

TILLING THE BEETS

Question as to Depth of Cultivation and Proper Time.

One Great Mistake of Farmers When Plowing Deep is That Fields Are Too Wet—Judicious Irrigation Essential.

In considering the question of the cultivation of the beets it is often a question in the mind of the grower whether he should cultivate deep or shallow, and just at what time he should begin the cultivation.

As we have often said, farming is not a constant science, but a variable one, writes Prof. F. Knorr in Ranch and Range. The various operations depend upon the climatic conditions more than upon all else, we have found in our experience that while deep cultivation is beneficial one year it may mean a failure the next. Year after year, however, we find that a fairly deep cultivation at the fore part of the season, that is from four to five inches in depth and a gradual shallow cultivation toward the end of the ripening season gives the best average results.

We have met with a great deal of opposition among the beet growers when we suggested deep cultivation for the first time, the argument always being that the cultivator covers too many of the small beets. We admit that this may cause a little trouble, but it is nothing serious. Those that have disc attachments for the cultivators may attach these as feeders to prevent the covering.

One great mistake that many farmers make when they wish to practice deep plowing is to go into the field when it is too wet. This, as a rule, will puddle the soil, turn it up in large pieces that will soon bake in the sun, and thus ruin the field for the season. If deep cultivation is to be followed take care that the soil is dry enough to work up nicely, and break up into a loose mulch.

For the past few years we have had the opportunity to observe a large number of beet fields. We made it a point to see how the cultivation was done, and found that in the majority of cases the growers used what we know as the "Austin" knives from one end of the season to the other, with the exception when the ditching hoses were used. In many of these cases we found that the knives were very dull, and as a result the actual cultivation was not more than about one inch deep.

What are the results of this kind of working? In the first place, the soil dries out quickly, in the hot windy weather a rapid evaporation takes place, and we are forced to either irrigate the beets or suffer loss from a much decreased crop. The other objection to this kind of cultivation is that we do not have a good loose bed for the roots to develop.

It is nothing uncommon for beet growers to say "I have plenty water; my beets will not suffer for the want of it." It is not so much a matter of suffering, but a matter of expense, a good cultivation does not cost any more than the mere scratching of the soil, but the application of water is an extra expense.

In Germany the saying is "Sugar is hoed into the beets." Here, where we do but very little hand work, we should strive to do better horse work. There is no reason whatever why we cannot grow as good beets as the farmers on the other side of the water.

The matter of a good loose soil for the roots to grow and to develop is also a greater item than many would suppose. By the way of illustration let us compare the root system of a plant with the stomach of an animal or the claw of a chicken. In order to get a good healthy animal we must feed it just the right kind of feed to make a good, vigorous growth. If we give these animals a great amount of succulent or watery foods they must fill their stomach to the utmost and keep it full in order to get sufficient nourishment out of it to make growth. Give a plant too much water and the root system is continually crowded with very much diluted plant food, as a cause of this, growth is checked to a large extent. When the soil is loose and just enough water is given the roots will seek the plant food and take it up in such a manner as it is required by the plant for the best results. In a hard stiff soil the fine roots find it difficult to make their way through and seek the food. By digging around plants in a hard soil we find that the roots are knarled and stunted, the effort thus expended means a loss to the yield of the crop.

Let us practice a more thorough system of cultivation, and judicious irrigation with our sugar beets, and the results will mean a greater profit for ourselves and a more satisfactory beet for the factory.

Fall Butchering.
One of the jobs becoming timely at the first touch of cold weather is butchering. As soon as the weather permits it, every farmer should be living on meat of his own raising. A light-weight hog is usually made the first victim. Old meat, no matter how well cured, is not so good as fresh, besides many a farmer lacks cured meat of any kind just now. "Store meat" has been a great expense to many farmers this year.

The Heifer Calf.
If a heifer calf is being raised for dairy purposes do not feed it too much fattening food.

SMALL ORCHARD ON FARM

For First Time in Many Seasons Little Patch in Arid Country Comes Through Booming.

