

Soils and Woods

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OLD EARTH CELLAR BEST FOR APPLES.

One of the problems of the householder each year is what quantity of apples he can store economically, and another question, "Why did not my apples keep well last winter?" or "Is there any way by which I can keep them better this year?" This does not apply, of course, to those who are fortunate in having the old-fashioned cellar without a furnace, which was cool but frost-proof, and moist without being damp. It was and is in such a cellar that apples can be kept to the best advantage and where they will best retain their flavor. The nearer the conditions approach those in this old earth cellar the better the results will be. First, the fruit should be kept as cool as possible without freezing. If the temperature can be kept between 35 and 40 deg. F., this would be best. The higher the temperature the shorter the life of the fruit.

Next in importance is retaining the moisture in the fruit. If the individual specimens are exposed to a very dry atmosphere they will wither, hence the desirability of keeping them in such a way as to retain the moisture as much as possible, even though the air of the storage room be dry. This can be obtained, to some extent, by keeping the fruit in a closed package and, better still, in addition, by wrapping each individual specimen in waxed or oiled paper, which will do much to preserve the moisture in the fruit, and to keep disease from spreading from one specimen to another. It is also desirable, if one has nothing else in storage that will be adversely affected, to keep an open vessel with water in it in the room.

A careful choice of varieties should be made if one is going to lay in several barrels, or more than the family can use in a month or so, as notwithstanding favorable conditions for storage, the length of the season that any variety will remain in prime condition is limited.—W. T. Macoun, Dominion Horticulturist.

MULCHING OF SMALL FRUITS AND PERENNIAL FLOWERS.

Although the mulching of small fruits and perennial flowers is useful in the attaining of several objectives, its chief use is for winter and spring protection. Ordinarily, our common hardy species do not suffer much harm from freezing, but are usually killed by alternate freezing and thawing. By the use of a good safe mulch, properly applied, the plant, after freezing will, as a rule, stay frozen during the winter and early spring thaws, and when it finally thaws out,

severe weather, and the danger of its again freezing will be over. It frequently happens that a few quite warm days will occur during early spring and the high temperatures not only thaw out unprotected plants, but induce growth as well. Such unseasonable weather may be followed by severe cold which will damage or kill the newly started growth and often kill the plant itself. It is, therefore, evident that a mulch for winter protection is not so much a protection against cold as it is against unseasonable heat by preventing premature thawing and too early growth.

Nature's protection, or mulch, is ideal, although unsightly. The stems of herbaceous plants, after dying, remain upright and catch wind blown leaves and later snow. As the season advances these stems break down and form a protection in the early spring for the crown of the plant. Shrubbery holds leaves that are blown into it, and anywhere necessary, leaves and litter collect to form an efficient mulch. It is, however, usually desirable to clear up fall litter of this sort, as it has an untidy and unsightly appearance, but if this is done, artificial protection, of a similar nature, in the form of a mulch should be given the plants. Generally speaking the best material for a mulch is coarse straw or very straw horse manure. Close lying or dense material, such as well rotted manure, is not satisfactory, as heating may often start and kill the plants. The mulch should be applied to a depth of two or three inches as soon as the ground is frozen, in the fall, and removed when danger of severe cold is past the following spring.

Practically all of our common perennial flowers are benefited by a mulch two to four inches in depth of straw, leaf mould or straw horse manure.

Many follow the practice of digging this material into the soil and the litter at the same time. Strawberries are best mulched with coarse straw spread evenly over the rows to a depth of two or three inches. The canes of blackberries, tender varieties of raspberries and grapes should be laid down and covered with four to six inches of soil. Currants, gooseberries and hardy raspberries are benefited by mulching around the roots with ordinary barnyard manure, which can be worked into the ground by cultivation during the late spring. As a rule, many plants will survive and even appear to thrive without it, but experience has shown that mulching, if properly done, will benefit practically any variety or species of small fruits and perennial flowers.

PUTTING UP PICKLES AND RELISHES

BY FLORENCE TAFT EATON.

There is nothing that glids the home table more than the liberal appearance upon it of the various delicious homemade relishes and appetizers.

A fine piccalilli or zesty chow-chow converts a plain hash into a tempting dish; a tart, spiced-fruit catchup or relish increases the flavor and appeal of a plate of cold meat; a fine mustard or tangy chili sauce seems the almost necessary complement of the Saturday-night baked beans or the Sunday-morning fish balls.

