

The World's Greatest Farm.



RUSSIAN PLOW FOR HEAVY WORK.



AMERICAN REAPERS RUN BY COSSACKS.

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MOSCOW, July 21.—(Special Correspondence of The Bee.)—My scouting expedition this week has been along the tracks of the invasion of American agricultural machinery. Our army of farm tool exporters is slowly but surely making its way into Russia. One firm is shipping as much as \$1,000,000 worth a year, and a score more are doing a good business. The imports so far are confined to a few specialties, but new tools come in every year, and our commercial invasion of Russia is to be largely in machinery. We already have the lead in reapers, mowers and harvesters, but we are far behind in everything else.

As it is now, the Germans have the bulk of the business. They have sent their drummers here and made them learn the language. They have good agents in all the principal towns and subagents in the surrounding country, so that they are working Russia just as the American wholesale dealer works his territory at home.

Their systematic organization tells, and their trade in this branch alone is at least five times as much as ours. They supply 50 per cent of all the plows, drills, seeders, and horse-power threshing machines, and a large part of the American imports goes through their hands. The value of their business is already considerably over \$100,000,000 a year, and it will increase right along.

Next to the Germans come the English, who are shipping about \$65,000,000 worth of farming tools and other machines into this country, and next the Americans, who furnish a possible \$20,000,000 worth.

All this, however, is as nothing in comparison with the possibilities of the future. This Russian empire is the biggest farm upon earth. It includes one-sixth of all the land upon the globe, and there are millions of acres which have not been touched by the plow. Here in European Russia there are more than eighty million farmers actively engaged in tilling the soil, and that with tools almost as rude as those used in the days of the scriptures. I wish I could show you some of them. The Russian plow is little more than a wooden stick. The sokha, used chiefly in the Black Earth Zone, has two iron shares, but no point, and in other places heavy two-wheeled wooden plows are used. In western Russia, Poland and about Odessa there are many iron plows, but nowhere do I see our American implements. There should be an enormous market for cultivators and sulky plows of our make, but so far the Germans have captured the business.

Other tools are even worse. Many of the harrows have wooden teeth, and the old spiked tooth iron harrow is rare. Most of the grain is sowed broadcast by hand, and it is only along the Volga and in the far south that you will find American drills.

There should be a big sale of American threshers. Russia is one of the great grain producers of the world. In Europe alone it has a yearly crop of about two billion bushels—chiefly rye, oats, wheat and corn. The biggest item is rye, which forms the bread of the people. The average yield of this is 737,000,000 bushels, and a large part of it is exported to Germany to make rye bread for the soldiers. In wheat Russia ranks next to us in the markets of Europe. It produces 330,000,000 or 400,000,000 bushels annually. The oats crop equals alone 600,000,000 bushels, and the barley yields more than 200,000,000 bushels.

This mighty grain crop has to be threshed, and at present a large part of it is hulled out by hand or feet.

There are millions of bushels threshed out by flails, other millions are trodden out with horses and cattle, and a vast quantity is threshed by driving carts over the grain as it comes from the field.

On the larger estates the horse or steam thresher is coming in, but as a rule, it is from Germany or England. The roads here are very rough, and the farmers are afraid



ON A RUSSIAN SUNFLOWER FARM.

of the American thresher on account of its light weight. The Germans sell more than the English, and they are doing a considerable business in Poland, in southern Russia and along the Volga.

A year or so ago an American from North Dakota brought in some horse-power American threshers and sold them. They have been giving satisfaction, and they may form the opening wedge for this kind of our machinery.

What is needed is an army of American drummers with a practical knowledge of agriculture and agricultural machinery and at the same time the ability to speak German and Russian. Such men could be found in the northwest, and they could make enormous sales for our great factories.

These drummers should travel over the country from village to village and from fair to fair. There are many fairs and markets held at regular intervals all over Russia. The men should have samples of their machines and a supply in stock at the port. The Russian wants to see what he buys, but he is willing to pay a good price and he wants the best. In a future letter I will write of the Nijni Novgorod fair, the biggest fair of the world, which would make a good headquarters for such work.

Our drummers will find this market a curious one. They will need to stay here for months before they understand their possible customers. In America you sell to the individual farmer. Here a vast business is done with the government, and the towns and villages, in addition to that with private persons.

