

HORTICULTURE



Top Grafting Old Trees.

I think the subject of top-grafting is one that has been too much overlooked, said Herman Behrens before a meeting of apple growers. Top-grafting when clearly understood and properly applied is one of the most helpful means for improving old orchards. It must be borne in mind that the great majority of orchards in this part of the country planted a score of years ago did not receive the careful attention and foresight of the orchards planted during the past few years. It would be a comparatively easy matter to find instances where the owners of such orchards would be ready to cut down the trees and plow up the orchards. An indifference to proper attention and care the trees should have received has allowed many fungous diseases and other obstructions to the growth of trees to become prevalent; in fact, to seemingly gain the mastering hand. Now if the apple growers knew more about top-grafting they could step in and use this method to the best advantage in such cases. There are different methods in top grafting. Some like to cut off one limb of the tree and then insert the graft. Where there are three strong, well preserved limbs it would require three years to perfect such grafting. My plan would be to graft all limbs on the tree whether there are three or four main limbs at one time and let the case rest for one year. If on close examination one year after graft has been made it is found to be growing; then would saw off each limb where the graft has made its proper effect. In case the graft, which is something like vaccination, had not struck into the life and sap of the limb, I would re-graft and wait patiently for the best results.

A Plum Orchard Village.

One day some years ago an enterprising resident of the village of Syracuse, O., brought a Damson plum tree home with him and planted it in his own front yard, says Country Life in America. It grew and thrived and in good time bore fruit. It was good fruit and he planted more along his garden fence from sprouts that came up from the first tree. They also soon bore fine plums. By this time his neighbors had their attention attracted to his modest plum orchard. They bought his surplus plums and begged sprouts from about his trees, thus exemplifying the spirit of the boys who desire to cast their lines in productive pools.

It was found that the locality was comparatively free from two annoying plum pests—black knot and insects—and the great bend of the river seemed to protect the fruit from late frosts, so that two full crops every three years might be expected with reasonable certainty. The result was that plum growing spread from lot to lot and from street to alley until the industry amounted almost to a craze. The markets grew and expanded, however, and there never was any difficulty in disposing of the crops at good prices. When other localities had crops Syracuse had to be content with the ruling prices in the general markets, but when other places failed Syracuse made her own prices.

Ten years ago the leading producer of apples was Ohio, while Michigan stood second and Kentucky third. Of late years a good many other states have planted heavily, and it is doubtful what state now ranks first. Among the states that have planted many millions of apple trees during the last few years are Virginia, New York, Pennsylvania, Illinois and Missouri.

Virginia has produced over 8,000,000 bushels of peaches in one year.

LIVE STOCK



Margin in Sheep Feeding.

Prof. W. J. Kennedy, in a bulletin of the Iowa Station, says:

Farmers throughout the central states annually feed and finish for market thousands of sheep. During the past decade a great many farmers have adopted the policy of purchasing western lambs and yearlings during the months of September, October, November and December, with the intention of feeding them from sixty to one hundred and twenty days, depending upon the condition of lambs, markets, etc., and then selling them at an advance in price sufficient to return a nice profit on the investment.

Many sheep feeders claim that one year with another when sheep or lambs are fed on grain and hay that the feeder must have a margin of at least one cent per pound between the buying and selling price to warrant a profit. In other words, lambs or sheep purchased at four cents per pound must be sold for at least five cents per pound when finished in order that the feeder may make sheep feeding a paying business. A careful study of the cost of producing gains on sheep and lambs at this and other stations would indicate that a margin of one cent per pound between the buying and selling price is not always necessary. In summarizing the results of five trials at Wisconsin, Minnesota and Michigan stations where corn and hay were used, valuing hay at eight dollars per ton and corn at thirty-three cents per bushel, each pound of gain was made at a cost of four and one-half cents. At this station gains have been made on grass and corn at a cost of less than two cents per pound, in which instance the sheep could have been sold without any advance over the buying price and a nice profit realized. Some of the things which have an important bearing on this matter are the price of feed stuffs, age of animals, season of the year when feeding is done, etc. When feed is low in price the feeder can work on a small margin and vice versa. Lambs can be handled on a much closer margin than yearlings or older sheep, due to the fact that the younger animal the better it can utilize its feed, thus more economical gains are made. Lambs purchased in the neighborhood of the feeder can be fed on a narrower margin than those purchased at some distant point as the freight charges must always be considered. The season of the year also has an important bearing on the matter, and as will be noted later in this bulletin, more economical gains can be made during the summer months on grass alone and grass and grain than can be made during the fall and winter months on grain and hay.

Fine Stock for Japan.

Tokuja Hashimoto and S. Tchil of Japan are in Chicago preparing to ship to their native land, for breeding purposes, sixteen high-bred cattle and eleven blooded hogs purchased in this country. The consignment includes two blooded shorthorn bulls from the farm of Frank O. Lowden at Oregon, Ill. Mr. Hashimoto did not care to say from what port the shipment would be made. Cattle and hogs, he said, are not contraband of war, but one could not tell what the Russians might do. Mr. Hashimoto is a wealthy dairy farmer in his own country, and most of the cattle are for himself, the balance for other dairymen and farmers.

Weeds cannot be allowed to grow if a good crop of anything is expected. They absorb moisture and prevent the roots of the food plants from getting it. As water is the conveyor of the food of the plants, this is a great drawback. The more succulent the weeds the more do they interfere with the growing of plants that are raised for the use of man.

