so far from being an unusual occurrence, that a statement of that sort passes here with but little comment.

Four years ago the total production of winter wheat in Alberta was 152,000 bushels. In 1905 it had jumped to practically 2,000,000 bushels. In 1906, owing to the fact of unfavorable weather in the spring which retarded planting and decreased the average yield, the production was about the same as in 1905. The wheat crop in Alberta for 1907 is conservatively estimated to be between four and five million bushels.

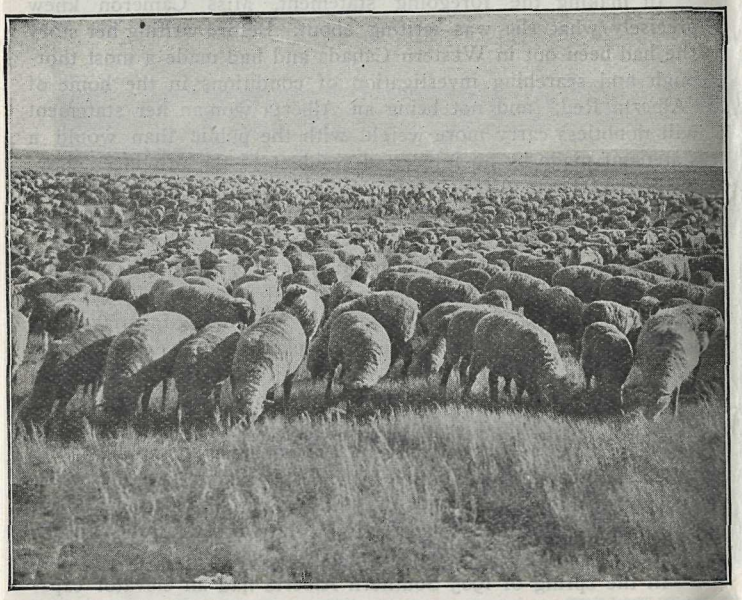
These figures convey a general idea of the rapidity with which the growing of winter wheat has extended, but this multiplied production marks only the initial stage of what in a short time must play an important part in the history of the world's bread supply.

In the spring of 1905 Southern Alberta had an elevator capacity of 230,000 bushels, and a milling capacity of 450 barrels a

day. At this time there is an elevator capacity of 3,000,000 bushels, and the milling capacity has been increased to 2,250 barrels a day. Two years have witnessed this phenomenal increase in crop production and in the facilities for handling it, and who is seer enough to truly forecast what the increase of the next five years will be? Certain it is that the raising of winter wheat has now passed the experimental stage, and that large areas throughout this part of the province that have heretofore been devoted solely to the grazing of cattle, horses and sheep, will in the near future, yield to the plow and be devoted to the growing of winter wheat.

What is to become of the product of these great areas? Calgary is situated 1,200 miles from Fort William, the great exporting point for the famous hard spring wheat raised in Manitoba and Saskatchewan. It is not reasonable to suppose that the winter wheat of Alberta is going to be hauled so great a distance by rail even during the season of navigation on the Great Lakes, to say nothing of the additional 1,400 miles to the Atlantic Seaboard during the winter months.

With this rapidly increasing production have come the questions of markets and transportation facilities for the handling of the product. Usually supply and demand settle these questions, and that quickly and definitely. Markets in their location do not change, but in their reaching out for supplies try, as far as possible, to hold down or to reduce the cost by eliminating the high freight rates of the long haul, and thus, in a large measure, affecting and changing the source of supply. It all resolves itself into a question of buying from the nearest granary.



THE GOLDEN HOOF

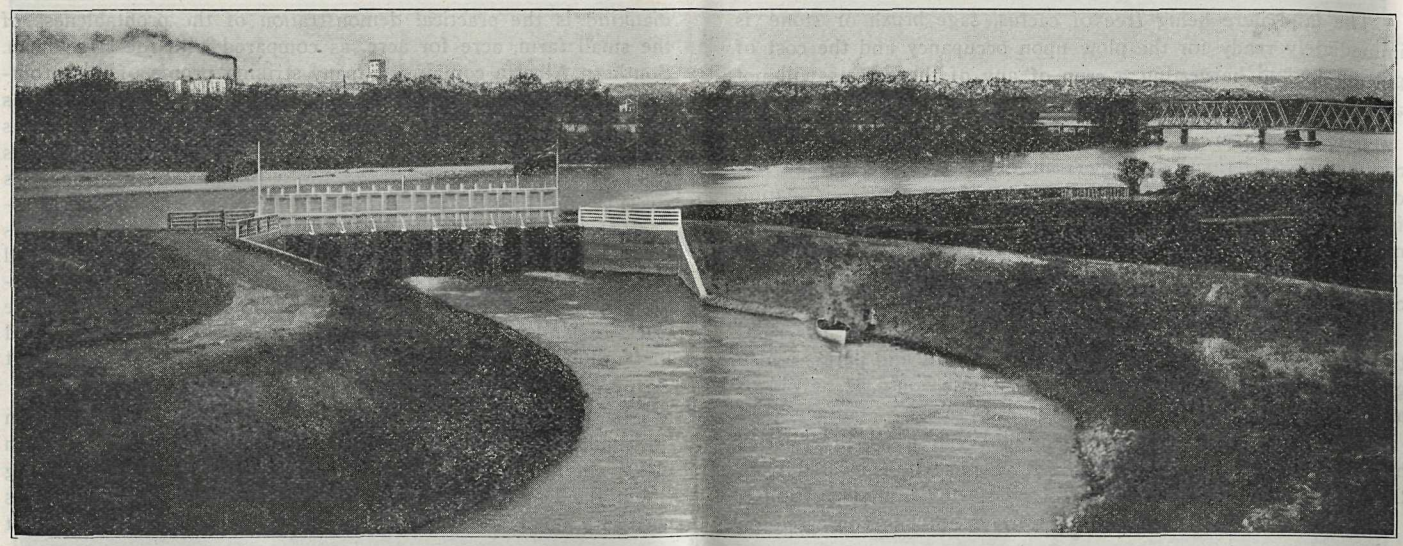
Southern Alberta is particularly favored in the way of transportation facilities and a near-by seaport. Instead of having to ship its wheat east 2,600 miles to tide water, it has through the Canadian Pacific Railway, which almost bisects its wheat growing section, with numerous branches extending to the north and south, a very short haul of 600 miles, with but 16 miles of adverse grades between Calgary and Vancouver, the western seaport of Canada. This railway company, with its magnificent harbor at Vancouver, and large steamers engaged in the Oriental trade, affords to Alberta all that could possibly be asked for in the way of markets and transportation facilities. The growing demand in the Orient for winter wheat and flour is now greater than the supply. What will it mean to Alberta when the Panama Canal is finished, and the now inaccessible markets in the Eastern Hemisphere are thrown open to her and begin bidding for wheat—more wheat? As long as there is a market in the world for wheat, and there always will be, Alberta will have a constant demand for her surplus.

Combination Farms

While the conditions are so favorable for the growing and the marketing of winter wheat in Southern Alberta, it must not for a moment be imagined that this is a one-crop country. Nor must it be imagined that it is a country of but one kind of land. The land on which winter wheat has made a record here is land that has never known artificial watering—irrigation. But there are other crops to which irrigation is as essential as is good soil and sunshine.

While it has been clearly demonstrated that the winter wheat lands here are of the richest soil to be found, and without the aid of irrigation are producing maximum crops, there is, taken in connection with the production of wheat on non-irrigable lands, a still more attractive and profitable opening for the new settler—the purchase of a combination farm.

It sometimes happens that progress in one industry retards the success of others. But such is not the case when settlers buy combination farms in the Canadian Pacific Railway Company's irrigation block. This block of land contains about equal proportions of irrigable and non-irrigable areas and offers to the purchaser an opportunity to engage in mixed faming under almost ideal conditions. Here can be secured in the same quarter-section, side by side, land lying above the canal system for the production of winter wheat and the grazing of live stock, and irrigable land for other crops, such as alfalfa, barley, vegetables, etc., requiring abundant moisture. For farm purposes, there is a never failing supply of water, which insures crops when the seed is placed in the ground, while the problem of a constant



HEADGATES, MAIN CANAL

supply of water in every pasture for the use of the live stock is also solved.

The irrigated portions of the land will raise all kinds of grain and root crops and a sufficient supply of fodder for winter feeding.

The non-irrigated sections will grow winter wheat or furnish the finest pasture for live stock to be found in the world.

The native grasses on the plains of Alberta are rich in fattening properties. So much so, in fact, that Alberta beef, shipped direct from the ranges, has come to be considered as fine as the corn-fed beef of the States.

Combination farms in this block may justly be regarded as the best agricultural proposition on the North American continent.

THE CANADIAN PACIFIC RAILWAY BOW VALLEY IRRIGATION PROJECT

The Canadian Pacific Railway Company owns a large tract of these rich Bow River valley lands. This tract has an average width of 40 miles from north to south and extends from Calgary eastward 150 miles. The land lies along the main line of their railway, and it is supplied with a first class passenger and freight service.

The Railway Company has undertaken the construction of the largest irrigation system on the Western Hemisphere. About one-third of the system is now finished, and the land in this section has been placed upon the market, at a price and upon terms that are attracting settlement from all over the world.

This is neither a land or a water selling scheme. The low prices charged for both make that clear. The Canadian Pacific Railway is expending millions of dollars on this project purely and simply to build up the most prosperous agricultural community in America. This sounds like philanthropy, but it isn't. The railway wants a prosperous community that the greatest possible volume of traffic may be created. Therefore, we appeal to those only who will add to the prosperity of this section.

The water supply taken from the Bow River is inexhaustible, and will for all time furnish sufficient moisture for the 1,500,000 acres of land under the Company's canal system, and at the small annual water rental of 50c. a year. When the work now going forward on the central and eastern sections of this undertaking is completed 3,000 miles of canals and waterways will have been constructed by the Company. The work now completed has been passed upon by Dr. Elwood Mead, Chief of Drainage and Irrigation Investigations, Department of Agriculture, Washington, who pronounces the work superior to anything he has seen in his investigations on this continent.

Prof. Samuel Fortier, Office of Experiment Stations, United States Department of Agriculture, in a paper delivered before the National Irrigation Congress held at Sacramento, California, September 4th, 1907, in speaking of the difficulties to be encountered by new settlers on irrigated land in the United States, says: "This brings us face to face with the weak feature of every plan yet adopted by the American nation for the reclamation of its arid lands. Before any harvests can be obtained on this new land it will cost on an average of over $20 per acre.

The land here being free of cactus, sage brush or stone is immediately ready for the plow upon occupancy and the cost of putting in and harvesting a crop of any of the cereals will not amount to more than $5.00 an acre.

