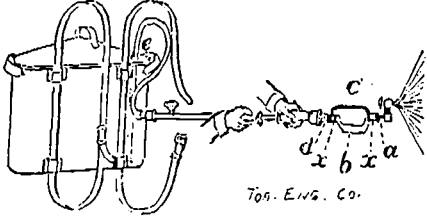




A Home-Made Sprayer.

A correspondent of Orchard & Garden gives the following sketch and description of an apparatus devised by Dr. R. Thaxter:



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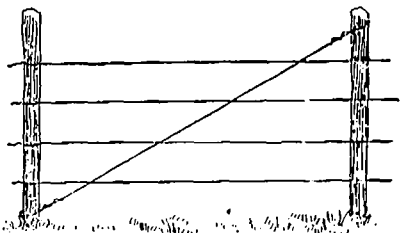
This consists of a reservoir which may be made of an ordinary copper wash boiler of small size, and a pump of the hydronette pattern, like the Whitman Fountain Pump, which is connected with the boiler by means of a hose which enters at *c* and passes to the bottom of the boiler. The boiler is fitted with straps as in the case of the ordinary knapsack sprayers. The Vermorel nozzle is used, and in order to give continuous action to the spray, which would not be accomplished with the single acting pump used, a sort of compression chamber is contrived between the pump and nozzle as follows: A piece of 5-8 inch elastic tubing *b* (hose will not answer) is fastened to the nozzle and pump at *x, x*. The nozzle and pump are also connected with two heavy copper wires *c*, which support the elastic tube *b*, and may be bent to give the nozzle any desired direction. The expansion of the tube *b*, is sufficient with the Vermorel nozzle to produce a continuous spray.

The Vermorel nozzle is not absolutely necessary, but is preferable. It is a modification of the Cyclone or "Riley" nozzle, with an arrangement for the prevention of clogging.

This apparatus can be constructed very cheaply and will answer not only for spraying the garden with insecticides, but can be used to good advantage in a small vineyard in treating mildew or black rot with the Bordeaux mixture. It is not patented and, so far as we know, not manufactured by trade. Any one can make it for himself.

Strengthening the Grape Trellis.

The constant change of temperature causes the trellis wires to expand and contract, and the heavy winds during the growing season when the



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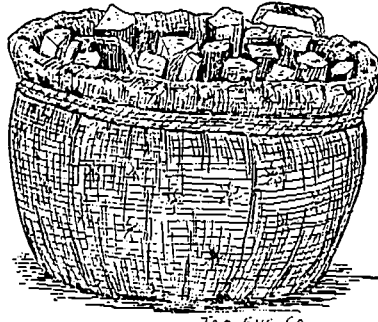
A STRONG TRELLIS.

vines are heavily laden with foliage and fruit, all conspire to loosen the end posts of the trellis line; hence, the posts need to be set deep and firm and otherwise braced to stand the strain upon them, and to this end the plan shown in the illustration is practised by many vineyardists. At each end a wire *a* is attached to the first post *c*, near the ground, and to the top of the second post *b*, as shown in the sketch. Where the trellis line is a long and heavy one, a wire is attached near the bottom of the second post and near the top of the third post. Of course by either plan the first post is not braced but, if firmly set, it will readily stand all the strain of the first space.—*American Agriculturist*.

Wood Basket for a Farmhouse Chamber.

The sketch shows a common farm basket covered with a long gathered strip of ordinary sacking, which has first received a powdering of small

daisy-shaped figures worked in long stitch with green Germantown; each figure requires only seven or eight stitches, each stitch being about half an inch long. The upper edge of the cover is gathered and tacked inside the basket just below



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AN ORNAMENTAL WOOD BASKET.

the top; then the lower edge is gathered in under the bottom, tacked to position and finished with a round bottom piece of the sacking, which is tacked to the basket, through and through. A strip of green striped carpet binding is bound about the basket to confine the fullness, and the handles are covered with the same. Such a basket is handy when one has much wood to carry up stairs, and it saves all litter from dropping bits of wood and moss; it also saves unloading, for the basket looks quite as well to remain in the chamber as the old-time wood box, and will hold as much as many of them did. If necessary, when spring comes, and every basket on the place is called for, the covering may be removed in a very few moments; but an old basket, past service, if neatly repaired, will often do just as well as a better one.

No more profitable work can be done on the farm in leisure times, than improving rough, swampy land, which is frequently the best because it has never been exhausted by cropping, and it often lies where it has caught the wash of the barnyard for years.

No arbitrary rule should be followed as to the depth in which to plant seeds. In a cold, wet soil the seed should be put near the surface; in a light, sandy soil deep planting is proper. As a late spring makes the ground colder and wetter than usual, it is plain that the depth to plant varies with the season. When the season is unusually dry, the planting should be deeper. Oats should have a shallower covering than wheat, corn should be covered deeper than wheat, and potatoes deeper than corn. Only finely pulverized soil should be placed over seeds.

VERY few farmers raise asparagus, which comes into use more than a month before peas, and it is less trouble to grow than anything else of equal value which the garden produces. A single row of asparagus, ten rods long, will furnish a large family all they can use. To start an asparagus bed plow out as deep a dead-furrow as possible, by passing several times with the two-horse plow. Then manure heavily, and with the plow turn the earth back and harrow it mellow. Then set out strong plants two feet apart, and with the crowns two or three inches below the level. Give clean cultivation the first summer, and after the land freezes, cover with four inches of manure. Repeat the covering every fall, which smothered out most of the weeds, so that very little cultivation is needed; all that is necessary is to keep down the weeds, which can be pulled out by hand, if there are but few of them.

THERE is nothing to be gained by cutting upland grass too close, whereby the roots are unduly exposed, and often killed. Some farmers mow their meadows as close as possible, and make the turf look as if it had been shaved with a razor. Of all grasses timothy probably suffers the most from too close mowing. It should not be cut below the first joint, and better still above the second. When cut

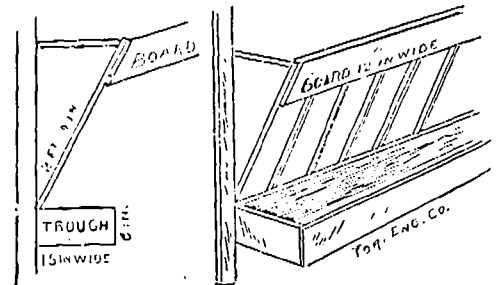
through the bulb, or too near it, the plant is often killed. The meadow will start much quicker if the grass is cut about two or three inches high, than when below that height, and the pasturage which will be gained, will much more than balance for the extra amount of hay of doubtful quality that is obtained by close mowing. Finer grasses can be cut lower than coarse ones, and lowland meadows suffer but very little from being cut close, and possibly benefited, as the sun can thereby reach the ground, and dry out the excess of moisture.

Do not trim apple trees for convenient plowing under them, but let them branch out low, say no more than two or three feet, and never cut off the lower tier of branches. Let them spread out without even shortening them in, and if they meet the ground with the burden of fruit no harm will follow. Such treatment will produce large, healthy trees, defying storms without leaning over; body and roots are shaded by the broad tops. Sun-burnt trunks full of the fat-headed apple tree borers cannot be found in such an orchard. When the intention is to raise such trees, the plowing must be stopped as soon as the young trees acquire a stiffness of body and branches, that prevents their being held out of the way of the plow. At that time the orchard ought to be sown to grass. But here is where often the fatal error is made, namely, in the kind of grass chosen. Timothy is the worst grass of all; besides, it is ruinous to the trees. It never makes a thick, protecting turf like the red-top.

Libe Stock.

A Handy Sheep Feeding Rack.

Following is an illustration of a sheep rack and trough. I have tried all kinds I have seen in this and the Old Country, and I have found none I like



so well as this. The great objection to most is that the fine chaff, hay seeds, etc., get into the wool. This is entirely obviated in this rack by placing a 12-inch hemlock board along the top, and then all the fine and best feed will fall into the lower trough, which is used for feeding grain and ensilage. All my racks are placed along the side of the stable. The great objection to having them in the centre is that sheep, when frightened or roughly handled, are liable to run against them and be injured.—*Rural New Yorker*.

As a remedy for what is called "fouls" in cattle sulphate of copper is a sure cure or specific. In a herd of twenty five cows, hardly a season passes without more or less cases. If taken in season, one application is generally all that is required.

WHENEVER the oat crop does not promise well to be harvested in the usual way, by reaping and binding, the best economy will be to cut earlier, the same as grass, rake up in light windrows, and as soon as dry, stow away in the mow to be reached about the first of February for the milch cows. The value will be seen in the milk pail. The cows eat them up clean, and, if there is enough to last them through March; the cows will come out to grass with coats as fine as silk. There is no better fodder than oat-hay for calves and yearlings. It brings them out in the spring in fine form and fettle. Full feed pays in growth and product.