

THE KITCHEN GARDEN.

German Hot-beds.

We take the following description of a method of preparing cotton cloth so as to answer the place of glass as a covering for hot-beds, cold-frames, &c., from *Our Home Journal*. We have never tried this substitute for glass, but perhaps some of our readers will give it a trial and send the results of their experience to the CANADA FARMER:—

We feel that, in giving some account of translucent cloth hot-beds, to be employed instead of the expensive glass frames in general use, we are doing all our gardening readers a service. We can vouch for the value of the "German Hot Beds," having tried them very successfully many years ago. For forcing early melons, tomatoes, &c., this prepared cloth is especially adapted, as it can be tacked to boxes of any size required and cut to suit them. Little rough square boxes, of the proper size and height, covered with the prepared cloth, can be placed over the hills in which tomatoes, melons, or other seeds are planted, and the plants allowed to stand, without transplanting, until all danger of frost is over, when the boxes may be taken off and packed away carefully for another season.

Take white cotton cloth, of a close texture, stretch it, and nail it on frames of any size you wish; mix two ounces of lime water, four ounces of linseed oil, one ounce white of eggs separately, two ounces of yolk of eggs; mix the lime and oil with a very gentle heat, beat the eggs separately, and mix with the former. Spread this mixture, with a paint brush, over the cloth, allowing each coat to dry before applying another, until they become water-proof. The following are some of the advantages these shades possess over glass.

1. They are being hardly on fourth.
2. It pairs are easily and cheaply made.
3. They are light; they do not require watering; no matter how intense the heat of the sun, the plants are never struck down, or faded, or checked in growth; neither do they grow up long, sickly, and weakly, as they do under glass, and still there is abundance of light. The heat, entirely arising from below, is equable and temperate, which is a great object. The vapor arising from the manure and earth is condensed with a cool air passing over the surface of the shade, and hangs in drops upon the inside, and therefore the plants do not require so frequent watering. If the frames or stretchers are made large, they should be intersected with cross-bars about a foot square to support the cloth. These articles are just the thing for bringing forward flower seeds in season for transplanting.

Trees in the Kitchen Garden.

We would caution our young beginners in horticulture and gardening, against the too common practice of growing large fruit trees in kitchen gardens, as the apple, pear and cherry trees are often found high enough to require a thirty or forty round ladder to gather the fruit. These towering trees are much more hurtful in the kitchen garden than is generally supposed; as their roots in the well cultivated mold of a garden run a great distance, and the crops underneath the shade of the trees are very indifferent in quality. As most gardens are more or less frequented by the family and their visitors, good, useful crops are certainly more interesting than poor ones, with an indifferent crop, perhaps, of apples or pears on the trees which overhang them. It is better to have the trees by themselves and the garden by itself; the trees will do better because they can receive the culture best for them which is surface culture; whilst the garden can be deeply ploughed to insure good crops of vegetables, which would be injurious to the roots of trees.

The main object in recommending this system is, to relieve the garden from those high, sometimes broad, overshadowing trees which greatly injure so many plots of vegetable ground. Trees are often too near; though on the outside of a vegetable garden, they injure by their shade, and they send their roots long distances foraging, and the more rapid growing kinds will soon devour the very fat of the land. We have seen a root upwards of fifty feet long, and nearly as thick at one end as the other, where it had got into the line of a flower border of good material, and speedily found its way to the furthest end of it. Trees on lawns will also search out flower beds, and occupy their enriched contents with astonishing rapidity, to the detriment of the proper tenants there.—*Pacific Rural Express*.

Medical Value of Asparagus.

A medical correspondent of an English journal says that the advantages of asparagus are not sufficiently appreciated by those who suffer with rheumatism and gout. Slight cases of rheumatism are cured in a few days by feeding on this delicious vegetable; and more chronic cases are much relieved, especially if the patient avoids all acids, whether in food or beverage. The Jerusalem artichoke has also a similar effect in relieving rheumatism. The heads may be eaten in the usual way, but tea made from the leaves of the stalk, and drunk three or four times a day, is a certain remedy, though not equally agreeable.

How to grow Early Cabbage.

The *Pacific Rural Press* says: "Take a large head of cabbage, strip off the outer leaf, and strip off the bud found at the root of the leaf. Take this bud, and simply set it in rich earth, like any other plant. The result will be a fine growth of early cabbage plants, with heads larger and sounder than can be raised in the ordinary way."

THE FRUIT GARDEN.

Grape Vine Ties.

There are a great many substances that can be used and are used for the purpose of tying up grape vines, but what is the best and cheapest is, I think, yet an open question, which I propose to discuss. To come to a proper understanding as to what substance is the cheapest tie, other things than the mere first money cost must be taken into consideration. For instance, I shall propose three-ply jute twine as the cheapest material with which to tie up the green wood, which can be had at 25 cents per pound, some one else proposes rye straw saying that it costs almost nothing, etc. Well, let us see. Ten pounds of twine costing \$2.50, have always sufficed to tie up all my grape vines, besides what was used for strings to bud with, and to tie up all sorts of other things. In using the twine there is no loss of time in preparing, etc., and a man can do more tying with this material in a day than he can with any other that I know of.

How is it with rye straw? A piece of ground must be ploughed and harrowed, seed must be purchased and sown and harrowed in, and when you want to tie you have to prepare it. Who will say that enough for 12 acres can be thus grown and prepared for less than \$2.50. In fact I don't think any one can begin to even prepare it for that sum after it has been grown; and when grown and prepared, vines cannot be tied up near so rapidly with it as with the twine; and after the rye straw has been on a while, has got dry, bleached by sun and rain, and is partially rotten, along comes a rain and wind, and down come great numbers of the young canes that have been tied up, and very likely have to remain on the ground several days before being again tied up—and a greater loss in the result than would have been the cost of the twine with which to tie up in the first place. Gunny sacks are good, but the first cost with the labor to prepare them, taken together with the difference in the amount that can be accomplished in a day, will make them a dearer article than a good new twine.

From my experience and observation, I am free to recommend three-ply jute twine as the best and cheapest material with which to tie up the green wood of grape vines; and for tying the bearing canes, I have found nothing cheaper or better than an article of tarred rope, resembling lath twine, but only half as thick, used by hardware men to tie up hubs, spokes and various other articles requiring a strong tie. It comes in coil of 85 strands in a coil, weighing about a pound to the foot, and sells at 25 to 30 cents per pound. This can be cut into lengths of 8 to 10 feet a strand, drawn out and used from one end, when a tie is made, it is cut off, and thus there is no waste, as is the case when the ties are cut into lengths before using. With this there is no loss of time to prepare it for use, more vines can be tied up than with any other article that I know of, and it will last the whole season without giving away; and when the work has been properly done, there will be no need to go through the vineyard after every rain or wind and tie up vines that have torn loose the ties that have failed to hold them.—*E. A. Richt, in Rural World*.

Currant Blight and Worm

Our attention has been called to a subject of lively interest to currant growers, by Mr. E. W. Garvitt,

of Alameda. His observations go to show that many of the currant bushes of Oakland, Alameda and other places around the Bay, that have hitherto produced no crop of fruit, are found to be stricken with what appears to be a kind of blight, accompanied by the presence of a minute insect or parasite in countless numbers. These blighted bushes are seen to be budless, and looking like dead sticks, standing in the midst of young ones that seem to be but little affected.

After being cut with the knife, at almost any point on the stem or on the leafy shoots, reveals the presence of a white grub-like worm, from half an inch to an inch in length, occupying the cavity of the pith or centre of the stem, and leading its way at a lively rate along the pith of the stem, whilst the smaller insect, which is found to be but a secondary or incidental pest, is the cause of the blight. The part of the stem that is thus infested is the growth of last year. The young of the worm are hatched are evidently seen to be in or under the buds, and it is by gnawing the bud, then makes its way directly into the body of the twig, utterly destroying it, and finally emerging in fact kills it outright. By cutting the blighted stems at this time, it is easy to see and remove the worms, the blights affected, from what has been the cause of the blight.

Not a small part of the making careful examination of all currant bushes, and every part found to be infested, the blights are cut away and carefully burned. In this way vast numbers of the worms can be destroyed and their increase materially lessened. It is convenient to a great extent, all the old wood, or that more than two years old, should be cut away every year, leaving only the young and vigorous shoots to bear fruit. In this way the ravages of the insect can be greatly lessened, and the fruit increased in size and quality.—*Rural Press*.

Remedy for the Currant Worm.

Powdered white hellebore is a perfect specific. If seasonally and rightly applied, the destruction of both eggs and larvae are complete. It will not do to wait until the bushes are defoliated, but watch them narrowly, commencing early, before the leaves are fully grown. The first indications are seen near the ground, or on the lower branches, in the finely perforated leaves, on the under side of which will be found numbers of very minute yellowish green worms, and perhaps some unhatched eggs. No time is to be lost now—have ready the hellebore previously rubbed through a sieve, or a horse feed from lumps, and, passing along to windward of the row, scatter with the hands sufficient to dust the lower portion of the bushes. It is not necessary that the leaves should be wet. A gentle breeze will diffuse the powder throughout. The eggs are always deposited on the under side of the leaf, and three or four distinct crops of worms appear during the season, each succeeding one higher up on the bushes, which must be looked over often, and if there are any worms, renew the application. Four years ago my bushes were overrun, and a part of them, with the fruit on all destroyed. Since then I have pursued the foregoing plan with entire success, having healthy bushes and abundant crops of finest currants. My neighbors have delayed longer, been less thorough, and lost their crops almost entirely. A great quantity of hellebore is not necessary; a light but complete dusting does the work. *See my Gardener*.

Bud-Grafting the Grape.

A correspondent of the *London Gardener* gives in substance the following mode of working our valueless sorts of the grape, which he says is better than either common budding or grafting. The best time for the work is after the vine has partly broken into leaf, and the blighting has nearly ceased—the shoot from which the buds are taken having of course been kept dormant in a cool place. First cut off a piece of wood from the shoot of 1st year's growth, three or four inches long, with a pump bud well ripened at the middle. Then cut away lengthwise one-half the wood, taking care not to destroy the pith at the woody base of the bud. Cut the ends with a sharp knife perfectly smooth and straight, and then place the prepared bud on the stem of the old vine to be worked over, and mark out the exact length and breadth of the piece holding the bud; cut out a part of the stem sufficient to receive the bud with close fitting—one side at least, and both ends should make a perfect fit. Press the bud in, tie firmly, and cover with clay or grafting wax. Several buds may be inserted in one large stem, to guard against failure. A part of the top should remain until the union has taken place. After the bud has grown a few inches the remainder is removed.—*Cultivator*.