IMPORTANT FACTS REGARDING PRUNING AND OTHER NECESSARY WORK IN VINEYARD

First Trimming After Planting May Be Done Any Time During Winter When Vines Are Dormant and Not Frozen—Varieties Require Different Methods.

(By GEORGE C. HUSSMANN, Pomologist, United States Department of Agriculture.)

In vineyard grafting, many operators, a month or so before grafting, cut off the stem of the vine an inch or two above where it is to be grafted so that the stock may bleed profusely. Water sprouts that otherwise would appear are thus to a great extent eliminated.

In cleft grafting, the vines are cut off at a smooth place near and preferably a little above the surface of the ground, unless it is desired to have the grafts establish themselves on their own roots, as it makes the removal of water sprouts and roots starting from the scion much easier and lessens the danger of injuring the scion before it is thoroughly knitted to the stock.

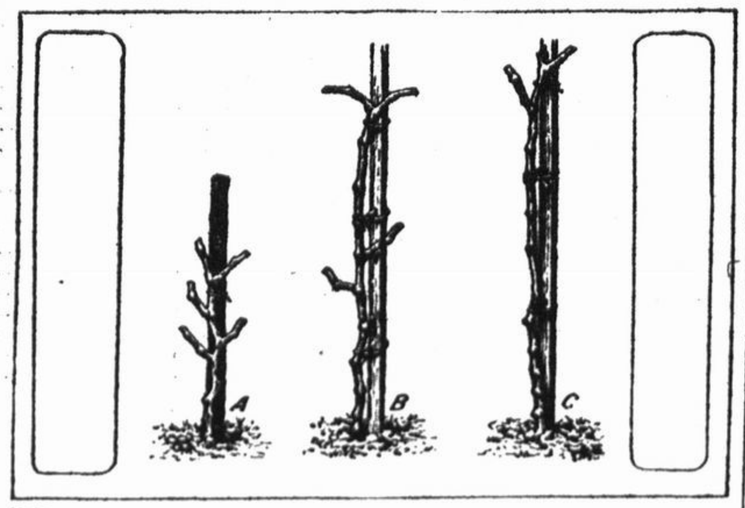
The first pruning after planting may be done any time during the winter when the vines are dormant and not frozen. The extent of pruning will depend on the growth made. If the growth has been small, all the canes except the strongest should be removed, and this one cut back to two eyes. If a strong growth has been made and there is one straight well-ripened cane, all other growth should be removed and this cane cut back to the height at which it is intended to head the vine. The cane should be tied securely and, as it is to become and remain the trunk or main body of the vine, should be kept as nearly erect and straight as possible.

Where the vine was cut back to two buds only one should be allowed to grow. All other young shoots should be removed, preferably when quite young and not more than three or four inches long. This concentrates all the force and growth of the plant into the cane, which is to become the trunk of the vine. The shoot left to grow must be kept carefully tied to the stake to cause it to grow erect and also to protect it from being broken by the wind or other agency. When a shoot has grown to a foot above where it is intended to head it should be topped slightly above where the head is to be, causing laterals to grow where they are desired. Only such shoots should be allowed to grow as are needed for shaping the vine for the following season. All suckers should be promptly removed.

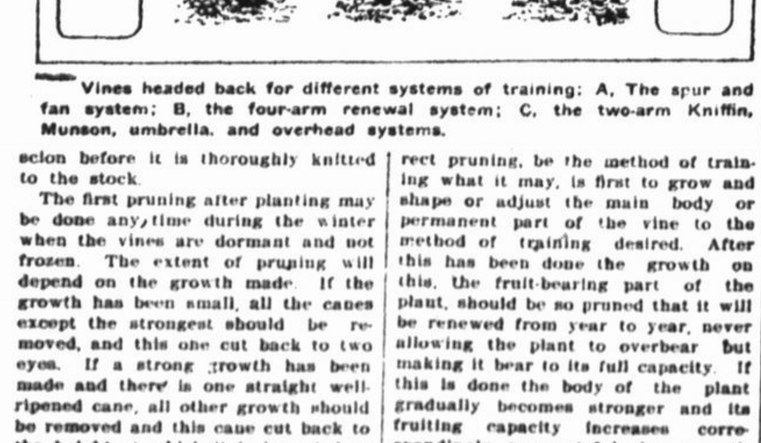
By the third year all vines should have erect, straight stems with two or more canes growing from the principal part, out of which the head or crown is to be formed and from which the growth of the vine is to be renewed from year to year.

