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All letters on business must be POST PAID, or they will not be attended to.

We promised some time ago, to publish directions for the cultivation of Silk, and the rearing of Silk Worms. The following are instructions from Mr. Gideon B. Smith, of Baltimore, to Dr. M. W. Alexander, of Mecklenburg county, in this State, who made successful experiments in raising Silk the last season; and no doubt these directions contain all that is necessary relative to the subject, for experiments on a small scale.

CULTIVATION OF SILK.

I have long and earnestly devoted much time and attention to this subject, from a conviction, that the United States at large, particularly the Southern and Middle States, and more particularly the Eastern Shore of Maryland and Virginia, and the State of Delaware, are well adapted to this species of agricultural production; and that the many millions annually sent abroad for Silk in its various forms, might be saved to the country without any material addition to its expense or labor. I have for several years kept Silk Worms and managed them through the whole process, and therefore speak from practical knowledge. It is a fact, which ought to be published and circulated throughout this union, that one acre of land will produce in Silk more than double the value that it will in any other production whatever: and this too with less labor than the same land would require in the production of any other crop. It is stated, and I believe upon good authority, that four acres of land planted with Mulberry near Boston, have supplied food for as many Silk Worms as made 420 pounds of Silk, worth three dollars and fifty cents a pound—the four acres producing fourteen hundred and seventy dollars; and all the labor was performed by four girls, whose attention was required but for a short period in the year. Now where is the land and what else is the article, that will afford such a product, with so little labor? The whole process is extremely simple, so much so, that children and superannuated servants, are as capable of attending to it as any other person; and I would suggest, that the occupants of our Poor House, and those of similar institutions throughout the country, could not be better or more profitably employed than in the culture of Silk. The farm attached to our Alms-House would not only maintain the paupers of the City and County, but return a handsome revenue to the treasury. It is hoped that this suggestion will receive the attention it deserves from the proper authorities.

The opinions as to the best mode of planting and cultivating the Mulberry, are various. Either of the two following, however, appears to the writer to possess all the necessary advantages: First, sow the seed broad-cast, and the second year the young plant will be fit for food for the Worms, when it may be mowed as wanted, like clover, and the whole of the shrub will be so tender that the worms will eat the greater part of it. Second, sow the seed in drills, and allow the shrubs to attain the height of three to four feet, which will require three years, when the leaves, together with the tender part of the branches, may be gathered, as wanted, for the Worms. In this process, the shrubs should be kept from attaining too great a height, by cutting off the top limbs, which may be used for feeding the Worms.—The latter process admits of culturing for the purpose of keeping down weeds and nurturing the

young trees. Both of these processes are adapted to extensive establishments, and probably produce more Mulberry foliage than the same ground would do if occupied with full grown trees, besides saving the labor necessarily required by the latter in gathering the leaves. For small establishments, for farmers, and those who have large trees already growing, full grown trees may be used, the labor of gathering the leaves being, in their case, the only objection to them. The *White Mulberry* is generally preferred, and probably makes the finest Silk; though the common Black has been found to answer very well.

Directions for the management of the Silk Worm.

In the Spring, when the temperature is at 80° or upwards, and the Mulberry leaves of the size of a silver dollar or larger, bring out the eggs and lay them on a table prepared for that purpose, in a dry airy room, partially darkened. In from four to eight days the worms will leave the eggs. They will be about the size of the smallest of the little red ants that infest our houses. Immediately procure a few Mulberry leaves and lay them close beside the Worms, taking care not to cover the eggs with them, as there will be many not hatched, which the leaves would cool and probably prevent, certainly retard in the process of hatching. As fast as the leaves become wilted, lay on fresh ones, and once in three days remove the dry leaves and rubbish, which you will be enabled to do by laying the fresh leaves beside the dry ones, when the Worms will leave the latter and take to the former. Fresh leaves will be required three times a day for the first twenty days, after which they ought to be laid on as often night and day as they are devoured or become dry, and after this time the dry ones need not be removed, as they will be so nearly consumed, and the Worms will have become so vigorous, that no injury will be derived by the Worms from them. The leaves must be free from wet and filth when given to the Worms.

