

wonder. After these came the younger enthusiasts, the foremen, and others who desired to see for themselves if half were true that had been told them. It was known that we intended to introduce the James Vick this season, but a gentleman who has charge of one of the largest nurseries of the country said that we would not have plants enough to supply the demand, as he thought the large firms would sell 100,000 plants of the James Vick. Mr. Vick and Mr. Charlton also thought the supply of plants would be wholly inadequate, and advised holding over the James Vick until another season. Mr. Charlton said that as soon as Norfolk, Va., and other large Strawberry planters learned of the value of the James Vick for market, and shipment, the demand would be something wonderful. But as our plans had been made we thought it not best to change them.

We received the following from the Geo. A. Stone nursery, Rochester, N. Y.:—"Dear Sir: I saw the James Vick to day at Rochester. It would certainly seem to possess all desirable qualities. It is very prolific, fine of flavor, and of firm texture."

Geo. S. Wales, the Bannockburn nurseryman, said he had seen nothing equal to the James Vick.

Secretary P. C. Reynolds, of Rochester, N. Y., considers the quality of the James Vick very good, and well suited to his taste, which, I will add, is exceedingly critical. With possibly one exception he has not seen anything to equal it in productiveness. He considers it more productive, larger and of better quality than the Manchester.

The roots indicate great vigor, the largest we have seen on any variety. Mr. Peter B. Mead remarked that they were something unusual. We sent fruit of the James Vick to Mr. J. T. Lovett, over 300 miles distant, and he reports that it came in fine condition. As a shipping variety it is particularly desirable.

Marshall P. Wilder writes: "You will be pleased to learn that Mr. Benj. J. Smith, of Cambridge, has succeeded famously with the James Vick." Mr. Wilder sent an order for the James Vick by telegraph.

Mr. Peter B. Mead says he has seen enough of the James Vick from spring set plants to warrant placing it among the very promising varieties, and that it endures drouth remarkably well.

Vick's Magazine says: "Its merits as a prolific and profitable strawberry are now pretty well established."

THE POINTS OF MERIT

of the James Vick are briefly:

1. Fine quality, unusual vigor, and hermaphrodite (or perfect) blossoms.

2. Color, form and firmness of berry, which approaches the ideal. No white tips, no coxcombs.

3. Ability to stand on the vines a week after ripening, without becoming soft, or rotting, or losing quality or much luster. Instead of softening it shrinks a trifle, and becomes firmer than when first ripe.

4. Uniformly large size and productiveness unequalled by any other variety. Two hundred and eighty berries were counted on one average plant, and from one row about 100 feet long nearly two bushels of berries were gathered.

The prices for the James Vick are \$2 per dozen, \$10 per 100.

In this connection we would draw our readers' attention to the fact that this valuable plant has been added to our premium list. Further particulars on pages 200 and 203.

HORSFORD'S ACID PHOSPHATE AS A COOLING DRINK.

Dr. M. A. Henry, New York, says: "It possesses claims as a beverage beyond anything I know of in the form of medicine, and in nervous diseases I know of no preparation to equal it."

STOCK.

A cow reared on a farm where she is to remain is more valuable to her owner than a strange cow. She is acquainted with the herd with which she must associate. She is familiar with the lands from which she obtains her food, and can travel them with greater ease than a strange cow. In consequence of these things she will yield more milk and be more profitable.

SULPHUR FOR HORSES.—When taken internally in quantities of about a teaspoonful once a week with food, sulphur will keep all kinds of animals free from lice, and promotes the general health. One teaspoonful is sufficient for ten or twelve hens, or three or four sheep or pigs. The same quantity of charcoal can be combined with it with good results.

Sheep are said to be the "animals with the golden hoofs; they enrich where they go, not only the master but the soil. Sheep are the best manure makers, the best weed destroyers, the best grubbers, the most easily cared for, and require the least cost for fencing and barns of all the stock kept on the farm.

Many people are slow to take steps for the improvement of cattle, because of the time required to bring about noticeable results. An improved kind of grain or seed can be planted in the ground, and a few months only are required to demonstrate its worth. Many months, however, are necessary for the farmer to reap the benefits of the introduction of good breeding cattle on his premises. In fact, it is a matter of importance and of profit. No consideration of this kind should be an obstacle to breeding up.

HOW TO TETHER A HORSE.

An owner of a horse often wishes to graze his horse for a while on some grass plot where he does not wish him to run at large, and fears to tie him for fear of accident. A horse may be safely tethered so that fear of accident may not prevent his being left to himself for reasonable time, as I well know from experience. A horse should not be tethered with a rope or other fastening about his head or neck, and tied to a stake or other fastening so that the tether will drag the ground. Few horses will fail of getting their feet entangled in some way and getting cast or badly injured. Often if tied by one of the fore legs, about the fetlock, the case is little or no better, as if the rope gets caught under the fetlock of the hind foot the rope will chafe or rub off the skin of pastern, or otherwise injure the horse. Such injury of the pastern is very apt to cause an ugly sore, hard to heal even if it does not lead to grease or scratches.

