

all for other roots and grasses. The next thing to consider is, how to manage thistles growing about stumps and fences. They must be cut with a spud close to the ground at the end of June, and again at the beginning of September, and be careful not to leave any leaves to ripen, and these also will then disappear. This work might be let by little contracts to juvenile members of the family; or this felling, to neighbors' children, and this too without depriving them of schooling. Any boy or girl, ten years and upwards, can be taught the use of a spud in five minutes.

The above (may I call it a system) put into rigid practice will prove the true panacea for the evil in question, and other perennials will fare no better. No more appeals to the moon by the magician or enchanter; let her move silently in her orbit, without blaming or praising her, as having any lot or part in the matter, save only, when the farmer has taken his repose after tea, he may sally forth and (it may be half a dozen in family) all with spuds in hand, for half an hour, and attack some secret patch of the thistles under the enchanting light of the much abused moon.

In the spring, when the clover lay is quite dry, make a harrow of brush, or bushes, like an equilateral triangle, and with one horse harrow twice, and cross-ways. This will crumble to pieces any remaining lumps, and leave the surface renewed, for which the clover will express itself grateful, after the first warm shower.

PUBLICOLA.

Contrivances in Rural Economy.

BAG-HOLDERS.

FARMERS who handle much grain and who cart off many hundred bushels annually, would find it a matter both of convenience and economy, to provide a simple stand to hold each bag while it is filled with the scoop shovel—instead of the more frequent practice of taking the time of a man or boy to do this work. These bag-holders are made in various ways.

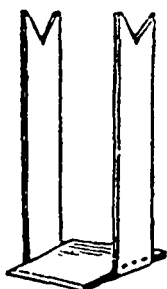


FIG. 1.



FIG. 2.

One mode is to drive a few sharp nails into the top of a light barrel open at both ends; hitch the top of the bag on these nails while it hangs within the barrel resting on the floor, with its mouth open ready for filling. When filled, it is tied and the barrel lifted off. A better way is to provide a board about a foot wide and eighteen inches long (fig. 1), which serves as a base, and on which the bag stands. Uprights or



FIG. 3.

standards with sharp points at the top hold the bag open until it is filled. These uprights are variously constructed. One mode is to take a piece of two inch plank for the bottom, and bore two holes, or one at each corner on the same side, and insert upright or forked sticks firmly into these holes, as shown in fig. 2. Another mode is to nail thin boards on the

opposite sides of the plank base, sawing a fork in the top of each, so as to form sharp points for holding the mouth of the bag. If these boards are so nailed on to the base that they shall spread a little towards the top, and being thin enough to have some spring to them, they may be slightly bent inward when the bag is attached, and springing out again will hold it the more firmly. One of the best, firmest and most convenient supports, admitting the ready removal of the filled bag, is represented in fig. 3. It has a board bottom, on two corners of which, upright boards are nailed as shown in the cut, connected and braced by a horizontal board at the top. Through this board are driven nails, projecting upwards, and to which the bag is attached. This support is light, and the uprights being braced, are not easily broken off. By first measuring the height of a full bag, the right dimensions may be obtained.

SNOW-PLOUGH.

The deep snow throughout the country the past winter, made a great deal of hard labour in shoveling by hand. A simple snow-plough may be made by any farmer in an hour or two, and will open paths by means of a single horse, with ease and rapidity. The height of a plough may vary with the depth of the snow, which being very uncertain, it should be sufficient. A foot will answer for nearly all cases.

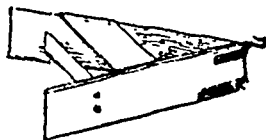


FIG. 4.

Take two pieces of plank or thick board, a foot wide and about five feet long, more or less, dress off one end of each in a wedge form on one side, so that when these two dressed faces are placed together, the two pieces will diverge like a letter > (fig. 4.) A width of three feet behind will be usually sufficient, and a board may be placed within, extending across so as to form a brace by nailing. Sometimes a joint is made at the forward end, and cross pieces of different lengths keyed in, to make the plough wider or narrower as may be desired. A hook is attached to the forward end for the whiffletree, and a box seat placed on the top for the driver. By increasing or diminishing the distance between the hook and whiffletree, the forward end will run high or low as the nature of the snow may require. The driver has only to keep the horse in the right place, slightly guiding the plough by throwing his weight left or right. This plough may be used around the house, to front gate, to barns and other out-buildings, along village streets and elsewhere. A finishing touch may be given to these paths by hand when desirable.

FASTENING OPEN BARN-DOORS.

Good barns are always supplied with fastenings to hold the doors while shut; but very few owners ever think of securing them while open, and as a consequence, strong winds often blow them about, slamming them against the walls or other obstructions, injuring or splitting them, and sometimes breaking them down from their hinges. Different modes are adopted for securing them while open. Doors which are merely fastened by a hook and staple, are easily

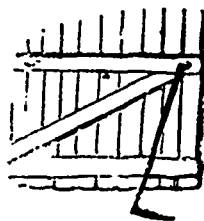


FIG. 5.

fastened open by inserting another staple at the place where the edge of the door strikes, to receive the hook and hold it fast. Another mode, (described in the *American Agriculturist*), is to prop the door

open by means of a stick provided for the purpose, an inch or more in diameter and three or four feet long, (fig. 6,) which is fastened to the outer edge of the door by an eye and staple, the other end resting horizontally in a hook when not in use. This end has a sharp iron point, to prevent it from slipping on the ground or ice. When the door is opened, the stick is placed in the position of a prop by a single movement of the hand; and when again shut, it is lifted and laid in the hook. A third mode, which may be adopted where a common latch is used on the door, is to place a second catch at the outer edge of the door, which may receive and hold the latch while the door is open. This is better or easier to manage than either of the others, the latch being self-fastening in both positions.—*Illustrated Annual Register of Rural Affairs.*

A New Food.

To the Editor of THE CANADA FARMER.

SIR—I send, for publication in your journal, an account taken from *Bell's Weekly Messenger* of the 11th February, 1867, of a new food plant, the *Sorghum Tartaricum*, and in addition, reports respecting some flour and bread made from the seed of the plant, in London, Ontario.

"The interest excited on the subject of Mr. Hullett's letter must have very much surpassed his expectations, as within a week of its appearance no fewer than 20,000 applications were made to him for seed. Some time must necessarily elapse before such a vast number of applications can be answered, but we are authorized to say that every person who has written will receive, before the end of March, at least three or four seeds, the largest number that under the circumstances Mr. Hullett will be able to send."

The following is a portion of Mr. Hullett's letter:—

"The Chinese Sugar Grass should be sown very *thinly indeed*, at the end of March, having been previously soaked in lukewarm water for some hours. It grows slowly at first, but very rapidly afterwards, and attains the height of from eight to twelve feet. Its appearance is very graceful, having a straight, tall stalk, marked at intervals with knots or nodes, and from these spring the long, spreading leaves.

"The seed grows in great bunches upon the eight or ten separate stems which form a tuft at the top of the plant. The crop is ripe about the beginning of September, and must then be gathered by hand from the stalks, before it is cut; the leaves are next to be carefully stripped off, and dried for fodder, being far superior to the best hay; and lastly, the stems or canes are cut into lengths, and either used for making wine or sugar, a very large quantity of either being easily made from them.

"The seed is separated from the husk by any ordinary threshing apparatus, and may be ground in the same manner as wheat, but there is no bran, so the whole is flour. The bread made from this grain tastes like a plain cake, being richer than wheaten bread, and more palatable.

"For fattening cattle it should be cut green, and is said to possess marvellous fattening powers; I had so small a quantity that I could not tell whether this was true or no; but I know that all animals prefer this rich, sugary fodder to anything else.

"I had the seed from a friend who is a missionary in Western China, of which place it is a native; but it is now much cultivated in America, and I would refer any one wishing for details, to a work on 'Sorgho Grasses,' by H. Olcott, published at New York, by Moore & Co., which contains a mass of information on the subject.

(Signed,) "J. HULLETT.

"CLARENCE LODGE, Cosham House."

The first of the following extracts is a letter from Mr. J. D. Saunby, of the North Branch Mills, to the editor of the *Free Press*. The second is a letter of my own on the subject to the same journal.

FLOUR FROM SORGHUM.—"Major Bruce brought some seed of the *Sorghum Tartaricum* to our mills the other day. I was doubtful if flour could be made from it or not, but as the Major was anxious to have me grind it, I was resolved to give it a fair trial, and the result was as follows, viz.:—From 21 lbs. of seed, 10 lbs. of flour, 4 lbs. shorts, and the remainder in husky bran, something like buckwheat bran. The abundance of bran may be attributed to the fact that at least one-third of the seed had not matured; owing, I think, to late sowing. Had the seed been fully developed, the return of flour per bushel might be estimated at the rate of at least 30 lbs. per bushel, thus giving 1,800 lbs. of flour per acre, at the rate of sixty bushels of seed.