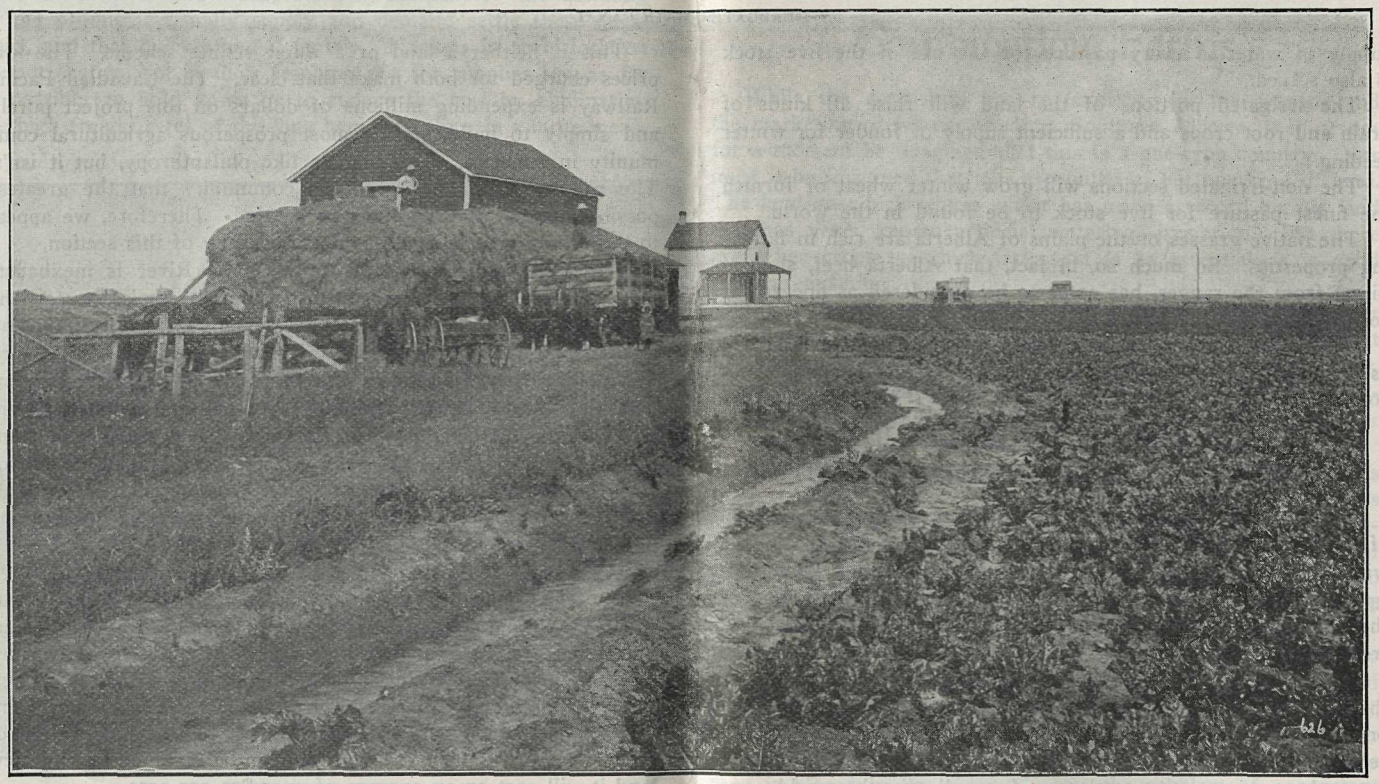
Irrigation farming is simplicity itself. The most successful community of irrigation farmers in Southern Alberta today, is one composed wholly of settlers who never saw an irrigation farm before they came to the Province. To irrigate land does not require any more skill than it does to plow or harvest a crop, and contrary to the general idea, irrigation farming is not only scientific farming, but business farming.

The sprinkling of a lawn, the watering of a plant, is irrigation in its simplest form. Without it the lawns and parks, which give to city life a touch of nature's beauties, would be devoid of all that makes them attractive.

The great irrigation development in Western North America has been the result of the efforts of people who migrated from the East and the middle West with no knowledge of irrigation.

Probably the greatest boon that irrigation has conferred on mankind is the practical demonstration of the profitableness of the small farm, acre for acre, as compared with the large farm. Southern Alberta contains as many striking proofs of this profitableness as may be found in the older districts. The day was when anything less than a section of land was looked upon as being too small and from that up to several thousand acres was considered none too large for a farm. But that day has passed, and farms have gradually decreased in size until today, forty acres, well cultivated, will produce greater returns than 160 acres would under the old system. The increased prosperity that will certainly accrue to a country from the multiplication of small farms as compared with the holding of large tracts of land by individuals is apparent to all. Everything good that follows in the wake of increased population is an argument in favor of irrigation, and the cultivation of small areas.

Irrigation and fruit farming seem to be so interwoven in the public mind that it is often a difficult matter to secure an intelligent hearing for irrigation in districts where fruit growing is not the leading industry. It is argued that so much labor is necessary upon surface work and the application of water that



THE MAIN DISTRIBUTARY ON AN IRRIGATED FARM EAST OF CALGARY.

IRRIGATING SUGAR BEETS AT STRATHMORE

the ordinary hardy forage and cereal crops will not yield a sufficient revenue to make irrigation a paying undertaking.

In considering the possibilities of irrigation in northern latitudes, it is, however, well to bear in mind the fact that the state of Montana, where the conditions are almost identical with those of Southern Alberta, raises more agricultural products under irrigation than the states of Oregon, Washington and Wyoming combined; as much as the state of Utah, and half as much as the state of Colorado. Great irrigation development is now taking place in Northern Montana, by the aid of and under the direction of the United States Government, which will place that state in the front rank of the irrigated districts. In fact, unmistakable evidence is visible on all sides to the effect that the largest area of irrigable lands in America will presently be among the rich agricultural lands of northern latitudes, and under sub-humid climatic conditions.

THE ASPECT OF IRRIGATION IN WESTERN CANADA

The following article taken from "The Farm and Ranch Review," the leading agricultural paper of Western Canada, will be of interest to prospective settlers, as the editor of that publication has farmed most successfully in Southern Alberta, both with and without irrigation:—

"A close study of the agricultural condition under which artificial watering is being practiced throughout the world today, reveals the fact that irrigation is by no means confined to countries where the rainfall is so scant that nothing will grow without it. On the contrary, in many countries, where irrigation has been brought to the highest state of perfection, the natural rainfall is very heavy. Indeed, there must always be contiguous territory of considerable precipitation in order to produce springs and streams from which water may be diverted for irrigation purposes. The States of Iowa, Wisconsin, Illinois and Ohio, and the Provinces of Ontario and Quebec are generally supposed to be amply supplied with rain and snow, and able to produce excellent crops under ordinary culture without the artificial application of water. Yet, in all of India, except the northwestern part, throughout China, Japan, Siam, Italy, France and Mexico, where millions of acres are brought under irrigation, the rainfall is quite as heavy as in the states and provinces mentioned, namely, 23 to 51 inches per annum, which would generally be considered distinctly humid conditions.

"The average rainfall during the past ten years in the provinces of Alberta and Saskatchewan, where irrigation by gravity is practiced, is as follows: Calgary, 17.69 inches; Macleod, 13.18 inches; Medicine Hat, 15.83 inches; and Swift Current, 16.40 inches. The average rainfall of the state of Dakota is somewhat less, being over 10 inches, but under 20 inches per annum. The conditions in the irrigable portion of Western Canada are, therefore, such that there has been sufficient precipitation every year to satisfactorily produce and mature crops. But with the increase of population and prosperity more scientific methods of farming were naturally adopted, and the introduction of irrigation marks an epoch in the history of Western Canada. Even in the most humid countries it is seldom that a season passes where the application of water at the critical time in the growth of a crop, would not add considerably to the value of the result. This refers with equal force to the years of greatest rainfall. As a matter of fact, farmers now are not satisfied with returns more or less in accordance with the accident of rainfall, but are aiming at perfection in the development and maturity of their grain and hay crops. It is, therefore, obviously good business to utilize the means which have been placed at the disposal of settlers in districts favored with an adequate water supply, to supplement the efforts of nature. Having water available in his ditch or reservoir, the irrigation farmer is able to distribute it on his land at such seasons of the year and in such quantities as experience has taught him are the most propitious to favorable results. He is not at the mercy of the capriciousness of the weather, and contends that crop growing without irrigation is a crude system, while irrigation farming is the most ancient, highly developed and natural system of culture.

"It is an admitted fact that the man who derives his living from cultivating the soil takes chances on the ultimate result of his efforts, such as prevail in very few legitimate branches of commerce. Weather conditions make or break him. It is, therefore, natural that where the conditions are favorable he should insure against untoward events. The tendency of the age is toward insurance. We insure against fire, against accident, and against death. It is a maxim in modern business management that every contingency must, as far as possible, be insured against. And the forecasting of the average result of every enterprise man embarks on, and consequently the posi-

IRRIGATING A GARDEN AT STRATHMORE

bilities of insurance, are daily extending. The farmer all over the world is rapidly adopting the principle. We insure against the death of live stock, and the destruction of crops by hail storms. In Western Canada we go a step further and insure against the absence of the necessary rainfall to produce the greatest possible crop. Drought is the bane of the agriculturist in every portion of the globe where the soil is tilled and where crops are grown. Countries with the highest average rainfall have at times suffered an almost total loss of crop from the absence of moisture at the time of the growing season, when it was especially needed. Consequently, artificial watering of crops or irrigation, as it is commonly called, has been resorted to on a more or less extensive scale in nearly all countries where the natural conditions admitted of it.

It will doubtless surprise many people to learn that farmers of Maryland, Pennsylvania, New York and some of the New England States have taken up irrigation, and a report of the Department of Agriculture shows that the results, as a rule, are that the irrigated farms in those states pay about twice as much as those without irrigation, and that there are years when without artificial watering the crops would be a total failure. Irrigated crops there mature as much as two weeks earlier than do non-irrigated crops, and, of course, bring much higher prices.

"To sum the matter up, therefore, irrigation in Western Canada is not essential to the production of crops, but promises to increase the returns from farming, that it is bound to become a leading factor in its agricultural development, particularly as the cost of irrigation, owing to favorable topographical and other conditions admitting of cheap construction, will be much smaller than anywhere else on the American continent."

THE CANADIAN IRRIGATION LAW

It is of great importance that the laws under which irrigation is practiced should be so framed as to avoid any litigation that might possibly arise over water rights. In many of the States of the Union where irrigation is in vogue more money has been spent in litigation over water rights than upon actual irrigation development.

The Canadian irrigation laws and their administration are acknowledged by the leading irrigation experts of the continent to approach perfection as nearly as possible. The United States Department of Agriculture in Bulletin 96 of that Department, recommends the Canadian law to the consideration of those whose duty it will be to prepare irrigation laws in the future for use in those States where irrigation is practiced or is likely to be practiced. Under these laws the waters of Alberta being recognized as the property of the Crown the title given for a water right is equal to and as good as is the title given for land. During the ten years irrigation has been practiced in Alberta there has not been a single law suit involving water rights.

Crops

While Southern Alberta has acquired a fine reputation as a winter wheat country, the land is adapted to diversified farming, and oats, barley, flax, alfalfa, timothy, clover, sugar beets and vegetables of every kind grow in marvellous abundance and of excellent quality.

