



DO NOT IRRIGATE TOO MUCH.

That crops of any kind, either in field or garden, cannot be produced in this arid and naturally barren, desolate country without artificial irrigation, excepting in a very few locations, is a fact which needs no demonstration, but there are many who have been engaged in agricultural pursuits for years, who seemingly have not even imagined that there is a possibility of watering the growing crops too much, and evidently from the free use of water on their fields and gardens which they make when it can be obtained by any means, they are of the opinion that the more their tilled lands are irrigated the greater will be the amount of their products, which is a great error and one that could be readily made to appear by making a few practical experiments.

If a person who believes that the amount of his crops, particularly those which require tillage while growing, depends more on the amount of water applied to them than on the free use of the proper agricultural implements, will take equal portions of a field or garden which has been prepared alike in all its parts before planting, and apply water to one portion profusely, using the hoe or other tilling implements but little, and irrigate the other portion but moderately and keep the ground free from weeds and the surface well stirred, which will require but little or no more labor than the excessive watering operation, and he will soon discover that the latter is by far the most profitable mode of culture, and that it is not altogether on the superabundance of water, even on the most arid soil, but materially on proper tillage, that he is dependent for a good and remunerative crop. Ground that is well cultivated will produce a crop of equal amount with less than one half the water that may be required to mature one of the same kind when the plow, hoe or cultivator is seldom used.

There will, in all probability, be no want of water for all the crops that have been sown or planted this season in these valleys, however late they may be in coming to maturity, but if husbandmen depend on water alone for an abundant harvest their expectations will not be realized.

CULTURE OF FRUIT.

At a late Horticultural meeting in Boston, Col. Wilder in the chair, there was quite an interesting discussion on fruits. The chairman made an opening address, in which he said, very truly, that to succeed in the culture of fruit, there must be appropriate soil, a careful selection of hardy sorts suited to the latitude, and followed by proper treatment. Some varieties of pears were adapted to a wide range of country, others belonged to a more circumscribed area. He said, however, that the Bartlett succeeded wherever any pear can be raised; and we may add, making it, indeed, all things considered, the pear of the country or the world! In referring to dwarf pears, Col. Wilder said that he had found the Vicar of Witley, Louise Bonne de Jersey, Belle Lucrative, and Urbaniste, not to have failed in their crops for thirty years, thus showing their hardiness and perfect adaptation to a latitude as high as that of Massachusetts. He thought the climate of California surpasses all others for the culture of fruit. In England, some dwarf pear trees, which had been planted forty years, looked as though they might survive fifty more. We have upon our own premises such trees about two feet in circumference, transplanted fifteen years ago, when they were at least two years old, now looking as robust as ever, and bearing good crops annually, but some years more abundantly than others. This year all our dwarf trees have been loaded down with bloom, and from the indications of the already swelling fruit, the prospects of a great crop were never more promising.

Col. Wilder denounces grafting on suckers as a curse to any orchard. As to apples, he thought with other gentlemen who expressed the same opinion, that the best varieties for general cultivation, were the Baldwin, Rhode Island Greening, Roxbury Russett and Talman's Sweeting. Dr. Loring had found lime employed in combination with pruning, very successful in renovating old orchards or old fruit trees. Orchards, he said, could be readily planted in land which could not be tilled for ordinary farm crops, provided the soil was good, thus saving more even land and securing the same end.

There was one or two points, touching the cultivation of fruit, especially apples, pears and cherries, which we should like to have seen referred to. These are, 1st, whether all

kinds of standard trees could not be grown as low-branched as dwarfs are, and allowed to grow in height not, say over twelve feet, and be as profitable as the larger standards, and whether they would not come into bearing much earlier? 2d, whether such a system would not be a safeguard against blight, by the protection afforded the trunk against the sun by the surrounding branches? Our own humble experience is, that the hot sun acting directly upon the trunks of trees, in the early part of the season, is the main cause of the blight. Dwarfs we believe are never blighted.

We have long thought that we permit our fruit trees to grow too tall, exposing the trunks at all seasons injuriously, while the difficulty of gathering the fruit is vastly increased. We should be glad to have the opinion of so experienced and intelligent a man as Colonel Wilder, on this subject.

The subject of covering raspberry canes in winter was touched upon at the meeting referred to, and Col. Wilder remarked that he hoped that the simple process of laying down the canes as well as grapevines, "upon the surface of the ground, would prove ample protection to them from the cold and piercing winds." As to the canes we do not believe this; but do as to the grapevines, and think it the true plan everywhere for them. Our raspberry canes, not entirely hardy, and none of them are except natives, and some of them not wholly—we prune, lay down and cover slightly with soil, just enough to make them invisible, and they come out splendidly. If they are covered too deeply, they are liable to sprout prematurely, and when exhumed would be subject to injury even from a slight frost.—[Germantown Telegraph.]

FRUIT AND FLOWERS—Double roses and flowers are unnatural, and are induced by high culture. The fullest roses will produce seed if grown for a while on poor soil. Some varieties of vegetables and flowers are more prolific, if their seed is kept several years. Prize melons have been grown from seed twelve years old, and the Balsam, or Lady's Slipper, is more likely to come double from old seed than from that freshly gathered. Most varieties of seed, however, are injured by long keeping. An overgrown specimen of fruit is generally considered coarse and deficient in flavor. The third or fourth year of the grape produces larger and better fruit than the first or second. Seedling fruit trees are less liable to disease than budded or grafted ones, and grafted trees generally produce fruit sooner than budded ones, and either, sooner than seedlings. Nearly all foreign varieties of strawberries are from American varieties. These are mostly sent wild from Virginia, and when Anglicised and named sufficiently, are sent back, usually with poor success. The Triomphe de Grand is an exception from Belgium. A good fresh virgin soil, or the top earth of an old pasture is better than any artificial soil for carnations. Land that has been in sod harbors the wire worm; the wire worm is sometimes destructive to plants, and a dressing of lime and ashes just before a rain, is destructive to the wire worm. Liquid manures often hasten the bloom of plants at the expense of their color. Foreign grapes grown in the open air in our climate, are inferior to our best natives, and thus far have otherwise proved unsuccessful.

DWARF AND STANDARD PEAR TREES.—The Germantown (Pa.) Telegraph says:

We find that dwarf pear trees are not as popular now as some five or six years ago, and it is not to be wondered at. The cultivation of dwarf trees—especially among careless persons, or those who do not or will not understand how to take care of them—is much more troublesome than the standard. Nevertheless they have this advantage over the standard: they are usually low branched; and if they are planted at least three inches below the union of the pear and quince, they are secure against the worm, and they also take root from the pear stock, making a more vigorous, thrifty tree. They can be easily kept small by pruning, thus occupying much less space, making a more beautiful tree, coming into bearing earlier, as a rule, and placing the fruit at all times within reach. If they should grow too freely, sink the spade in a radius of about thirty inches from the tree, severing the roots beyond that distance. Should the roots lie deep, remove some of the earth before commencing the operation. This is called root-pruning, and retards the too rampant growth of trees. When standard trees are preferred when room is limited, select the low-branched, and pursue the same course.

CUT WORM AND CORN GRUB KILLER.—Asa Fitch, the eminent entomologist of the New York State Agricultural Society, says: "I doubt not that you have noticed in plowed fields, a large black beetle with most brilliant golden dots placed in rows on its back. It is the *Calosoma calidum* of entomologists, and its eggs produce the corn-grub killer. It is a most inveterate foe of the cut-worm, grasping the worm in its strong jaws, and in spite of its violent writhing and struggling, securely holding it; and when it finds these worms in plenty, it gorges and surfeits itself upon them till it is so glutted and distended as to be scarcely able to stir—for it never knows how to let a cut worm alone when it meets with one. It is continually hunting these worms, feeding on nothing else if it can obtain them. Both it and the golden dotted beetle which produces it, therefore, should never be harmed."

NEATNESS IN THE FLOWER GARDEN.

The principal characteristic of the flower garden should be neatness. No matter how much may be expended on new and beautiful plants or how great the number of flowers, yet if neatness is neglected, the effect of the whole is spoiled in the eyes of all persons who have been accustomed to see well kept gardens. A beautiful flowering plant may have all its loveliness destroyed by the remains of dead flowers or decayed leaves, or a fine specimen may be devoid of attraction for want of a little care and attention in tying up or training. The lawn may be robbed of its beauty by allowing the grass to remain uncut until it more resembles a luxuriant meadow than an ornamental portion of the flower garden, whose chief beauty consists in a smooth, closely shaven sward with a velvetlike surface. So too, rambling, straggling shrubs, climbers with no provision of strings or trellis, walks filled with weeds, borders foul with grass and noxious plants, are all unsightly to a person with a true perception of the proper keeping of the garden.

The walks should be always kept free from weeds, and neatly raked. If grass edgings are used, they should be kept neatly pared.

The borders should be frequently hoed and raked, not only to destroy weeds, but also to break up the surface, which soon becomes baked and hard under the joint influence of sun and rain.

All tall growing plants, or those with tall flower stems, should be tied to neat painted sticks, which should be prepared in large quantities of all sizes during seasons of leisure. Herbaceous plants of the larger sorts should have their stems loosely tied together, or else heavy storms will beat and break down the outside stems.

All flowers and leaves which have begun to decay should be immediately removed, unless seeds are wanted, in which case only the dying petals of the flowers should be taken away.

Climbing plants should have trellises or strings to run up the moment they begin their growth, and those sorts which will not run, should be tacked to the wall or fence with neat strips of leather.

All annuals, which have finished their bloom, should be removed, and the early flowering herbaceous plants may be cut down to the ground as soon as the flowers have faded, when they will probably make a second growth and bloom.

Straggling shoots in shrubs should be at once cut out.

Many useful rules might be given for the proper care of the garden, but the above are sufficient. The vigilance of the cultivator will at once detect the want of neatness in any department of the garden, and will remedy it.—[Country Gentleman.]

VALUE OF SOOT AS A MANURE.—In response to an enquiry relative to the worth of soot as a manure, the *Working Farmer* replies:

Its chief component is carbon, and in so divided a form as to be equal to a solution in water. As soot is formed on the side of a chimney, thousands of cubic feet of atmosphere are passing over it, much diluted by heat, and containing ammonia; this is absorbed by soot, is fine carbon retaining the ammonia, and in a condition not to be defined by chemistry, but certainly known in practice to have high value. In England the soot from both coal and bituminous coal is habitually saved, and many farmers buy it largely. In this country, soot, in common with many other valuable substances, is wasted. Some English Farmers use thousands of bushels annually, and with great profit, applying twenty-five to fifty bushels per acre. Its great value, however, is for the compost heap, where it not only absorbs new quantities of ammonia, but assists in insuring that kind of decay of woody fibre known as *ermacausis*, and arresting the putrid fermentation, which frequently is so violent as to cause the loss of much of the volatile products, producing the condition known as *fire-fanging*. Soot may also be used like other finely divided black powders, for dusting over young turnips and other plants infested with the turnip-fly, and after performing this office it will find its way into the soil.

REMEDY FOR LICE IN FARM STOCK.—The following remedy I have used, and found to be a certain cure, and one which I am satisfied will not fail, if properly tried: Take two ounces Venice Turpentine, one ounce of Red Precipitate, eight ounces fresh butter; take the turpentine and put it into a smooth vessel, pour water upon it and stir it well, then pour off all the scum that rises on the top, and continue this process until it becomes like cream or wax, and then add the other ingredients and mix them well before using. One ounce of the above will cure the itch and kill lice of all descriptions on man and beast, and the old sow too.—[John Eversole, in Canadian Agriculturist.]

UNRULY CATTLE.—An ox or cow that is accustomed to throwing fences, may be prevented doing so by taking a large wire and bending it in the shape of a bow; then bend the points in the shape of a fish-hook; tie two strings to the wire, place the hooks in the nostrils lightly, and tie one string to the point of each horn. This will prevent the most unruly ox or cow from throwing fences.

HORSES SHOULD BE EXERCISED DAILY.—Dr. Dadd, in the *American Stock Journal*, says: Horses require daily exercise in the open air, and can no more be expected to exist without it, than their owners. Exercise is an essential feature in stable management, and like well-opportuned food, tends alike to preserve the health of horses.

Daily exercise is necessary for all horses, unless they are sick; it assists and promotes a free circulation of blood, determines morbid matter to the surface, develops the muscular structure, creates an appetite, improves the wind, and finally invigorates the whole system. We can not expect much of a horse that has not been habituated to sufficient daily exercise; while such as have been daily exercised, and well managed, are capable not only of great exertion and fatigue, but are ready and willing to do our bidding at any season. When an animal is overworked, it renders the system very susceptible to whatever morbid influences may be present, and imparts to the disease they may labor under, an unusual degree of severity. The exhaustion produced by want of rest is equally dangerous; such horses are always among the first victims of disease, and when attacked, their treatment is embarrassing and unsatisfactory.

FEEDING CALVES.—A Groton (N. H.) correspondent of the *New England Farmer* writes on this subject as follows:

In the spring of 1859, I raised thirteen calves, and all the milk they had was what two ordinary cows gave. I fed them on Indian meal and boiled potatoes. I put the meal into a kettle of water and boil it very thin for one hour or more, until it comes to a kind of jelly, and boil a sufficient quantity of each to last two or three days. I give each calf four or five potatoes, well mashed up with what meal I think the calf will bear; turn the milk on them, and stir them well together. In teaching them to drink, I put two fingers in their mouth, leaving a space between them, so that at each draft they can draw what they would naturally want to swallow. I keep a tub of clean water and a box of salt where they can help themselves. My calves are as good in the fall as my neighbors' are, that suck twice a day until they go away from the cow.

REMEDY FOR RINGWORMS.—The North British Agriculturist says that the disease locally known as ringworm or tetter, which shows itself about the head and neck of young cattle, in the form of whitish dry scurfy spots, can be removed by rubbing the parts affected with iodine ointment. The disease may also be combated by the use of sulphur and oil; iodine ointment is, however, to be preferred. As this skin disease is easily communicated to the human subject, the person dressing the cattle should wash his hands with soap and hot water after each ointment.

TOWN AND COUNTRY LIFE.

It is neither an exclusively rustic life, nor one passed wholly in a city, that the most perfect energy of brain can be expected; but rather in alternations between the two. Each condition then prepares for the highest operation of the other. The organization rapidly adjusts itself to conditions which are permanent; and in the purer air the entire level of the life is carried to a different pitch rather than special energy developed. The invention of towns was a pure gain to humanity, if due admixture of the country life can be secured. And to obtain this advantage to our laboring population is one of the great tasks of our age. Our physiology teaches us that the vice and misery of our great towns can never be combated successfully in the strongholds which they have made their own, and fortified for ages—the courts and alleys where the poisonous atmosphere combines with all hateful sights and sounds at once to deaden and to irritate the nervous sensibility. From the continued breathing of a vitiated atmosphere inevitably arises either apathy or a craving for intoxicating drinks; in all probability, each in turn. The dark blood, accumulating in the vessels, at first acts as an irritant, and then reduces the organs to a state of lowered activity; both conditions alike exciting the taste for poisonous doses of alcohol. To deliver the brains of the industrious poor from these oppressive demons of bad air and hateful sights, were a task worthy of the highest ambition.—[Cornhill Magazine.]

THE SPIDERS OF CEYLON.—One species weaves threads, or cords rather, athwart the pathways, which more than once actually lifted Sir Emerson Tennent's hat off his head in riding; and, when they struck the face, produced a painful twang across that tender district of the body? There is a Ceylonese spider with legs that would span an ordinary-sized breakfast-plate; and it seems to be a fact, now pretty well authenticated, that they seize small birds and feast upon their blood! It is also known that there are such spiders both in Australia and in Hindostan. The webs of such spiders are strong enough to entangle and hold the small birds, on which they are said occasionally to feed. The birds, however, are more of the nature of humming-birds than of larger size. Small house lizards will also be seized and devoured by these fellows.