The weather ought to be pleasant and settled before the eggs are brought out for hatching. The room must be free from tobacco smoke or other effluvia, and persons must not be permitted to breathe on the worms, as they are very sensitive, and the human breath is very offensive even to worms "of a larger growth." If a cold spell of weather happen, a little fire must be kept in the room, as also if it be very damp—in the latter case, a little pulverized saltpetre, say half a small thimble full, should be sprinkled on a shovel of firecoals in the middle of the room. Care must be taken to keep ants from the worms, as I have had full grown worms not only killed, but entirely devoured in one night by the common little red ant.

At first a thousand worms will only require half a dozen leaves at a time, which should be torn in pieces, the more widely to distribute them; after the twentieth day, they will eat a full grown leaf each in the course of the day, and often more. You will find it a great advantage to give them as much as they can eat, night and day after the 20th day from hatching—they will begin to spin the sooner for it. About the 6th, 10th, 16th and 22d days the worms will shed their skins, at which times they appear stupid and sickly. If at any time any of the worms are sick, which will be easily observed, remove them to another table, as there is danger that they will infect the others. The worms must not be too much crowded on the table; a thousand, full grown, will require a table three feet wide and twelve long.

Between the 30th and 36th the worms begin to spin, and must be attended to accordingly. They will cease eating, wander about, become partially transparent in their bodies, and leave fibres of silk, resembling those of a spider, on the leaves in their path. These things observed, lift the worm exhib-

iting them, by means of a leaf on which it is found, and carry it to twigs or leaves prepared for it, which will be described presently—it will soon begin to spin, and requires no further attention till its cocoon or ball of silk is completed.

There are various things for the worms to spin on, the best of which, according to my experience are *chestnut leaves*. Gather a parcel of chestnut twigs well hung with leaves, and lay them on a table near that on which the worms are feeding, and when a worm begins to spin place it on the chestnut leaves. The leaves when gathered green, soon begin to curl, and the worm will spin its cocoon in its cavity.—Where chestnut leaves are not at hand, chinquopin, or chestnut oak will answer. Another mode is to gather small twigs, such as are used for stable brooms, and weave them into little arbors, trees, &c. and place the worms on them. Some erect these arbors, &c. on the table with the worms, and leave the worms to climb of their own accord, when they are prepared to spin; but I have found it better, especially in the management of a small number, to place the worms on the bushes myself.

The worms that begin to spin each day, should be kept separate, and on the 8th day from the commencement of spinning the cocoons or balls of silk, should be removed, and those intended for silk, stripped of the loose coarse silk, called tow, must be put in an oven about half heated, and baked for half an hour, for the purpose of smothering the insects, which, if not thus killed, will work out of the cocoon and spoil the silk. Care must be taken that the oven be not hot enough to scorch the silk. After this, the cocoons may be laid away for reeling.

The cocoons from which the eggs are expected for a future crop, must be taken on the 8th day from the commencement of spinning and laid in rows about a foot apart on white paper, either on the floor of a dry airy chamber or on a table. Three or four cocoons may lie beside each other, the whole touching lengthwise, in a row. In from 8 to 12 days, the worm will have changed its form to that of a grayish butterfly or miller, and will come out of the cocoon; and in 24 to 36 hours the female will commence laying eggs on the paper between the rows of cocoons. There will be about an equal number of males and females, and each female will lay about 450 eggs, of at first, a beautiful sulphur color, about the size of mustard seed. In a day or two, the eggs become of a blueish lilack color, to the naked eye, but when seen through a microscope, they are beautifully speckled, like some kinds of bird's eggs. Those that remain yellow or of a sulphur color, have not been fecundated by the male, and are good for nothing. As the flies cease laying, the eggs must be removed on the paper to a cool dry place for future use. It is not necessary to keep them in a temperature of 45 or 50 degrees to prevent their spoiling as has been asserted; the only injury they are liable to from a high temperature is that of *hatching*, which, after the Spring, they will not be apt to do in any temperature lower than 75 deg. They ought to be kept in a dry place to prevent mildew which would be injurious, protected from insects, and where they will have the benefit of air. The flies eat nothing after leaving the cocoon and die in a few days after laying their eggs.

The cocoons from which you expect silk, after having been baked, as above, may be reeled at any time after your attention to the other parts of the process ceases, for which purpose, put about fifty of them into a kettle of water of a temperature so high only as you may put your hand in without scalding, (at which it must be steadily kept, by means of coals under the kettle,) and with a wisp of twigs stir them about briskly till you observe the end of a fibre of silk sticking to it, when you must secure it and proceed as before until you have as many fibres as you wish for a strand of the thread you in-