Note

A MACHINE FOR TYING CEREAL NURSERY BUNDLES

A mechanical tier for tying bundles of wheat, oats, and barley from rod-row trials has been developed and used successfully at the Minnesota Agricultural Experiment Station, University Farm, St. Paul, Minn. A crew of five or six men, with the use of the modified Jari mower for cutting, can harvest, tie, and wrap the bundles more rapidly and efficiently and with less physical exertion than can be done by hand.

The cutting is done by two men, one operating the Jari mower while the other draws the standing grain into the cradle of the mower with two hooks. The gavel from each row is picked up by the other crew members who carry it to the tying machine, where it is tied and then wrapped or put in a bag, and tied again. If the grain is standing well it may require an extra man or two to carry the bundles to the tier and wrap the grain as rapidly as the rows can be cut.

The tier is made from the tying mechanism from an ordinary binder. It is motor driven and mounted on a trailer so that it can be moved from field to field behind a truck or to any place in the field by hand.

The details of construction, shown in Fig. 1, are described below.

Fig. 1.—Showing construction of machine used for the tying of nursery bundles mounted on a trailer.

1Contribution from the cooperative investigations at St. Paul, Minn., of the Division of Cereal Crops and Diseases, Bureau of Plant Industry, