



Agricultural Department.

HINTS ABOUT WORK.

The *American Agriculturist* says the commencement of a new year is the most appropriate time to open a day-book and begin to keep not only accounts, but a record of events. Such a record for the past year would be profitable reading now, and many hints for one's guidance would be always at hand. What a man knows is but little compared with what he has forgotten. When the year's experiences are written down and indexed at the end of each year, the needed information is ready at a moment's notice. This is the appropriate season for laying out plans. To have a well-digested plan is the best preparation for a successful year's work. A methodical man, whether farmer or not, is a man of comparative leisure, and yet he accomplishes much more work than the one who is without plan of system.

The following hints about work, which are extracted from the above publication, will be found reasonable:—

Roofs should be removed from weak or flat roofs every storm, lest the weight should be too much for them. It should be also removed from doorways and yards as soon as it stops snowing.

THE KITCHEN GARDEN.—Manure is the keystone, the king-bolt, the beginning, middle, and end in a successful garden or farm. It is the one thing of which a wide awake gardener never has enough. The home supply is usually supplemented by arrangements with stable keepers, express drivers, and all who keep many horses for the year. The farmer's garden depends upon home supplies. It is too often the case that the best manure goes to the fields, and the garden gets what is left. It will pay to give the best manure to the garden. Unless the heap is so large, that the heat of its fermentation will prevent freezing, the manure should be kept under cover. Private gardeners may well follow in some things the example of those who grow vegetables for a living. Muck, if frozen one winter, and then allowed to dry, makes an excellent absorbent in the stables, and if composted with lime, is useful on light lands, deficient in vegetable matter. So with leaves, which is one of those things of which the gardener can never have too many, and in some localities they can yet be collected. Used as bedding, they make a valuable addition to the manure heap, and mixed with stable manure, for hot-beds, they are of great use. One-third leaves and two-thirds manure will hardly diminish the activity of the manure, and make it more lasting; reversing the proportions, makes a mild and enduring heat. Hot-beds, for sowing seeds, will be needed soon and as the time for making these will differ in each locality, we need only repeat the general rule that they should be started about six weeks before it will be safe to set the plants in the open ground.

SUNDAY MATTERS.—Look to the horses in time, and keep them rough shod. See that cellars, cisterns, and root pits are safe from frost. Procure seeds for the spring, before the busy time of the seedsmen arrives, when there may be delay or disappointment. Select seeds from the granary while there is opportunity to choose the heaviest and largest grain. Keep all seeds in a dry, cool place. Watch the outlets of the drains, that they do not become closed up. Lay up a stock of fuel for the whole year, in a weather-proof shed, cut and prepared for use. Although a man's work lies chiefly out of doors, let him not neglect to give every possible aid to those who keep the house, and relieve them from work which may expose them to the inclemencies of the weather.

FEDDING STRAW.—Straw is too valuable to be used for bedding, whenever other absorbents, such as sand, swamp muck, leaves, or sawdust can be procured. Horses working moderately may be kept in good condition upon clean, bright straw, cut and mixed with six quarts of meal daily. A feed of long hay and oats may be given on Sundays, to save labor, and as a welcome change. Common sheep will do well fed on straw, with a pint of corn, or a quart of bran daily; the heavier bodied breeds will require a pound of oil-cake meal, or some roots, and at least one feed of hay daily in addition. Sheep are not early feeders, and love to lie late. They need not be fed until after breakfast. Other stock should be fed before breakfast. For cows straw is very poor feed.

WATER.—The consumption of dry fodder makes an ample supply of water necessary for the stock. Green fodder contains about 80 per cent (or four pounds out of five), of water.

Dry fodder contains about 16 per cent (or one pound only, out of six of fodder) of water. If a cow consumes 20 lbs. of dry, solid matter, a day, in the shape of green fodder, she takes with it 80 lbs., or nearly 10 gallons of water; if this 20 lbs. is in the shape of hay or corn-stalks, she takes with it only 4 pounds, or half a gallon of water, and the remainder must be supplied. Many poor animals cruelly suffer from want of water in the winter season, as neglect in watering is common enough, and likely to be more so this year owing to a general scarcity.