There are so many good things in this line that can be made at this season of the year that it is very hard to pick and choose. Housewives are, however, usually interested in trying something a bit different, as sometimes the family tires a bit of the same old stand-bys, however tempting.

Peaches serve as a foundation for numberless delectable concoctions. Pickled Peaches—Make a syrup of four pounds of brown sugar and one quart of vinegar, and boil ten minutes with a loose bag of mixed spices—stick cinnamon, cassia buds, allspice and one teaspoonful of cloves; half a cupful in all.

Skim and add eight pounds of whole peaches which have been scalded and skinned. If large and firm they may be halved if preferred. Cook about ten minutes or until soft but not mushy; remove carefully into a cork, boil the syrup a few minutes longer and pour over the fruit.

Next day drain off syrup and boil until thick and rich, then pour over the peaches. Do this three days in all; keep in a stone crock, retaining the bag of spices. Ripe Seckel pears may be done the same way.

Peach Conserve—Scald, peel and cut up six pounds of ripe peaches; add an equal quantity of sugar, the shredded kernels of six or eight pitted, dried oranges put through the meat chopper and the juice of a small bottle of maraschino cherries. Cook, stirring frequently, until well blended, adding a few minutes before taking up, the cherries cut in small pieces. Store in jelly glasses or in half-pint sealed jars.

Watermelon Balls—Cut the pink

but firm part of the melon—near the rind—into marble with a potato scoop. Soap over night in weak alum water—half an ounce to two quarts water. In the morning take out into cold water, rinse thoroughly and put into a boiling syrup made of three-quarters the weight of fruit in sugar and enough water to just cover the fruit; add half each of a thinly sliced lemon and orange to each pound of fruit, and one ounce of ginger root in small pieces to each three pounds.

Cook until clear, skim out the fruit, boil the syrup until thick and rich, reheat the fruit and can all boiling hot. Cubes of the melon may be used instead of cutting into marbles.

Cucumbers—Select Cucumbers at least one and a half inches in diameter, pare, cut in halves and remove the seed portion with the apple corer. Then slice into half-inch thick slices. Simmer for a couple of hours in vinegar and water—half and half—to cover, salting to taste; drain. Make a syrup of one pound of brown sugar and three cupsful of vinegar and boil five minutes with a small bag of mixed spices; skim and pour over the cucumber rings.

Stand overnight; repeat two days more. On the third day pack in jars, cover with the boiling syrup and seal. Grape Conserve—Pulp four pounds of wild or Concord grapes, cook and strain the pulps, add to the skins and boil eighteen minutes, stirring carefully. Then add two and a quarter pounds of sugar, half an orange and half a lemon put through the meat chopper, three-quarters of a pound of small seedless raisins washed and dried, and cook, stirring, three-quarters of an hour.

Andover Conserve—Put in a large preserving kettle eight pounds of hard pears put through the meat chopper, eight pounds of sugar, two lemons, one orange and a quarter pound of preserved ginger, all put through the chopper. Pieces of ginger root cut in small pieces will do, but the preserved ginger is nicer. Set over very moderate heat until sugar is melted and juices flow, then cook, stirring occasionally, about two hours, or until thick and clear.

Polly's Conserve—Three pounds of plums, three pounds of pears and



Although only fifteen years old the Duke of Norfolk, shown above in court attire, has inherited approximately \$85,000,000. Since his father died seven years ago, it has taken all that time to complete the valuation of the estate which the boy inherits.

three pounds of apples. Stone the plums and boil the stones in two cupsful of water forty minutes. Peel, core and chop fruit; add one orange or lemon put through the meat chopper, six pounds of sugar, the strained stone water, and cook, stirring occasionally, until as thick as you wish.

Green Tomato Marmalade—Green tomatoes, sliced, in such quantity as you wish. Place in good-size kettle and fill two-thirds full with water; then add two-thirds the weight of the fruit in sugar and two thin slices of lemon for each pound of fruit. Cook slowly a long time until thick and rich.

Plum Conserve—This is a fine way to use the abundant windfall plums. To six pounds of pitted plums, add the same quantity of sugar, three oranges and one lemon put through the fine knife of the meat chopper, and one and a half pounds of seeded raisins. Boil slowly until the consistency of jelly and put in hot sterilized glasses.

