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Homemade Seed Harvester for Sweet Clover

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HOMEMADE SEED HARVESTER FOR SWEET CLOVER

A few years ago a one page circular outlining simple directions for making a homemade sweet clover seed harvester was distributed by the Extension Service of the Oklahoma A. and M. College. A good many machines of this type have been made since that time by farmers in this state. Similar machines have been made and used by farmers of other states.

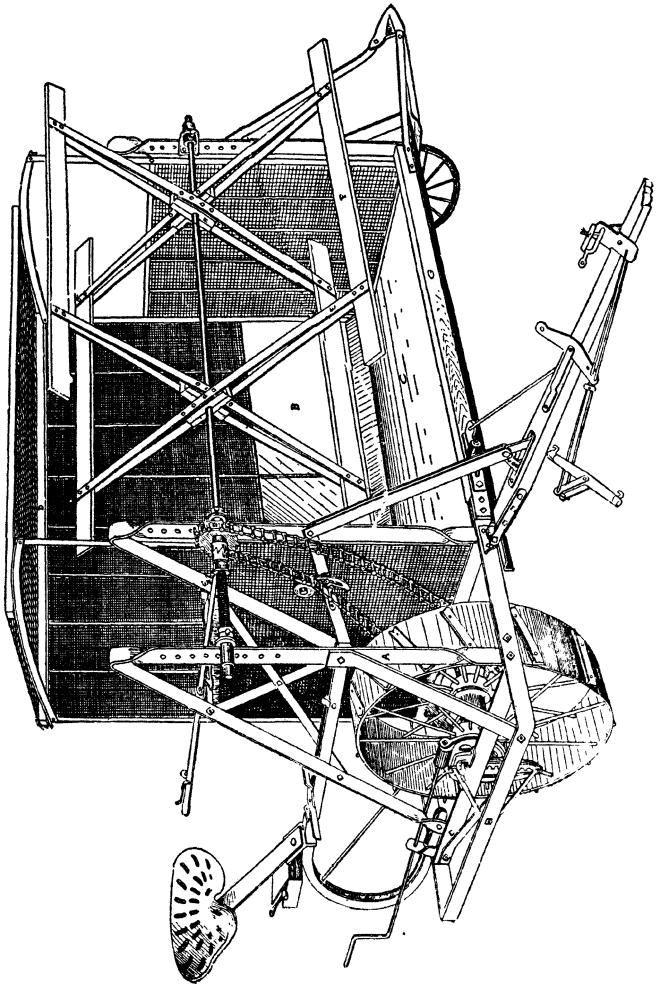


Diagram showing details of the set-up of the homemade harvester

In Oklahoma sweet clover is fast increasing in importance as a soil improvement and pasture crop. Many Oklahoma farmers are becoming "legume-minded" and are planning to include sweet clover regularly in crop rotations. The need for an abundant home supply of good sweet clover seed is apparent.

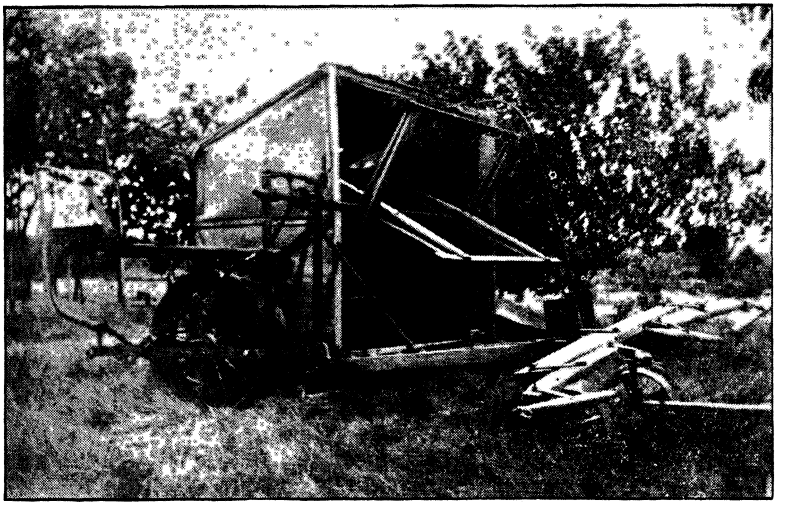
An old binder with the table and deck removed, and replaced by a big hopper or seed catching box, is the foundation upon which the machine is built. There are many old binders no longer used which can be converted cheaply into sweet clover seed harvesters.

The binder is first stripped down to the frame, the bull wheel and the grain wheel. The metal platform becomes the floor of the seed hopper.

While there seems to be no definite requirements as to size or material used, the machine shown on page 2 has three five-foot posts of 2x½ inch iron supporting the reel which is five feet in diameter. The blades are of 1x4 material, preferably hardwood. The shaft is 1⅛ inches in diameter and is driven direct from the bull wheel gear or sprocket. A hand lever controls the clutch which when engaged puts the reel in motion. The lower half of the hopper can well be sided with wood, using canvas for the upper half, instead of wire screen as shown. With the entire lower half of the back panel made as a sliding shutter, removal of the seed is easy, since the panel may be raised to permit the entrance of a man and shovel. The tongue truck steadies the machine.

The crop must be mature for best results. The reel which is chain driven revolves very rapidly, beating the ripe seed into the hopper. The plant stalks are left on the ground to be turned under for soil improvement.

The draft is about equal to the draft of a binder.



The above picture represents one farmer's efforts at building a sweet

clover seed harvester. This machine works quite satisfactorily, and is shown here to emphasize the statement previously made that, "There seems to be no definite requirements as to size or material used." When in use the upper part of this machine is covered with burlap or canvas.

To build one of these machines at lowest cost, careful planning ahead of time will permit the profitable use of rainy days or other slack periods of time. Tearing an old binder to pieces is no small job if many of the bolts must be cut with a cold chisel, and the building up of the complete machine also requires some time. If this time is to be taken from other important duties the cost of the machine will be correspondingly higher than it would be if slack periods were used. A farm forge and some knowledge of blacksmithing will be found useful. A 1½ inch pipe serves very well for the reel shaft, which may be drilled to permit bolting through the arms of the reel. Care should be exercised in dismounting the clutch for reassembly on the reel shaft. The pin of the end casting must be found and removed or this part of the clutch will be broken.

The homemade harvester works satisfactorily on rough land, along roadsides, or elsewhere. A well made machine will handle the rankest growing crop or a field sprinkled with weed growth. It is necessary to clean out the hopper frequently. Often much green material is mixed with the seed. It is necessary to dry out the mixture and finally run it through a seed cleaner to eliminate foreign material. The seed obtained is known as unhulled seed.

Unhulled seed appears to have some advantages over the cleaned hulled seed, and also over scarified seed. It is possible that best results will be obtained from midwinter or early spring planting when unhulled seed is sown. When delayed (late spring) seeding is practiced it is possible that the hulled seed may give best results. However, if a liberal sowing of the unhulled seed is practiced the results should be as good or better than when the hulled seed is used. Many experienced growers of sweet clover prefer unhulled seed and will sow nothing else.

The homemade seed harvester has been used in a number of demonstrations in the harvesting of soybean seed with excellent results. It is necessary to wait until the crop is fully mature and all leaves have fallen to the ground. It is probable that varieties which shatter easily at time of maturity would be most easily handled with this machine.