The vine, when permitted to do so, bears its fruit on shoots from the last year's wood growth; therefore, the cardinal point underlying all correct pruning, be the method of training what it may, is first to grow and shape or adjust the main body or permanent part of the vine to the method of training desired. After this has been done the growth on this, the fruit-bearing part of the plant, should be so pruned that it will be renewed from year to year, never allowing the plant to overbear but making it bear to its full capacity. If this is done the body of the plant gradually becomes stronger and its fruiting capacity increases correspondingly, no wasteful plant growth is allowed at the expense of fruitage, and the vines are easily kept clear of insects and fungous diseases. The manner of renewing the growth on the body of the vine so as to leave the body permanent is illustrated.

Not only do different countries have different methods of pruning and training, but methods often vary in the several districts of the same country. The inherent peculiarities of the varieties themselves often require special methods to obtain the best results. No attempt is made to describe methods other than those that appear most applicable and have proved most satisfactory for the grape species grown in various parts of the United States.



Vines headed back for different systems of training: A, The spur and fan system; B, the four-arm renewal system; C, the two-arm Kniffin, Munson, umbrella, and overhead systems.



A vine pruned according to the four-cane Kniffin system: C, Canes, called shoots when green and canes when mature; Sp, spurs, canes cut back to one to four eyes; T, trunk, the stem or main body of the vine; a, b, c, d, arms.

TRYING A SMALL FLOCK OF SHEEP

For All-Around and General Purpose Animal None Better Than Shropshire.

Sheep raising on a small scale is almost universally profitable on almost every farm, but when more than a small flock is kept quite a different proposition is involved, says the Progressive Farmer. With a small flock no special pastures are required, they can be housed in buildings and used for the other stock without crowding and require little feed and practically no special attention. When a larger flock is kept two or more pastures should be maintained, ample houses for keeping dry without crowding provided, and an abundance of suitable feed supplied.

For the south we are inclined to favor the Shropshire, Southdown and the Dorset. For an all-round and general purpose sheep there is probably nothing better than the Shropshire. The Dorsets produce early lambs and being good milkers, the lambs grow rapidly. As a matter of fact, however, any breed of sheep will prove satisfactory if given the care and feed which they need. It is probably a fact, however, that except on the highest and dryest lands sheep are more likely to suffer from parasites and not do so well in the south as in the dryer and colder climates of the north. We are not inclined to give livestock as much care as they receive in the north, and really to raise sheep successfully we believe they require more care, especially if kept in large flocks.

We advise the beginner in this line of stock raising to procure the best native ewes obtainable in his locality and then buy a pure-bred ram and with this small flock learn the business thoroughly before attempting to raise sheep in large numbers.

Method of Hoeing.

In hoeing a long, slow movement should be made, if the soil is in good condition. Simply "scuffing" half an inch of the top soil is enough to kill weeds and one can go over a lot of ground in one day if the hoe is sharp and bright and the strokes long and smooth.

POULTRY

NEW INDUSTRY IN PHEASANTS

Interest Becoming Widespread and Thousands of Birds Now Scattered Throughout Country.

(By W. L. M'ATEE.)

Conservation of the fauna including the game birds of the United States requires the strict enforcement of laws intended to control the shooting and marketing of wild birds, and necessarily limits both the period during which they may be hunted and the number available to supply the increasing demands of those who desire those table luxuries.

This lack may be remedied by the product of aviaries, preserves, and private parks, devoted to rearing of domesticated game, the marketing of which under suitable safeguards is already permitted in several of the states, indicating that American markets will open more and more to these domesticated substitutes to the fast disappearing wild game.

At present there is no lack of demand for pheasants for various purposes. Owners of private preserves, and state game officials, pay profitable prices for certain species for stocking their covers, zoological and city parks and owners of private aviaries are ready purchasers of the rarer and more beautiful species, and large numbers of dead pheasants are annually imported from Europe to be sold for several times the price they bring in European countries. The demand for pheasants is increasing.

Ringneck Pheasant.

Ringneck pheasants have long been established in Oregon, Washington and British Columbia, and are less common in the wild state in Massachusetts, New York, Indiana and Kansas.

Efforts to acclimatize pheasants in the United States are of comparatively recent origin, though earlier than is popularly supposed.

The few pheasant stomachs examined indicate that these birds are very fond of grain. Oats and wheat composed about 34 per cent. of the food of 12 ringneck pheasants collected in Oregon and Washington and 82.5 per cent. of the stomach contents of two English pheasants from British Columbia. But all of these birds were taken in September, October and December; hence it is probable that all of this grain was waste. The next largest item of food in these stomachs was insects, consisting entirely of larvae of March flies. One stomach contained no fewer than 360 of these larvae and another 432. The remainder of the food included acorns, pine seeds, browse, peas, rose hips, lupine, bur clover, black mustard and chickweed.