For the first time in a dozen or more seasons the general farmer's little old orchard in the semi-arid country has come through with a good round profit. The crops were not only large but the profits were good, and in this way the owners of such places caught the weasel both ways, says Field and Farm. The result is that the general farmers all over the country have not only sat up and taken a look around, but are out hot foot for nursery stock to increase their plantings next season, and why not? It is a good time to consider whether the general farmer can grow apples as a farm crop or more particularly whether he can afford to care for the trees now on the farm so as to grow fruit for family use and for sale, provided there are enough trees.

It seems reasonable to suppose that any irrigation farmer who has the willingness to care for his orchard and will follow a few plain directions can do quite as well or better than some of the producers of the present season. It will be difficult for many farmers to name a crop that will give a greater net income for a series of years and at the same time involve less risk or require less capital. To make a measurable success of such a proposition, however, a farmer must have a little love or at least respect for his trees and perform the various essential operations upon them in careful manner and at the proper times. If the spraying is left until he can find nothing to do it will never be done on time and will seldom be effective. The farmer is quite likely to conclude that spraying is of no value. Some fruit of fair quality can be grown without spraying, in some seasons considerable good fruit, but a paying crop is never assured without spraying. During the last year or two there have been a few instances of good crops from unsprayed orchards.

This spraying could be done by those who make it a business of furnishing apparatus and materials and go from farm to farm spraying small orchards for less than it would cost the farmer who owns a few trees. If some reliable person can be found to do this and do it on time by all means secure him and pay the price without grumbling. But few can command such service and must do the work for themselves, if it is done at all. The outfit need consist only of a good brass pump with barrel, 25 feet of hose, a good eight or ten-foot extension rod and one or more standard nozzles, the whole costing from \$20 to \$25, which is only a fraction of the equipment needed to grow other crops.

WATER BRINGS OUT ALKALI

First Step is to Treat the Soil with Gypsum, which Will Change Soda to Sulphate.

Water brings alkali to the surface wherever irrigation is practiced and water will take it out. There are two kinds of alkali—the sulphate of sodium and the carbonate of sodium. The first is called white alkali and the second black alkali. The latter is much more difficult to wash out than the white kind. The first step will be to treat the soil with gypsum, which, being the sulphate of calcium or lime, will change the soda in the soil to a sulphate and then it can be washed out. After trees are once well established there is not likely to be any trouble from alkali and especially is this so if the soil is well drained and the soda is the white kind or is changed to the white alkali by the use of gypsum. When a field of low land is badly affected with alkali salts it may be necessary to put in a system of open drains. A tilling system is still better and should be laid three and one-half feet deep a distance of 50 feet apart or so.

Qualifications of a Hired Man.

There are great differences in the qualifications of the hired man. One is worth all and more than he receives, while another who is apparently equally intelligent is not worth anything and the employer is a loser in the long run by having him around. The best hired man is one who is intelligent and active. A good one should receive the best of treatment from his employer and should never tire of what is to be done on the ranch, regardless of the lateness of the hour or the inclemency of the weather, if loss is likely to accrue in case he should fail to work at that particular time.

Irrigating a Few Acres.

There are many places where it is easily practicable to irrigate a few acres, and those acres will produce more than enough to repay the cost the first year. Now is the time to prepare to irrigate next year. If no more than a small garden may be irrigated, this should be done. With soil made rich and plenty of water, and utilized fully, most people will be surprised at the results. There may be a succession of crops on the same soil. A kitchen garden may be irrigated from a well.

Milking Experiments.

Experiments in developing a milking strain of shorthorn cattle have been begun by the dairy division of the United States department of agriculture, in co-operation with the Minnesota experiment station and with nine Minnesota breeders, the latter having agreed to allow their herds to be used to manage them according to the instructions of the department.

The KITCHEN CABINET



HE truest homes are often in houses not especially well kept, where the comfort and happiness of the family, rather than extreme tidiness and the preservation of the furniture are first consulted. The object of the home is to be the center, the pivot on which the family life turns. The first requisite is to make it so attractive that none of its members shall care to linger long outside its limits.

The Luncheon Basket for School Children.