Piquant Apple Jelly—Cut up crab apples or any early tart apples, pack them in a large kettle; add a cupful of vinegar, a bag of mixed spices and enough cold water to just appear between the fruit. Boil, covered, until broken and mushy, stirring and mashing, and strain through a jelly bag.

Next morning measure the fruit, boil hard with the bag of spices ten minutes; add an equal measure of hot sugar and boil three to five minutes, skimming carefully. Put in glasses.

English Chutney—Uncooked. One pound each of ripe tomatoes and tart apples, four medium-size peppers, eight medium-size onions, half a cupful of chopped mint leaves, one and a third cupsful of seeded raisins, one heaping teaspoonful of dry mustard, one and a half teaspoonfuls of salt, two cupsful of granulated sugar and three cupsful of vinegar. Chop tomatoes, add salt and mix. Chop other ingredients. Scald and cool vinegar; add sugar and mustard; combine everything, mixing well, and let stand two weeks before using, stirring occasionally.

Harlequin Pickle—Ten large green peppers, ten large red peppers, twelve onions. Chop peppers coarsely, pour boiling water over them, let stand ten minutes; then drain, again cover with boiling water, and let stand five minutes. Drain thoroughly, add onions, chopped, two cupsful of light brown sugar, two tablespoonfuls of salt and one quart of vinegar. Bring to boil, cook fifteen minutes and can in jars.

Meriton Pickle—Uncooked. Slice five dozen unpeeled green cucumbers about four inches long. Sprinkle liberally with salt in layers and let stand overnight. Drain off brine, add one and a half dozen small onions sliced thinly. To five cupsful of vinegar add

one large cupful of best salad oil, three teaspoonfuls of celery salt, half a teaspoonful of white mustard seed, and best vigorously; pour over cucumbers and onions and put in pint jars and seal. This makes six jars.

Veribest Chowchow—Peel and slice one peck of ripe tomatoes and one quart of onions—less of onion if you prefer—and four green or red peppers. Sprinkle over the mixture half a cupful of salt. Let stand two or three hours; drain, saving juice. Boil one hour in a large kettle and add one pint of good vinegar, two cupsful of brown sugar, a saltspoonful of cayenne, two tablespoonfuls of ground mustard, a tablespoonful each of cinnamon and whole cloves, a teaspoonful of celery seed, and boil another hour. Can, boiling, in quart or pint jars. Delicious with fish balls, baked beans and cold meats.

Fruit Chowchow—To half a peck of green tomatoes put through the meat chopper, add half a cupful of salt and let stand overnight; then drain. Add three pints of vinegar, two and a half pounds of brown sugar and a bag of mixed spices; cook twenty minutes after it begins to boil, then add half a peck of apples or Seckel pears put through the meat chopper. Apples must be pared; pears need not be. Cook until tender, boil hard with the bag of spices ten minutes; add an equal measure of hot sugar and boil three to five minutes, skimming carefully. Put in glasses.

What is a Bacon Hog?

Pamphlet No. 40, New Series, will explain what constitutes a select bacon hog, and also the various other grades into which hogs are classified under the government grading regulations. Hog types are clearly explained and the advantages of grading are clearly set forth. The pamphlet referred to "The Bacon Hog and Hog Grading" is obtainable on request from the Dept. of Agriculture at Ottawa, and should be in the hands of every farmer who raises hogs for market.

To kill garlic, try late fall plowing, followed by an intertilled crop the following year. Corn in check-rows is a good crop to plant. To get rid of the garlic in pastures, if the plants are not too numerous, dig each plant and destroy it. Sheep eat the tops of the plants, and close grazing for a few years often kills the pest out. Coal-tar creosote oil applied to each plant at the rate of about four thumbfuls is effective in killing both the plant and the ungerminated bulbs.

How time changes! The very ones who used to demand the full dinner pail are now shouting for more parking space.



The bronze figure of Evangeline has been erected at Grand Pre, in honor of Henry Wadsworth Longfellow, well-known American poet, who made Nova Scotia famous with his poem "Evangeline."

Home Education

"The Child's First School is the Family"—Frederick

Making and Filling of a Terrarium—By Emma B. Dashley

And Nature, the old nurse, took The child upon her knee, Saying, "Here is a story book Thy Father has written for thee."

The possession of a terrarium is ever a source of delight, because of the difficult plants and berries which appeal to the eye; and also because of the bugs and other creatures which show active life.

To make a terrarium, first of all, a berry crate with a cover is needed. Saw or cut out the middle slats from near the corners on the four sides, leaving the top and bottom slats for support. If the slats run up and down, saw them from the top slat to the bottom slat. Cover the top and two short sides of the inside with wire screen. Use glass in the front and back, the entire length of the crate, to provide light and heat; also to make it possible to observe readily what is inside.

Paint the crate and wire screen dark green to harmonize with the plants inside; and set the crate in a low window or upon a pedestal stand low enough to allow the children of the family to observe the growth of the plants from day to day.

On the bottom of the terrarium, place a pan about three or four inches deep and the length of the crate, or a galvanized pan made. To a depth of three inches fill the pan with soil preferably from the woods. Then you are ready to select the plants you find most pleasing. As a lover of nature and the woods, I prefer to have plants from the woods. The partridge or squaw-berry vines with their bright berries may be gathered at any time in the fall and will last all winter. Wintergreen roots and berries usually grow near the partridge-berry vines and are attractive. Ferns are

always pretty and keep green until Christmas. Select small plants of a hardy nature. The rock ferns or small woods ferns are best.

If you can find a pitcher plant in the swamps, it will add greatly to the beauty of your terrarium. The wild flowers, hepatica, blood-root, pack-in-the-pulpit, and trillium, if planted in the fall, will blossom in the spring.

In addition to plants in the terrarium, cocoons on their twigs can be suspended from the cover. These cocoons may be found on lilac bushes and grape-vines, or in trees. Great will be the delight of the little folks when in the following spring, beautiful moths or butterflies come out of the cocoons.

If you can find some snails living in their shells, in a damp place, put them in the terrarium also and let them wander among the plants. At times the snails will hide away and then reappear when you least expect them. Children always enjoy watching snails. And the chirping of the cricket gives much pleasure to some people. With the grasshopper, the crickets may be housed for the winter, affording additional entertainment to the children.

Filled with these flowers, vines and insects, your terrarium will prove an interesting feature during the long winter hours.

In the spring an entire change of plants can be made, or the box filled with wandering Jew. This vine grows luxuriantly and is very ornamental.

Fortunate are the children, mothers and teachers, who are so placed that Nature's story book is close at hand; for Nature, the old nurse, is loving and bountiful, and will re-write many a page in her wondrous book, the terrarium.

Dangerous Farm Wells.

The Dominion Chemist in his annual report again calls attention to the precautions that should be taken in establishing a farm well. For more than thirty years the Division of Chemistry of the Experimental Farms, over which Dr. F. T. Shutt presides, has been analyzing well waters and issuing warnings with respect thereto. In his latest report Dr. Shutt points out that there are yet many farmers who do not realize the gravity of the question. By the continuance of the work he expresses the belief that more and more the farming community will be brought to understand more completely the bearing that the quality of the water supply has on the health of the family or on the health and thrift of the live stock.

The chief fault in the present condition of affairs, he states, is found in the location of the well. Too often safety has been sacrificed for convenience. The most innocent-looking well may carry dangerous contamination. Where an analysis confirms the suspicion that the well is receiving drainage of a dangerous character, the Dominion Chemist recommends filling up the well and sinking another on a safer site at least fifty yards from a possible source of contamination.

As it is assumed that only suspicious water is submitted for analysis, the results of the tests made by the Dominion Chemist do not represent the true condition of the average well. During the year for which the report is made but 17 per cent. of the samples of water analyzed were pure and wholesome, while 36 per cent. were shown to be seriously polluted. The remaining 47 per cent. were either suspicious or saline in character.

Samples of water for analysis should not be submitted for examination until the proper form is received from the Dominion Chemist and filled out respecting the well and its surroundings. With the information thus given the water should be sent in a thoroughly clean bottle for examination.



Art in a Hall Bedroom. Mr. Neighborly—"Say, my friend, I'm the man that lives across the light shaft and I want to ask you if you can't close your window when you play that trombone. The noise is fiendish."

Mr. Tootie—"Sorry, old pal. Can't do it. Gotta hav room to slide the horn."