POULTRY

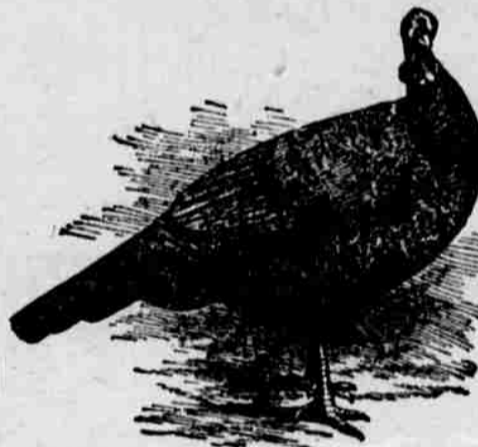


Poultry Meat Profitable.

Poultry meat is always healthful and always profitable to produce. It takes at least two years to get the steer to the point where the meat may be marketed, but the meat of the fowl is ready for market five months or earlier after birth of the bird. The money invested in the operation is quickly turned. The present inclination of the market for meat is upwards, and this is as true of poultry meat as of any other. The advantage in the production of poultry meat is that it is always marketable and can be sold in small quantities. It can be retailed out little by little, that is, bird by bird, while a thousand pounds of beef must be quickly marketed or it will spoil. Life is the great preserver, and a thousand pounds of live chicken has an immense advantage over a thousand pounds of beef when demand is slow and uncertain.

The Slate Turkey.

This is a variety that is not extensively bred. It is supposed to be the result of a cross between the white and the black. The foundation



Slate Turkey Hen.

color is ashy or slaty blue throughout, spotted with black. The less of this spotting the purer the bird is supposed to be. The old toms reach a weight of 27 pounds in many cases and the hens usually attain a weight of 12 pounds. The real value of this bird for market has not been determined, and it may possess in it qualities that are not now apparent.

Whitewashing With a Sprayer.

There are nozzles on the market that make it possible to apply the whitewash to the country house without the use of a brush. The construction of buildings at the Columbian Exposition was an object lesson to the general public as to how whitewashing can be done on the wholesale. There the buildings were whitewashed very rapidly by means of streams of whitewash thrown on the buildings but in spray sufficiently fine to penetrate all the cracks and crannies and yet not to be wasteful. Our poultry houses need to be frequently whitewashed and it would doubtless pay to have a sprayer for this purpose if for no other, if such a one can be obtained for a few dollars. Men that have fruit orchards large enough to warrant them in having spraying apparatus will find it an easy matter to give the inside of the poultry house a treatment frequently.

Eggs are finished products. Unlike most other products of the farm, they are ready to go to market as soon as dropped. The buyer wants them in their natural state and no other.

In the greasing of any kind of fowls for body lice it is only necessary to use lard. The mixing of kerosene with it is not necessary and is hard on the skin of fowls.

Poultry raising is popular for the reason that it may be entered on by people of small capital or by people of no capital.



AGRICULTURE

Home-Grown Sugar Beet Seed.

A bulletin of the United States Department of Agriculture says:

It is believed that the average sugar content of beets in this country can be increased 2 to 3 per cent when we shall have developed a higher strain of beets through home-grown seed. On account of the higher vitality of the germ, these experiments indicate that we shall have a race of beets more vigorous from the start.

In the production of beets for a factory, the vitality of the seed as shown by germination is an important factor. It is the first evidence of the probable yield of the crop that the grower looks for. Everything depends upon the stand. It is desired that a beet shall fill every place in the row provided for it. It is evident that if every third beet is missing there will be only two-thirds of a stand of plants matured at the harvest. If the rows are 18 inches apart and the beets stand 8 inches apart in the row, there will be 312 beets to the row, and 138 2-3 rows to the acre. If every beet is in its place there will be 43,264 beets to the acre. If these beets average one pound, there will be 43,264 pounds to the acre, equal to 21.63 tons. If the beets average two pounds, which is more nearly the usual size, we will have 43.26 tons per acre. This shows the possible tonnage per acre when all conditions are favorable and we have a perfect stand. Vitality of seed is a strong factor in reaching this ideal.

The plants should start out strong, vigorous and healthful. They must send down their taproots vigorously, and send out their laterals quickly; this enables them to entrench themselves early in the soil. Plants are like animals. Vigor in youth promises much for healthful maturity. Strong vitality or germinating power of the seed indicates this early vigor, which will enable the plants to withstand diseases, pests and drought. The number of sprouting germs in a given number of beet balls and the vigor and rapidity of germination are the tests of this vitality. Home-grown seed has shown a higher germinating power in a shorter time than those selected from ordinary imported seed. From these facts it would appear that we are entitled to anticipate a higher yield of beets from the use of home-grown highly developed beet seed.

The extraction of refined sugar in this country averages 11 per cent, or 220 pounds of refined sugar to a ton of beets. The factory pays the farmer for this sugar \$2.27 per hundredweight while it is still in the beet. If the factory could extract 13 per cent of sugar on account of our perfecting a strain of beets with higher sugar content and purity through home-grown seed, a ton of beets would yield 40 pounds more sugar, worth at the factory \$1.80. This alone would give the factory 36 per cent profit upon the investment of \$5 per ton for beets. This seems quite possible. Home-grown seed to-day offers the most encouraging prospect of insuring the future growth and prosperity of the beet sugar industry.

Exercising Show Horses.

In the fitting of show horses exercise is of considerable importance. A little mistake in this may make a good deal of difference when an animal comes into the show ring. It is one thing to exercise an animal in cool weather, but a very different thing to exercise him in hot weather. The horse owner that tells his man to give the horse just so much exercise a day needs also to specify that in the hot days of summer that exercise is to be in the early morning while the temperature is comparatively low.

The profit on the feed put into the cow depends very much on the cow.