



READING THE "FARMER'S ADVOCATE" AT CAMP FIRE, SASKATOON.

from 10s. to 12s. per square verst (two-thirds of a mile), and at other places for 6s. per verst. From 1893 to 1901 in Western Siberia, 18,900,000 acres of State land were transformed into immigration plots. In cases of need, immigrants get a £10 loan without interest, food at cost, seed for next to nothing, and implements on easy terms.

A few words indicating the area and natural resources of this country will be of interest. Of course, away to the north lies the Arctic ocean area, south of which, stretching across the continent, is a great forest zone, 2,000 miles wide, and still further south the immense agricultural region, thousands of miles eastward from the Ural Mountains to Lake Baikal. It is through this territory that the Trans-Siberian Railway runs. It is a prairie country of deep, rich soil, which reminded Mr. Fraser of Canada and the best portions of the Western States. He regards it as the ultimate feeding ground of the world. There are great stretches of undulating timber areas, and vast tracts of wonderful natural pastures, but poorly stocked as yet. In the City of Omsk he found thirteen firms engaged in the newly-developed Siberian butter trade with England, and operated mostly by Danes. Three years ago only 3,000 buckets, each containing 36 pounds, were shipped to England, but in the summer of 1901 30,000 buckets went per week. The week of Mr. Fraser's visit, five trains loaded exclusively with butter left Omsk for Riga. The pasturage is rich, and the milk of the cows, though miserable looking things, tests 7% fat. The Russian peasant farmer, or "Moudjik," called the cream separator a "devil machine," and smashed it on its first appearance, but is now beginning to see the good of machinery. The Government is spending money freely in the hope of making Siberia a great wheat-growing country. The beet sugar industry is being fostered, ten times as much being produced in 1900 as in any previous year.

There is coal in abundance, and east of Lake Baikal is another Klondyke or South Africa in mineral wealth.

Looking at such immense natural resources and possibilities, one would naturally fear the outlook of competition—and it cannot be ignored—but there is another side to the question. The territory is sparsely settled, and only about three per cent. of the population, declares Mr. Fraser, can read or write. The Russian is one of the worst farmers on the face of the earth. For centuries a serf, he is without energy and initiative. Left to himself he stagnates, lazy and improvident, caring but for animal satisfaction, enough food for to-day, and a few seeds so that he can get drunk with vodka to-morrow. Half the population seems to be illiterate. Among the other half, the few who are educated, are everywhere either in the army or in the civil service. One day four men in a room, and a single girl, a tall, black speaking girl, were seen. To educate and energize the Russian people is a tremendous undertaking, but it is the advantage of the country's agricultural development. The Russian will produce the goods cheaply for other nations to sell. Along the railway German is the language of commerce. German and United States travellers are driving their business. Wherever Mr. Fraser saw an implement warehouse, he found American or German machinery

there, but none from Britain. The British do not appear to want trade. Baldwin locomotives from Philadelphia were running on the railways, and shiploads of American flour were unloading at Vladivostok. At Omsk a Deering agent told him that in 1888 he sold only 40 machines, but in 1901, 1,500, and in 1902 prepared to bring out 4,000. There were eight American implement manufacturers represented in that city.

Mr. Fraser warns his fellow countrymen to bestir themselves for the Russian trade, and Canada would do well to take a hint from his observations, for a mighty people are there growing in to life. If Canada, with its equal advantages and its intelligent and enterprising agricultural population, cannot more than hold her own in the British markets, it will be because of sheer commercial negligence and an illiberal transportation service.

Pink-eye Distemper.

At present "pink-eye" has made its appearance in many places of the West, and is reported to be quite prevalent on the Portage Plains. Diseases of the liver are common with the horse, and it may be interesting to some to know that he possesses no gall-bladder, but simply has a gall-duct, called the hepatic duct, which enters the intestine about six inches from the stomach, so that the gall is emptied into the bowels as fast as secreted.