That an understanding may be had of the cereal production in Alberta, as compared with that of other countries, the following table is published:—

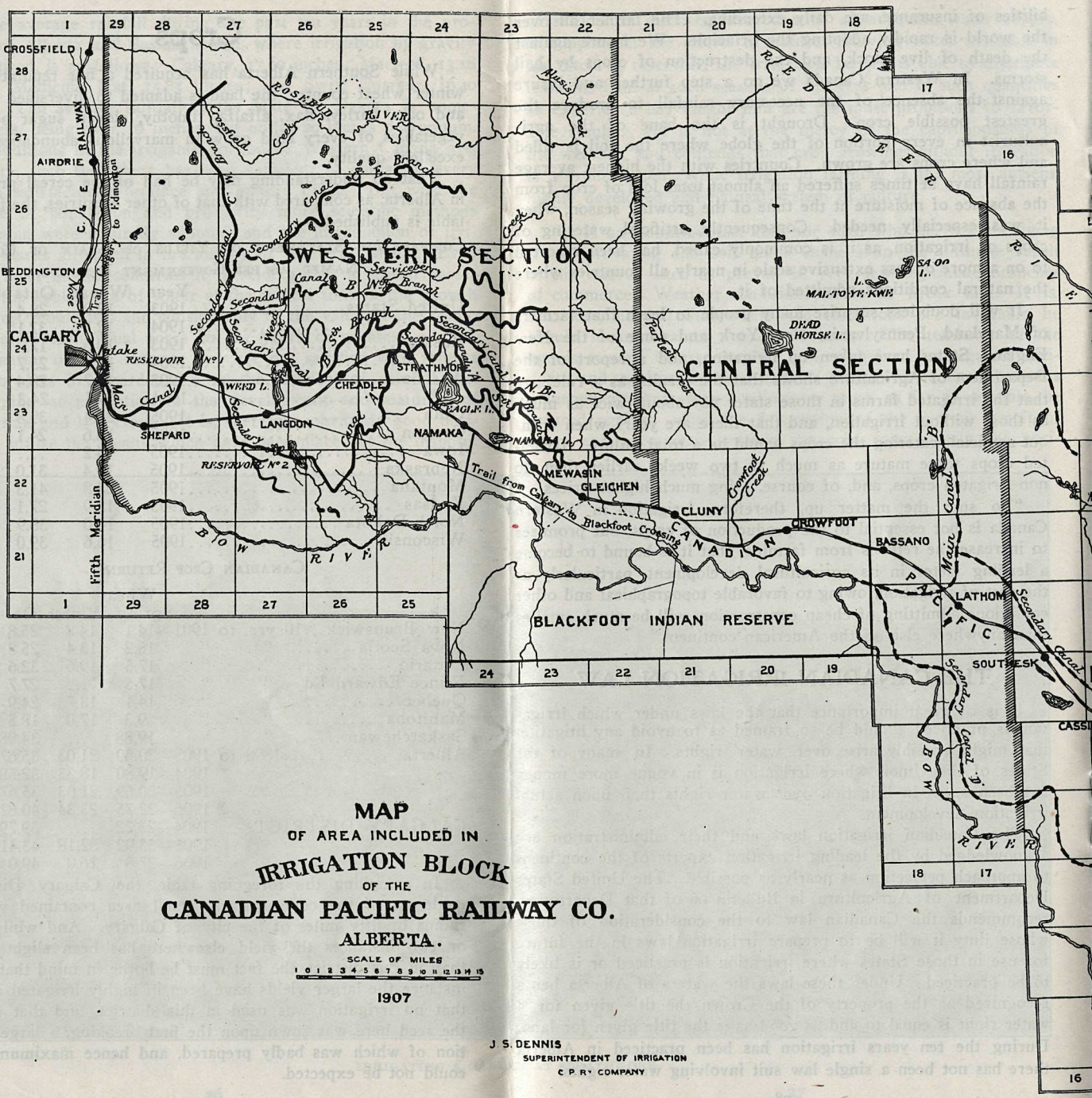
COMPARATIVE STATEMENT OF YIELDS OF GRAIN OF COUNTRIES NAMED, AS PER GOVERNMENT RETURNS.

	Year	Wheat	Oats	Barley
United States	1903	12.9	28.4	26.4
" "	1904	12.5	32.1	27.2
Russia	1903	10.6	17.7	17.5
"	1904	11.5	25.7	14.4
Austria	1903	17.7	28.4	24.7
"	1904	19.5	24.3	22.9
Utah	1905	26.4	39.8	37.0
Oregon	1905	18.6	24.1	31.0
Iowa	1905	14.2	....	...
Nebraska	1905	19.4	31.0	27.5
Montana	1905	23.8	41.3	33.0
Kansas	1905	13.9	27.1	22.0
North Dakota	1905	14.0	38.9	28.0
Wisconsin	1905	16.6	39.0	29.6

CANADIAN CROP RETURNS.

		Wheat: Spring	Winter	Oats	Barley
New Brunswick	10 yrs. to 1901	14.1	14.8	25.8	21.6
Nova Scotia	" "	15.2	13.4	25.8	23.5
Ontario	" "	17.5	19.6	32.6	27.5
Prince Edward I'd.	" "	17.5	....	27.7	23.1
Quebec	" "	14.1	13.7	24.9	24.3
Manitoba	" "	9.3	17.0	18.5	19.1
Saskatchewan	" "	19.88	....	34.98	24.45
Alberta	1898 to 1905	20.69	21.03	35.67	26.50
	1904	19.80	18.33	32.58	26.12
	1905	20.69	21.03	35.67	26.50
	1906	22.75	23.34	40.82	29.04
CALGARY DISTRICT	1904	23.22	.....	39.79	31.42
	1905	33.92	32.18	43.41	32.01
	1906	27.8	26.0	49.0	31.0

In compiling the foregoing table, the Calgary District is made up of the comparatively small area contained within a radius of fifty miles of the city of Calgary. And while in one or two instances the yield elsewhere has been slightly larger than in this district, the fact must be borne in mind that in each instance the larger yields have been in highly irrigated sections; that no irrigation was used in this district, and that much of the seed here was sown upon the first breaking, a large proportion of which was badly prepared, and hence maximum results could not be expected.



MAP

OF AREA INCLUDED IN

IRRIGATION BLOCK

OF THE

CANADIAN PACIFIC RAILWAY CO.

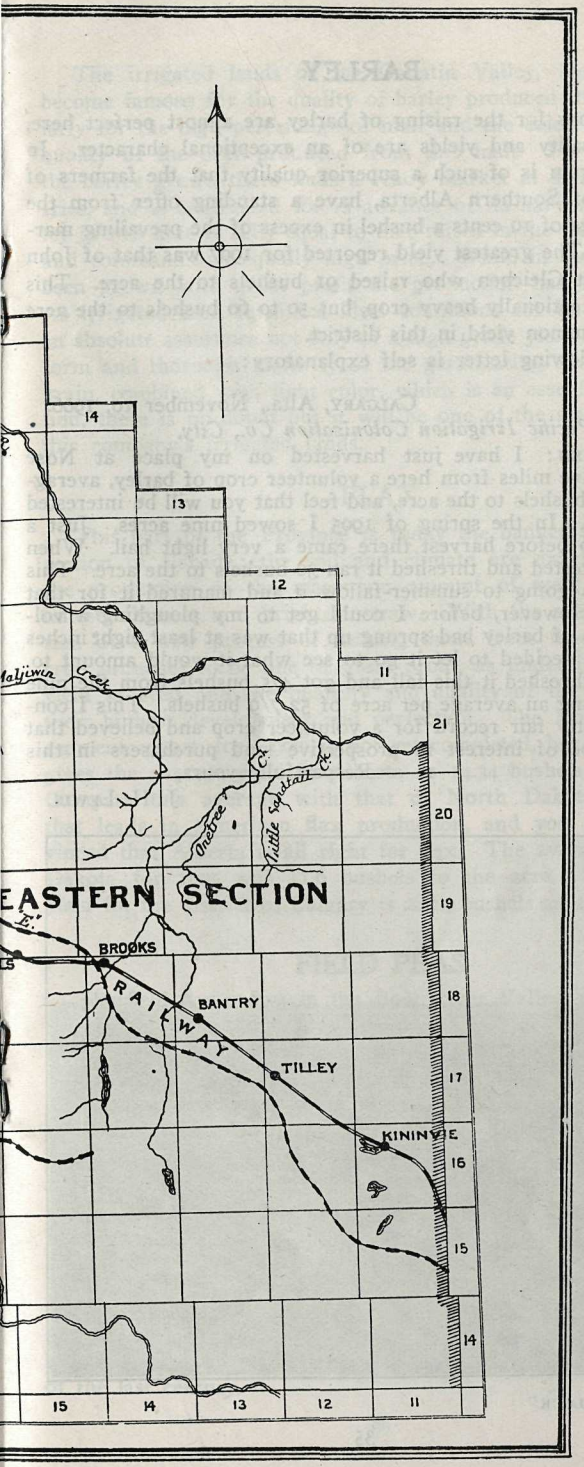
ALBERTA.

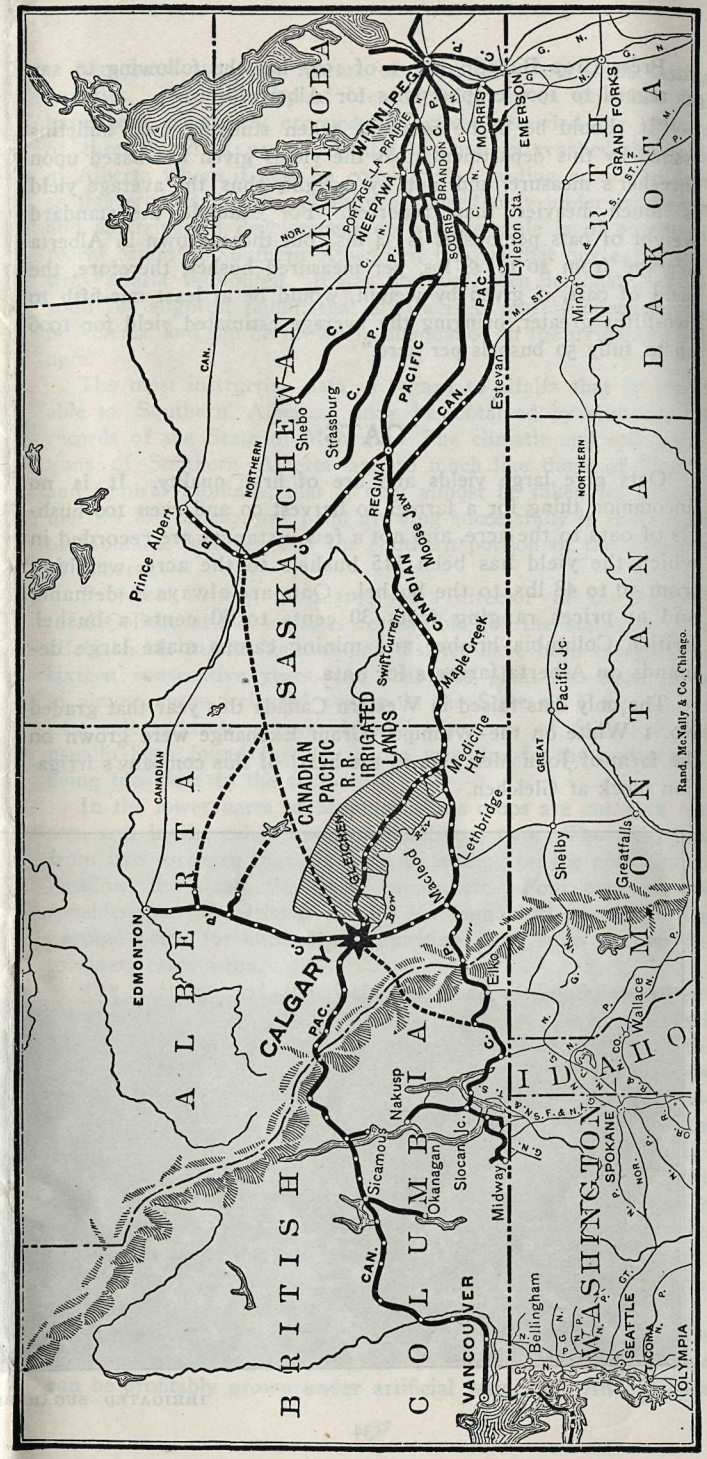
SCALE OF MILES

1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

1907

J. S. DENNIS
SUPERINTENDENT OF IRRIGATION
C. P. R. COMPANY


EASTERN SECTION
BROOKS
BANTRY
TILLEY
KININVIE
RAILWAY
Maljiwin Creek
Onobree Cr.
Little Sqidtail Cr.
14
13
12
11
21
20
19
18
17
16
15
14
15
14
13
12
11


BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
MONTANA
NORTH DAKOTA
IDAHO
WASHINGTON
CANADIAN PACIFIC R.R. IRRIGATED LANDS
CALGARY
EDMONTON
WINNIPEG
REGINA
VANCOUVER
SPOKANE
SEATTLE
TACOMA
OLYMPIA
GRAND FORKS
Prince Albert
Strassburg
Shebo
Moose Jaw
Swift Current
Maple Creek
Medicine Hat
Lethbridge
Macleod
Elkio
Sicamous
Nakusp
Okanagan
Slocan Jc.
Midway
Bellingham
Neepawa
Portage la Prairie
Souris
Brandon
Morris
Emerson
Lylcton Sta.
Esteven
Minot
Pacific Jc.
Shelby
Greatfalls
Wallace
CANADIAN PACIFIC
NORTHERN
GREAT
Rand, McNally & Co., Chicago.

Press Crop Bulletin No. 1 of 1907 has the following to say in regard to 1906 crop reports for Alberta:—

"It should be borne in mind, when studying crop bulletins issued by this department, that the yields given are based upon thresher's measure, and not by weight, thus the average yield is much heavier than reported. For example, the standard weight of oats per bushel is 34 lbs., but those grown in Alberta average from 40 to 48 lbs. per measured bushel; therefore, the yield of oats, if given by weight, would be at least one-fifth to two-fifths greater, bringing the average estimated yield for 1906 up to fully 50 bushels per acre."

OATS

Oats give large yields and are of first quality. It is no uncommon thing for a farmer to harvest 90 and even 100 bushels of oats to the acre, and not a few instances are recorded in which the yield has been 115 bushels to the acre, weighing from 40 to 48 lbs. to the bushel. Oats are always in demand, and at prices ranging from 30 cents to 60 cents a bushel. British Columbia lumber and mining camps make large demands on Alberta farmers for oats.

The only oats raised in Western Canada this year that graded No. 1 White on the Winnipeg Grain Exchange were grown on the farm of John McEwen, in the heart of this company's irrigation block at Gleichen.

BARLEY

Conditions for the raising of barley are almost perfect here, and the quality and yields are of an exceptional character. In fact, the grain is of such a superior quality that the farmers of this part of Southern Alberta, have a standing offer from the grain buyers of 10 cents a bushel in excess of the prevailing market price. The greatest yield reported for 1907 was that of John McEwen at Gleichen who raised 91 bushels to the acre. This was an exceptionally heavy crop, but 50 to 60 bushels to the acre is no uncommon yield in this district.

The following letter is self explanatory:

CALGARY, Alta., November 10, 1906.

Canadian Pacific Irrigation Colonization Co., City.

GENTLEMEN: I have just harvested on my place at Nose Creek, twelve miles from here a volunteer crop of barley, averaging 52 7/9 bushels to the acre, and feel that you will be interested in the fact. In the spring of 1905 I sowed nine acres. Just a day or two before harvest there came a very light hail. When it was harvested and threshed it ran 30 bushels to the acre. This year I was going to summer-fallow it and manured it for that purpose. However, before I could get to my ploughing a volunteer crop of barley had sprung up that was at least eight inches high and I decided to let it go to see what it would amount to. I cut and threshed it this fall and got 475 bushels from the nine acres, making an average per acre of 52 7/9 bushels. This I consider a pretty fair record for a volunteer crop and believed that it would be of interest to prospective land purchasers in this district.

Respectfully yours,

J. H. LEWIS.

IRRIGATED SUGAR BEETS IN THE "BLOCK"

The irrigated lands of the Gallatin Valley, Montana, have become famous for the quality of barley produced there, particularly for the high percentage of malt and the color and superior quality of the beer produced from this malt. For this reason the barley grown there finds a ready market in European countries, and is contracted for in advance of its harvest. The barley grown here is fully equal to that raised in the Gallatin Valley and commands an equally high price. While in the past it has been grown with great profit the production has been limited. As irrigated land furnishes ideal conditions for its growth and an absolute assurance not only of a high grade yield but of a uniform and thorough maturity of the germinating qualities of the grain, combined with light color, which is an essential qualification, there is no doubt but it will be one of the staple crops on this company's irrigated lands.

FLAX

This part of the Province is today the banner flax growing section of Canada; the soil and climate are exactly suited to the production of the maximum amount of seed, and of the tallest, cleanest and brightest straw. With the successful solution of a new process of making linen from flax straw, this crop promises to be one of great profit, as under irrigation the yield of seed and the quantity and quality of the straw reach their highest development and perfection. The Dominion Government report for 1906 is not yet completed, but that of 1905 gives the average yield in Alberta as 14.34 bushels to the acre. Compare this average with that of North Dakota, the State that leads in American flax production, and you will be convinced that Alberta is all right for flax. The average in North Dakota for 1905 was 11.6 bushels to the acre. The average yield for the district of Calgary is 28.64 bushels an acre.

FIELD PEAS

The field pea grown in the Bow River Valley, owing to the climatic conditions and long hours of sunshine in Alberta, is a small, hard, round pea; not at all like the "cow," "clay" or "whippoorwill" pea, grown so extensively in the South.

These peas can be fed to sheep in the field from the vine all winter and also make an excellent feed for hogs. They make a sweeter and firmer pork than does corn. Western Canada is absolutely free from the ravages of the pea weevil, and will be called upon to supply the seed for the farmers of the East.

ALFALFA

The modern popularity of alfalfa lies in the fact that it is perhaps one of the oldest known forage crops, and yet it may be justly regarded as the agricultural revelation of the latter part of the last century.

The most attractive feature of the alfalfa field is its lasting qualities. Near the city of Mexico fields are in existence that have been constantly cropped and never reseeded for upward of three hundred years. Alfalfa has not yet reached the point in Alberta where it may be considered a leading crop. In fact, as this crop can be successfully produced only under irrigation, and as irrigation development on a large scale is of somewhat recent origin in Southern Alberta, it follows that our experience with alfalfa is limited. It has, however, been demonstrated beyond the slightest doubt, that alfalfa is a most successful crop in Alberta, and can be grown in abundance on the irrigated lands here.

The most instructive data in regard to alfalfa that is applicable to Southern Alberta, may be obtained by studying the records of the State of Montana. The climatic and soil conditions of Southern Alberta are so much like those of Eastern and Central Montana, that it may almost be taken for granted that the life zone of any plant growing successfully in those parts of Montana, includes also the southern portion of the Province of Alberta.

Professor Emery, for many years director of the Agricultural College at Bozeman, is responsible for the statement that alfalfa fields in the Yellowstone district have been cropped for sixteen consecutive years, and that this plant has been tested in almost every irrigated county in the State of Montana, and as a rule succeeds remarkably well. In case of failure it has usually been found that the cause was due to the water table being too close to the surface.

In the lower parts of Montana three crops are cut each season, and in the other parts of the State, two. The yield runs from two to seven tons per acre, depending on the condition of meadow, the stand, the water supply, etc. Four tons may be considered a fair estimate of the Montana yield per acre. The average price for cutting and stacking runs from seventy-five to ninety cents a ton.

The certainty of the irrigated lands of Southern Alberta producing alfalfa as a leading crop, opens up a vista of possibilities in many directions. During the early years of settlement in this Province the claim was made that Alberta possessed all the natural conditions to make it one of the leading live stock countries of the world. When farmers invaded the ranchmen's domain later on, and numerous crops of winter wheat and other coarse grains were successfully harvested year after year, Alberta's fame as the foremost stock country faded, and the world henceforth knew it only as a great crop-producing district. The advent of irrigation and alfalfa will again bring the live stock industry to the front rank in Southern Alberta; history thus repeating itself.

The popular impression of farming under irrigation is, that only the most valuable crops, such as fruits and garden produce, can be profitably grown under artificial watering. An examina-

TRUCK FARM AT STRATHMORE

tion of the agricultural statistics of the United States, however, reveals the fact that fruit growing and truck farming form a very small percentage of the areas under irrigation. Fully 80 per cent. of the whole irrigated area of the United States being devoted to producing crops for the feeding and the finishing of live stock, principally with alfalfa, but including also the coarse grains. The live stock industry being the foundation of all irrigation development in America, it is reasonably certain that live stock husbandry in connection with irrigation farming will predominate to even a greater extent in Alberta.

To further illustrate the minor importance of fruit growing under irrigation compared with fodder production, it may be mentioned that in the State of Colorado, out of a total irrigated area of 1,500,000 acres, only 35,000 acres are devoted to fruit growing, while considerably over a million acres are given to alfalfa and other fodder crops.

To sum the matter up, it has been shown above that even in States where irrigated lands command the highest value per acre, and where the climate admits of the tender fruits being grown, alfalfa is still one of the leading crops, and greatly out-

ranks in importance fruit growing and truck farming. It is not at present claimed that Southern Alberta will grow the more tender varieties of fruit, but it has been demonstrated beyond doubt that the irrigated lands here can and do produce alfalfa, which is regarded as being the more valuable and profitable crop in those States where it is grown side by side with fruits. Hence it is reasonable to say that the rich, virgin alfalfa lands of the Canadian Pacific Railway irrigation block are fully equal in value, acre for acre, to the most high priced irrigated lands in the Western States.

Mr. W. H. Fairfield, the writer of the subjoined letter, was born in the alfalfa district of Colorado. Subsequent to his coming to Southern Alberta, eight years ago, he was in charge of the Wyoming Experimental Farm at Laramie, Wyoming, and is recognized as one of the foremost American authorities on alfalfa. When he came to Southern Alberta he bought an irrigated farm and as soon as possible put the greater part of it into alfalfa. His efforts as an irrigator have met with such success that he has recently been appointed superintendent of the Dominion Experimental Farm located in Southern Alberta.

Dominion of Canada, Department of Agriculture, Experimental Farm for Alberta.

LETHBRIDGE, Alta., Jan. 18th, 1908.

