

WITH THE JAPANESE WHO PAY THE WAR BILLS

A VAST Country of Garden Patches—Plowing With Mattocks—A Look at the Villages—What a Farm-hand Gets—How the Government Is Educating the Farmers—The Japanese Horses—The New Agricultural Societies—Two Hundred Experimental Stations and Three Hundred Farm Lecturers.

(Copyright, 1909, by Frank G. Carpenter.)
Special Correspondence of The Star.

OSAKA, Japan.

URING the past two months I have been traveling through the farming districts of Japan. They should be an object lesson to the United States. The country is kept like a garden, and it is as fat as the valley of the Nile. A great part of it, however, is covered with forests, much of it is mountainous, and, all told, the cultivated parts are half as big as the state of Ohio. Nevertheless, this small area is now feeding more than 50,000,000 people, or more than one-half as many as we have in the United States. It produces every year 100,000,000 bushels of rice, barley and wheat; 250,000,000 bushels of rice, and nearly 100,000,000 pounds of tobacco. It grows 50,000,000 pounds of tea, 10,000,000 bushels of silk cocoons, as well as buckwheat, millet, beans, indigo, cotton and hemp. The rice crop alone is worth \$200,000,000 per annum.

I can give you no idea of the intensive cultivation which is going on here. The whole country is divided up into patches, ranging in size from that of a bed quilt to tracts of an acre or so, and every bit of it is as clean of weeds as a government flower bed. There are no fences, and one looks over a crazy quilt, made up of patches of many colored crops, bound together with the green grass which forms the boundaries of the fields. The Japanese farms are, on the average, not more than two acres in size, and only 15 per cent of all the holdings are of more than four acres.

The ownership is widely scattered. There are, altogether, about eight million families engaged in agriculture, and many of these have their whole living from two acres of ground. Others have small tracts of their own and rent more. As it is today, only about one-half of the land is worked by the owners. The rest is farmed by tenants who pay a proportion of the crops or high money rents. But come with me and take a look at the farming country. It is nothing like that of America. There are no barns, no hay stacks. There are no big fields and no cattle nor horses. The ordinary Japanese farmer would look upon a Pennsylvania bank barn as a temple, and worship in it if he saw it. He would look upon our sheep as so many wild animals, and a Percheron horse or a Shorthorn cow would be as much out of place on his little tract as the traditional bull in the china shop. This is so, notwithstanding there are something like two million cat-

tle and horses in Japan. Most of them, however, are used for freighting or as draft animals to carry goods over the country. They are always kept up and one never sees them roaming about or feeding alone in the fields. The cart is the chief farm vehicle and it is more often hauled by men or bullocks than by horses.

On the other hand, the American farmer would be lost if he came to Japan. If he brought along a reaping machine, his horses would tramp down his machine, his crops while turning it around in his fields; and, as for a thrasher, the people would mob him for taking away the work from the laboring classes. He could not use his plows without he bought up a whole county, and his fences would be useless to say the least. He would be surprised at every step at the methods of good cultivation. He would see wheat, oats and barley planted in series and transplanted again in rows a hand's breadth apart. He would see these crops weeded as we weed onions, and would eventually see them reaped with sickles close to the ground. After cutting the

through the mud as they set out the plants. I know of no crop which takes so much work as rice, and this is the money crop of Japan. It ranks here as wheat does with us, and Japan is rich or poor according as the rice crop does well or ill. In times past the royal taxes were paid in rice, and today the financiers watch the growth of this crop as our people do corn, cotton and wheat.

The greater part of the rice crop is raised by irrigation. The fields are made at different levels, and the water from the hills is run by canals from one to the other. The ground is prepared during the winter. It is covered with manure and made as level as the floor. Along about the 1st of April it is broken up with a hoe or spade and then flooded. In the meantime the rice plants have been grown from the seeds in nurseries. They are taken up and scattered over the water as needed. Then the men, women and children of the family tie up their clothes and wade out in the mud. They

The harvesting of the rice is even more difficult than harvesting wheat. After the grain is cut, it has to be pulled from the straw and be husked before it can be used. If you will take a sheaf of ripe oats, and then pull them over a cross-cut saw, fastened to a piece of wood about the height of a table, so that all the grains are torn off, you will have a fair idea of how the Japanese get their rice from the straw. The grains are still in the husks, and the husks have to be taken off before it can be used. This is mostly done by hand, the grains in the shell being put in a mortar and pounded with a wooden pestle until the kernels are free. Some of the farmers have rice mills, worked by water, and others hulling machines, worked by hand. Much of the rice is winnowed by machinery, such as hand mills being used.

A good rice field ought to produce forty bushels to the acre, and some of the best lands here produce more. Japan has altogether almost 200 different kinds of rice, and it raises some of the best rice of the world. Its finest rice is so valuable that much of it is exported to other countries, the nation importing poorer kinds at lower prices for its own food.