CARE OF STOCK.—Liberal feeding will be found of benefit to all kinds of stock. Observe caution with cows in high condition; as they near the period of calving, let their feed be gently laxative, and not stimulating. No corn-meal should be given to such cows. Bran is safe feed, and if there is any sign of fever, a pint of linseed oil, or a dose of salts, should be given, as a precaution against milk-fever. Pure air is of vital consequence to stock confined in stables. Animals will maintain their natural heat better in pure cold air, than in a warm foul one.

SCRAPING and washing the trunks and larger limbs, as soon as they can be got at, will destroy many eggs of injurious insects. Use a wash of common soft soap, thinned to apply readily. The best implement for scraping off the loose bark, is a triangular plate of iron, having 3 inch sides and the edges ground. This may be fastened by its centre to a handle 2 to 3 feet long. The eggs of the tent caterpillar may be readily seen on the ends of last year's twigs, and removed now, thus saving much work in destroying their nest next spring.

ORCHARD TREES.—If new orchards are to be set in the spring, the trees should be ordered this winter, when there is abundant time to consider the matter and to secure a proper selection of trees. Our opinion of the pedlars and agents, has often been given. First-class nurserymen have a reputation which they desire to keep; they are careful not to send out any trees not true to name.

CORN STALKS.—Cows will thrive upon well-cured corn stalks. As good butter, both in color and flavor, has been made in winter from cows fed wholly upon cut stalks, with bran and meal, as when they had the best hay. But the stalks should be cured green, and well saved. One bundle of stalks, cut less than half an inch long, will go as far as four bundles thrown whole to the cows.

DWARF TREES may be broken by snow and ice, and should be after severe storms, if the branches are broken, pare the wound smooth, and then cover with grafting wax, paint, or shellac varnish.

A WINDOW GARDEN.

Miss. J. C. Bateham writes to the *Ohio Farmer*: A few house plants we can not dispense with, even if they do fill up the room somewhat. The great objection I have had to them has been, that even with oil-cloth under the pots, the carpet would be damaged; but I have learned a better way, and now I wish you could see my window garden, for we give up one double window to the plants. I have bought a zinc pan, four feet long, twenty inches wide and four deep, and have this put on a board raised a foot or more from the floor. Of course, if the window is single, and does not come to the floor, the pan should be smaller and raised higher. In this pan I have arranged my plant pots, and all the intervening spaces are filled with rich dirt, in which are growing little fern plants, vines and little bits of moss. The pots are mostly hidden, the space is all used, the whole is more attractive, and the plants can be sprinkled and kept more evenly damp.

On the floor at the end of each pan there is a large garden vase of luxuriant plants, that of course did not need repotting. In fact I usually leave some of my house plants in the pots all summer, sinking the pots in the ground, and the result is entirely satisfactory. The rest of the tender plants are now put in boxes, ready to place in a frost-proof cellar as soon as necessary. A few winter-blooming plants, a sprinkling of ferns or pretty foliage plants, and plenty of vines, are what I want in the sitting or dining-room, and of course the vines are prettiest, trained all about the walls, pictures and windows. Of these, the English ivy, which is hardy and retains its foliage in sheltered positions out of doors, is the most valuable, as it will bear more changes of temperature than others. Equally pretty, though not so hardy, are the passion vine and smilax. The German ivy, Madeira vine and vines are also good.

A VERY POWERFUL SQUASH.—The *Hartford Daily Times* says: "The lifting power of plants is something marvellous when one considers the chemic laws and subtle principles of plant growth. The power of growing trees to displace huge rocks is often illustrated, and seldom more strikingly than in the case of an oak tree in South Hadley, Mass. This tree, says a local account, is opposite the residence of Nelson W. Burnett. A rock had a seam

in it, and a fibrous root from the oak crept in to the seam, grew, and lifted the rock, weighing over a ton, to the height of one foot. The thickest and heaviest of our Hartford flagging stones, as shown in the case of several on Main street, has been lifted out of position by the growth of tree roots; and on the corner of Main and Pleasant streets one of these roots has thrown up the solid half-foot thick flags of freestone there imbedded. Here is an account of the action of forces in vegetable growths in the case of a squash—the locality being Amherst, Mass. The squash in the Durfee plant-house is now lifting 4,000 pounds. It is now ten weeks since it was harnessed, and something has been continually breaking loose. Five levers have been used, each larger than the preceding, and a set of larger irons, overlapping the first, was found necessary. The leverage is a curiosity, the seven weights comprising buckets of sand, boxes of paint, an anvil, a chain, a pipe-stake, and innumerable other miscellanies. The vine is between 50 and 60 feet long, and this dynamic squash is the only fruit it is allowed to bear."