From 200 to 960 kernels of wheat and oats were taken by various birds; about 200 peas were found in one stomach, but it was evident that these were the old and partly decomposed refuse of the harvest. Twenty-three acorns and 200 pine seeds were taken by the birds which ate the largest amount of mast, and about 800 capsules of chickweed, containing more than 8,000 seeds, were in the stomach of the best weed seed eater.

What is most evident is that pheasants are gross feeders; their capabilities for good or harm are great. If a number of them attack a crop they are likely to make short work of it, or if they devote themselves to weed seeds or insect pests they do a great deal of good. It seems therefore that the question of the economic value of pheasants is peculiarly a local one. Much depends on the proportion of land under cultivation, the kind of crops raised, and the quantity of wild food available. Apparently the chances are about even that imported pheasants will or will not become useful economic factors.

Clover for Fowls.

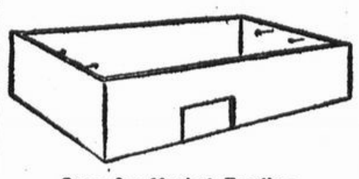
Clover is better than any other hay for fowls for the reason that it possesses egg making nutriment, as well as fiber to separate the particles of grain. It is not bulk (mere quantity) that is needed, but coarse fiber to separate the concentrated feed in the stomach, that the gastric juices can circulate through the mass.

POULTRY

FATTEN CHICKS FOR MARKET

Arizona Woman Has Much Success With Coop Covered With Wire Netting—Ration Used.

I am having great success in fattening my overstock of chick cockerels for hotel and restaurant trade, writes Mrs. Almo of Roswell, N. M., in the Farmers' Mail and Breeze. My feeding coop shown in the drawing has a solid floor of matched boards, covered with an inch of road grit. The top is covered with poultry netting, over which a solid roof is hinged, which may be raised on warm days. The front and west end are covered with wire netting. The roosts are in the west end of the coop. The feed drawer is covered with two-inch mesh wire netting and one feeding a week will do. I feed the following mixture for fattening: One quart each, alfalfa meal, corn chop and bran, and one pint meat scraps. This way of feeding saves both time and feed and I now make money where I lost money before with ordinary care. Besides my own stock, I buy chicks of the quick-growing breeds to fatten.



Coop for Market Feeding.

GERMAN EGG-LAYING TESTS

Results Given of Experiments Made to Determine Effect of Various Meat Meals on Poultry.

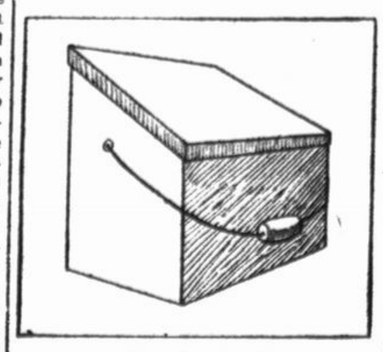
Tests were made a short time since in Germany to determine the effect of different meat meals on poultry. During these experiments it was found that the egg production ceased earlier than with normal hens. Fish meal was more favorable for egg production than meat meal. The eggs were of poorer flavor than normal eggs, and could not be preserved in the usual way.

The meat meal increased the intensity of the yellow color of the yolk. The flesh of the birds fed meat meal was normal as regards taste and odor, though slightly changed in color, melting point and fat, which were higher than normal, but lower than normal with fish meal. When fed cadaver meal the flesh of the fowl had a rancid taste, and whenever fed should be free from fat as possible, tuberculosis beef did not cause tuberculosis in the hens.

FEED SUPPLY CAN IS USEFUL

Galvanized Receptacle, as Shown in Illustration, Affords Protection From Rodents.

Where one keeps much feed in the poultry house and wishes to protect it from rats and mice a can, such as is shown in the illustration, is the best device. This is made of galvanized iron 18½ inches high at the back, 12 inches in front, 9 inches deep and 11 inches wide. It will hold 25 pounds of whole grain. There should be a heavy bail on each can, so that it may be carried easily, and to hang it up by. There should be at least one can for each poultry house. This avoids the necessity of carrying a measure of feed around when gathering the eggs.



A Feed Supply Can.

POULTRY NOTES

Keep something in the grit box.

Poultry keeping is business of quick profits.

Suggestions of fall weather are reviving egg prices.

Plowing up runs and yards is a seasonable job any time.

All the milk they will consume is a help to the molting hens.

Corn makes fat and heat. Oats, wheat, bran and middlings make eggs.

Not a bit of decayed food of any kind ever ought to be given a hen or chick.

Too many birds in a house simply can not do so well as they would otherwise.

Before the roads get frozen, scrape up some dust for winter use. Put it in a dry place.

Ten hens that have room according to their strength will bring in more money than fifteen crowded.

When we get a good many chicks on hand there is a temptation to crowd them during the winter season.