The only way I have ever tried and felt as if safe, was to fasten the horse by one of his hind legs above the pastern point. I have a leather strap two or three inches wide to buckle around the leg to which the rope or chain, with swivel joint is fastened, the other end being made fast to a pin or stake with a head, so that a ring at the end of the tethering line will not slip over, but be free to turn as the horse may go around in feeding. I have never known a horse thus fastened to get into any trouble, and have known them to be thus left over night, after becoming accustomed to being tethered. For tethering any animal I prefer a light tethering chain to a rope, as a chain never becomes knotted or kinked from being wet, as does a rope. Even when wound around the foot or leg it drops

off easily in moving, never clinging and drawing tight as does the rope. I have often seen an ox, when fastened by the head, get the chain around one hind foot and then raise the foot with a shake, the chain falling off, and even the mere stepping along was enough. —Country Gentleman.

PROVIDING WATER FOR ANIMALS.

All kinds of stock should have access to pure water at all times. Although some animals will exist for almost an unlimited period, and some seemingly thrive, when deprived of water, still all do better when they can have access to pure water, where they can drink a pleasure. My own experience and observation in raising and fattening animals warrant the assertion that they all thrive better if they are well supplied with pure water. On many farms all or a large proportion of the water is obtained from wells. Where such is the case a well should be dug near the barn, yet not so near as to endanger the purity of the water by leachings from the yard. A pump can be placed where the water is to be delivered, connected with the well by an underground pipe. This pump may be operated by a windmill, or by hand, only making sure that a constant supply is kept where the animals can obtain it at will.

A well is almost likely to be reliable if dug while a drouth has lowered the springs to a low point, and then it should be sunk as low as possible after water is once reached. A curb or frame of oak planks should be made to fit the well, on which to build the brick or stone wall. When water is reached, and comes in too fast to dig farther, this frame may be laid on the bottom of the well and the wall built up a foot or so, and then, by digging under the curb the wall will settle, provided the earth is taken out alike from all sides. In this way a well may often be settled several feet after water is once reached; and sometimes old wells which become dry may be sunk deeper in this way, and be thus improved so as to give a permanent supply of water.

In some cases, when there is a spring or stream of water only a few feet higher than the barnyard or stable, a small stream may be brought in pipes to the desired point. A main essential in laying them is to have the pipes lie level, without high and low places where sediment will settle, and below where frost will be apt to interfere with the water in winter. Tiles may often be used for conductors by cementing the joints carefully so that none will leak. In case of a spring or brook lower than the point where the water is desired to be delivered, if there can be a fall of a foot or two away from the spring within a few rods, a water ram will throw a part of the water to any desired point within reasonable limits. Often a suitable fall may be made, where there is not sufficient natural fall from the spring or fountain, by digging a well three or four feet deep with provision for conveying surplus water away from the machine. The quantity of water a given machine will deliver depends upon the yield of the fountain, the fall away from the fountain, the height the water is to be raised and the distance carried. This mode of raising water is the best and cheapest that I have ever seen in operation. The care or expense in keeping one in operation is scarcely anything when once put down as it should be.

For one dime get a package of Diamond Dyes at the druggist's. They color anything the simplest and most desirable colors.

Agriculture.

SPONTANEOUS VEGETATION.

A correspondent of *The American Farmer* asks "What process produced the first vegetation on earth?" and proceeds to discuss the problem in this wise:

"Does any intelligent, reflecting being believe that the material seeds were manipulated by the hand of the Almighty, and by him placed in the ground, and there quickened into life by the sun and moisture of the atmosphere? I know that there are such, and that some of them would condemn any man to be burned at the stake who dared to believe that such an idea is a preposterous absurdity. And yet it may be honestly doubted that such was the origin of vegetation. I believe that vegetation was produced as the result of the chemical combination of the elements of the plant in the earth and the atmosphere. I am as positive in the belief as I am that our bodies return to dust." And just as I believe that vegetation to have been originally produced by nature's chemistry. I believe a great deal of vegetation to be produced by the same process to-day.

"My reflections were first drawn to this belief by noticing, during a ride in Southern Maryland when I was quite a youth, a thicket of young white oak growing upon the site of a former thicket of pine. I was deeply impressed with the observation, and later reflection and observation have all tended to strengthen the belief and conviction in what I thought then, viz.: that the chemical elements of the white oak lay dormant in the soil, but the pine having possession of the soil in living growth it preserved the ascendancy, and that as soon as the pine was removed the chemical combination was formed that quickened the elements into life and produced the oak by the contact of the atmosphere with the soil, which was before interdicted by the vital power of the pine. I believe that soils in a natural state teem with vegetation, and that the plants in actual possession of the soil lose their strength from continued reproduction of their seed which robs the soil of the elements of their nature. That, gradually, other combination occur, producing plants of a different nature. And thus in agriculture we fail utterly to get a stand of the seeds that we plant even with fertilizer. The ground becomes covered with some other plant—rag-weed for instance—which produce a most luxuriant growth from the effects of a fertilizer that we have used for an entirely different purpose. I believe that seed placed in the earth, except in isolated cases, either rot or vegetate. And it is impossible for a field to be cultivated for years without the absolute destruction of seeds that have fallen on the surface from growth that has existed before the land went into cultivation. And when such growth occurs it is because the chemical elements that originally produced it are still dominant in the soil awaiting a favorable opportunity to form the chemical combination that reproduce the plant.

"If a field be set in grass and then regularly fertilized with the elements that chemical analysis shows to be the constituent of the plant, the grass will hold the soil to the exclusion of all foreign vegetation, as far as human science can produce the analysis of the plant. And if foreign vegetation does make its appearance it will be attributable to the fact that, in the fertilizer used some element is absent that