

## FOR FARMERS AND GARDENERS.

At Mr. W. C. Staines' gardens, while on a visit there a few days since, we noticed two splendid Double Roses—one crimson, the other red—truly the most grateful to our senses of anything we have yet seen, in the floral department, since our residence in the mountains. We were informed by Mr. Staines that he designs propagating these delightful flowers, by budding on native stocks.

We also had the pleasure of tasting his new seedling Strawberry—alluded to by Mr. E. Sayers, in another column on this page—which, we must say, cannot be too highly recommended, as possessing flavor and other desirable qualities far surpassing any strawberry hitherto cultivated in this Territory, and which will not soon, if ever, be excelled in the valleys of the mountains. Mr. Staines designs to dispose of a few hundred at a moderate price, for the purpose of more generally introducing this choice variety—which should, as soon as possible, supersede all other varieties, now in cultivation among us.

Melon and cucumber vines, in the gardens of Mr. Staines, have attained greater perfection than we have yet seen the present season—with the exception of those in the garden of ex-Governor Young.

A visit to these gardens by those who would take pleasure in beholding many of the rich and varied vegetable productions which have, with incessant labor, been successfully cultivated here, will most amply repay the time that may be occupied therein.

The Article from the *American Agriculturist*, concluded in our last number, on "How cane sugar is grown and made" is worthy the attentive perusal of all. The routine of work on southern plantations is not generally familiar to those who have been raised in the northern States, or who come from foreign countries; the article will therefore possess much interest to them. To those of our community, however, who cultivate the sorghum variety—though the cultivation of the southern sugar cane is quite dissimilar, in most respects, to that of the sorghum—the article will be of peculiar interest, as not only evidencing the simplicity of sugar making when reduced to a system, but also affording data from which may be gathered hints applicable in sugar making from the sorghum cane.

Although all the efforts thus far, in this Territory, to manufacture sugar, have proved utterly fruitless—notwithstanding the aid of approved and powerful machinery—we are not the less sanguine of complete success in sugar making, when the work is systematically entered into, upon common sense principles—regardless of the circumlocutive notions of would-be scientific men, who were better versed in their own vague theory than in anything that pertained to the practical business of sugar making.

The Black Walnut tree, says the *Genesee Farmer*, is one of the most "beautiful, ornamental and useful trees" that grows in this latitude. It is a native of America and, on the banks and islands of the Ohio river, they may be seen from three to six feet in diameter and from sixty to eighty feet in height. Mr. Eleazer Miller, 12th Ward, has one black walnut tree, now in bearing. We believe there are also one or two elsewhere in the Territory.

This tree is a rapid grower, seems to thrive well here and is valuable for its excellent wood as well as its fruit and, in our opinion, no tree is better suited to shade and adorn public streets.

A writer in the *Genesee Farmer* states that, where the shade of his black walnut trees fell, during any portion of the day, his peach and cherry trees had invariably been destroyed, while others adjoining, not so shaded, grew well.

If the shade of the black walnut is thus fatal—a new idea to us, we confess—care must be taken, when they are set out, to place them where they cannot shade those varieties.

Since writing the above, we have learned that Mrs. Levi Jackman, of the 16th Ward; Charles Cowley and Charles Lambert of the 7th Ward, also have the black walnut tree growing in their gardens.

**Errata.**—In article No. 4, of "A Treatise on the Present State of Horticulture in Utah," printed in number 14, under the sub-heading "Its Annual Yield," fourth line, "twenty thousand pounds" should have read "two thousand pounds." In the last line of same paragraph, "eighteen pounds of grapes" should have read "eighteen hundred pounds of grapes."

Green Peas are becoming plentiful. Also early turnips.

[For the Deseret News.]

## A Treatise on the Present State of Horticulture in Utah.

BY E. SAYERS, HORTICULTURIST.  
NO. 5.

## LONGEVITY AND FRUITFULNESS OF THE GRAPE VINE.

The Great Vine of Hampton Court.

[Continued.]

After giving the history and manner of culture of the old Hampton Court grape vine, it will be well to make a few remarks on the manner of treating the vine.

## Cause of its Great Success.

It will readily be seen that the success of this vine has been in part owing to the soil in which it grew, which, without any preparation, was precisely such as the nature of the grape required. Almost any person can readily form an idea of what compost an old choked up drain contains, which is nothing more or less than the sediments from sinks and other places, where all kinds of offal of animal and vegetable substance were collected, going into a state of decomposition.