DWARF CHERRY TREES.—Lack of success with the dwarf pear has prevented general trial of dwarfed trees of other kinds of fruit. But the dwarfed cherry is well worthy of being largely planted. It is beautiful as a shrub, in or out of blossom; but when in spring it peeps out in one rich white ball of bloom it is unsurpassed for beauty. When, again, it is studded full of scarlet fruit it is a charming object. Those who have but little space can hardly do better than to plant a few dwarf cherries. The tree need not occupy more than a square of eight feet, allowing for interspaces as well as trees. They should branch from the very ground and be headed in so as to assume a globular shape. The height will be about four to six feet. The borders can be kept out by packing coal-ashes about the trees and by a strip of tarred paper, occasionally renewed. The curculio can be watched with great ease and from one or two trees be kept off by hand-picking. The amount of fruit will be very large for the space occupied. Success, however, will not be obtained with dwarf cherries, any more than with dwarf pears, without mulching. Give them a good surface dressing of coal-ashes, and occasionally of manure.—*N. Y. Independent.*

APPLES FOR COWS.—There is a prejudice against feeding apples to cows which, according to the *Newburyport Herald*, does not always hold good. A writer in this journal says that the cows will eat them heartily and dry up less. It is a good idea to feed them in moderation. One experimenter gave out his small apples at the rate of half a bushel a day for each milk cow, and reports a marked improvement as to color and flavor in the butter made during the winter months. Another who tried a like experiment found that his cows yielded a third more milk than those of his neighbors, while he was suspected of using anatto on account of the deep yellow color of his butter. Still another declares that cider apples are worth much more for feed than for cider, and as the crop all over the country is very abundant, this year, the time is favorable for testing the truth of the foregoing statement. At least it is easy to try with one or two animals and note the result.

AGRICULTURAL EDUCATION.—I am not able to see what benefit agricultural colleges will be to the farming community, unless they have experimental farms attached to them, and the various questions as to the best and cheapest mode of feeding live stock, and manures and crops, &c., are solved by a series of careful experiments which farmers have not the means, time or knowledge to prepare and carry on. Students should not be admitted until they have acquired a good general education, and their time at the college should be devoted to special training in the theory and practice of the most improved system of farming, so that they might, when they returned home, enlighten their respective neighborhoods. Merely to give a few farmers' sons a good general education, is not conferring any benefit on the farming interest.—*S. W., in Cultivator and Country Gentleman.*

CARBOLIC ACID FOR HOUSE PLANTS.—"Farmer's wife" writes: Several of my nice geraniums began to look sickly, and upon examination I found little worms at the roots. I applied a solution of weak carbolic acid quite freely to the earth, and found it restored the plants to health and beauty in a very short time. It will also kill lice upon the stalks, if applied with a swab or feather to the plants, without injuring the foliage.

PARIS-GREEN AND THE POTATO BUG.—At a meeting of the Academy of Sciences, held at Philadelphia, in the beginning of last month, Dr. Le Conte showed that the use of Paris-green for destroying insects injures the soil, and poisons growing vegetables. This confirms the suggestions we recently threw out regarding the effects of this poison, besides the danger of its accidentally killing cattle.—*Canada Farmer.*

DOMESTIC.

TO MAKE PEPPER VINEGAR.—Take six large red peppers, slit them up, and boil them in three pints of strong vinegar down to one quart. Strain it, and bottle for use. It will keep for years.

PLAIN PUDDINGS.—Bread crumbled and put into a pie-dish with alternate layers of stewed apples and a little sugar, when baked makes an excellent pudding, the juice of the apples making the bread-crumbs quite moist.

