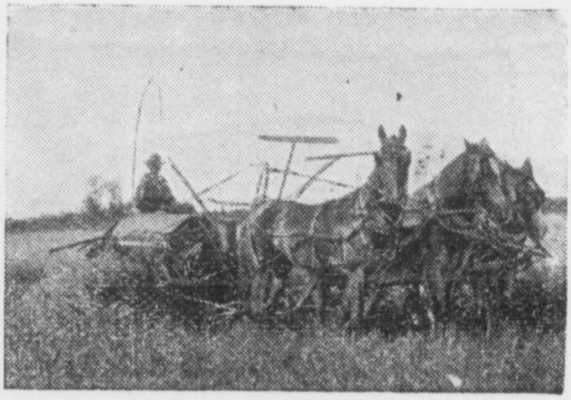
The Farm Implement Industry



BY

WATSON GRIFFIN

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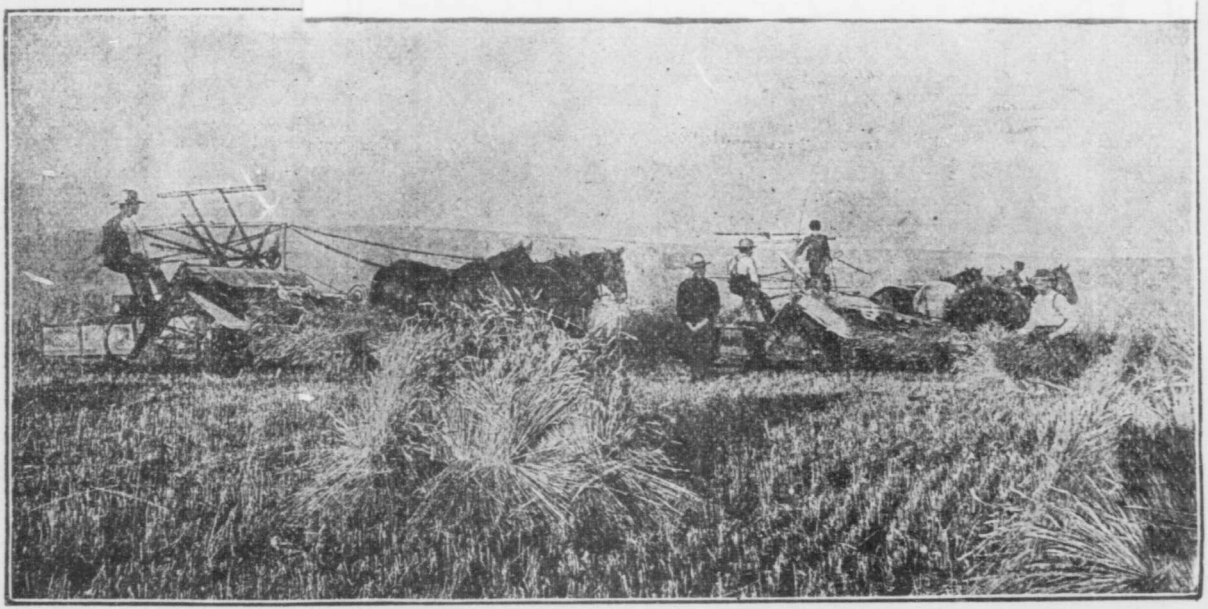

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A FARMER'S DAUGHTER'S KODAK

THE manufacture of farm implements is an industry whose growth has a far-reaching effect upon other Canadian industries, influencing the whole national life. About six times as many farm implements were imported into Canada from the United States in 1902 as were imported in 1896, the low tariff being to blame for the increase. Prices of farm implements are very much higher in free trade England than in Canada. In the United States, the most highly protected of all countries, agricultural implements are cheaper than anywhere else in the world. The reduction of the Canadian tariff on farm implements a few years ago did not cause any reduction in the price. The raising of the tariff now would cause no increase in price, but it would bring about the establishment of many new factories in Canada and the enlargement of many old ones.

A FARMER'S daughter received two birthday presents. One coming from an uncle in Toronto was a kodak, the other from an uncle in Montreal was a book containing a series of pictures of Canadian sports entitled "Canadians at Play."

The farm had recently been equipped with a number of new agricultural implements, and the first photograph taken was one of her father ploughing a field. This was such a success that she took photographs during the following summer and autumn of all the operations on the farm in which agricultural implements were used. These photographs she mounted in a book to which she gave the title " Canadians At Work," and making several copies, sent one to each of her uncles. She visited her Toronto relations during the next winter and they all expressed great admiration for her skill in photography, but one of her cousins, a young man attending Toronto University, said : " You should call it 'Canadian Farmers At Work.' Anyone looking at your book would suppose that Canadians do nothing but farm. I suppose farming is the best of all occupations, but

there are others, and a nation that does only one thing does not count for much. You should change the title of your book or enlarge it to take in pictures of Canadians engaged in all kinds of work."

