

# LIVE STOCK



## MORNING CATTLE IS BEST

Should Be Performed Early Enough to Permit Wounds to Heal Before Fattening.

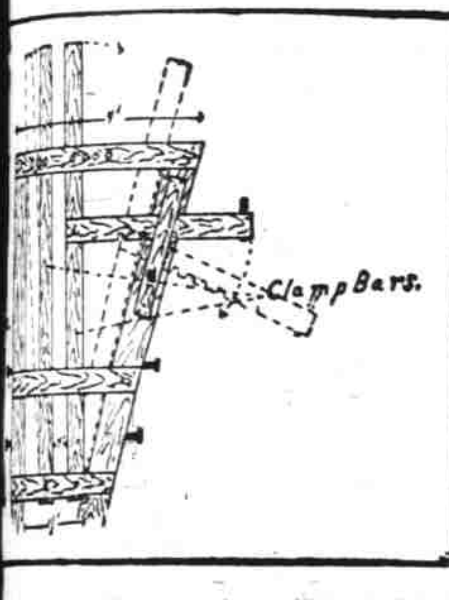
(Prepared by the United States Department of Agriculture.)

The principal objects sought in pruning may be summarized as follows:

1. To modify the vigor of the tree.
2. To keep the tree shapely and within bounds.
3. To make the tree more stocky.
4. To open the tree top to admit air and sunshine.
5. To reduce the struggle for existence in the tree top.
6. To remove dead or interfering branches.
7. To renew the vigor of the tree.
8. To aid in stimulating the development of fruit buds.
9. To secure good distribution of fruit buds throughout the tree.
10. To thin the fruit.
11. To induce uniformity in the ripening of the fruit.
12. To make thorough spraying possible.
13. To facilitate the harvesting of the fruit.

The most common method of dehorning cattle is to saw the horns off. For this purpose an ordinary meat saw can be used, though there are several other methods which are specially adapted for the operation. By this method a good clean job can be done and the wound is in a condition to heal readily.

The use of dehorning clippers is becoming more common, especially where a large number of cattle are to be dehorned and where they are dehorned before the horn becomes hard.



View of Dehorning Chute With Clamping Side Showing Clamps Closed. Dotted Lines Show Open Position.

When using the clippers it is that thin and horns are sometimes crushed or splintered, resulting in a wound that heals slowly. This objection is overcome by using clippers that are constructed with two V-shaped blades which, when pressed together, bring four cutting edges against the horn, lessening the tendency to crush or splinter the horn.

A number of methods of restraining animals during the dehorning operation have been practiced. Where only a few head are to be dehorned, the oldest way is to throw the animal on the ground and hold it or tie it securely until the horn is taken off.

When a considerable number of cattle are to be dehorned, it will pay to construct a dehorning chute. Plans for a chute that has proved very satisfactory for this purpose are given herewith. This chute is made narrow enough so that the animal will not be able to struggle a great deal, and with a stanchion-shaped head clamp at one end for holding the animal's head. After an animal is in the chute and the head clamp closed a rope should be placed around the neck with a loop over the nose. The animal can then be snubbed down to the ground indicated on the side post. This will press one horn forward so as to make it easily removed. After one horn is removed the head should be snubbed to the other side for the removal of the other horn. A chute of this kind can be constructed at very low cost by using scrap material about the farm.

Cattle should never be dehorned during warm weather when there is danger of the wound becoming infested with screw worms. The best time to dehorn is in late fall and early winter during the cool weather of spring. If the weather is sufficiently cool there is very little danger of the wound becoming infested with screw worms. However, it is best to apply some fly repellent, such as pine tar or one of the coal-tar products to the wound. The accompanying plans show the construction of two types of simple and satisfactory dehorning chutes. The dotted lines in both types of chute show the head clamps when open, and the lever in both cases is used for locking the head clamps after the animal's head is in position. The sides of the chute are shown in the plans can be made for either type. The gate is constructed for letting the animal out of the chute and also for branding and restraining.

## KEEP TO CLEAN OUT WEEDS

Common Practice to Turn Flock Into Corn After It Is Well Tasseled—Eat Lower Leaves.

A practice quite common among sheep men is to turn the flock into the corn field, after the corn is well tasseled. The sheep will clean out the weeds and grass, and usually will not eat any more than the lower leaves of the corn.

# Horticultural News

## OBJECTS SOUGHT IN PRUNING

Mistakes in Forming Head or Results of Neglect in Early Years Are Irreparable.