## Natural Food, Heat, Air, &amp;c.

The roots of the vine, by instinct, as it were, penetrated under the wall of the house and traversed to this source of nutriment and was fed for a number of years on this aliment. In this instance the roots were also in a place where the temperature was nearly always the same. Sun, air and water was in a measure excluded from acting too powerfully on them at any time, and where the components were going under a gradual decay and preparation, so that the vine might be fed in the most natural manner.

## Recapitulating and Concluding Suggestions.

In closing these remarks the reader may readily discover that the principal cause of the vine growing to so large a size and continually yielding so good a produce, was, in a great measure, owing to its being treated in such a mode that nature was in every way assisted.

The vine was allowed at the first onset to extend its luxuriant branches to the full extent without restraint, or being cramped into the unnatural forms of hoops, &c., to check a free and natural flow of sap in one year and in another, all the branches cut down to the trunk, in order to throw out rank, succulent shoots, and cause an unnatural flow of sap, so that the wood could not be matured in a firm and healthy state.

As the main branches of the vine extended, care was taken to lead off lateral shoots, spurred in close, to keep up a succession of young and healthy wood; hence, there was a continual supply of sap flowing to every part of the vine in the growing season and, as the leading branches grew old, they also became firm and solid in wood, and the vine was by this means more capable of producing regular crops of fruit than if it had been pruned down every two or three years to its trunk.

Every precaution was taken against the inroads of insects, by keeping the leaves and wood in a clean and healthy state, and care was also taken that the leaves and young summer wood was regularly distributed, so that every part might have its due share of sun, air, &c.

Indeed, everything was always done to give health and vigor to the vine.

Before closing I will now say a few words to the general reader, as this article was partly written to gratify the many inquiries often made, as to whether I had ever cultivated the grape. What has been written may serve to answer.

Respecting any opinion I may have to advance on the culture of the vine, I will here say that, in my judgment, the system which has been given is the only true way of culture that can be practiced to bring a vine into a proper size and healthy state.

The cutting down grape vines to a stump every year and twisting the shoots into hoops and all manner of forms to check a regular flow of sap is not only artificial but unnatural; when every gardener and vine dresser well knows or should know that the true system of pruning and cultivating the grape, as well as every other vine or fruit tree, is to assist nature by applying every judicious means of art.

It is much to be regretted that, in the present enlightened age of horticulture, the cramping trees into a dwarfish, pigmy state is often followed; which, with the unmerciful manner of pruning to make trees bare prematurely, has a tendency to bring trees and vines into a weak, sickly state. Instead of this, trees, vines, &c., should be permitted to spread their natural, free born limbs to their full extent and vigor.

It is really surprising that cultivators in the Western States should adopt the system of cutting down the grape vine every year, like a raspberry bush, while its natural growth at once shows, by the wood dying down to the ground every year after bearing, that the object of the pruner should be to prune out the old wood; but let any one observe go into the western forest and he will there find the native grape clinging to the top of an old oak or other tree, from fifty to seventy feet, with a stem some fifty years old, like a large cable. Now these vines, when young, clung to the young sapling oak and grew with its growth, always having the ascendancy by covering its top with young branches.

Before parting with my old favorite I will pass a remark on its quality as a table grape. The Black Hamburg is not surpassed by any other grape at the desert. The bunches are well formed and the berries, when well ripened, are of a fine, rich, dark purple color, possessing a delicious, vinous flavor and are remarkable for leaving an agreeable flavor on the palate for some time after tasting the fruit.

Indeed, while at the desert table with the best connoisseurs of the grape—who, after par-

taking of the rich, musky, flavored varieties of the Muscatines and Muscat of Alexandria and other choice kinds,—I have often seen them return to the old black Hamburg to finish their dessert—to enjoy, as it were, the last relish of the grape.

**Staines' Seedling Strawberry.**—Relative to this fine strawberry, we have been favored with the following descriptive notice, from the pen of Mr. Edw. Sayers:

"By the politeness of Mr. W. C. Staines I had the pleasure of seeing a new seedling strawberry at the garden of Mr. W. Woodruff, which far surpasses any strawberry I have seen in the valley. This strawberry was raised from seed by Mr. Staines, who furnished Mr. Woodruff with the first plants, which were set out last August.

The bed is now in full bearing. The strawberry belongs to the stock of the old English Pine, which it very much resembles. The fruit is large and handsome, of an oval form, and when ripe, of a dark red color and a fine, rich flavor.

I am really glad that Mr. Staines has been successful in producing so good a strawberry, which will compare, in point of flavor and bearing, with the best varieties of strawberries of the present time.

The plant is dwarf and compact and well adapted to this locality, and will doubtless become a universal favorite. Indeed, it is doubtful whether it will ever be surpassed as a good standard strawberry, adapted to the valley."

The *Genesee Farmer* for May came by last Eastern mail. About one hundred dollars is offered in cash premiums, varying from one to twenty five dollars, to be awarded to those persons who obtain the largest number of subscribers, the next largest, the third largest, and so on to the twelfth—for the half volume commencing with July. The *Farmer* is also offered, during the last six months of the present volume—July to September inclusive—to single subscribers for 25 cents; five copies for \$1, eight copies for \$1.50, sixteen copies for \$3; and a copy of *Rural Annual and Horticultural Directory* to the person getting up the club. We notice that C. W. (H?) Oliphant, G. S. L. City, Utah, gained the seventh prize—\$14—for forwarding, previous to April 15, sixty five subscribers.

**Horses Legs**, when it is necessary to wash them, says Sir George Stephens, "do it in the morning." He thinks it is unnatural and absurd to wash a horse's legs, when he enters the yard, immediately after being heated with exercise. They should be rubbed down with straw and a dry brush and next morning washed clean with soap and water. To pick and wash the soles of a horse's feet in the evening is beneficial.

Farmers and others, in any of the settlements, who wish to obtain the *American Agriculturist*, can do so by forwarding one dollar to the publisher in New York City, or, if they prefer, they may remit their names and the amount to this office and we will forward them.

The Apple crop has been seriously injured in this vicinity, by the strong easterly gales of last month. We were informed by Mr. P. H. Young, that his trees would not yield more than a quarter crop.

The Peach crop, in the warm, gravelly uplands, bids fair for a good yield, while that in other localities, particularly in and around this city, is reported as not so promising as that of last year.

Apricot trees are generally very full of fruit. We noticed several fine trees, a few days since, in the gardens of Mr. W. C. Staines, that were overloaded with this excellent fruit.

Cucumbers, grown in his garden, in the open air, have been on ex-Governor Young's tables, we have been informed, for some two weeks.

[From the American Agriculturist.]

## Breeding In-and-In—C. M. Clay's Reply to a Cattle Breeder.

No. II.

"A Cattle Breeder's" 24 No. is before me. Its length is formidable; but the importance of the subject will warrant a close scrutiny of all he has said. He prefaces his argument by saying, "I do not advocate the breeding 'in-and-in' in all cases; and do not recommend others to do so at all, except under circumstances of perfect health and condition of the animals so proposed to be bred." This is for all practical purposes giving up the whole theory; for as no man can tell when an animal is in perfect health and condition, he can never be sure but that he is committing a grave offense against Nature's law, which will certainly not go unwhipped of justice! Here I might rest the argument, but that I desire to place this matter beyond cavil; which if not done, will be the fault of the disputant.

1st. THE STUD BOOK.—Following up "A Cattle Breeder's" advice, I have posted up myself in relation to the Stud Book, never fearing that all the laws of animal life would fall to run parallel. I have before me, in addition, letters from some of the most intelligent practical breeders of the Race-Horse—from all of which I conclude.

a.—The Race-Horse so far from being advanced by 'close' breeding is not a pure breed, but a composite of the Arabian, the Barb, the Persian, the Turkish, and the Arabian, mingle in his veins. Even if these are of quasi specific type—they can not claim excellence from close breeding, but the contrary.

b.—The original stock imported in the reign of Edward the Third were reinforced repeatedly by new importations at various times, and especially from the time of James the 1st to Anne's reign.

c.—Since which time the improvement of the race-horse has been the result of culture.

d.—There were great numbers of horses for selection, and the four breeds were combined in infinite variety. So much for the general facts of the stud-book. Now for authority and special proof.

e.—James K. Duke, Esq., of Scott co., Ky., one of the most successful breeders and racers in America, says in reply to my questions: "It has been a maxim with the English and American breeder to AVOID IN-AND-IN BREEDING of the race-horse. In England the practice is to combine DIFFERENT STRAINS, and of these strains there are many." "In America it has not always been practicable to breed so judiciously, because the field for selection was comparatively small. It has sometimes occurred, as in the case of the Arabian family, that there was but one highly distinguished strain on the turf; and that strain, the stallions of that family were almost exclusively bred from. But the conjunction of the mares with the horses of that strain was deplored as an evil. Fresh importations of English blood came to our relief, and the ARABICS FADED FROM THE SCENE: BOSTON AND WAGNER ONLY OF THE OLD AMERICAN AND ARABIC BLOOD PROVED GOOD ENOUGH TO SURVIVE!" [The small caps are mine.]