"It would make a pretty big book," said his brother. "We Canadians are a busy people, and it would require a book of many volumes to depict all our industries."

"If you would follow the agricultural implements back to their starting point," said the young photographer's uncle, "you would be able to give sufficiently varied views of Canadian life."

"Their starting point! I suppose you mean n the factory," said the girl.

IMPORTANCE OF RAW MATERIALS

"I would go farther back than that," said her uncle. "I recently went through very extensive agricultural implement works in Toronto. The varied work done in the factory and the great number of men employed was a surprise to me, I finished going through the various departments of the works just at six o'clock, and when coming away saw quite an army of men pouring out of the vast buildings. A fine, intelligent-looking, sturdy lot of men they were, mostly sons of Canadian farmers probably. After

seeing them at their work and on the way home, I said to myself, 'Any policy that would drive these men out of the country would be a calamity for Canada.' But what impressed me most of all was the immense store of materials to be seen at the works, including lumber, pig iron, malleable iron, steel, malleable chain, cotton duck, paints, oils, varnish, benzine, coke, coal, fuel oil and other things, all of which were used in making agricultural implements. I came to the conclusion that great as was the number of employees in the factory engaged in mak ing agricultural implements, a still greater number of men must be employed in producing the materials they used, and I realized for the first time that the growth of an industry of this kind has a far-reaching effect upon other industries of the country, influencing the whole national life. So when I said that if you would follow the agricultural implements back to their starting point you would be able to give sufficiently varied views of Canadian life, I meant that you should take pictures of all the men engaged in getting out the raw materials used in agricultural implement works.

TO PHOTOGRAPH LUMBERMEN

"As many millions of feet of lumber are used by Canadian agricultural implement

works your first visit should be to a lumber camp, and you would need to visit more than one, for a great variety of woods are used and they are not all obtained in one place. In one binder that I examined there were eight different kinds of wood, soft maple, hard maple, basswood, soft elm, rock elm, white ash, hickory and oak. The kind of wood suitable for one part of a machine may not be suitable for another part. I saw sixteen different varieties of wood in the great lumber yard at the works. So you would have to visit several lumber camps and take pictures of the men cutting down the trees, hauling them to the streams, making them into rafts and floating them down the river to the saw mills. Then there would be pictures of men at work in the saw mills, men loading the lumber on railway cars and unloading the cars again at the factory, with many railway scenes between, showing the trainmen at their work."

"All these scenes would certainly give varied views of Canadian life and make a much bigger volume of pictures than my photos of farm life," said the girl.

"Yes," said her uncle. "But lumber is only one of the raw materials. Enormous quantities of iron and steel are used by the agricultural implement works. Why the

works I visited alone use thousands of tons of pig iron every year, and there are many other agricultural implement works in the country. Great quantities of malleable iron and steel are also used."

A VISIT TO AN IRON MINE

"The raw materials used in making pig iron are iron ore, coke or charcoal and limestone. You must first go to the iron mine and photograph the men at work taking out the ore, loading the ore on the cars and transferring it to vessels. You might then board one of the ore boats and go with it to the great docks where the ore is unloaded by huge buckets that descend into the hold of the vessel, open like mouths, grab the ore, closing again when full, and then, being elevated, discharge their contents into cars which stand on tracks on the pier, waiting to carry the ore to blast furnaces. You could get quite a series of interesting pictures of men at work unloading iron ore. A visit to the limestone quarries would give you another set of pictures of Canadians at work, and you would have to follow the limestone to the blast furnaces just as you did the iron ore.

COAL MINES PHOTOGRAPHED

"Then would come a visit to the coal mines and photographs of all the coal

mining operations. You would require a whole volume to depict them. The coal having been mined, would have to be washed to rid it of pyrites and slate, which might make trouble in the blast furnace. You would need to wear an old dress while taking pictures of the coal washing plant and the men working at it, for a pretty dress like that you have on would be completely spoiled by black water dripping on it. Next you would photograph the operation of charging the washed coal into the coke ovens, and then after an absence of 36 hours you might return and picture men pushing the red hot coke out of the oven by aid of a discharging machine, and afterward cooling it by water from hose before loading it into the railway cars which carry it to the blast furnace. Charcoal is sometimes used as a fuel in a blast furnace instead of coke, so you must also take pictures of all the operations of charcoal manufacture.

