

AGRICULTURAL



[From the Country Gentleman and Cultivator.]
SILK CULTURE IN CALIFORNIA.

Two kinds of silk-worms are bred and fed here to some extent. The Ailanthus silk-worm of China, (*Bombyx cynthia*) and the true mulberry silk-worm.

The former, so far as I can learn, is reared only to a small extent, and the business is not attracting very much attention. The *Ailanthus glandulosa*, from which this variety obtains its food, somewhat resembles the Sumac in its general appearance and habits of growth: flourishes on almost all soils, even on very light, sandy or gravelly ones; and is easily propagated by roots, or young shoots from the roots. It should be planted in rows six feet apart, and the plants set three feet apart in the rows. It may then be pruned so as to form compact hedges of easy access to all parts. It needs no cultivation or care except the pruning.

The eggs of the Ailanthus worm, which are about twice as large as those of the mulberry worm, should be kept in an even temperature of about 60 degrees in winter, and until about the first or second week in June, when, if exposed to a temperature of from 70 to 75 degrees, they hatch in about ten days, and should be placed upon the hedge, where they will attend to themselves, with but very little aid from the breeder. They commence eating immediately after they are hatched and placed upon the hedge. They moult or change their skin four times, resting from 24 to 48 hours previous to each moulting. After the fourth moulting they prepare their cocoons, suspending them from the under side of the little sprigs and branchlets. These vary in size and weight according to the circumstances of growth, quality and quantity of food, weather, &c., but afford nearly as much silk as the mulberry worm. The silk, however, is of a coarse texture, and perhaps, of an inferior quality, but is very strong and easily wrought into almost any fabric, leaving no waste in combing.

The cocoons intended for breeding may be kept as the eggs alluded to above are, but should not be kept after the tenth of June, when the insects, in their perfect estate, appear, are mated and soon commence laying. They lay only about half as many eggs as the mulberry worm does. A second crop may be obtained in August, if desirable. Although the silk thus obtained is not nearly as valuable as the best from the mulberry worm, the demand for it, for cheaper fabrics, is, perhaps, as good, and it may be produced with so much less labor, care and expense, and in such enormous quantities, that it is very far from certain that the business of growing it here may not be made very profitable. Further experiments, or more light from those who have experimented, is needed upon the subject.

Unlike the Ailanthus, the mulberry silk-worm and true silk culture is attracting much attention in the State, and very justly so. I think, for it has now been fully demonstrated that silk of the finest and most delicate fiber, of the richest and most beautiful lustre—in short, silk of the very best quality, can be produced in California,—silk for which the highest prices will be paid, and for which there will be a constant and constantly increasing demand. Some of the difficulties encountered in cultivating silk in European countries and Atlantic States, which serve to retard the business there, and to render the opening of a new and more favorable field for prosecuting it desirable, are irregularities of climate, sudden changes of weather, rain storms and showers, undue moisture in the atmosphere, thunder and lightning, diseases of the insects, the high price or high rent of land, diseases of the mulberry tree, rendering its growth irregular and uncertain, and impairing the quality of the insect food produced from it, and the great amount and the increasing price of labor required in those countries for producing silk.

These difficulties are most of them lessened, many of them entirely removed here. The climate in all the principal valleys where the business will be conducted is very regular and very even. There are no rain storms or even showers in the season for feeding the worms; the atmosphere is sufficiently dry, and continues so, with great uniformity, and is entirely free from injurious electric shocks. No diseases of any kind have yet been detected affecting either the insects or the plants. Land is abundant and cheap here. It may be purchased in quantities large or small, far less than the annual rental of land of similar quality in most of the European silk-growing regions. In fact, for one-fourth the amount required to hire such lands in some of the best of those countries. For these reasons, and others to be named, far less labor is required to breed the worms and cultivate the silk here than in those countries.

The mulberry tree flourishes best in a deep, rich loam, such as we have for many miles in extent in all the principal valleys here, and their adjacent slopes. In this soil it will throw out shoots in all directions to the length of three to five feet or more every year when properly pruned.