C. P. Irrigation Colonization Co., Calgary, Alta.

DEAR SIRS: Replying to your recent letter asking for my "experience with alfalfa in Southern Alberta, and my opinion as to its future possibilities as a forage crop under our climatic and soil conditions."

In my judgment there is a great future for alfalfa growing here, our soil is rich and deep and we have plenty of sunshine. On my private farm, near Lethbridge, there are fields that are seven years old from which we obtain from two to three cuttings each season. To obtain maximum results under our conditions in Southern Alberta irrigation should be practiced, for with irrigation a heavy yield for each cutting may be counted on.

In my judgment alfalfa will become in time the leading crop on the irrigated lands in the Province, and eventually one of the most important industries of these districts will be the feeding of cattle, sheep and hogs. Very sincerely,

(Signed) W. H. FAIRFIELD, *Superintendent.*

TIMOTHY

Alberta soil has proved itself particularly adaptable to the growth of timothy, and returns large yields in this crop. It has a fine head and a sturdy stock, and grows to a good height. Three tons to the acre is no unusual crop, and it finds a ready market at from $12 to $18 per ton.

Last year a farmer at High River raised under irrigation a crop which he sold for $52 an acre.

Owing to the ever increasing development in British Columbia and the Yukon, these sections will afford a sure market for the timothy crop of Southern Alberta.

SUGAR BEETS

No industry lends itself more readily to profitable development under irrigation in Southern Alberta than sugar beet production. With a view to encouraging beet growing, the Canadian Pacific Railway has arranged to reduce its transportation charges on beets from points in the irrigation block, east of Calgary, to the nearest sugar factory, located some 200 miles, from that city. The Provincial Government pays a bonus on beets through the sugar companies, and other industries contribute as well toward the rapid development of this important industry. The result is that the price paid to farmers for sugar beets at the nearest railway station in the irrigation block has been fixed at $5.00 per ton f.o.b. cars. The average price paid for beets for the whole of the United States, according to the last census, was only $4.18 per ton. In the State of Minnesota a minimum price of $4.25 per ton has been established by law. The price paid for beets in Utah, one of the foremost of beet growing States, was $4.25 a ton, with an average yield of 11.4 tons an acre. It is generally considered that 15 to 16 tons to the acre is a fair crop. In the State of Washington up to 32½ tons

an acre were produced by actual weight. It is only a question of a year or two when factories will be established within the block itself; the transportation cost will then be saved to the farmer, and the beets will net him from $5.50 to $5.60 a ton at the station.

The most favorable soil for sugar beets is conceded to be a soil which carries a generous quantity of sand. A clay soil with a tendency to bake is the most unfavorable. The former class of soil abounds almost everywhere in the irrigation block. It is also a well known fact that the farther north the sugar beet can be successfully grown, other things being equal, the better the result. The reason for this is that the long cloudless days of northern latitudes increase the activity of the chlorophyl cells of the beet leaves, which elaborate the sugar, so that a greater quantity of sugar may be made in proportion to the area of leaf surface.

Three samples of sugar beets, selected at random from fields in the company's irrigation block at Strathmore and Gleichen, during the season of 1907, in a test of them made by the Knight Sugar Company of Raymond, Alberta, showed co-efficient of purity 88.1 per cent. and 19.2 per cent. sugar in the beet. This is an exceptionally good showing when the fact is taken into consideration that beet sugar factories in the States are paying the highest market price for beets that test as high as 80 per cent. co-efficient and 12 per cent. sugar in the beet.

It may here be mentioned that the average percentage of sugar in beet, in connection with a series of analysis of Montana grown beets in 1898, was only 11.2, while the total average for Montana analyses for 1897, 1898 and 1899 was 12.1; even in Utah, one of the best beet sugar producing States, the percentage was only 14.3 for the above-mentioned period. It may, therefore, be safely concluded that Alberta possesses unequalled advantages on the score of the quality of the beets that can here be produced.

The labor problem has always been regarded as the most serious one in connection with sugar beet culture. In this respect the irrigation block is fortunately situated. The Blackfoot Indian Reserve is located contiguous to the block. The Indians take considerable interest in farm work, and generally hire out on hay contracts and similar farm work during the season.

Letters in Proof

This company has at hand facts from which might be written a book so large that the average person would have neither the time nor the inclination to read it. And with all that this book might tell there would be nothing nearly so convincing, nor that would carry nearly so much weight, as would a few short letters by people from various parts of the country, south, east and west, who have actually been upon the ground, and for themselves at first hand, acquired a knowledge of conditions here that it

would be impossible to gather in any other manner. After all, it is really the man who has put a country to the test and proved its worth who is best qualified to speak for it. For that reason the following letters, which speak for themselves, are submitted.

LA PORTE, Ind., Dec. 10, 1907.

C. P. I. C. Co., Calgary, Alta.

DEAR SIRS: I am in receipt of your letter of the 30th ultimo asking for my opinion of your irrigated lands. Last spring after having sold out my business in Three Oaks, Michigan, I had the pleasure of taking a trip on your special car "Calgary" to see your Canadian lands. This was in the month of April. Previous to this, I had been in Manitoba and Saskatchewan, looking at land some of which was very good, but I found that their winters were very cold and practically all that could be grown was wheat (Spring wheat), oats and flax. I had also been in the Dakotas and Minnesota looking at land and my reasons for buying your irrigated land is as follows:

The quality of the soil, a heavy chocolate loam which will never bake, and in my opinion a better soil does not lay out of doors.

The abundance of water for irrigation and the fact that it is delivered to your farm at a very low cost of 50 cents per acre per annum.

The excellent railroad facilities which are far in advance of what we have here.

You have good markets, not far from the Coast for export, and the city of Calgary is bound to be a large city. From what I have learned from old settlers during my stay there, which was several months, the winters are quite mild as a rule and the summer months are fine.

VEGETABLES GROWN UNDER IRRIGATION EAST OF CALGARY

During my stay there last summer, I broke 100 acres on my quarter section, built a nice house and barn Also had a well drilled and I wish to say that the water is fine. I intend to put the 100 acres into flax next spring. I also wish to say that the crops I saw grown and harvested were very fine and the yields were large. I think in five years these same lands will be selling from $50 to $100 per acre, because so many things can be grown successfully, such as winter and spring wheat, oats, flax, barley, sugar beets, potatoes, and all kinds of vegetables. The large price that is obtained for sugar beets will alone make it a great country. I intend to move to Alberta next March and make it my home.

Yours very truly,

(Signed) OTTO F. BREMER.

MORNING SUN, Iowa, Dec. 21, 1907.

C. P. I. C. Co., Calgary, Alta.

DEAR SIRS: You wrote me some time since as regards my opinion of your lands. I will say in return that during the months of July and August, 1907, I traveled over 6,000 miles looking for snaps in the land proposition and when I came to your land in Southern Alberta near Strathmore and Calgary, I saw the greatest bargains of my trip. For quality of soil there is none better in Canada or the United States. The quality of soil is equal to Iowa corn land and the rich Missouri and Mississippi River bottoms. The pasture is unexcelled anywhere. The climate in Southern Alberta is very fine—much better than it is farther east. The railroad service and markets are very good. Good prices for produce prevail. The lay of your land is fine, and will, without a question raise wonderful crops for I saw some of them this year. I paid $15 per acre in July and August, 1907, for my non-irrigated land and $25 per acre for my irrigated land. I would not entertain a raise of $10 per acre for my land and sell it. It is not for sale. And I will advise all who want a good home on easy terms to look over your proposition.

Yours sincerely,

(Signed) W. F. BOWSER.

SAWYER, Kansas, Dec. 15, 1907.

C. P. I. C. Co., Calgary, Alta.

DEAR SIRS: In March, 1907, I invested in Western Kansas wheat land. Being favorably impressed with the profits to be derived from farming by business methods, I began searching for a more favorable location regarding soil, markets, etc., and where the certainty of sufficient moisture would insure an annual profit.

Now the soil of Western Kansas, the Texas Panhandle and Eastern Colorado is well adapted to mixed farming but the rainfall is too uncertain so that farming in these sections is much like gambling.

After considerable investigation of Western lands, my attention was directed to the irrigable lands of the Canadian Pacific Railroad near Calgary, and in August I left Kansas for a trip to Alberta.

After satisfying myself that the land and the water title were all that was claimed for them, I bought 320 acres, Sec. 11-22-26. This half section was selected in preference to land both in the United States and the other parts of Canada because of the following facts: The soil being a deep, black, sandy loam is well adapted to irrigation, this soil will not bake or become lumpy with the application of water. Irrigation insures a larger and more certain yield. It is essential to the most successful growing of sugar beets, and that sugar beets can be profitable grown in Alberta has been clearly demonstrated in the past few years. Irrigation farming under Canadian laws is not the haphazard occupation encountered by the farmers in many of the irrigated districts of the Western States. This land can be purchased at an extremely low price, for irrigated land.

There is a good market for all farm products. One of the largest railroad systems in the world stands back of this irrigation project; a railroad that realizes that its interests and the settler's are mutual.

Today this land, with its broad gently sloping sweeps of virgin prairie, means opportunity for the man of enterprise and a little capital. But of its opportunities a few years hence who can tell?

Here and there scattered over this vast tract with its thousands of prosperous farmers will be immense factories turning out daily their many tons of beet sugar. Here will be grown millions of bushels of Alberta Red that will keep many a wheel turning in the flour mills of Europe. Here will be produced tons of the finest creamery butter manufactured.

What then will this land be worth? Land that will produce under proper cultivation from 40 to 60 bushels of No. 1 winter wheat or 16 to 20 tons of sugar beets to the acre. What is the value of such land? But above all the profits to be derived from the cultivation of such land and the certain rapid rise in value, there is one's health to be considered. Alberta with its wealth of pure, fresh air laden with ozone from the snow-capped Rockies to the West, with its dry, sunny days, and its cool summer nights, offers to the settler an assurance of good vigorous health that doctors and medicine cannot give.

To the enterprising farmer who is looking for cheapest land, with good soil, plenty of moisture, good markets, and a healthful climate, Alberta, offers today, the best location in the great West.

I am looking forward with eagerness to the rapid development of this vast territory.

Assuring you that my best efforts will be given to help attain this development, I remain, Very truly yours,

(Signed) GAYLORD GIBSON.

WILSONVILLE, Nebr., Jan. 1, 1908.

C. P. I. C. Co., Calgary, Alta.

DEAR SIRS: Replying to your letter of Nov. 30th, 1907, will say I have travelled over a number of States from the extreme

southern states to extreme north and from the middle east to the Rocky Mountains in the West. When I made my first trip to Alberta, Canada, I was very prejudiced against that country and had no thought of buying land there, but after looking the country over thoroughly, I became much interested in it and bought one section of land before leaving there. This trip was made in July, 1906. Since that time I have sold my land in Fulton County, Illinois, and also all my land in Nebraska. Today, I have not a foot of real estate in the United States and am improving my land in Canada which is situated in the Calgary and Gleichen districts under the C. P. R. irrigation ditch. Some people may ask why I preferred the Alberta country to that of Illinois or Nebraska. In answer will say in the first place the climate is much better in Alberta, Canada, than it is either in Illinois or Nebraska. The winters are no worse and the summers are much pleasanter in Central and Southern Alberta than they are in those two states.