AT THE BLAST FURNACE

"Having got the iron ore, limestone and coke or charcoal together at the furnace you must photograph the scale cars in which these materials are weighed, the skip cars that elevate them to the top of the furnace and the men in charge. You could not photograph the chemical processes which go on in a blast furnace, but when the materials have

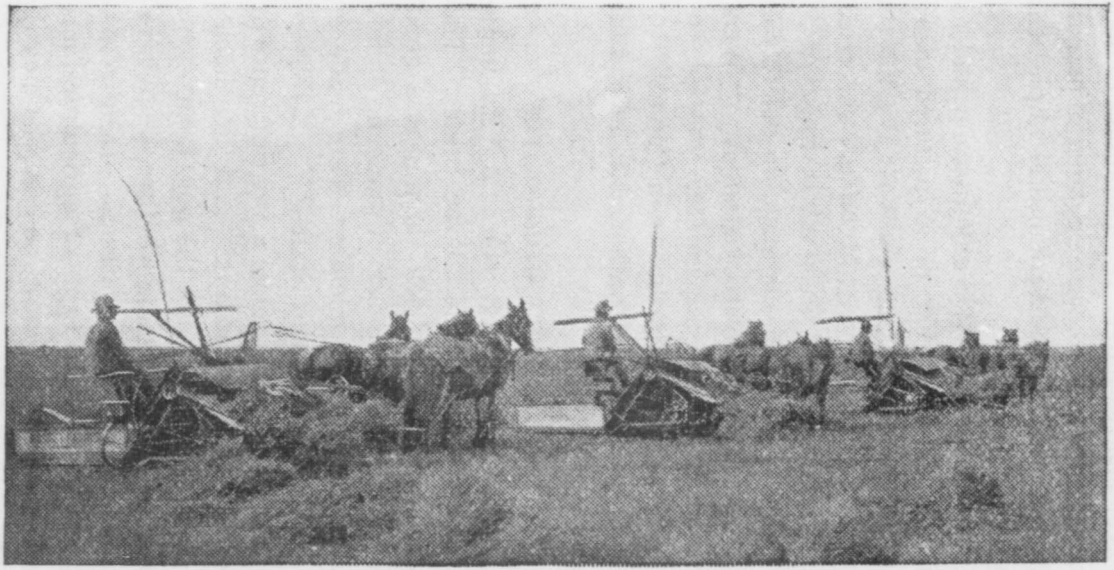
all been melted by the blasts of hot air blown through them, the limestone uniting with most of the impurities of the iron ore to form a slag while the carbon of the coke or charcoal unites with the iron to form pig iron, you might get some very good pictures, as the men in charge of the blast furnace first tap off the slag and then let the liquid pig iron run out into troughs made in sand or into huge ladles in which it is carried to a casting machine or to the steel furnace. You could also have pictures of the men making troughs in the sand and those in charge of the huge blowing engines and the boiler house. The pig iron having been cooled in the sand or by running through water in the pig casting machine, is loaded on cars which carry it to the piers, where it is transferred to vessels. Some of the pig iron is taken direct to the agricultural implement works, to be moulded there in the foundry into various shapes required for the implements Some of it is converted into malleable iron by a series of interesting processes employing many skilled workmen, all of whom you might photograph.

MAKING STEEL

"You would of course have to follow the ladles that carry liquid pig iron to the steel furnaces and get pictures of the many skilled men engaged in converting it into steel

ingots. Then you would follow the ingots to the rolling mill and see them rolled by skilled workmen into billets and blooms. These would be shipped by rail and water to other mills, where they would be converted into steel bars, nails, nuts, rivets, screws and other things required in making an agricultural implement. If you could get photographs of all the skilled workmen employed in the multifarious processes of converting iron and steel into the materials used at the agricultural implement works you would indeed have a big volume of pictures of 'Canadians At Work.'"

"Then you would have to see the paint factories. Hundreds of thousands of pounds of paint and an amazing quantity of oil, varnish and benzine are used in the establishment I visited. You might also follow the raw materials used in the paint factory to their origin and get many pictures of Canadians at work. The petroleum districts of Ontario would have to be visited, for great quantities of fuel oil are used, and it might be worth while to take a trip to Hudson Bay in order to photograph a whaling vessel with its crew, for whale oil and seal oil are extensively used in tempering steel. I noticed large quantities of cotton duck in one of the store rooms, and was told that it came from Yarmouth, N.S. In fact you would have to



travel nearly all over the Dominion to photograph the men who are engaged in preparing materials for the agricultural implement works of Canada."