The best varieties for producing silk here are those of the white mulberry (*Morus alba*),

particularly the Morns Moretti. The *Morus multicaulis* will do well for the first two ages of the insect, but no longer, as there is not nutriment enough in the leaves of this variety to give quality to the silk. These varieties are propagated by cuttings and seeds, the latter being preferable, and should be planted eight or ten feet apart, according to the strength of the soil, and trained about three or four feet high at first, so as to afford easy access to the branches for feeding. They may be used for this purpose the second year, but are better the third and subsequent years. If the plants are set on dry soil they will need irrigation or constant cultivation the first year, but will not need irrigation after this. These trees not only flourish well here, but the soil and climate seem to impart a peculiarly rich and nutritive character to the leaves, which in their turn give a higher, finer and more delicate quality to the silk produced from them. The eggs of the mulberry silk-worm should be kept in a cool cellar of even temperature, and may be hatched by putting them in a warm room of about 80 degrees of temperature. When hatched, they must be fed under cover, and carefully protected from birds and ants, their deadly enemies. They should be fed on dry, fresh leaves three times a day. Wet or wilted leaves are very injurious to them, producing sickness and destroying large numbers of them. In these dry climates, however, they may be fed by carrying whole armfuls of the branches to them at a time, with the leaves all on, which will keep fresh until they are eaten, the worms helping themselves.

The worms will have done eating and begin to make their cocoons in just six weeks after they are hatched, which is three or four days after the required heat is attained for the eggs. In this country two crops can be obtained if the quantity and quality of leaves is sufficient, the first about the 15th of May, and the second about the 15th or 20th of July, using the eggs of the first crop for the second. When ready to spin they turn a bright yellow color, and raise their heads. If left to themselves they will find their own place and make their own cocoons. When these are complete, if the perfect silk is wanted, the chrysalis must be destroyed by putting them in a warm oven, or exposing them several hours to a hot sun. For breeding, the hardest and best shaped cocoons should be selected. The miller appears from these in about twelve days. The sexes should be put together about 10 o'clock A. M., and separated about 4 o'clock P. M. The female commences laying almost immediately, and deposit about 300 eggs each, so small that about 40,000 of them are required to weigh an ounce.

The silk is easily obtained from the cocoons by putting them in hot water to dissolve the gum. They can then be safely kept a long time, or may be easily transported—can be sent to Europe, packed in boxes, at any time for manufacture. But it is presumed that manufactories will soon be established here, as it is now well known by capitalists that the advantages for conducting the business here are immense over those of Europe.

Many of these facts and sentiments I obtained from Monsieur L. Prevost, of San Jose, Santa Clara Co., an active, earnest, intelligent Frenchman, to whom I had a letter of introduction from Col. Warren, editor of the California Farmer; and I will here acknowledge that I have made free use in preparing this article of one I previously prepared for that journal, and which was published in it on the 22d of January, 1864.

M. Prevost has been experimenting on this subject five years—never satisfied with present attainments, he is still progressing. He said to me that he could not follow a certain course in this country with reference to any pursuit, simply because his father or his grandfather before him followed the same in France. He is truly the pioneer of silk culture in California, and is about to publish a work on the general subject, which will be looked for with interest.

I have no doubt that the demand for the eggs of the silk-worm will be very great for several years to come, not only here but in Europe, as eggs exported from California are not diseased, and are largely sought to replace those that are so. Pants of the mulberry will also be in great demand for some time.

W. G. WYMAN.

San Francisco, Cal. Jan. 30, 1864.

VARIETIES.

—Dean Swift was once called to preach a charity sermon. He read his text, which was in these words: He that giveth to the poor lendeth to the Lord; that which He hath will He repay him again. "My hearers," said the Dean, "you mark the offer. If you like the security, down with your dust!"

—When Cromwell first coined his money, an old cavalier looking upon one of the new pieces, read this inscription on one side, "God with us;" on the other, "The Commonwealth of England."

"I see," said he, "God and the Commonwealth are on different sides."

—LINCOLN'S LAST. A visitor, congratulating Mr. Lincoln on the prospects of his re-election, was answered by the indefatigable story teller, with an anecdote of an Illinois farmer, who undertook to blast his own rocks. His first effort at producing an explosion proved a failure; he explained the cause by exclaiming, "Pshaw, this powder has been shot once before."

—Advice is like snow; the softer it falls, the longer it remains and the deeper it sinks.

