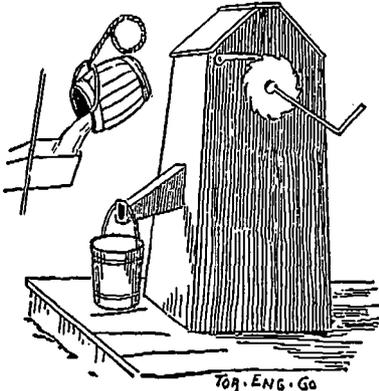




### Well-Curb and Tilting Bucket.

Our engraving shows a perspective view of a well-curb, which, with the accompanying devices, is convenient and durable, while it conduces to keep the water in a wholesome condition. The curb is made of upright boards in the form shown in the engraving. The front and back need be only twelve or fourteen inches in width. The sides are twenty-eight inches wide at the bottom, sloping to twenty-four inches, whence they are cut to a truncated triangle. The top of this is covered by a board firmly nailed, to which the sloping covers on either side are hinged. Near the top, and somewhat at one side, are holes with boxes to admit the iron journals of a solid wooden drum. On the crank end of the journal, and outside the curb, is a toothed wheel and iron ratchet, to prevent the full bucket from going down by the run, if the crank slips out of hand in drawing water. The ratchet is lifted when it is desired to lower the empty bucket. On the front of the curb is a wooden spout, rather large at the upper end, and projecting inside of the curb, as shown in the upper left-hand corner of the illustration. Directly above this, and also repre-



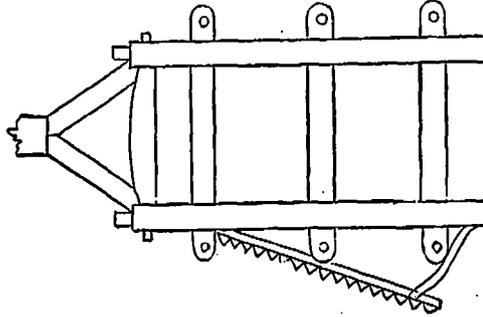
A SERVICEABLE WATER-LIFTER.

sented in the sketch, is an iron rod, firmly attached to the inside of the curb, with the bent end projecting inward an inch farther than the open spout. This is the tilter which catches one side of the bucket as it comes up, and holds it until it is tilted by the continued action of the crank, and empties its contents into the open spout. The bucket has a two-inch hole in the bottom, covered by a leather valve. The latter is simply a piece of sole-leather, three inches wide and four long, tacked by one edge over the hole. A flat piece of iron or lead is fastened to the upper surface of the valve, to keep it in place. The bucket must be heavy enough to sink of its own weight. It is well to leave one of the hinged covers of the curb open most of the time, to admit air for the purification of the water.—*American Agriculturist.*

### A Serviceable Meadow Smoother.

The man on the mowing machine dislikes to jolt over the bogs, and to run a mower on rough land soon spoils it. Aside from this, to leave a meadow full of bogs looks shiftless, and is poor farming. Bog grass is fit for nothing but bedding, while the clean meadow fescue, bent grass, or red-top would make fragrant and nutritious hay. Those who have tried it know that it is next to impossible to dig or pull out the good-sized meadow bogs, and the old, slow, laborious way of cutting them off with a bog-hoe is an expensive process. Yet the remedy is a cheap one, and lies useless in many a barn. Take a worn-out section bar of a mowing machine holding the knives that play in the cutting bar, mortise it into the under side of the wooden sled shoe, or otherwise attach it to the sled-runner, so that it will slide on the ground at a slight angle, as seen in

the sketch. Some fine day, when the meadow is cleared of hay, hitch on to the sled and see how neatly and speedily it will slice off the bog tops. It is a success and a conqueror. Put on a box, and

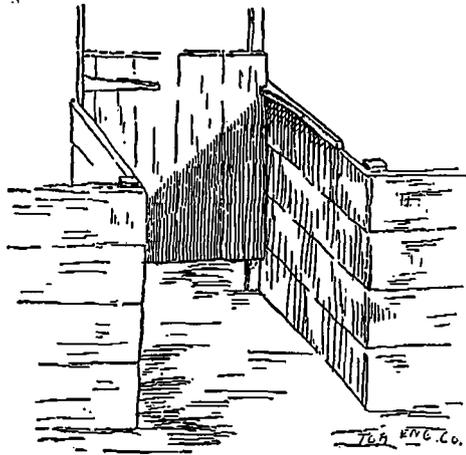


HOMEMADE MEADOW SMOOTHER.