The girl had a vivid imagination, and as her uncle talked, her mind pictured many varied groups of "Canadians At Work."

"I wish I could start at once," she cried at last. "It would be so interesting."

"Let me ask you one question before you start," said the University student. "Were those agricultural implements you photographed on your farm made in Canada?"

The girl's bright, enthusiastic face suddenly saddened.

MADE IN THE UNITED STATES

"Oh, I am so sorry," she said. "I know they were made in the United States. The agent who came to sell them was a good talker and father thought it made no difference whether the implements were made in Canada or the United States."

"You see it does make a big difference to Canada and Canadians," said her uncle. "But your father is not the only farmer who thinks it is all the same whether he buys in Canada or the United States. During the fiscal year 1902 the value of agricultural implements imported into Canada, was nearly three million dollars."

"Why do Canadian farmers buy United

States implements?" asked the student. "Is it because they are better than those made in Canada?"

"That cannot be the reason," said his father, "for it is a well-known fact that in England, Australia and many foreign countries where implements from Canada and the United States compete on equal terms Canadian implements are given the preference. In Australia, for instance, farmers willingly pay more for Canadian implements because they think they are better."

"Are many Canadian implements exported?" asked the student.

"Yes," said his father. "I have some figures which I copied out of the Trade and Navigation reports published by the Dominion Government, showing the value of agricultural implements imported into Canada and the value of Canadian implements exported during the last seven years."

He took a paper out of his pocket book and read the following figures:

Year	Imports	Exports
1896.....	445,070	595,277
1897.....	575,409	762,262
1898.....	905,140	1,444,463
1899.....	1,639,888	1,867,223
1900.....	1,826,944	1,693,581
1901.....	1,896,760	1,749,565
1902.....	2,655,468	1,820,800
Total.....	$9,944,674	$9,993,171

"What countries are they sent to?" asked the girl.

"Australia, New Zealand, Argentina, Great Britain, Germany, Russia, Switzerland, Denmark, Norway, Italy, Holland, Belgium, Roumania, Austria, Asia Minor, Cape Colony, Orange River Colony and Natal. A few are even sent to Palestine, but as you can imagine the demand is not very large for them in that country."

"I suppose a great many are sent to the United States, as we buy so many from them," she remarked.

"On the contrary, our agricultural implements are completely shut out of the United States by their high tariff," said her uncle.

WOULD SHUT THEM OUT

"If I were making the Canadian tariff I would raise it high enough to shut their's out of Canada," said the girl.

"So would I," said the student. "Why it is evident that if all those imported implements were made in Canada the beneficial influence would be felt in every branch of trade. Every factory in Canada would have to increase its output and all those millions of money now sent to the United States would be put into circulation in Canada, turning over and over again as the workmen employed in the factories and those engaged

getting out the raw materials paid out their wages to grocers, butchers, drygoods dealers, hardware stores, tailors, milliners, furniture dealers, booksellers, tinsmiths, plumbers, carpenters, masons, ministers, teachers, doctors, druggists, lawyers and many others I cannot think of. The consuming population would be greatly increased and Canadian farmers would have to supply all these people with food."

HOW IT WOULD AFFECT PRICES

"But would not the price of agricultural implements rise as a result of the tariff being increased?" said his brother. "I believe the Canadian tariff on agricultural implements was reduced a few years ago. I suppose that is why about six times as many agricultural implements were imported into Canada from the United States in 1902 as were imported in 1896, but what has been the effect on prices?"

"The prices are no lower than they were before the tariff was cut down," said his father.

"Did not the Fielding tariff reduce the duties on some of the raw materials used by the agricultural implement manufacturers?"

"Yes, and those materials are generally dearer now than they were when the tariff was reduced, but the effect of the lower tarift

is to encourage the manufacturers to use foreign materials instead of materials produced in Canada."

PRICES HIGHER IN ENGLAND

"You spoke of so many Canadian implements being exported to England and other countries," said the girl. "How do the prices of agricultural implements in England compare with the prices in Canada and the United States?"

"I am glad you asked that question," said her uncle. "As you know the United Kingdom is a free trade country. There are no duties on agricultural implements or on any of the materials used in making agricultural implements, yet the prices of agricultural implements in free trade Britain are actually from 15 to 25 per cent. higher than in Canada, which has a low protective tariff, while in the United States, which gives very high protection to agricultural implements and all the materials used in making them, the prices of agricultural implements rule lower than in any other country in the world. That is an undeniable fact and it is something that the Canadian farmer should think about. It is positive proof that high protection does not necessarily increase prices as advocates of free trade or a low tariff pretend."