—'Gentlemen of the jury,' said a Western lawyer, would you set a rat-trap to catch a bear, or make fools of yourselves by trying to spear a Buffalo with a knitting-needle? I know you would not. Then how can you be guilty of convicting my client of man-slaughter for taking the life of a woman? The prisoner was acquitted.

—A Would-be Agreeable, taking his seat between Madame de Stael and the reigning beauty of the day, said, "How happy I am to be thus seated between a wit and a beauty!" "Yes," replied Madame de Stael, "and without possessing either."

—'I can't believe it's any use, this vaccination,' said a Yankee. 'I had a child vaccinated and he fell out of the window a week after, and got killed!'

—Smoking in Windsor Castle has been prohibited by express command of the Queen. Cards, requesting that gentlemen will not smoke, have been hung in the private rooms of the Lords, and even in the rooms of the Prince of Wales.

—Punch suggests that if a European Congress can preserve peace, it is more than an American one has been able to do.

—Why are the stars like rowdies who keep late hours? Because they scin-tillate in the night.

—The population of the whole United State, by the last census, was 31,429,881.

—Another keeper has been partially eaten by the lions in the menagerie in London.

—It is proposed to use the steamship Great Eastern in laying the Atlantic cable, which will weigh six thousand tons.

—The Princess of Wales is in trouble. She desires to wet nurse her own baby. Court traditions would not, however, allow it, as never was English prince or princess yet suckled by its own mother. So the healthy and virtuous Mrs. O'Somebody was sent for, and the princess had a long cry, but it was of no avail, although Albert Edward was disposed to let Alexandra have her own way. But Court etiquette on this subject could not be set aside.

CHEAP AND GOOD PREPARED GLUE.—Dissolve common glue in cider vinegar, as thick as may be wanted. As it becomes too thick from time to time, add vinegar. This is as good as any that can be purchased.

School Committees and Teachers.

I HAVE FOR SALE a full set of Pelton's outline Maps and Key, adapted to Naylor's System of Geography.

Also a set of books for a class of twenty-five pupils. These maps are superior to any series of maps published in this country or Europe; as they are the largest, best executed, most comprehensive, and the most distinctly delineated.

G. W. MOUSLEY,
16th Ward, G. S. L. City.

March 25, 1864.

STRAYED OR STOLEN,

FROM before the residence of the undersigned, in the early part of last summer, a roan HORSE, with near hind foot white, and star in forehead; also from the herd of Barnabas L. Adams, a red and white COW, branded G. H. O. on horn. Whoever can give any information shall be suitably rewarded.

FRANK FOX,
12th Ward.

EXCELSIOR GARDENS!

ROSES! ROSES! ROSES!!

A CHOICE COLLECTION of Imported ROSES and Flowering Plants; also, fifty varieties of Choice Flower Seeds on hand, for Sale by

FRANK F. FOX,

27-1m 12th Ward, next door east of School House.

WEAVING IN THE 20th WARD

NOTICE OF REMOVAL.

I HAVE Removed my business operations to that New House, one block East and two North of the Lime-Kiln, where I am prepared to weave all kinds of Cloth that can be made in the Territory. I will work Wool and Flax on Shares, into

JEANS, LINSEYS, KERSEYS, SHEETS,
BLANKETS, FLUSHED STRIPES,
BALMORAL SKIRTS,
RAISED SPOTS, DIAPERS, ETC., ETC.,

guaranteeing to produce a superior article of Cloth. Holders of large quantities of Wool and Flax would do well to apply early.

The people who would be independent must be self-sustaining. If we would be self-sustaining we must encourage the development of Home-Manufactures.

JAMES MCGHIE.

TREES! TREES! TREES!

FLOWERING PLANTS,

STRAWBERRIES,

And other Choice things.

Where?

At OLIPHANT'S Nurseries and Gardens,

Five Blocks East of Theatre and half Block South,

25-3

12th Ward.

BOOTS AND SHOES

CHEAP FOR CASH,

BY E. B. TRIPP.

Call and SEE. D

24-1f

EXCHANGE, BROKERS AND BANKING OFFICE,

J. W. KERR,

DEALER IN

COIN,

GOLD DUST,

and EXCHANGE.