The Japanese farmers seldom live on their farms. They have little villages of wooden houses, thatched with straw. Here they come at night and from here they go out in the morning to work. The people generally work in gangs. You seldom see a man alone in the fields. A whole family, father, mother, boys and girls, all work together. There are many hired hands, and the wages paid are exceedingly small. It is a poor part of the United States where a farmhand is not worth 50 cents a day and his board, where he gets less than \$15 a month, if employed the year round. The wages here without board are 16 cents per day for men and 10 cents for women, with much less for children. The work goes on from sunrise to sunset, and it is fully as hard as any on our farms at home. Hands employed by the year receive proportionately less. Including board men are paid about \$28 a year, or less than \$5 a month; the women get about \$20, or a little more than \$4 a month.

In a government report of 1906 I see that male farm laborers were getting less than \$20 a year, and females less than \$10. There is a steady rise going on in wages of all kinds, and these cannot remain as they are. In some cases, farm laborers hire out to work only on alternate days, devoting themselves to their own little tracts of land during the rest of the week. Boys are often bound out to farmers for terms of from five to seven years, their pay being little more during the time than their board and clothes. Of late, I understand, there has been a considerable movement of the farming classes to the cities, and just now there are many who are emigrating to Korea and Manchuria. Indeed, the farmers of Japan are rapidly changing. There are public schools everywhere and the boys and girls of the country communities attend them. Nearly every man can read and write, and most of the landholders know what is going on as to scientific cultivation. The government is doing a great deal along the lines of agricultural education. It has big agricultural colleges at Tokio and Sapporo, and there are thirty-six smaller colleges which are teaching theoretical and practical farming in the towns and prefectures. There are special colleges in Kyoto devoted to the art of silk culture, and instruction is also given in tea raising and in the other specialties of Japan. The government has three hundred and ten traveling lecturers, who go from town to town and from district to district preaching advance agriculture to the farmers and instructing them in every detail, fertilizers and various crops. Some of these men are present at every agricultural show, and attend also to the mental farming carried on at the public expense.

Japan has now more than two hundred

experimental stations, and there are other experimental stations established by the farmers themselves. The first of these stations were organized by men from our Agricultural Department, and there have been many American professors in the colleges. Among the experimental stations is one for the study of the tea plant and of all modes of curing the leaves and preparing them for the market. There is also an imperial silk farm and imperial cattle raising and breeding establishments.

Within the past few years Japan has done a great deal to improve its live stock. It had practically none of much value at the time that Commodore Perry came here. It has now a million cattle and a million horses, and one can buy a good one at all of the ports. When I first came to Japan it was impossible to get anything else but tinned butter. There are now numerous dairies, and fresh butter, unsalted, is sold in most of the cities. The masses of the people use neither butter nor meat. They live upon fish, rice and vegetables, which they eat with a sauce called soy.

The farms of the soldiers who went from the most of Manchuria to fight the Russo-Japanese war, their first acquaintance with beef in the consumption of canned meats from America, and it is probable from this that a demand for meat may spring up.

As to cattle, the government has now an imperial breeding farm which is supplied with animals purchased by experts who were sent abroad for the purpose. The favorite cattle are Ayrshires and Simmenthals, a number of each being kept.

The Japanese are doing all they can to improve their horses. The emperor has a number of studs and horse farms, and his men are importing animals for their improvement every year. He has Arabian, trotters, thoroughbreds and hackneys, altogether numbering about five hundred stallions. There is now a horse administration bureau, which is under the control of the cabinet, with an ex-minister of state as its chief. The business of this bureau is to improve the native stock, with the special object of furnishing better animals for the army.

The Japanese are doing all they can to improve their horses. The emperor has a number of studs and horse farms, and his men are importing animals for their improvement every year. He has Arabian, trotters, thoroughbreds and hackneys, altogether numbering about five hundred stallions. There is now a horse administration bureau, which is under the control of the cabinet, with an ex-minister of state as its chief. The business of this bureau is to improve the native stock, with the special object of furnishing better animals for the army.

As to imported horses, a number were brought here from America in 1872, and after the war with China systematic introduction of foreign stallions began. At present there are 1,274 such animals in the various government depots and studs. I am surprised at the interest that the farmers are taking in improved agriculture. They have something like sixteen hundred different societies, and new methods are being discussed in every town, village and farming district. They are alive to the use of artificial fertilizers, and of late have been importing a vast quantity of sulphate of ammonia. They understand the use of manures better than we do, and by applying them directly to the plants are able to get better results. Every bit of stable manure is saved, and notwithstanding the comparatively small number of animals that now exist in a year is valued at almost twenty-five million dollars. Another fertilizer which is largely purchased is fish guano. This is made by boiling down herring for their oil, the refuse being sold to the farmers. Such manure brings in millions of dollars a year, and just now a great deal is coming from Saghalien, the lower part of which island Japan got from Russia. The herring fisheries there are valuable, yielding an oil cake which is shipped to Japan.