Russia is a country of villages. The people do not live in houses scattered over the farms. They are collected together in little hamlets, usually composed of log cabins, containing from a few hundred to a thou-

sand people. They have their stables and cattle in the villages and drive the latter out to the fields. They go out to work in gangs every morning and walk back every night.

Much of the land is owned by the villages as such, and not by the individuals living in them. The head men of each town divide up the land from year to year, giving so much to each family, and the crops are divided at the end of the season.

The village council fixes the time of sowing the crops and of gathering them, and it may buy machinery to aid in the work. Thus a little town may have a half dozen threshers, mowers and reapers, and a good American drummer may get a big order at one clip. He may introduce plows, rakes and other small tools, at the same time working each little community as a lobbyist does a legislature.

Indeed, the drummer will have to understand the system of Russian land ownership in order to do his work well. He will find that about one-third of all the land here belongs to the state and imperial family. The czar owns more than 400,000,000 acres in Europe alone. Much of this land is under cultivation, and his agents buy farming machinery in enormous quantities. Many of them are susceptible to persuasion, and a judicious present at the right time will help a sale.

A second third of European Russia belongs to the peasants. It came to them when the czar freed the serfs. This was at about the same time as our abolition movement. We freed 3,000,000 negroes, at a cost of hundreds of thousands of lives and a big national debt. Russia freed 50,000,000 without losing one life, and it gave every man, woman and child, on the average, about seven acres of land. It did not give the land to the individuals, however, but to the villages, and these villages ap-

portion them out from time to time among the families.

This land was taken from the nobles, but they were paid for it. The serfs had been working the lands and had the villages upon them. The peasants were given the villages and enough land about them to average thirty-three acres to the family, so that a village of a 100 families got 3,300 acres of land in common. This land is still so held, and the village as a whole is responsible for the taxes. It is bound to pay so much for the land, the payments running over forty-nine years. Some villages have purchased their lands outright. Others are still paying for it. Altogether, from such payments and from the lands granted the crown peasants the government now gets about \$40,000,000 a year.

Of the private lands of Russia about three-fourths is owned by the nobles. Some of them have tens of thousands of acres, the average size of the estates in the north being from 15,000 to 20,000 acres, and in the south much smaller.

There are also many peasants and quite a large number of merchants who have their own farms. The nobles and the peasants are better customers than the merchants. Many of the former give large orders for agricultural machinery and some of the latter farm intensely. The merchants buy land as a speculation and work it to death. They cut off the wood, and crop and recrop until the land gives out, and then sell it again. All over Russia, however, there is little good farming. The common plow only scratches the earth and the yield per acre is small. The average product of rye is only eleven bushels, wheat from ten to thirteen bushels, barley about twelve bushels, and oats seventeen bushels per acre. Much of the soil is as worn out as the old tobacco and cotton lands of the south, and it will take careful cultivation to make it valuable.

There is little chance here for the introduction of American flour. The freight rates are too heavy and of late years the Russians have been putting up modern mills of their own. The first roller patent process mill was introduced along late in the sixties, and since that time many have grown up near the railroads and rivers. It is estimated that there are now 20,000 mills in Russia, which are grinding 31,000,000,000 pound of flour every year. Estimating a pound of flour to a loaf of bread and that one loaf will feed a man one day this would be enough to feed the whole world for about three weeks. Forty per cent of this flour, comes from along the Volga and the remainder from central and southern Russia. It is an excellent article, well ground and well graded, a large quantity of it being exported.

I am surprised at the work done here by women. There are more of them in the fields than men, and a not uncommon sight is a crowd of women hoeing and digging, bossed by a man who leans on his staff and keeps them up to their work. Much of the ground is spaded by women. The grain is cut by them with sickles and scythes and the harvest scenes embrace more girls than boys.

The women dress in bright red calico gowns with white waists or chemises. Some have aprons beautifully embroidered. They have a sort of turban about their heads in place of a hat and the ordinary shoe is made of straw and the stocking is a rag tied on with strings.

The hours of labor are longer here than with us. I have ridden through the black earth zone on the cars in the early morning and have seen the people starting out to work at 4 o'clock. They labor from then until 7 or 8 in the evening and are satisfied with 20 or 25 cents a day. I am told that you can get girls at 10 cents a day in some parts of Russia, and that they board themselves. The men are paid a bit more, but wages everywhere are much lower than with us.

I wish I could take you into one of these

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