To get beeswax from the comb, put the comb in a stout sack, submerge in boiling water and with a strong paddle press out the melted wax through the sack. As the wax hardens it can be skimmed off the water.

Running silage cutters at a high speed wastes power. On a large machine, the capacity is as great when the speed is 650 or 600 revolutions per minute as when it is much higher; in some cases the capacity is greater with the lower speed. Besides, the lower speed saves power.—U. W.

PLANT BULBS FOR SPRING FLOWERING

Bulbs for flowering outdoors next spring must be planted this fall. The kinds most commonly grown are tulips, narcissi, hyacinths, snowdrops, crocuses and scillas. These bulbs should be planted early enough to develop a good root system before winter. Very often the cause of poor flowers in the spring is lack of roots. If planted during the latter part of September or early in October, the bulbs will have ample time to get well rooted.

Bulbs do best in loamy, well-drained soil. A sandy loam is better than a clay loam. Dig the soil to a depth of 12 to 16 inches and mix with it well-rotted manure. See that the manure is buried below where the bulbs will be after planting, as when pure manure comes in contact with the bulbs they are apt to rot or become diseased. Bulbs are liable to rot also in soil that is not well drained.

The proper depth to plant is determined largely by the size of the bulb and the character of the soil. Tulips are best planted four or five inches deep, measuring to the bottom of the bulb; hyacinths and narcissi, five to six inches, and about the same distance apart. Small bulbs, such as crocuses and snowdrops, may be planted only two or three inches deep, and same distance apart.

Bulbs may be planted deeper in light soil than in heavy. The depths suggested are for medium or loamy soils. If the soil is very heavy or if it contains much manure near the surface, it is advisable to put a little sand under each bulb for safety against rotting.

For best effect, avoid planting in straight, single rows. Plant in masses or clumps in beds, or among the perennials in a border. Nearly all kinds of bulbs are effective also set in turf, where they will usually come up every spring without further care; by this treatment, however, one should not expect as fine quality in bloom as when planted in prepared beds or borders. For grass planting, cut and raise a small piece of sod, plant the bulbs in the soil and replace the sod firmly.

All bulbs planted in cold climates should be covered for winter protection, especially as a preventive against heaving, due to alternate thawing and freezing during warm spells in winter and early spring. This mulch is especially useful where there is no snow on the ground. It should be removed quite early in the spring to prevent rotting of the bulbs, which usually is early and rapid.

In florists and seedsmen's catalogs, there are many beautiful species and varieties of bulbs listed and described. It is difficult to choose a few to recommend which will combine all the desired characteristics and be acceptable flower lower in all parts of the country. As a few varieties are less hardy than the majority, persons who are unacquainted with varieties should consult florists or experienced amateurs of the neighborhood concerned.

Agricultural Conditions in Peace River District.

Sir Henry Thornton's remarks regarding agricultural prospects in the Peace River District will naturally direct attention to that section of Canada. More information will be sought, and probably no better way of obtaining it is forthcoming than that supplied by the reports of the Dominion experimental sub-stations there located. Principal of these is the report of the superintendent at Beaverlodge, Alta. Mr. W. D. Albright, who goes fully into the conditions prevailing in the Peace River District in 1922, the year that the publication covers.

Relative to the keeping of live stock, to which Sir Henry especially referred, Mr. Albright says "Initial experimental work with 24 cattle and 88 hogs confirmed the dictum of experience, that, with proper methods, Peace River conditions are well adapted to the economical feeding of both these classes of animals. Cattle fattened well in an open-front pole and straw shed. Those receiving silage made a little more efficient use of their feed, that twelve that had finished on the staple roughage, sheep oats, with a very small meal ration and a very little hay at the last, also registered a performance that would compare creditably with results in any climate or almost any fodder. Mr. Albright adds, "The busiest live stock on the station was a colony of bees, which built up from forty-two pounds in the latter part of July to seventy-three pounds in August."

Most encouraging results have been experienced at the sub-station in the economical production of suitable feeds for live stock, such as sheep oats, legume hay, rye pasture and feed grains.

The report, it might be added, is not confined to 1922, but contains seasonal notes on preceding years, as well as results obtained in the cultivation of all kinds of cereals and vegetables, and several varieties of flowers and fruits.

Two Things Necessary.

Two essentials: To succeed, common sense. To be happy, a sense of humor.