The general opinion of people through the states is that the winters are long and cold through all Canada, much longer and colder than through Iowa, Illinois, Nebraska or Kansas—when the fact is the winters are not as long in Central and Southern Alberta as in those states and in Alberta you do not have to feed stock as many months as you do in those States. Last April I made my second trip to Canada and at that time the winter was bad, very cold and lots of snow through Nebraska, Wyoming and Montana as I passed through those states on my way to Canada. When I arrived at Calgary I found the weather fine, the snow all gone and the farmers were discing their ground for spring grain. I remained in that part of the country until the fore part of June. At that time the spring grain had been sown ten days to two weeks, as I passed through North Dakota and Minnesota they were still seeding. This summer I have had occasion to make a trip to Canada about once every 30 days and have certainly had a chance to witness the vast difference in the climate there and in the States. I am frank to confess that the summer climate cannot be equalled in any country, I have ever visited. There are no wind and dust storms such as we have in Nebraska and Kansas. There are no heavy wind or rain storms as we have in the States. Everything goes to make up a most agreeable and comfortable place to live in. The water in

PARTY OF LANDSEEKERS FROM THE UNITED STATES JUST ARRIVED AT STRATHMORE IN TWO OF THE COMPANY'S PRIVATE CARS

most places cannot be beat for its purity and there can be plenty of it found at a depth of from 10 to 80 feet. As for railroad and market facilities, we consider them first class and do not have to wait for railways to be built or markets to spring up as we have them to start in with. I paid for my land when bought $25, for irrigable and $15 for non-irrigable. This I consider a very low price. The man that purchases this land, in my mind, is making an investment that cannot be equalled in any country for this reason:—taking this from an agricultural view, our crops from sod broken late last summer and disced only one time before seeding to oats, yielded 80 bushels per acre. We marketed our oats from the thresher at 38 cents a bushel. From this you will readily see that the first crops from sod, including your labor, more than pays for your land. I took up there in my car last spring 20 bushels of speltz and drilled it in sod that was plowed in the fall. The yield was very satisfactory and quality could not be beat in any country. This is going to be one of the coming crops for Alberta in my mind as it is next to corn. Some experiment stations say it is equal to corn for feeding hogs and cattle. Some of my neighbors' crops were much better than mine, as they had their ground in better condition. They raised 100 bushels of oats and as high as 91 bushels of barley per acre off land broke last summer, but well pulverized before seeding. Some of their wheat went as high as 50 bushels this year.

My land in Illinois was valued at $118 per acre, my rent which was two-fifths brought me about an average of 3½ per cent., and land decreasing in value. My land in Nebraska paid me about 8 per cent., but was increasing in value. But I considered the top price had arrived for land in the state of Nebraska last spring and sold my land here. My opinion this far was right as our crops were very short here this year and land has again taken a drop and there is no chance to sell at a profit. As to the value of my land in Alberta, judging from an agricultural point of view, it is well worth $60 as an investment. I firmly expect to see in three to five years this same land that the C. P. R. is selling now for $15 and $25 per acre sell from $50 to $100 per acre and it will be a good investment even at that price. I will close by saying that I will be glad to answer any letters of inquiry and give any information I may be able to give at any time to anyone who wishes to write me at Wilsonville, Nebraska.

Respectfully yours,

(Signed) W. R. PAYNE.

NAPA, California, R. F. D. No. 1, Dec. 27, 1907.

C. P. I. C. Co., Calgary, Alta.

DEAR SIRS: Replying to yours of Nov. 29th, will say that in my experience for and inspection of lands suitable for agricultural purposes or stock raising, and general farming has been interesting and successful as regards my own interests, but not very extensive. Have been over considerable areas in this state and the territories also as far south as Florida. I was induced

to visit Alberta last July to inspect the C. P. R. irrigated block for the express purpose of buying if the land in itself seemed to be desirable and the conditions otherwise seemed favorable. I was given every attention and assistance by your obliging officials and upon inspection found the soil excellent and I think the railroad facilities will be ample, the climate is said to be fine. I believe it is very healthy and I am quite ready to take the chances on that point. I paid $15 and $25 an acre for my land and consider it a reasonable price and expect it to advance to $50 an acre in three to five years. I am well satisfied with my purchase as are all those with whom I have spoken and who have also bought land. My people here and more particularly my sons, one of whom anticipates taking charge of the half section we already have bought. We purpose breaking the whole tract in the coming spring and summer if possible and put in as much spring crop as seems advisable. We look for a great future for that great country and particularly the C. P. R. irrigated block for reasons which are obvious to those who are willing to give due credit to facts, which are well known. I inspected the lands in the vicinity of Fort Macleod 18 years ago and find that the favorable opinion I formed then of that part, has been proved to be justifiable, but I am better pleased with my half section near Calgary on the C. P. R. irrigated block.

Yours sincerely,

(Signed) CHAS. H. SANDERS.

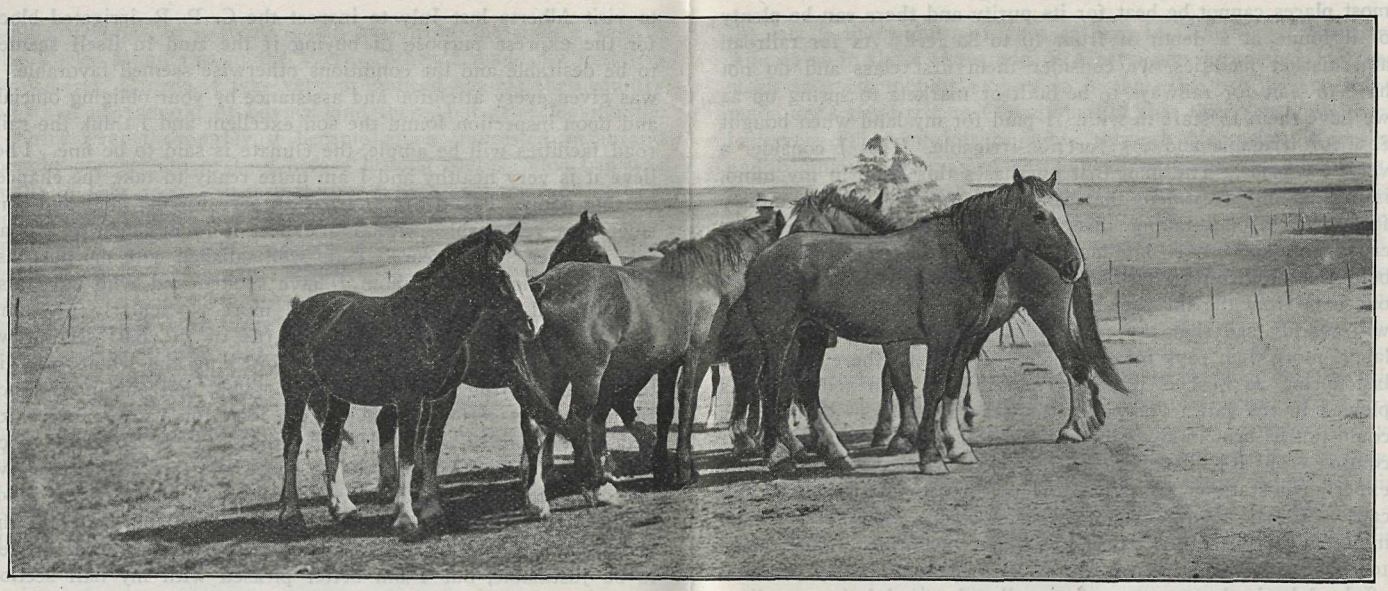
GLEICHEN, Alberta, January 22, 1908

Canadian Pacific Irrigation Col. Co., Calgary, Alta.

DEAR SIRS: Your letter of November 30th received, and I take pleasure in complying with your request. Before purchasing land of you at Gleichen, I had an opportunity of making a very thorough investigation of land in Arizona, Utah, Idaho and parts of Colorado. My reason for selecting land here in preference to land in those states was that I found it to be cheaper, the soil of a much better character than I found it in the majority of localities in the states mentioned, and the opportunities for a young man are much better here. In many instances, I have seen larger crops grown here without irrigation than can be raised in some parts of the states referred to with irrigation.

I have now spent two years in Southern Alberta and believe the climate here is one that will appeal favorably to at least 99 out of 100 people. Being situated along the line of a transcontinental railway, I know that the facilities for moving crops are much better than they possibly could be if we were located on some small branch line. I found that the markets here are much better and more accessible than they were in many parts of the States to the south.

My land here cost me $25 for irrigable and $15 for non-irrigable areas. Probably the best manner in arriving at its probable value would be to make a comparison of it with land that I have worked and am acquainted with at Blackfoot, Idaho. Land



SOME PROMISING PURE BRED CLYDESDALE COLTS AT GEILCHEN

there is selling at from $50 to $150 per acre. The $50 per acre land is gravelly and very poor quality, while the $150 per acre land is of light soil with no sub-soil to speak of. In fact, I know that if the farmers of Blackfoot could have the sub-soil here for a top soil they would consider themselves very fortunate. Here the soil is a rich, dark, sandy loam, over-topping a chocolate loam and underlaid with a sub-soil that will retain moisture.

Wheat in Idaho will average about 15 bushels to the acre, while wheat in my district here will run from 30 to 35 bushels to the acre. A yield here of 85 to 100 bushels to the acre for oats or barley is no uncommon thing. With all the natural advantages here greater those of the Snake River Valley, Idaho, I feel sure that a conservative estimate will place the value of land here in the next three to five years at from $50 to $75 per acre. Of course as settlement continues, this land will rapidly advance to the maximum in value which should, at least, equal values in the less fertile districts in the States to the south, where land is being sold at from $100 to $150 per acre.

Yours truly,

(Signed) JAS. NAYLOR.

STRATHMORE, Alta., Dec. 17, 1907.

C. P. I. C. Co., Calgary, Alta.

DEAR SIRS: It is now just about four months since I came out here and I thought you would like to know what progress I have made on the land. During this short time, I can truly say

that I am more than satisfied with what I have accomplished. I have built a substantial four roomed house, dug out a large cellar and a well. I have also put up a good sized stable and outhouse and have put up about 30 tons of hay of which we have an abundance here. In addition, too, I have fenced 160 acres and the first post holes were dug on the 2nd of December. I have broken and harrowed 25 acres of the finest land one could wish to see. It will grow grain of all kinds and different kinds of vegetables. I consider the land is well adapted for mixed farming. I am now thoroughly prepared for the winter, which I judge is close upon us. As yet the weather has been all that can be desired—bright and cloudless—and with a great deal of sun. I have not seen a nicer fall during the last ten years. I may say I have previously lived in Montana and in Michigan and the weather there was much colder for the time of year than it has been here. Most of my neighbors round here have come from the United States and they all seem surprised at the mildness of the climate. The greater part of my land can be irrigated which will be an undoubted advantage as if a dry season comes, I have nothing to fear and this together with the fine soil and even climate led me to choose this part in preference to land I have seen elsewhere. I consider this land will double its value in a very short time, and feel satisfied no one can make a mistake in buying land in this district

Thanking you for the trouble you have taken in locating me here, I remain, yours faithfully,

(Signed) JOHN J. KENNAUGH.