One of the most important fertilizers of



COUNTRY SCENE IN WESTERN JAPAN.

The Japanese farmer is a night soil, which is used to the amount of \$2,000,000 annually. This is saved in city, village and country, and it has a regular market value. You can smell the wazons carry it with them at certain hours every night in any Japanese city, and at these hours it is best to remain in one's hotel. Such manure is fermented in wells covered with straw awnings to keep out the rain. It is dipped out in buckets and sprinkled directly upon the plants. For this reason the average foreigner who understands anything about Japanese gardening will not eat salads nor any new vegetables unless cooked.

This country has a live up-to-date department of agriculture. It is associated with the ministry of commerce, and it deals with almost everything that comes out of the soil. It has branches devoted to insect diseases, to fertilizers and to stock raising. The nation is doing all it can to make two blades of grass grow where one has grown before; and it is trying to open up new areas to cultivation. Japan has been farmed for more than 2,000 years, and it is difficult to find much good uncultivated land. Every available foot seems to be used, but by changing the hills, and more particularly by consolidating the holdings of owners who have small tracts in the same district, much has been done. As it is now, the fields are of all shapes. Here one spreads out like a fan, there one is square and further on is a triangular patch. The country is made up of patches of all shapes and sizes, but none contains more than an acre or so. The government has persuaded the farmers of certain localities by means of the exemption of taxation on their lands for certain time to unite or exchange their holdings so that they may make rectangular fields and thus do away with many of the boundaries and paths. This has not only increased the area, but has brought about better farming and bigger crops. Some land has been redeemed in the Hokkaido, or as we call it, Yezo; and there is something like 700,000 acres of new land there.

Lands are being opened up in Formosa, and an attempt is being made to fill up the waste lands of Korea.

At present the farming country is overstocked with people, and most of the farmers have some sort of house industry which they carry on while not engaged in cultivating the soil. In this way the winters are not wasted as in our country, and the nation materially adds to its manufactured products. This phase of agriculture is encouraged by the government. Here are some of the occupations that the farmers follow during the idle seasons. They make starch, macaroni, jam and dried fruits. They manufacture straw braid, mat facings and the mats used for rearing silk worms. They make baskets of all kinds, bags for charcoal, straw ropes, straw rain coats and straw hats. In many of their houses weaving goes on and in some they manufacture silk and paper. Some of them burn charcoal, others make lime, and others refine camphor. One feature of the government help is a part of the Japanese banking system. There is one big bank, the Hypothec, with a capital of \$2,000,000, which loans out money to farm districts and to farmers' associations and even to individuals upon real estate security. It gives long time loans, payable by installments and at a low rate of interest, and it also issues savings bonds, in denominations as low as \$2.50, for the encouragement of thrift. And then there is the Industrial Bank of Japan, with a business of somewhat the same nature, which has a capital of about \$8,000,000 and a number of agricultural and industrial banks, each of which has a capital of \$100,000 or more, which work in combination with the Hypothec Bank in loaning to farmers and to the cities, towns and villages upon long time and at low interest. All of these banks pay good dividends and are adding to their surpluses.

FRANK G. CARPENTER.

THE EVENING STAR'S WEEKLY SONG HIT

“COULD I.”

Dedicated to ROBERT KILEY.

Sung by Julius Steger in his most successful Vaudeville Sketch
“THE FIFTH COMMANDMENT.”

Words by EARL JONES. Composed by LESTER W. KEIFFER.

Andante.

1. Could I but read your heart, my own..... And know the secrets written there..... I'd
2. Could I just be a lone with you..... Up on some love-enchant-ed isle..... My

hope to see my name a lone..... dear, With in its shrine so pure and fair..... But
stars would be your eyes of blue..... dear, My sun the glo-ry of your smile..... And

if I found a thought of love, dear, That your dear heart had saved for me..... My
there wed wan-der hand in hand, Where ros-es bloom and flow-ers grow..... We'd

soul would fly with those a-bove, dear, Through all e-ter-ni-ty..... Could
stroll up-on the gold-en sand, dear, And hap-py be I know..... Could

love would for-sake you nev-er; Could I..... could I.....

CHORUS. *Allegro.*

I..... from the light of your eyes, dear, Know..... that your love was

mine..... True as the sum-mer skies, dear, My

heart would beat for thine..... Could I be with you dear, for-

ev-er, While the hours go by..... My

love would for-sake you nev-er; Could I..... could I.....