



AGRICULTURAL—INTERESTING AND INSTRUCTIVE ITEMS.

We have, from a synopsis prepared for the *American Agriculturist*, the following very interesting outline view of the modes of soil culture and fertilizing in Japan. Although the Japanese, up to within the last few years, have been classed among the barbarians or "heathen" nations—and may still be held in such estimation by some benighted Christians, their works and arts, in many respects—though for centuries past excluded from all intercourse with the nations of Christendom—entitle them, in respect to the more weighty components of true national prosperity and greatness, to rank far above the vaunted achievements of those who have with loud swelling words, paraded their "birth and education in a Christian land" within the radius of the full-glory blaze of the nineteenth century.

Dr. H. Maron, has made a report to the Minister of Agriculture at Berlin, on Japanese husbandry, which is full of interesting facts and eminently suggestive. The Japanese cultivator follows a routine which the experience of centuries has marked out, and though there is nothing about their system which indicates progress, their results show that their actual state of cultivation is far in advance of more civilized countries. The area of the Japanese Empire is about the same as that of Great Britain and Ireland, and contains a far larger population: yet Great Britain is obliged not only to import food from other countries, but to also import large quantities of fertilizers to aid in raising its crops. Japan, on the contrary, imports neither grain nor manures, but exports considerable quantities of food. This is the present condition of Japanese Agriculture, taken as a whole. Its details are not such as could be carried out among our people, as they bend the whole energies of a large majority of the population to producing the greatest possible amount from a small area of soil. The whole arable land of the country is divided up into plots of from two to five acres each, and their agriculture would be considered by us as a very close system of gardening. The land is kept constantly up to its greatest productiveness, and this is done by a system of manuring and cultivation which may offer some suggestions to our own farmers. In the first place, the Japanese follow deep tillage, the arable soil being several feet in thickness. What is a wheat patch at one month is converted in part into a rice swamp the next—one part of the field being excavated, and the earth thrown upon the other to make an elevated island for the growth of sweet potatoes and other crops, while the lower portion is flooded with water for the rice crop. In this way the whole soil is frequently turned over to the depth of 2 or 2½ feet. Another peculiarity is that the crops, of whatever character, are always grown in drills; sown in this way they can receive the highest possible culture, and special manuring. Each crop is grown with no reference to that which shall succeed it.—The system of rotation and fallows is unknown, but the land is looked upon as a bank which will honor any drafts made upon it, if the drawer has only made a sufficient deposit—of manure. The amount of manure on hand determines the breadth of land which the Japanese farmer will sow. The peculiarity of Japanese husbandry is that no animals are kept. Human excrement forms the principal manure. The Japanese farmer does not allow the crop to be eaten by cattle and then return to the soil the manure from them, but he eats the crop himself, with the help of his family, and returns the manure directly to the soil. The religion of the people prevents their eating any animal food except fish; and they eat the mollusks or "shell-fish" in great quantities, and the manure from them is the only fertilizing material returned to the land that does not come off of it. On the farm, human excrement is returned to the land from which the food came, and the cities regularly return to the country loads of human manure in exchange for the food which they receive. Throughout the country the greatest care is exercised in preserving the night soil. The cabinet or privy, is an essential part of the houses of the poorest as well as of the wealthy. A bucket or earthen vessel is placed where it will receive the deposit and is provided with projecting ears into which a pole can be inserted for the purpose of carrying the vessel. At the towns and cities "thousands of boats may be seen early each morning laden with high heaps of buckets full of the precious stuff, which they carry from the canals in the cities to the country. These boats come and go with the regularity of the post; it must be admitted, however, that it is a species of martyrdom to be the conductor of a mail boat of this kind. In the evening long strings of coolies are met with on the road, who, having in the morning carried the produce of the country to the town, are returning home, each with two buckets of manure, not in a solid or concentrated form, but fresh from the privies. Caravans of pack-

horses, which often have brought manufactured articles (silks, oil, lacquered goods, etc.) a distance of 200 to 300 miles from the interior to the capital, are sent home again freighted with baskets or buckets of manure; in such cases, however, care is taken to select solid excrements." For the way in which the manure is treated, we cannot do better than to quote the language of this interesting report.

"The excrements are diluted with water, as other addition of any kind being made to them, and stirred until the entire mass is worked into a most intimately intermixed fine pap. In rainy weather, the vessel is covered with a movable roof to shield it from the rain; in dry weather this is removed, to allow the action of the sun and wind. The solid ingredients of the pap gradually subside, and fermentation sets in; the water evaporates. By this time the vessel in the privy is again ready for emptying. A fresh quantity of water is added, the whole mass is again stirred and most intimately mixed together, in short, treated exactly like the first emptying. The same process is repeated, until the cask or pan is full. After the last supply of excrements, and thorough mixing, the mass is left, according to the state of the weather, for two two or three weeks longer, or until it is required for use; but under no circumstance is the manure ever employed in the fresh state. The entire course of proceeding clearly shows that the Japanese are no partisans of the nitrogen theory, and that they only care for the solid parts of the dung. They leave the ammonia exposed to decomposition by the action of the sun, and its volatilization by the wind, but take the greatest care to shield the solid ingredients from being washed or swept away by rain, &c. As the peasant, however, pays his rent to his landlord, not in cash, but in a certain stipulated percentage of the produce of his fields, he argues quite logically that the supply of manure from his privy must necessarily be insufficient to prevent the gradual exhaustion of the soil of his farm, notwithstanding the marvellous richness of the latter, and in spite of the additional supply of manuring matter derived from the water of the brook or canal from which he takes his material for irrigation. He places, therefore, wherever his field is bordered by public roads, footpaths, &c., casks or pots buried in the ground nearly to the rim, urgently requesting the traveling public to make use of the same. To show how universally the economical value of manure is felt and appreciated in all classes of society in Japan, from the highest to the lowest, I need simply state the fact that, in all my wanderings through the country, even in the most remote valleys, and in the homesteads and cottages of the very poorest of the peasantry, I never could discover, even in the most secret and secluded corners, the least trace of human excrements. How very different with us, in Germany, (and in America.—Ed.) where it may be seen lying about in every direction, even close to the privies! I need not mention that the manure thus left by benevolent travelers is treated exactly in the same way as the family manure.

The Japanese farmer prepares also compost. As he keeps no cattle to turn his straw, etc., into manure, he is forced to incorporate this part of his produce with the soil without "animalization." The method pursued to effect this object consists simply in the concentration of the materials. Chaff, chopped straw, horse-dung, excrement gathered in the high ways, tops and leaves of turnips, peelings of yams and sweet potatoes, and all the offal of the farm, are carefully mixed with a little mold, shoveled up in small pyramidal heaps, moistened and covered with a straw thatch. I often saw also in this compost, heaps of shells and of mussels and snails, with which most of the rivulets and brooks abound, and which, in all parts close to the seashore, may be obtained in any quantities. The compost heaps are occasionally moistened and turned with the shovel, and thus the process of decomposition proceeds rapidly, under the powerful action of the sun. I have also of en seen the horter process of reduction by fire resorted to when there was plenty of straw, or where the manure was required for use before it could be got ready for use by the slower fermentation process."

It will be seen, from the foregoing, that the Japanese farmer applies his manure only as a top-dressing and in the liquid form. The manure being fully fermented, is brought into immediate contact with the seed, not only without injury, but with decided benefit to its early growth. Another feature which characterizes their culture is the manuring with every crop. Each sowing receives the necessary amount of manure, and a full return is expected from the immediate crop without reference to the next harvest. We have introduced this subject to show that for thousands of years, a successful system of agriculture has been carried on mainly by the aid of human excrement, in the hope of in using our readers to add this element of fertility to their farms. There exists a sort of prejudice against the use of night soil as a manure. A general knowledge of chemistry would dissipate this and other notions. Human excrement, as well as that of animals, contains elements which are needed for the growth of the plant. It matters nothing from what source these are obtained, the wondrous processes going on within the plant will convert these elements into food. Every thoughtful person will see that it is man's duty, when he has taken the products of the soil for food, to return to it those portions which are not needed in his own system, but which are, ac-

ording to the operations of nature, voided in such a state as to demand their removal, and which form valuable plant food.

AGRICULTURAL WORKS.—The *American Agriculturist* and *Country Gentleman* continue to grace our table, having not only steadily maintained but materially enhanced their former standard of excellence, during the past two or three years. We regard them as pillars in the temple of agriculture. The *Horticulturist* and *Journal of Rural Art and Taste*—one of the oldest publications of this kind in the country, is also a most acceptable monthly visitor.

PROPOSALS FOR ARMY SUPPLIES.

COMMISSARY DEPARTMENT.

PROPOSALS FOR SUBSISTENCE SUPPLIES.

SUBSISTENCE OFFICE,
Great Salt Lake City, Sept. 1, 1863.

SEALED PROPOSALS will be received at the office of the U. S. Commissary of Subsistence for the District of Utah, in this city, until the 15th DAY OF SEPTEMBER inst., for furnishing the following named Subsistence Stores, viz:

FLOUR.

1st.—FOUR HUNDRED THOUSAND (400,000) lbs., more or less, of A. No. 1. FLOUR, in good and substantial sacks, containing 100 lbs. each, and subject to inspection to be delivered in such quantities and at such times as may be required, the delivery to commence on the 1st day of October, prox., and the whole to be delivered on or before the 1st day of January, 1864. PROVIDED that not less than Fifty Thousand (50,000) lbs. shall be delivered during each of the months of October, November and December, 1863.

FRESH BEEF.

2nd.—TWO HUNDRED AND FIFTEEN THOUSAND FIVE HUNDRED (215,500) lbs. more or less, of FRESH BEEF, killed and dressed in the usual manner, (heads and shanks excluded) for the troops stationed at Camp Douglas; to be delivered at that place, at such times and in such quantities as the Commanding Officer may direct. The delivery to commence on the 1st day of October, prox., and end on the 30th day of June 1864.

POTATOES.

3rd.—TWO THOUSAND (2000) bushels of POTATOES, the delivery to commence on the 1st of October, next, and the whole to be delivered on or before the 30th of November, 1863. The delivery to be made at the Commissary warehouse in Great Salt Lake City or at Camp Douglas as the Commissary may direct.

SALT.

4th.—ONE HUNDRED AND NINETY (190) Bushels A. No. 1. Fine Salt, in sacks delivered on or before the 1st of November, at the Commissary warehouse, provided that at least 25 bushels be delivered on or before the 1st of October, prox.

PAIDMENTS will be made in such funds as the Government may have on hand for distribution. Good and sufficient bonds will be required for the fulfillment of the contract or contracts, and the names of sureties must accompany each bid. Contractors and sureties will be required to take the oath of allegiance.

In all cases, except that of fresh beef, bids will be entertained for part or the whole, or a part of the above named articles provided such part shall not be less than Fifty Thousand (50,000) lbs. Flour, Two Hundred and Fifty (250) Bushels of Potatoes, Fifty (50) Bushels of Salt, and each bid must state specifically the articles and amount proposed to be delivered, and the price.

The Government reserves to itself the right to reject any or all bids. Bidders are invited to be present at the opening of the proposals at the office of the undersigned at 1 p. m., on Tuesday the 15th of September, 1863.

No bids will be entertained from parties not present to respond. Bids will be addressed (through Post Office or otherwise) to Capt. Chas. H. Hempstead, C. S. Great Salt Lake City, U. T., and endorsed "Proposals" for "Flour," "Beef," "Potatoes," "Salt," as the case may be.

CHAS. H. HEMPSTEAD,
Capt. & Commissary of Subsistence,
District of Utah.

QUARTERMASTER'S DEPARTMENT.

PROPOSALS FOR FORAGE and FUEL.

ASSISTANT QUARTERMASTER'S OFFICE,
Great Salt Lake City, U. T., Sept. 1, 1863.

SEALED PROPOSALS will be received at this Office, (next door to the Post Office) until the 15th inst., at 12 M. for furnishing the following supplies: to be delivered at Camp Douglas or in Salt Lake City, at my option, in such quantities as required. The delivery to commence October 1st, 1863, and all to be delivered by April 1st, 1864.

Thirty Thousand (30,000) BUSHEL OATS
Six Hundred and Thirty (630) TONS HAY.
Fifteen Hundred (1,500) CORDS WOOD.

All the articles must be of the best quality, and bidders will specify in their bids. Also good and sufficient bonds will be required for the faithful performance of the contracts, and names of sureties must accompany each bid. Bids will be received for furnishing the whole amount of each article required in one bid, but not less than 500 Bushels Oats, or 150 Tons of Hay, or 300 Cords of Wood will be accepted in any one bid.

Payment will be made in such funds as the Government may furnish. Contractors and sureties will be required to take the oath of allegiance.

No bids will be entertained from parties not present to respond. The Government reserves to itself the right to reject any or all bids. Bidders are requested to be present at the opening of Proposals at my office at 12 M. on Tuesday, September 15th, 1863.

Bids will be addressed through Post Office or otherwise to Capt. D. B. Stover, Asst. Quartermaster, Salt Lake City, U. T., and endorsed "Proposals for Oats, Hay or Wood as the case may be."

D. B. STOVER,
Capt. and Asst. Quartermaster,
District of Utah.

STOVES AND TIN-WARE!

I HAVE just received by train from the East, a complete assortment of

NEW ERA, PREMIUM and PARLOR OVES,

with all the latest and most approved fixtures.