Live Stock

In studying the economic side of irrigation, the first fact that must be clearly grasped is, that the back-bone and foundation of any irrigation enterprise is not by any means the production of either fruits, cereals, roots or garden truck, but the feeding and finishing of live stock. This has been the history of irrigation development in every State of the Union. The proof of this contention is that the total irrigated acreage in crops in the United States at the time of the decennial census was sixty-four per cent. in hay and forage. The actual figures are: Total acreage, 5,712,000 acres; in hay and forage 3,666,000 acres. This tells the tale.

The lands embraced within the Canadian Pacific irrigation block are destined to serve the same purpose in regard to the highest development of the live stock industry, as do the corn growing States tributary to the great market centres of the Union, and the irrigated valleys of the Western States. The time is close at hand when most of the live stock produced in Alberta, and now marketed in a more or less unfinished condition, will be sent to the rich alfalfa-growing lands east of Calgary, there to be put in prime shape before being exported or slaughtered. A home market will thus be made available for all the fodder that can be produced on our irrigated lands at highly remunerative prices, and with the additional advantage of having the feed consumed on the irrigated farm and ultimately returned to the soil that grew it, thus maintaining the fertility for which these lands, have already gained renown.

HORSES

In breeding horses, Southern Alberta occupies a somewhat similar position to Canada that Kentucky does to the United States. Owing to its high altitude, dry and invigorating atmosphere, short and mild winters, and its nutritious grasses and inexhaustible supply of clear, cold water, it is pre-eminently adapted for breeding horses, and the Southern Alberta animal has already become noted for its endurance, lung power and perfect freedom from hereditary and other diseases. There are in Southern Alberta several grades of horses, varying in point of quality from the hardy Indian pony (cayuse) to the beautiful well-formed thoroughbred.

Heavy draught horses are now finding a ready sale at highly paying prices. Teams, weighing 3,200 lbs. and upward, are worth $400 and more. Between 2,800 and 3,200 lbs., the average price would be $375, and the value of teams weighing between 2,400 and 2,800 lbs., is $300 and upward, according to quality.

Owing to the mildness of the climate, horses can be wintered outside at a nominal expense, consequently, no country in the world can compare with Southern Alberta in horse raising.

Inasmuch as it costs no more in Southern Alberta to raise a four-year-old colt than a steer of the same age, it will be seen that horse production here, with the necessary capital, is an easy road to success.

CATTLE

We have already briefly referred to the question of beef production, with special reference to Southern Alberta's nutritious grasses. The feeding effect of the cured prairie grasses puts a finish on beef almost equal to grain. Southern Alberta is now supplying the province of British Columbia with beef, as well as the Yukon Territory. In addition a large export business to Great Britain is done.

It is a fact that the cattle of this section are of much better quality and breeding than the average run of range stock in the Western States. The best pure-bred bulls are being generously used. It is an interesting fact that the City of Calgary is the home of the largest individual pure-bred cattle auction in the world. This sale takes place in the month of April each year, and on that occasion stockmen gather from far and near to purchase their bulls and to transact other business. Shorthorns, Herefords, Polled Angus and Galloways are the chief breeds, while a few Holsteins and Ayrshires are produced.

For the smaller breeders, while dairying and beef production must necessarily go hand in hand, a good milking strain of Shorthorns is found the most profitable.

To show what kind of cattle are produced, it may be mentioned that a train-load of four-year-old steers from a ranch near Cochrane, after being driven 140 miles, and shipped by rail 2,300 miles to Montreal, weighed at the end of the trip, on the average, 1,385 lbs. Four year-olds and long threes have during the past four years netted the owners from $40 to $50 on the range; three-year-olds and good cows, $32 to $37 each; old cows from $24 to $28. Calves from six to eight months old are worth from $10 to $14. However, prices seem to be advancing, and one shipment of cattle from Alberta to Chicago last fall averaged $70 a head, ranging in price from $53.34 to $85.18.

SHEEP

Sheep, in common with other stock, have always prospered on native Alberta grasses. With the growth of alfalfa and field peas on our irrigated lands will come a marked extension of the

LANDSEEKERS INVESTIGATING C. P. R. FARM LANDS

sheep-raising industry, and the ever-increasing population in the eastern part of Western Canada, where, for climatic and other reasons, stock raising is not profitable, will forever guarantee a satisfactory market.

Those engaged in sheep raising are enjoying unparalleled prosperity. Mutton and wool now command top prices. Flockmasters in Alberta will not be affected for many years to come by the great fluctuations in sheep products. Woolen mills are being established in the West and a good local market for mutton is available in British Columbia, the Yukon, and the Province of Manitoba. The principal market for Alberta-grown mutton is at present the Province of British Columbia and the Yukon Territory. The requirements of the Province of Manitoba are not as yet very considerable, but with the large growth of urban population and the gradual acquirement of a taste for mutton, noticeable all over the civilized world, it is quite certain that Manitoba will in time become a valuable market for Alberta mutton. During the past year some 5,000 head of Alberta sheep were sent to the Manitoba market, and no more being available, it was found necessary to draw upon the Province of Ontario for a considerable number. These sheep were thus sent some 2,000 miles to supply a market right at the front door of Alberta. The markets in British Columbia and the Yukon are susceptible of expansion, as considerable mutton is now being brought in from the United States and the colony of New South Wales, amounting to over 20,000 carcasses annually, which also might be supplied from Alberta.

HOGS

As might be expected in a district where the dairy industry is growing so rapidly, hog raising, affording as it does, the most economical method of realizing the largest profits from skimmed milk and othed dairy by-products, is a very important branch of

farming in Southern Alberta. The soil conditions and the climate, which are so eminently suited for dairying, are also productive of those crops which make the cheapest pork.

As a foundation for winter feeding, all root crops can be grown with great success under irrigation. Large crops of turnips, beets or mangolds, are produced with ordinary field cultivation.

The mildness of the winter season makes it unnecessary to have the costly buildings which are essential to profitable feeding in the winter time in the colder climates, thus enabling farmers of moderate means to have fat hogs to sell when the highest prices are obtainable, during the late winter and early spring months. For some years past the fluctuation in prices has been very slight, the net prices received by the farmers being seldom under five cents in the autumn and six cents in the spring and summer months (live weight), and at these prices farmers have made good profits.

Calgary, the live stock centre of Alberta, has an excellent pork-packing establishment where top prices are paid.

DAIRYING

The Provincial Government maintains at Calgary the largest and most important "dairy station" and cold storage plant in the West. Some years ago our dairymen became dissatisfied with the private creameries which were then in operation throughout the country, and asked the Government to take charge of these institutions. The Dominion authorities fell in with the request, placed experts at the disposal of the dairymen, and eventually organized a chain of co-operative creameries all through the country. These creameries are subject to the control of the patrons, through boards of directors, under absolute Government management. Most of the patrons separate their milk at home

by means of hand separators and bring their cream to the dairy station from three to four times a wek. The cream is then carefully tested and weighed, and at the end of every month each patron gets credit for the equivalent of his cream in butter, and receives a cash advance of ten cents per pound.

At the end of 30 or 60 days a cheque for the balance due each patron is sent to him from the Department of Agriculture. A uniform charge of four cents a pound is made by the Government for manufacturing, and one cent a pound is deducted to create a fund for purchasing buildings and machinery, of which the patrons become part owners to the extent of the amount which they contribute in this manner. Any settler having the means to procure a few milch cows can thus insure a cash income from the first day he starts on his land. The butter is sold principally in British Columbia and the Yukon District. A trade is also being developed by the Government in China and in Japan. This creamery service has recently been placed under the control of the Provincial Government.

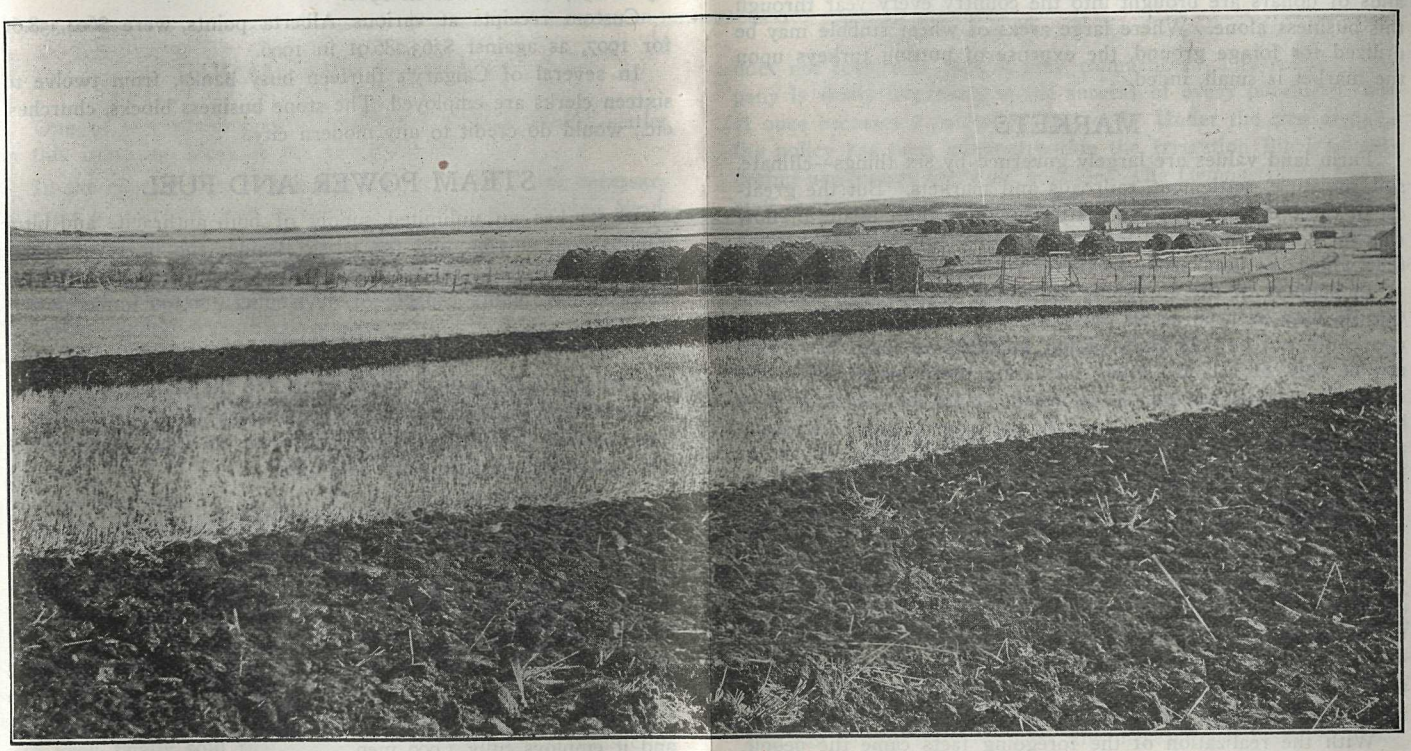
Here is our dairying combination: A never-ceasing abundance of the best food for cows; our nutritious native grasses, supplemented by alfalfa and peas; an abundance of fresh, pure water; the absence of mosquitoes and of flies, with our provincial creameries taking charge of the cream, manufacturing it into butter and finding the best market, all at a nominal charge of four cents per pound, a cheque to the farmer the first of every month and a home market already greatly in excess of the production and constantly and rapidly expanding.