APPLE CHARLOTTE.—Line a pie-dish with thin slices of bread, buttered on both sides; fill it up with layers of apples, cut up very small, placing a little apricot jam between each layer, some grated lemon-rind, and plenty of brown sugar; cover the dish up with slices of bread in the same way, and bake it till the bread is well browned.

BEEFSTEAK SAUSAGE.—Take coarse, lean beef, with a small quantity of suet, run it through a sausage cutter, or chop it very finely; add pepper and salt, make into cakes three-quarters of an inch thick, and cook as you would beefsteak. To those whose masticating powers are deficient this mode is well adapted.

OYSTER SOUP.—Take one hundred oysters out of the liquor. To half of the liquor add an equal quantity of water. Boil it with one teaspoonful of crushed allspice, a little mace, some cayenne pepper and salt. Let it boil twenty minutes, then strain it, put it back in the stew-pan, and add the oysters. As soon as it begins to boil, add a teaspoonful of cream, and a little grated cracker, rubbed in one ounce of butter. As soon as the oysters are plump, serve them.

TO DO RED CABBAGE.—Slice right across perfect ones, and put into a tray or jar, first a layer of cabbage well salted, then salt, then cabbage salted, layer upon layer. Then after draining off the brine, heat vinegar enough to cover, adding an ounce of mace to each quart of vinegar and a handful of whole pepper. Just let it heat well—not boil. Then pour it over the cabbage. When it is cool, tie it up. Use white wine vinegar; about six quarts of vinegar will be sufficient for eight good sized cabbages.

GOOD CHILDREN'S CAKE.—Mix a quarter of a pound of butter, or good, fresh dripping into two pounds of flour; add half a pound of pounded sugar, one pound of currants, well washed and dried, half an ounce of caraway seeds, and a quarter of an ounce of bicarbonate of soda, or allspice, and mix all thoroughly. Make warm a pint of new milk, but do not let it get hot; stir into it three teaspoonfuls of good yeast, and with this make up your dough lightly, and knead it well. Line your cake-tins with buttered paper, and put in the dough; let it remain in a warm place to rise for an hour and a quarter, or more if necessary, and then bake in a well-heated oven. This quantity will make two moderately-sized cakes; thus divided, they will take from an hour and a half to two hours baking. Let the paper inside your tins be about six inches higher than the top of the tin itself.

QUEEN OF PUDDINGS.—1. Soak a pint of bread-crumbs in boiling milk, add the yolks of four eggs, well beaten, and sugar to taste; bake in a pie-dish; when cold, spread jam over the top, and over that the whites of four eggs, beaten to a stiff froth, with four table-spoonfuls of white sugar; put into the oven, and bake to a very light brown; flavor with essence of vanilla or lemon.

2.—Cut stale bread into slices, butter them, and lay them in a pie-dish; sprinkle them with a little brown sugar and a few currants. Repeat this until the dish is quite full; then pour on the bread boiled milk mixed with one beat-up egg, until the bread is soaked; bake it light brown. You can make a still plainer bread-pudding of odds and ends, when too stale to use otherwise, by soaking them in skim milk, then beating the bread to a pap, adding a few currants, and a little brown sugar, and boiling in a cloth. Or another very palatable and economical pudding may be made as follows:—Boil the pieces of bread, crust and crumb together, until so soft that it can be beaten up with a fork; add a little chopped suet, some skim milk, and a few spoonfuls of molasses; put it into a pie-dish, and bake it brown; leave the top of it quite rough, or scratch it rough with a fork.

3.—Put the scraps of bread, crust, and crumb, into a basin with sufficient milk to cover them well. Cover the basin with a saucer-lid or a plate, and put it into the oven to soak for about half an hour. Take it out and mash the bread with a fork till it is almost a pulp; then add a handful of raisins, and as many currants, a teaspoonful of brown sugar, some candied lemon-peel, and one egg. Stir it up well, grease a pie-dish, and pour the pudding in. Grate over a little nutmeg, put it into a moderate oven, and let it bake for an hour and a half or two hours.