let one man follow the planer-sled with a fork and pitch on every bog as fast as it is cut off. Dried they make a hot fire, and should be saved for fuel for the kitchen fire during the warm weather.—*American Agriculturist.*

### Automatic Gate-Fastener.

A useful contrivance for a stable is shown in our illustration. It is simply a piece of hickory shaved as represented, and securely fastened at the end furthest from the gate, so that it will spring towards it. When the gate is being closed, it pushes this to one side until it is shut, when the notch is



reached and the spring immediately flies back, securely fastening the gate. It would be equally useful for gates in many situations other than stables, and might be used for doors wherever the part which extends along the edge of the door could reach on through, to afford a means of opening it from the opposite side.

If the temperature of the cellar is 60 and that outside above 60, keep the windows closed if you want a dry cellar.

THE birds, as a general rule, are the farmer's best friends. Their natural food to a large extent, is composed of insects injurious to the fields and gardens. To have a swarm of hungry birds constantly about the farm, ever on the alert for all kinds of insects, is a great advantage. Since insects increase with marvelous rapidity, the destruction of a large number in spring, when the birds find little else to eat, means far less insects during the year than there would be were it not for the destruction thus effected.

Docks mature early enough in the season to be bothersome in haying time. If time cannot be found to pull or dig them out before they are cut down with the crop of hay or grain, they should be gathered from the field as soon after cutting as possible and burned. It is very important to burn these weeds, as they mature their seeds much earlier than their appearance would indicate. War must be constantly waged against them as they readily spring up again when cut down.

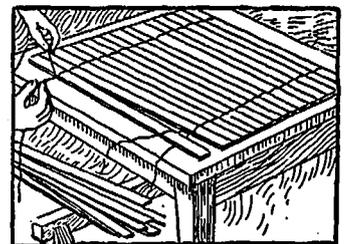
POWDERED potash scattered about the haunts of rats and mice, and rubbed on the edges of their holes, makes their feet sore and often drives them away. It is also a good plan to sprinkle potash on cotton batting and stuff it into holes and crevices which they frequent. Another excellent remedy is to stir strychnine with Indian meal and add either grated cheese or the oil of anise. Sir Humphrey Davy's great rat destroyer was hog's lard and carbonate of baryta, mixed well together and smeared upon the inside of a skillet, which he placed well out of the reach of any other animals than these mischievous little rodents.

WOODEN boxes are decidedly better for many purposes of plant culture than earthen flower pots. Plants in them do not dry out so soon as those in pots fully exposed to the air, and the boxes provide a more equitable temperature, being cooler in summer, and warmer in winter. Boxes are easily made or obtained from stores as waste product, and when nicely painted, are not at all unsightly. Oaken butter tubs, or casks sawed in halves, are cheap and serviceable for receiving large bushy, or tree-like plants, and with a little paint may be made quite ornamental. Large boxes or tubs may have hooks screwed into their sides for convenience in handling and moving. The faculty of flower pots to absorb water is at least a very questionable advantage.

HARNESSES, halters, blankets, etc., should be kept suspended in tight closets, the same as wearing apparel. Such closets can be made to utilize space which would otherwise be unoccupied, and not in the least interfere with the convenience of the stable. There are at least two vacant places in every stable, in which the closets may be placed. Measure from the corner each way, on the wall about five feet. At each terminal point strike a plumb-line from ceiling to floor, marking it plainly so that boards can be accurately matched to it. Tack to the floor a square-edged cleat, running from the line on one wall to that on the other. Measure the desired width of a door in the centre of the cleat, and set in two light uprights, reaching from the floor to the ceiling. The uprights should be firmly toe-nailed to the floor and ceiling, using matched lumber. Saw it in lengths to reach from door-casing to outside corners, sawing the farther ends beveling to fit neatly against the stable-wall. Above the door full-length boards can continue to the ceiling, and, with a door hung, the closet is nearly complete. All that remains is to fasten the pegs or wooden hooks to the wall inside, whereon are to be hung the harness. The whole is a simple job, which any farmer with a saw and hammer can do in half a day.

### Tree Protector.

THE device here illustrated is very serviceable to protect trees from sun scald, rabbits, mice, etc. Drive nails in a work bench the distance apart you wish the cords to be. Take tarred cord, in pieces long enough to go about twice around a tree when



double. Put one cord over each nail, bring the two ends even and begin to tie in lath or whatever you may use. When you have enough tied, put it around the tree, slip one of the ends of the cord through the double ends, draw it up tight and tie it.