f.—Lexington, bred by E. Warfield, Esq., of Ky., made the best time on authentic record, either in England or America. The time of Flying Childers is merely traditional, and regarded by modern racers as a myth. Lexington was by Boston, an American; his dam by Tarpedon, an English horse. Boston and Tarpedon were of distinct strains; the one the grandson of Sir Archie, the best American; the other the son of Erulus, the best English stallion of his day.

g.—Mr. Duke concludes by sustaining generally my theory, abating somewhat its stringency as you descend in the animal scale of intellectual and muscular action.

h.—Landers D. Bruce, Esq., Secretary of the Ky. Trotting Association, who is about getting up an American stud book (for which he is deemed highly competent) sustains my theory with regard to the race-horse to the fullest extent; giving many special examples of entire failures of the best racers by 'close' breeding! Time will not allow me to introduce them.

2. ANALOGY: MAN. a.—The Jews were not only 'warlike' requiring 'great bodily health and energy in action,' (which so far is giving up the argument as drawn from Jewish history, in my favor) but highly observant of natural and psychological and physical laws. Their theory and destiny are on my side. I hold that it is unphilosophical to go back to the mythical times of 'Adam and Eve' in these discussions, and leave my opponent in full possession of all that field, as I propose to discuss a practical common sense subject, with practical common sense men.

b.—I deny the statements as regards the Greeks and Romans generally, and call for the data. Great excesses were committed in various ways among the Greeks and Romans in their semi-Barbaric State, as well as in their corrupt decline; but the best specimens of both races were clear in thought and deed of the imputations of my opponent.

c.—In the case supposed of 'close' marriage, I am not willing to admit the conclusion. And whilst all the effects of a good law are not at once lost, nor all the effects of a bad law (or rather abused law), at once visible, it does not prove them therefore to be disregarded as a general rule. Besides it is simply a 'petitio principii' which is worth nothing.

d.—'Brutus' I agree are 'desirable,' but close breeding is not the way to get them, as I will show presently. The example of Georgia is not conclusive; but so far as authority goes, is certainly worthy of respectful consideration; and so far as the observation of men can determine a law of nature, as testimony, is certainly cumulative in my favor. That cousins may come over the line and marry with impunity! certainly does not prove the Georgians the less 'Solomons' in their action. The same objection might be urged against legal adultery or even marriage itself! which is a clear case of 'reductio ad absurdum' against my opponent. A great many men have married cousins, and many more propose to do so, which brings a strong force against legislation on this subject, and when in the face of the natural vis inertia of legislative reform, and these powerful interests, such acts are passed in intelligent communities, and projected in others, the sneers of even 'A Cattle Breeder,' (whose abilities I certainly do not despise) will not fail to have due weight with sensible men.

e.—I repeat, that outside of mental and sentimental phenomena, man is governed by the same physical laws as other animals. This is not an unmeaning dictum, as my opponent would intimate. I don't use that sort of filling up; nor will such practice go unobserved in others! If he grants that 'make men savages then they are like other brutes,' then he yields all that I ask from the argument of 'analogy,' although in paragraph 2d (2a.) he asserts the contrary! Let me explain a little: give an ox sufficient food, and he will fatten; give a man any quantity of food, and he remains the same. Why? Because his mind is over active, his sentiments are engaged, he is speculating, he is in love! But let his mind become inert, and his sentiments stagnant (all possible!) and he will fatten also! The physical law is, nevertheless, the same in man and animals because of the 'mental and sentimental phenomena,' but only obstructed, retarded, or deranged by them! Indeed the same phenomena 'mental and physical,' are common to man and the lower animals: though the mental are more faint in brutes. Remove the ox from his accustomed mates, and he will not take on fat so well, or at all, for a time; here his sentiments control the natural law. So the cow when separated from her calf ceases for a while to yield her usual milk. It can be proved by dissection that a dog when fed and put upon a hunt, does not digest his food in the usual time. Here the mental law simply controls the physical.

If 'close' marriages were forbidden on account of 'mental and sentimental phenomena' only, then in the case supposed (2. c.) the issue would be the same as if 'wide' breeding was practised; but as in addition to the 'mental and sentimental phenomena,' the simply physical law is violated, I should look for (what experience proves) a malformed issue!