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The pruning which a tree receives during the first two or three years after it is planted has much to do with its future. Mistakes in forming the head or the results of neglect during the early years in the life of a tree are practically irreparable. On the other hand, if the tree is well formed and properly pruned during its first years, the foundation of a good tree is established; subsequent errors in pruning, if they occur, may admit of correction without permanent harm to the tree.

In general, the proper time to prune peach trees is during the dormant period, preferably in late winter or early spring, just before growth starts, except in regions where bleeding from wounds is likely to occur. In such regions it should probably be done in early winter. But conditions and the object of the pruning must be considered in each case. If the pruning operations are very extensive, it may be necessary to prune throughout the winter whenever the weather is suitable for men to work in the orchard. If the fruit buds are endangered during the winter by adverse temperatures, it may be advisable to delay pruning as much as economic conditions permit until settled spring weather arrives. This is especially advisable if heavy heading in of the previous season's growth is involved, since the proportion of live buds may determine the extent to which the cutting back should be carried.

A limited amount of summer pruning can usually be done to advantage. The trees should be observed constantly throughout the season of active growth. Whenever a branch is seen to be so placed that it obviously will need to be removed at the annual pruning for the shaping up of the tree, it is well to take it off at once. In this way the annual pruning can be reduced to a minimum and the removal of large limbs will rarely be necessary.

Then, too, it frequently happens that a single branch in the top of a tree will grow considerably faster than any of the others, making the tree unsymmetrical if the growth of the branch is not checked. A slight heading in as soon as such a tendency is apparent will usually keep the top well balanced.



Badly Pruned Peach Tree Where Bearing Wood is Near Extremities of Limbs—Weight of Small Crop Would Be Likely to Break Limbs to Serious Extent.

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## KEEPING QUALITY OF FRUIT

Among Dominating Factors Are Character of Soil, Age of Trees and Care of Orchard.

The character of the soil, the age of the trees, the care of the orchard—all of these factors modify the growth of the trees and fruit and may affect the keeping quality. The character of the season also modifies the keeping power of the fruit.

# Resources of the Jordan Valley



Lake of Galilee at Magdala.

THE district of Palestine which contains the greatest possibility of rapid development under a settled government is the basin of the Jordan. Here, in this great and unique chasm and its tributary valleys, we have abundant water, a rich alluvial soil, and a semi-tropical climate, a combination which under scientific direction should produce astonishing results. For centuries the resources of this region have been neglected, writes Dr. E. W. G. Masterman in the Sphere.

In the north, the fertile plain of the Huleh, traversed by the four tributary streams of the Jordan, is capable with little engineering of receiving irrigation in every part. In some districts, at the head of the valley where this has been done, very striking results have been obtained. In this district "red" rice is now cultivated. At the further end of the plain lies the marsh and shallow lake of El Huleh. Here probably a good deal of land might be recovered for cultivation by drainage. This was done to some extent a few years ago by deepening the bed of the Jordan a mile or two below the lake, and much marsh land was recovered. To the south and west of the Huleh are splendid corn lands, hence the lake's second name, Baheiret el Khat, the "Lake of the Wheat."

In the Huleh valley as a whole, "ice, maize, hemp, and probably cotton could all be profitably cultivated, while other parts might be planted with poplars for timber, and with apricot and peach orchards, as is done with similar lands around Damascus.

The district of rocky, volcanic hills slopes between the Huleh and the Lake of Galilee is scarcely likely to afford scope for irrigation, but in the great descent of the Jordan, 689 feet in nine miles, there exists an economical source of power sufficient to produce, if properly utilized, all the electrical energy needed for public and private use for many miles around.

To the north of the Lake of Galilee lie the two fertile and easily irrigated plains, El Batalhah—the Jordan delta—and El Ghueir, or Gennesaret. Of this latter Josephus writes: "Extending along the Lake of Gennesaret, and bearing also its name, lies a tract of country admirable both for its natural properties and its beauty. Such is the fertility of the soil that it rejects no plant, and accordingly all are here cultivated by the husbandmen; for so genial is the air that it suits every variety. The walnut, which delights beyond other trees in a wintry climate, grows here luxuriantly, together with the palm, which is nourished by the heat; and near to these are figs and olives, to which a milder climate is assigned."