The year 1906 has been the most successful dairy season since creameries were established in Alberta. From less than four hundred pounds of butter in 1902 the output has steadily increased until 1,050,536 lbs. were manufactured in 1906.

The following table will show the volume of increase in output during the past three years:—

Year	No. Creameries	Lbs. Butter Manuf'd	Value at Creameries	No. Patrons	Average price at Creameries
1904	7	293,356	$ 60,443.38	444	20.67
1905	12	813,430	173,671.40	1,201	21.35
1906	18	1,050,356	222,970.77	1,755	21.23

While the dairying statistics for 1907 have not as yet been compiled. There was an increase of three creameries and 2 cents per pound in the average price of butter at the creameries in that year.



A FARM SCENE NEAR CALGARY

POULTRY RAISING

There is a large field in Southern Alberta for the industrious poultry-raiser. A few acres and a few hundred chickens will yield a good income. With eggs at 25 to 50 cents a dozen and dressed poultry at from 15 to 22 cents a pound on the Calgary market, little need be said about the profits of this valuable feature of the Southern Alberta farm.

An excellent market exists in the province of British Columbia for poultry products, and this market is enlarging every year. An egg gathering station is maintained in Calgary by the Government, where the highest market price is paid for eggs, and from which periodical shipments are made to Western points. No less than $367,950 worth of poultry and eggs were imported into Calgary by jobbers alone during 1906 for distribution at Alberta and British Columbia points. It only remains for our farmers to go into the poultry business on a larger scale in order to have this money circulated in Alberta. Our climate is ideal for poultry-raising, and our market is the best in Canada.

Turkey raising has come to be an industry of importance. In parts of this section, where range is good, thousands of these birds grow and fatten for market in the coast cities, and thousands of dollars are brought into the country every year through this business alone. Where large areas of wheat stubble may be utilized for forage ground, the expense of putting turkeys upon the market is small, inded.

MARKETS

Farm land values are largely governed by six things—climate, soil, moisture, settlement, railroads and markets. But the greatest of these is Markets. No matter how fine the climate, or how rich the soil, or how sufficient the rainfall, without a market for that which the land produces there will be found no settlement.

In support of the foregoing statement the lands of Western Canada may be used as an illustration. Lands that a few years ago could not be sold for a dollar an acre—in fact, they could not be sold at all, are today attracting more people than any other agricultural section of the world. Here for centuries have been the climate, the soil and the moisture. But, possessing these three great natural advantages, it was still practically uninhabited. It was lacking that one great essential—a market. Here were millions of acres possessed of great potential wealth that were but awaiting the awakening touch of man to be added to the available wealth of the world. The awakening came slowly, and it was only after the promoters of the Canadian Pacific Railway had constructed that road, and spent years in educational work, that the world at large began to realize that here was a country possessing all the natural advantages claimed by older communities; that land here just as good as could be found in the older settlements could be had almost for the asking.

With the realization of the foregoing facts came the people,

who found that a railway had preceded them and that markets already existed for anything that they might care to raise. These markets are capable of great expansion, and assure to the agriculturist the prevailing prices of the world. An assured market means added value to every acre of land in Western Canada, and the near future will see lands that are now selling at exceptionally low prices begin to increase in value, just as they have done in the United States during the past few years. For all of which, markets made possible by the railways, are responsible.

EDUCATIONAL

Calgary alone has 12 public schools, including a high school complete in every essential, the Provincial Normal, the Western Canada College for Boys, the St. Hilda's College and the St. Mary's Convent for girls.

CALGARY—THE COMMERCIAL METROPOLIS

The Bank Clearings of Calgary for October, 1907, were $5,868,893—an increase of $178,479 over 1906 in spite of the fact that business was supposed to be much less throughout the country in 1907 than it was in 1906.

Custom receipts at various Alberta points, were $604,358.61 for 1907, as against $363,286.91 in 1906.

In several of Calgary's thirteen busy banks, from twelve to sixteen clerks are employed. The stone business blocks, churches, etc., would do credit to any modern city.

STEAM POWER AND FUEL

Calgary has an unlimited supply of both anthracite and bituminous coal surrounding the city. Besides the finest of steam and domestic coals, there is now under way the construction of water power plants capable of developing 100,000 horse power.

COST OF LIVING

Living in Calgary is as cheap as it is in the United States, and labor is readily obtained. There are today as many industrial opportunities in Calgary as there were in St. Paul, Minneapolis, Chicago or St. Louis a few years ago.

RAILROADS

More railroads are projected into Calgary than to any other point west of Winnipeg. Within two years the city will be entered by the Great Northern, Canadian Northern, and the Grand Trunk Pacific Railways. Calgary is a general divisional point of the Canadian Pacific Railway, and the lines for Edmonton and Macleod start from here. The annual pay roll of the Canadian Pacific Railway at Calgary is considerbly over a million dollars and it employs fully 1,000 men.

THE COMPANY'S IRRIGATED DEMONSTRATION FARM AT GLEICHEN

RURAL TELEPHONES

One of the advantages awaiting the coming of the settler in this irrigation block is the telephone.

In the construction of this irrigation system it was necessary to erect a telephone line between the various engineering headquarters and Calgary. The Bell Telephone Company of Canada is going to put in an exchange and connect this line with its system, which will give to the block all the advantages of the long distance telephone and at rates much lower than are charged by any other telephone company.

EXPERIMENTAL AND DEMONSTRATION FARMS

Realizing fully the magnitude of the task involved in colonizing the huge area of land embraced in the Irrigation Block, and the importance of placing at the disposal of settlers there expert advice and assistance the company operates at central points farms devoted to demonstrating the agricultural possibilities of the tract. As a rule, when a corporation is in the land business, once they have sold a new settler a farm, their interest in the transaction ceases. The Canadian Pacific Railway Company is in an entirely different position. When a parcel of land has been finally sold that company's interest in the transaction

does not cease. In fact, it only commences. The railway company is vastly interested in the success of every purchaser, who at once becomes a patron of the road. Under the circumstancs, the policy has been adopted within the Irrigation Block of rendering newcomers every aid possible. The Demonstration Farms' staff is always ready to assist new colonists, and on some of the farms are maintained pure-bred bulls and boars of the best breeding for the use of the settlers.

BUY LAND NOW

The pendulum of prices on most commodities swings backward and forward. Not so, however, with reference to the price of land. They are going higher every year, and because each year sees the number of people to be fed increasing, nothing can check the upward movement of land. The time to buy land is now, while it is cheap, so that advantage may be taken of the rise in values which is taking place every day, and is rapidly increasing with the settlement of the land. If you own land now that is worth $50 to $100 an acre, you can sell it and secure five acres of the most productive lands in the world here for every acre you now own elsewhere. The increase in land values here will be as marked as it has been in older settled communities. You can readily estimate what this increase will mean to you.

The following table will furnish some idea of the difference in taxes paid in Western Canada and in some of the Middle and Western States:—

That as nearly as possible an actual comparison may be made the taxes paid on a farm of 550 acres located six miles from Calgary, valued with its improvements and personal property at $44,000 is taken as a fair example of the amount of taxes paid in Western Canada, while the tax schedules furnished by various county treasurers in the States have been used in arriving at the amount of taxes that would be collected there on a piece of farm land with improvements and personal property of the same valuation, viz., $44,000.

	Value	Assessed Valuation	Taxes
Calgary	$44,000		$ 38.25
Saunders County, Nebr.			
Pottawatomie County, Iowa	44,000	11,000	319.00
Gallatin County, Mont.	44,000	11,000	232.00
Cook County, Ill.	44,000	8,800	278.96

In selecting the foregoing figures those dealing with the States have not been selected from counties with the highest or lowest tax rate but from counties that most nearly meet the average tax of all the counties in their respective States.

PRICES AND TERMS ON WHICH LANDS ARE SOLD

Realizing the traffic these lands will produce when fully settled the railway company has placed them upon the market at a price that is certain to colonize them in the shortest possible time.

The best quality of non-irrigable winter wheat and pasture land is now being sold for $15 an acre, while the irrigable land, generally attached to non-irrigable land, is selling for $25 an acre. The terms of payment, however, are so liberal that the purchaser will have made more out of his land before his final payment becomes due than the land has cost him.

For full and detailed information regarding land referred to in the preceding pages, apply to the Canadian Pacific Irrigation Colonization Company, Calgary, Alberta; and for any further facts regarding the irrigation project, apply J. S. Dennis, Superintendent of Irrigation, Canadian Pacific Railway Company, Calgary, Alberta, Canada.

CUSTOMS—FREE ENTRIES

Settlers are allowed to bring in free of duty wearing apparel, also household goods and farm machinery that has been in use for at least six months, one animal each of neat stock or horses

for each ten acres of land purchased, and one head of sheep for each acre. Stock will be passed only upon a certificate of a quarantine inspection officer.

FREIGHT RATES ON SETTLERS' EFFECTS FROM PRINCIPAL POINTS IN THE UNITED STATES TO CALGARY

PORTLAND, ORE., VIA SUMAS, B. C.

Carload lots of 24,000 lbs. $153.60
Less than carload lots ..... 1.50 per cwt.

CHICAGO, VIA N. PORTAL, SASK.

Carload lots of 24,000 lbs. ..... $ 72.00
Less than carload lots ..... 0.90 per cwt.

KANSAS CITY, VIA N. PORTAL, SASK.

Carload lots of 24,000 lbs. ..... $ 91.20
Less than carload lots ..... 1.15 per cwt.

OMAHA, VIA N. PORTAL, SASK.

Carload lots of 24,000 lbs. ..... $ 88.80
Less than carload lots ..... 0.90 per cwt.

ST. PAUL, VIA N. PORTAL, SASK.

Carload lots of 24,000 lbs. ..... $ 45.00
Less than carload lots ..... 0.67 per cwt.

DENVER, VIA ST. PAUL AND NORTH PORTAL, SASK.

Carload lots of 24,000 lbs. $189.60
Less than carload lots ..... 2.52 per cwt.

NEW YORK, VIA BUFFALO.

Carload lots of 24,000 lbs. $264.00
Less than carload lots ..... 1.72 per cwt.

BUFFALO.

Carload lots of 24,000 lbs. $156.00
Less than carload lots ..... 1.24 per cwt.

FIRST-CLASS PASSENGER RATES FROM POINTS IN UNITED STATES TO CALGARY, AND RETURN

Chicago	$41.00
Omaha	47.00
Kansas City	49.20
St. Louis	44.00
St. Paul	33.00

Twenty-one days' limit. Excursions 1st and 3rd Tuesdays, February to December 1908, inclusive.

OFFICE BUILDING OF THE COMPANY, CALGARY, ALBERTA

FOR FURTHER INFORMATION WRITE

CANADIAN PACIFIC RAILWAY

COLONIZATION DEPARTMENT

Calgary, Alberta, Canada

OR

Jonathan Johnston & Son,
Walla Walla, Wash.

POOLE BROS., CHICAGO