Office, Salt Lake House, Main Street, G. S. L. City.

24-1f

B. M. DU RELL,

Boise City, Idaho.

WM. B. HUGHES,

San Francisco, Cal.

B. M. DU RELL & CO.,

WHOLESALE & RETAIL DEALERS

Dry Goods,

Groceries,

Liquors,

Boots,

Shoes,

Clothing,

Provisions, and

MINER'S OUTFITS Generally,

BOISE CITY,

IDAHO TERRITORY.

In addition to their general business, B. M. D. & Co. will pay particular attention to Sales of Consignments of the products of Utah, if required on

COMMISSION.

In such cases, LIBERAL ADVANCEMENT will be made on Consignments, and we solicit persons bringing such articles to this Market to give us a call.

Persons from Utah, desiring BACK Freight, such as will pay a profit, such as

TEA, COFFEE, SUGARS, &c.,

Will do well to examine our Stock previous to making purchases, as owing to the fact that one member of our firm resides at San Francisco, we are able to buy on better terms, and therefore can give better bargains than any House in these mountains or Valleys.

Boise City, Idaho, March 10, 1864.

27-6m

GREAT SALT LAKE

AND

EAST BANNACK EXPRESS LINE

WILL Commence running regular trips, with good thorough braced Wagons, May 1st, 1864.

THROUGH IN SEVEN DAYS.

Leave G. S. L. City every WEDNESDAY via Bannack, Nevada, and arrive at Virginia City every TUESDAY.

Leave Virginia City every TUESDAY via Nevada and Bannack City, and arrive at G. S. L. City every MONDAY.

Passengers and Express matter Conveyed.

A. J. OLIVER & Co., Proprietors.

THOS. D. BROWN, Agent, G. S. L. City.

27-4

PURE SUGAR CANE & Madder SEED.

THE Deseret Agricultural and Manufacturing Society have a limited quantity of SEED for Sale. Apply at the Historian's Office.

24-1f

HEMENWAY'S NURSERY.

For Sale a Large and Splendid Lot of FRUIT TREES.

A FIRST CLASS assortment of Eastern varieties of Apple Trees, suitable for this climate, a great portion of them are of extra large size, and worked for early bearing.

A few hundred Pear Trees, one and two years from the graft on the pear stock. Also a lot of Pear worked on the Thorn, for low damp ground.

A good supply of Plum and Apricot Trees of the most approved varieties.

A fine assortment of Flower Seeds for sale.

Prices low for the times. Purchasers are solicited to call and see the fine form and thrifty condition of the trees, and may rely on the correctness of the names, as all the leading varieties have been fruited by the proprietor.

A Discount made on sales for Gold or Silver coin.

Terms:—Prompt payment, as no credit can be given.

L. S. HEMENWAY, 4th Ward.

G. S. L. City, Feb. 23, 1864.

23-1f



I WILL Freight Steam Engines, Quartz Mills, and all kinds of Machinery and Merchandise, Wagons, Carriages, Stoves, &c.,

FROM BOSTON, NEW YORK, OR ANY OTHER CITY IN THE EASTERN OR WESTERN STATES TO G. S. L. CITY FOR 15 CENTS PER POUND,

with 10 per cent. commission on the first cost, for purchasing. The money in all cases for purchase, freight, and commission, to be paid in advance.

I will deliver in G. S. L. City, Double Cylinder Wool Carding Machines, with Picker, Card Clothing, Belts, &c., complete, for

Single ditto, complete, for

Cotton Jenny Spinners, complete

Mower and Reaper 2 horse power complete

Thrashing Machines, with 6 to 8 horse power

Grist Mills, for grinding breadstuffs, horse feed

&c., from 4 to 5 bushels per hour

Horse power for the same, 4 horses

" " " 8 horses

Cane Mills, 1 horse power

Parties who have sent orders will please take notice, that they will be filled only to the extent of the funds furnished by them.

George J. Taylor, at the residence of John Taylor, 14th Ward, is authorized by me to receive all orders and moneys, receipt for the same, and forward, until the 6th of April next.

E. R. YOUNG.

I arrived at the Missouri River Feb. 23d, and am prepared to receive orders, &c. My Address will be Box 2037 New York Post Office.