Hepatitis, or inflammation of the liver, particularly in that form known to horsemen as "pink-eye distemper," rarely exists as a primary affection, but is frequently found as a sympathetic one, and thus the symptoms are more obscure than those of most diseases. By close observation, however, a degree of accuracy can be reached by which the trouble may be known.

The mouth and breath are unduly hot, while the extremities are the reverse. The membrane lining the eyelids becomes highly injected, presenting an orange-red appearance, and the pulse rises, often to more than a hundred beats per minute. Appetite is lost, respiration variable, often distressing, yet at times tranquil; frequently the animal gets up and down, looking wistfully and deplorably at his sides. There is usually much tenderness on the right side and the dung small, hard and generally dark colored. In acute stages the animal often appears bloated. It is generally helpful to blister the sides, and particularly when any trace of tenderness can be found. Injections of castile soap and water should be used occasionally until the bowels are opened. Give every four hours one of the following balls: Of Barbadoes aloes, six drams; calomel, three drams; mix with molasses and divide into twelve parts. Keep the body warm, and in severe cases bandage the legs with flannel; turn into a loose box stall, where the atmosphere is pure. When convalescent, give one of the following balls, night and morning: Sulphate

of iron, two ounces; pulverized gentian root, one and a half ounces; pulverized Jamaica ginger, one ounce; and pulverized anise seed, one ounce; mix with molasses, and divide into sixteen parts.

The Co-operative Movement.

Agriculture is a very complex industry. It is troubled by no particular affliction, but by a series of perplexities which some of the wisest heads of our time have unsuccessfully attempted to solve. To say, therefore, that co-operation will afford a solution of the problem is to claim what even the most rabid supporter of combination among farmers would hardly be prepared to admit. In the poorer districts of Ireland co-operation has in many ways proved a saviour to the industry, and put heart and life and flesh on the dry bones of a decaying industry. There we find co-operation at its very best, exercising a beneficent influence on behalf of the smaller holders of the Emerald Isle. In England, however, it must be frankly confessed that the co-operative movement has not taken such a deep root, possibly because it cannot be applied in the same way. It will prove most fruitful of good results if diverted to other channels. What we most require in England, speaking broadly, is combination among farmers themselves; co-operation to buy their necessities cheaper—such, for instance, as manures and feeding stuffs; co-operation to represent their views in an effective form, and combination to make their influence felt in the way of gaining advantage for their industry. Generally speaking, these are the lines upon which co-operation can be most successfully applied to English agriculture. We are not in the same position as either Denmark or Ireland. The co-operative creamery in England would be starved out of existence, for the simple reason that milk-selling to our large towns is a more rent-paying feature of modern agriculture than butter or cheese making; and, further, in summer only in a few districts could the surplus milk keep a creamery in active operation; during the winter months it would be lying idle. From England practically no agricultural product is exported. Its markets are at the farmers' door, and where the individual can excel in the marketing of his produce, he finds it pays him very much better than working through any co-operative agency. This has been proved by experience of the past. The industries which are, relatively speaking, the most powerful are those which are best organized, but it must be distinctly understood that the form of co-operation adopted in one country may be of practically no service in another. Local conditions must decide the issue, and it is eminently desirable that full advantage should be taken of the effort now being made to determine how far co-operation may be applied to local agricultural conditions with a reasonable certainty of success.

At a largely attended meeting on the foregoing subject at Reading, Eng., it was unanimously resolved after a very thorough discussion: "That, in the opinion of this conference, it is desirable in the interests of agriculture to encourage the study and adoption throughout Great Britain of those principles of agricultural co-operation which have been for many years so successfully established in foreign countries, and more recently in Ireland and several parts of England and Wales."

—[Farmer and Stockbreeder.



THE "FARMER'S ADVOCATE" TENT AT BARR COLONY, SASKATOON. Manager Capt. W. Wilson Irwin, seated; Jas. Kerwin on right; Jno. McBean in rear; R. Vickery and Jas. Cahy on left.