For the children who carry luncheon to school the mother who prepares the food remembers that it must be wholesome. Good bread and butter spread with a little jelly is a luncheon in itself, good enough for anybody. Children cut the sweet tooth early, and it always delights them to find a surprise in a cake or a piece of candy. The trouble with most children is that they will eat the sweets and ignore the more substantial bread and butter.

The more dainty and attractively put up, the greater desire the child will have to partake. A good plan when sweets are added to the luncheon is to put them in the bottom of the basket. Dates and figs are wholesome sweets, much better for little people than candy.

Whole wheat bread is the best to be used. A cup custard and an apple will make a luncheon sufficiently substantial for a noontime meal. The health of the child should of course be considered. If it lacks vitality, more nutritious foods should be added. A chopped nut sandwich made of Brazil nuts spread on buttered whole wheat bread is very nutritious, or chopped hard cooked eggs spread thickly between buttered bread and a little cup of rice pudding will make a most satisfactory luncheon.

When cake is given, let it be sponge, angel food or sunshine cake. It is better to add a few small pieces of candy for dessert, for an occasional change, and do without cake entirely. A bottle of milk or cocoa may be put into the basket if a liquid food is desired, although a drink of water after the meal is sufficiently satisfying to most children, especially if they have fruit in the lunch basket.

A baked apple and a little molded jelly may be used occasionally, a sweet orange, a bunch of grapes or an uncooked apple are always delightful additions to a lunch basket.



It is GOOD, gigantic smile of the brown old earth. This autumn morning! How he sets his bones To bask 't the sun and thrusts out knees and feet. For the ripple to run over in its mirth; Listening the while, when on the heap of stones The white breast of the sea-lark twitters sweet." —Browning.

Desserts.

A few recipes for desserts that are easy to make and may be prepared in a short time, the wise hostess will have at hand where they may be quickly found. A fruit salad with crackers is always a delicious dessert, a piece of cake and a dish of canned fruit or preserves is another easy to serve, and almost always ready. If not cake, then cookies will be fully as good. A very dainty dessert and extremely attractive in appearance is one made of marshmallows quartered by cutting with the shears. Stir a sufficient number into sweetened, flavored whipped cream and sprinkle with blanched, shredded almonds. If one cares to have it more elaborate, maraschino cherries make a pretty garnish, or both the nuts and cherries may be omitted. Flavor with almond when using the nuts.

A dainty little water to serve with a fruit salad as a dessert or for afternoon tea, is made by using boiled frosting with a tablespoonful each of steamed raisins and chopped nuts, stirred into it. Drop in the center of the round, salted waters and set away to dry or heat quickly in the oven.

A favorite dessert which is easily and quickly made, is a gingerbread baked in gem pans, and served with whipped cream.

Stuffed dates is another nice dessert. They may be stuffed with nuts, cream cheese, or simply may be confection stuffed with fondant.

One of the simplest of steamed puddings which will be cooked in 15 minutes is made of a cupful of flour, a teaspoonful of baking powder, a little salt and rich milk enough to make a drop batter. Put fruit in greased cups and add the batter, allowing for the swelling of the dough. Steam without uncovering 15 minutes. Serve with cream or fruit sauce.

Generalities.

Use the pieces of old lace curtain made into bags to put lettuce in after washing, to drain. The bag with the lettuce can be put into the ice chest.

Another good way to use up old curtains is to make bags to use when washing small things, like collars and dollies that are apt to be lost. Pin the bags on the line, holding the small things.

WATCH the corn to grow and the blossoms set. To draw hard breath over plow and spade; to read, to think, to love, to hope, to pray—these are the things that make men happy; they have always had the power to do this and always will. The world's prosperity or adversity depends upon our knowing and doing these things. —Ruskin.

The Emergency Closet.

We read with a great deal of interest of the housewife who is suddenly submerged with unexpected company and has nothing to begin a meal with but cold chicken and potatoes. "Fortunate woman," we hear some one say, that she had those, for often the flour barrel is the only resource for many an unfortunate, improvident housekeeper.

One of the most satisfying possessions for the household is the emergency closet that holds choice things in can and package, reserved for just such occasions. Let there be salmon, sardines and olives, peas, beans, corn, macaroni and tomatoes, with pickles and preserves; a few boxes of crackers, cookies and gelatine; chocolate, cocoa and any number of little choice things that are favorites in the family. Renew as used, and one will always have the feeling of security, come who will.

A soup of tomato and milk with seasonings is always good. A can of salmon, heated and served in the center of a platter with rice, seasoned potatoes served around it, and around the potato a thick white sauce, makes a delicious hot main dish. A gelatine dessert if one has the time to wait for it, served with cream, is easily prepared, or preserves with cookies will make a sufficiently satisfying dessert. The accessories of olives, pickles or cheese will make a most attractive meal.

Chestnut Soup.

Blanch chestnuts by cutting a slit in the side with a sharp knife, then put into a hot frying pan with a bit of fat, stirring until they burst. Boil the blanched nuts in salted water until soft, then put through a sieve, add rich milk and bind with two tablespoonfuls each of butter and flour that have been well blended. Use a cup of nut meats to a quart of milk. Beat an egg and pour the hot soup over it slowly in the tureen.



YOU may not be able to do the work of some other woman, but you can do your own work, and that is all that is required."

"If we worry we do not trust, and if we trust we do not worry." "Worry is hope turned wrong side out."

Some Apple Hints.

The juicy queen of fruits is not always easy to reach in price, so we wisely learn to use the small ones in a variety of ways that none may be wasted. One of the nicest ways of preparing apple sauce is to wash the fruit and remove all spots, cut into quarters and core, leaving on the skin where so much of the flavor lies.

Put into a stone dish, cover well and bake slowly, adding a little water when first put in, and sugar after they have become soft. Apples may be used this way that are too imperfect for ordinary use.

When one wants something especially dainty, core the apples without peeling, then fill the centers with sugar and chopped nuts. Bake until tender in a sugar and water syrup.

Another very attractive way of serving nice apples is to core them, then peel, as they are liable to crack when cored if the peeling has been removed first. Stew in a sugar syrup until they are easily pierced; remove and stick blanched almonds all over them. Fill the centers with sugar, pour around the boiled syrup and bake until well done. Sprinkle with powdered sugar and serve with sweetened whipped cream.

The centers may be filled with the chopped nuts if desired. A more dainty or delicious dessert it will be hard to find.

If you should want to mold apple sauce, use two tablespoonfuls of tapioca soaked until soft and stirred into a quart of apple sauce. Strain and mold. This will be found as good as gelatine and much less expensive which appeals to a large majority of our housekeepers.

Apples are such a favorite fruit that the dumpling, bird's nest pudding and the apple pie are almost cherished desserts in many homes.

A nice way to prepare a baked dumpling is to make a rich biscuit dough, roll it out and wrap a cored, pared and peeled apple in it, filling the center with sugar and pinching up the dough on top to keep the steam in when baking. They will bake, leaving the dumpling round and shapely like the apple.

Spots of all kinds are much harder to get out if they are allowed to remain. A fresh spot may often be nearly removed at once by wiping quickly with a napkin.

Nellie Maxwell.

For Little Curly Locks



Bobbing curls, dancing on the head of childhood, arranged or disarranged, appeal with an unending charm. It is only lately that the most gifted hair dressers have revealed to us all the fascination of Curly Locks, as quaintly arranged for the little festival occasions of children.

As in many late coiffures for grown-ups, the hair is cut in a light, graceful fringe across the forehead, writes Julia Bottomley in The Illustrated Milliner. For the little girl the remainder of the hair is "frizzed" in the quaint old-fashioned way, half its length. This is accomplished with curling irons or by dampening the hair and braiding it in several tight braids half its length, and allowing it to dry. The crimping necessary may be very satisfactorily done on crimping pins, but they are not always comfortable.

This pretty coiffure is lovely even without the addition of pretty furberies. But the placing of the ribbon band and buoyant bow as shown in the picture is an immensely attractive finish and takes the coiffure out of the simply childish class into the high art rank. The folded ribbon holds two short curls to the front and in every way adds brilliance to the design.