**Fish Supply of Gennesaret.** Gennesaret is watered by several streams, some of which in the deep valleys through which they emerge support groves of lemons, oranges, and other trees. They also supply a number of mills. With a proper scheme the abundant water reaching this plain might be distributed to every part, and the district be thus restored to a condition at least as fruitful as that described by Josephus as existing in Roman times. Jewish colonists have already in parts of the district greatly added to its productiveness. All along the northern shore, where some of the springs feeding the lake are warm, the fishing is especially good; but, indeed, the waters of the Huleh, of the Lake of Galilee, and of the Jordan itself abound in fish of which the larger varieties are all wholesome and palatable. The fishing industry has not yet been exploited for the benefit of the public.

Debouching upon the lake from both east and west are several valleys which in their lower reaches contain streams that can be utilized for irrigation, and in their higher parts in many

## PLAN TO KEEP BRASS CLEAN

Where It Is Difficult to Use Liquid Polish Finest Grade of Emery Cloth is Best.

Some of the brasswork of the car, because of its position and the work it has to perform, is apt to get into a rough state that makes it difficult to keep clean. This applies to the brass strip edging the running boards and the foot plates on the door sills. It is difficult to clean these with liquid brass

instances contain rapidly descending torrents, even in some places waterfalls, suitable for supplying mechanical power. The greatest of these is the Yarmuk valley, up which the Haifa railway ascends toward Damascus. This is the Helromax of the Greeks, and here shortly before the valley opens into the main Jordan valley there is a group of hot sulphurous springs, amid which lie the ruins of the baths and theater of the Greek settlement of Amatha, a health resort for the great city, Gadara, whose abundant ruins crown the mountains immediately to the south. These sulphur springs, as well as those south of Tiberias, also developed in Roman times, and of the ancient Callirhoe springs, visited by the dying Herod the Great in hope of cure, in the Wady Zerka Mann, are all undoubtedly valuable assets to the land and should be properly developed. They have, even under the primitive conditions obtaining today, proved of benefit to rheumatic affections, and are visited by the natives at certain seasons. The water of some of these springs reaches a temperature—Independent of the season—of 143 degrees Fahrenheit, but all gradations of heat down to the merely pleasantly warm occur.

Immediately south of the Lake of Galilee is a fairly level plain—once the bottom of the great lake which then filled this valley—which is a good corn land, while nearer the Jordan some of the lower ground can be easily irrigated. How far the whole 60 miles of the Jordan valley between the two lakes is capable of complete irrigation is a question for experts, but I gather from the views of one expert from India who visited Palestine when I was there, that water can be distributed over the greater part. It will need, however, a big scheme, which must deal with the valley as a whole. Certain spots are naturally well provided with springs and streams, and have in the past been very well watered, notably the district around Beisan and the Vale of Jezreel to its west, the Wady Fara, running from Nablus to the Jordan, the eastern side of the Jordan around the Wady Zerka (the Jabok), and the Jericho district, watered at present in a very incomplete way, from Ain es Sultan (Elisba's fountain) and Ain Duk.

## Water Supply in Roman Times.

In the Roman era the Jericho plain was also watered from the Wady Kelt by a series of aqueducts, the ruins of which exist today, and the whole neighborhood must for miles around have been a mass of gardens, orchards, cornfields, and palm groves. In Crusading times sugar was cultivated here, and some ruins are now known as Tawahin es Sukkar, the sugar mills. Even today there are extensive fruit gardens of oranges, lemons, bananas, and dates, and a great deal of wheat and barley is grown on irrigated land in this neighborhood. In the various parts of the Jordan valley may be successfully grown, besides wheat, barley, and maize, dates, bananas, grapes, figs, oranges, lemons, apricots, vegetables, and in all probability rice, cotton, and sugar.

As the northern shore of the Dead sea is approached the soil becomes increasingly impregnated with salt, and only supports tamarisks, reeds, and other salt-loving plants. The sea is itself a vast storehouse of salt, particularly at Jebel Usdum, where there is a solid mass of crystallized salt rising 100 feet to 150 feet above the Dead sea, of unknown width, and running for seven miles along the shore.

## Suited Him, All Right

The Dominie—"I'm glad to see you realize what our country is fighting for. This war will make the world a better place to live in." Betchureifer it will, boss. De wimmin are beginning to do all de work."—Life.

polish, which has the characteristic of staining the surrounding territory, including the rubber footboard covering. It is better to stop using the liquid here and to polish the brass with the finest grade of emery cloth. A piece of this cloth that has been used some what elsewhere and so has lost some of its cut is best for this work.

Storage batteries will freeze unless kept fully charged. Tires should not be allowed to carry the car's weight when put away for the winter.