ALSO:

BRASS KETTLES,

SKILLETS,

SHEET IRON,

TIN-WARE,

and NALES.

ALL WHICH ARE OFFERED AT FAIR RATES.

R. C. SHARKEY,

EAST TEMPLE STREET.

7-17.

PACIFIC WAREHOUSE

OF THE

RUSSELL & ERWIN MANUFACTURING COMPANY,

—OF—

NEW BRITAIN, CONN.,

MANUFACTURERS OF HARDWARE,

106 & 108 Battery St., SAN FRANCISCO.

ATLANTIC WAREHOUSES.

57 & 59 BEEKMAN ST., NEW YORK.

53 & 55 CLIFF STREET, " "

22 SOUTH 5th STREET, PHILADELPHIA.

138 CONGRESS STREET, BOSTON.

SOLE AGENTS

FOR THE SALE OF

LILLIE'S CELEBRATED

CHILLED IRON SAFES

7-17.

CONCERNING THE MAIL TO IDAHO TERRITORY.

Messrs. OLIVER & Co., Proprietors of the Bannack City Express Wagon are making weekly trips from G. S. L. City to all the camps in the vicinity of the Beaver Head, Grasshopper, Stinkingwater, and Dorsett Mines, carrying passengers, packages, letters, etc., with celerity and security. They also forward Express matter to Deer Lodge, Gallatin on three forks, Missouri river, Prickly Pear, Sun river, Fort Benton, American Fork, Hell Gate, Bitter Root Valley, Elk City, Lewiston and all the principal camps in the South-eastern part of Idaho Territory.

The U. S. mail from Great Salt Lake City to this place via Brigham City, Cache Valley, Soda Springs, U. T., Snake river Ferry, Bannack City, Stinkingwater mines to Fort Benton, Idaho Territory, will naturally come under the same contract, which is in fact the only practicable road that can be traveled during the winter months. Besides this it will be over 200 miles nearer from Denver to the new gold fields by Russell's wagon road, now nearly completed, than by any other route.

The prejudice for certain localities and the ambition for single handed gain are insignificant when compared with the interest of the Government and the wishes and interests of so many thousands of people who are becoming identified with the growth and prosperity of Idaho Territory.

All persons wishing to communicate with their friends in this country should direct their letters to G. S. L. City, in care of the Bannack City Express.

OLIVER & Co., Proprietors,
Bannack City, Idaho Territory, July 19, 1863. 5-17.

UNITED STATES MAILS UTAH TERRITORY.

POST OFFICE DEPARTMENT, Washington, D. C. }
1st. August, 1863. }

PROPOSALS will be received at the Contract Office of this Department, until 2 p. m. of 3rd October, 1863; (to be decided by the 23rd) for conveying the mails of the United States in the Territory of Utah from 1st January 1864, to June 30, 1864, on the routes and by the schedule of departures and arrivals herein specified.

No. 14618.—From Salt Lake City, by Ogden, Cache Valley, Snake river Ferry and Bannack City to Fort Benton, 723 miles and back once a week.

Leave Salt Lake City, Mondays at 8 a. m.; arrive at Fort Benton 15th day by 6 p. m. Leave Fort Benton on Mondays at 8 a. m.; arrive at Salt Lake City 15th day by 6 p. m.

Bids to end the service at Bannack City omitting Fort Benton. 400 miles less distance will be considered. If service on this route be let, that on 14619 will not be.

No. 14619.—From Fort Bridger by Bannack City to Fort Benton, 673 miles and back once a week.

Leave Fort Bridger on Mondays at 8 a. m.; arrive at Fort Benton 14th day by 6 p. m. Leave Fort Benton Mondays, at 8 a. m. Arrive at Fort Bridger 14th day by 6 p. m.

Bids to end service at Bannack City, omitting Fort Benton, 350 miles less distance will be considered. If service on this route be let, that on 14618 will not be.

For forms of proposals, guarantee and certificate, and also for instructions and requirements to be embraced in the contract, see pamphlet advertisement inviting proposals for conveying the mails in California, Oregon and the Territories of Washington, Utah and New Mexico, dated Oct. 20, 1861, or that dated August 9, 1862, to be found in the principal offices.

The law requires that the mails be conveyed with "celerity, certainty and security." Without regard to mode, and proposals must be made entirely in accordance therewith to be entitled to consideration. No other bid can be considered.

M. BLAIR,
Postmaster General. 7-17

LOST

YESTERDAY afternoon, on East Temple Street, a GOLD VEST CHAIN. The finder will please leave it with Mr. BALLAN, Watchmaker, and be rewarded. 7-17

H. W. WALKER.