For an older girl, and for grown-

ups (on the dressiest of occasions), the second coiffure is presented.

This coiffure is an arrangement of curls pinned down to the head, in fact a mass of puffs with one end free. The hair is cut in a light fringe across the forehead and slightly curled. A portion is parted off and tied at the crown of the head, where it is twisted into a knot and pinned down to support the curls. The remainder of the hair is parted off in sections and apparently tied near the head. Each separate mass is then again parted into strands and curled. The mass of big, short curls only needs then to be arranged becomingly. They are placed with careful attention to apparent careless irregularity all over the back of the head. Little clusters of "cork-screw" curls are grouped at each side, where they appear to be held in place by a little jeweled ornament set with pearls. Two strands of pearls strung on wire extend across the head to the other ornament at the right side of the head. Narrow bands of velvet or satin ribbon might be used. An ornament of some description is essential to this coiffure.

The little cork-screw curls at the side are made by separating fuller curls into strands, parting them off with the fingers. Coiffures by courtesy of E. Burnham, Chicago.

OF LIE-DE-VIN FACE CLOTH.

Complete Costume with Some New and Attractive Points of Ornamentation.

Lie-de-vin face-cloth is chosen here, the plaited skirt has Russia braid arranged in a wavy pattern as trimming at the foot, buttons are also put on. The coat has the braid put on to

HAIR MUST BE DRESSED FLAT

That is Really the Most Important Point of the Coiffure is a Circassienne.

The flat hairdressing now worn in America is called the coiffure a la Circassienne. This particular kind of arrangement has as many names as attached to it as the modern turban. There seems no end to these. Mop, Sans Gene, Brittany, Moyen-Age, turban, are among some of the first that greeted the coiffure. This much may be said of it; there are more ways of doing it than there are names for it.

The requisite thing is to have it flat. How one manages this is one's own secret.

No three hairdressers do it alike. The hair may be loosely braided and wound around the head, or it may be twisted into a rope and placed from nape of neck to forehead in as near a circle as the head will permit.

Again, it is arranged in a long puff cap in the middle of the head and luxurious ropes or braids of hair are wound around this.

No hairpin must show except the four huge shell ones that are to hold the coils in place. There is no perceptible pompadour and the extremists are endeavoring to make the ears imperceptible.

For Your Party Bouquet.

The stems of party flowers will not injure the delicate party frock if they be incased in a little tube-like cover, made for the purpose, of oil silk. These covers have been made of chamois, but that is not impervious to water and the tinfoil in which stems usually are wrapped will itself make a discoloration on the gown.

The pinning on, too, will often tear and pull the soft fabric and this may be partially obviated by tying the stems with a ribbon—green, like the leaves, if you do not want it to show—and pinning several of the loops under the folds of the trimming.

Shadow Lace.

This is new and, because of its unobtrusive patterns, can be used in great quantities without fear of over-decoration.

The pattern is woven in such a way that an uncertain shadow effect is produced. It is especially lovely in black and cream. The black shadow lace is used over the black net and a white satin underslip. The cream is effective over pale tints in evening gowns.

Suede Gloves in Fashion.

Smart women seem to have laid aside the white glove in camp. Suede is the thing. It is worn for street in its heavy texture, with wide stitching on the back, and is worn in the evening in the pale gold-ens tones that are very becoming to the arm and hands.



match from the shoulder downward, but round the lower edge the pattern is much deeper. The right-hand side of front is cut in tabs and fastens over a waistcoat of black velvet; the collar and cuffs are partly made of same, while the other part is cloth braided at the edges.

Hat of black beaver, trimmed with feathers and silk.

Materials required: Seven yards cloth 48 inches wide, one yard velvet, three dozen yards Russia braid, two dozen buttons, 4 1/2 yards silk for coat lining.

Everything Beaded.

Large pieces of beading are used on gowns and wraps, gloves and opera bags and even stockings. The woman who has leisure can amuse herself by making designs in beads. She can buy the latter in large boxes of all colors at small prices.