# THE KITCHEN CABINET

Oh for a booke and a shady nooke  
Either in doors or out;  
With the green leaves whispering over-head  
Or the street cryers all about.  
Where I maie read all at my ease  
Both for the newe and olde;  
For a jollie good booke whereon to looke  
Is better to me than golde.

## MEATLESS DISHES.

Peanuts and peanut butter are foods which take the place of meats and are cheap in price. Various other nuts, when reasonable in price and equally nutritious, should be used often to take the place of meat.

**Peanut Loaf.**—Soak a quart of fine bread crumbs in milk; mix with it a cup of shelled peanuts finely ground; add an egg well beaten, and salt and pepper to taste. Mix as the usual meat loaf and bake about as long. Serve with tomato sauce. Cook a pint of tomatoes with half an onion, four cloves, a piece of bay leaf, sprig of parsley and a blade of mace. When well cooked, strain. Put two tablespoonfuls of butter in a saucepan, add a slice of onion, brown and add two tablespoonfuls of flour. When smooth add the tomato; season with salt and pepper and serve.

**Pea Timbales.**—Cook a pint of peas until tender, then mash through a colander and beat the pulp to a paste. To this add two well-beaten eggs, two tablespoonfuls of melted fat, onion juice; pepper and salt to season. When well blended, place in buttered molds and bake until done.

**Peas on Toast.**—Prepare a rich, white sauce, stir in a few cooked peas, season well and serve on buttered toast. This is a simple and easy dish to prepare, but most wholesome and nutritious. Asparagus prepared in the same way with a hard-cooked egg or two is a well-relished dish and very sustaining.

**Scalloped Cheese.**—Cheese in its different forms is an excellent substitute for meat. Cottage cheese, which may be made in the home, is a most versatile one to use in many ways. Take any good flavored cheese, cut in small pieces and use in layers in a baking dish with small cubes of bread; repeat until the dish is full. Beat two eggs, add salt and pepper to taste and mix with pint of milk. Pour this custard over the bread and cheese and bake until set. Serve hot as a luncheon or supper dish.

A poem every flower is  
And every leaf a line.  
The empty spilt, ne'er cherish wit;  
Minerva loves the larder.

## USES FOR LEFT-OVER CHEESE.

Cheese is so nutritious, an ounce being equal to two ounces of meat, without its waste. Cheese is particularly good with starchy foods and foods lacking in fat and flavor. Cheese should be bought in such quantities that there need be no waste, as it molds very easily. Grate all the small pieces left over and put them in a glass with a tight cover; keep cool and dry. Cooking cheese at too high a temperature makes it difficult of digestion. When possible, cook it at a low temperature or in the hot mixture just long enough to melt it. A tablespoonful of cheese will add flavor to some dish, and not even a scrap should be thrown away.

Onions cooked and then baked as an escalloped dish with white sauce and cheese is a very fine dish. Cabbage cooked in the same way is also good.

**Fried Cheese Sandwiches.**—These are sufficiently sustaining to serve as a main dish with a salad. Take thin slices of cheese, sprinkle with pepper and salt or other seasoning if liked, put as a filling into sandwiches, then brown the sandwiches on both sides in a little hot olive oil.

Cottage cheese with raspberry jam makes delicious sandwich filling. Crackers heaped with grated cheese and browned in the oven or heated until the cheese melts is a most tasty accompaniment to a cup of tea.

**Cheese Balls.**—Add a dash of tobacco sauce to a small amount of cottage cheese which has been well seasoned; make pink with paprika and roll into small balls. Roll the balls in finely minced black walnut meats. Serve on lettuce with French dressing.

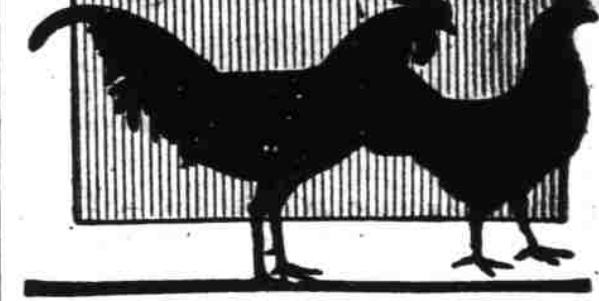
**Hashed Brown Potatoes With Cottage Cheese.**—Chop cold boiled potatoes fine and season well with salt, pepper and onion juice. Mix with enough milk to help brown when turned into the pan, which is greased with some sweet fat or oil. Cook the potatoes slowly without stirring until they are brown underneath. Meanwhile mix cream with cottage cheese until it spreads easily, adding chopped onion, chives, parsley or pimientos, a little left-over ham, or chili sauce, and spread over the potatoes; then fold like an omelet and turn out on a hot platter at once. The acid flavor, if not liked in the cheese, may be removed by the addition of a pinch of soda when mixing the cheese with the cream.

Potatoes, onions and corn, all roasted in the ashes of the fire, develop un-tasted flavors.

When two turkey hens with broods of about the same age are tamed out on free range together they will remain in one flock, and this makes it easier to hunt them up and care for them. It is not a good plan to have more than this number of young poult in one flock, however, as they may all try to crowd under one or two hens to be hovered.

Neenie Maxwell

# POULTRY



## MAIN OBJECTS OF STANDARDS

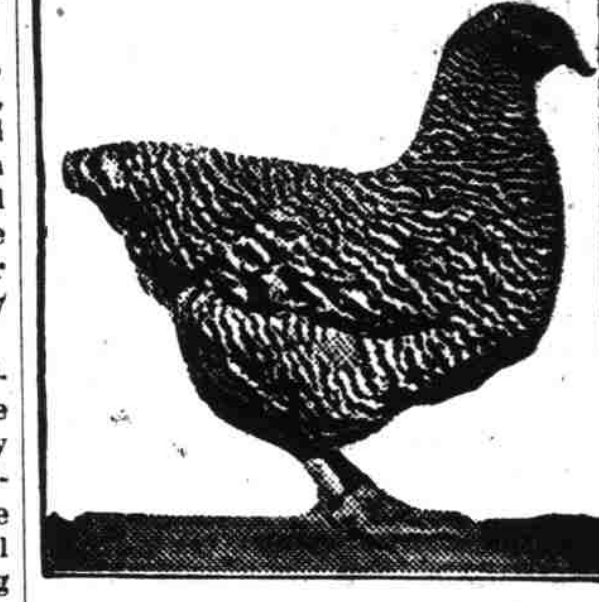
Aim is to Secure Uniformity and Establish Series of Grades as Basis of Trading.

(Prepared by the United States Department of Agriculture.)

The object of making standards for poultry is the same as the object of making standards of weight, volume, or quality for any product or commodity; that is, to secure uniformity and establish a series of grades as a basis of trading in the article.

In making standards for poultry which apply in the process of production the principal points considered are size, shape and color. Size and shape are breed characters and largely determine the practical values of poultry. Many standard breeds are divided into varieties differing in color, but identical in every other respect.

Color is not a primary utility point, but as a secondary point often comes in for special consideration. For example, a white variety and a black variety of the same breed are actually identical in table quality, but because black birds do not dress for the



Mature Early Hatched Pullet.

market as clean and nice looking as white ones, it often happens that they are not salable.

When a flock of fowls is kept for egg production only, uniformity in color is much less important than approximate uniformity of size and type, yet the more attractive appearance of a flock of birds of the same color justifies selection for color as far as it can be followed without sacrificing any material point.

When a poultry keeper grows his own stock year after year he ought by all means to use stock of a well-established popular standard breed. By doing so and by selecting as breeders only as many of the best specimens of the flock as are needed to produce the chickens reared each year, a poultry keeper maintains in his flock a highly desirable uniformity of excellence in every practical quality and with little extra care and no extra cost can have a pleasing uniformity in color.

## CHICKENS TAKE FIRST PLACE

Some Reasons Why They Lead in Scheme of Poultry Production—Utilize Much Waste.

(Prepared by the United States Department of Agriculture.)

Chickens, in any general scheme of poultry production, of course must take first place. They are best adapted to general conditions, take a wider range of feeds and convert them, perhaps, with the greatest margin of profit. Chickens, better than any other class of poultry, utilize table scraps and the general run of waste from the kitchen door, all the way from apple and potato parings to sour milk. Chickens far surpass all other kinds of poultry in salvaging waste grain from the stables, from the shed or lot where the cattle are fed, and from hog pens. During the winter months on farms where any considerable number of live stock are kept, the hens would take their living from these sources with only slight additional feeding from time to time. Chickens are great destroyers of insects, including many injurious forms, in yard, pasture and orchard. They utilize also many grasses and weeds, and seeds from the same, that would otherwise be of no use. Except in isolated instances the part of wisdom would be, undoubtedly, to keep more chickens than all other kinds of poultry combined, but these should be, in a majority of cases, some of all the other common kinds of poultry.

## TURKEYS GIVEN FREE RANGE

Two Broods in One Flock Are Easy to Care for—Larger Number Is Not Favored.

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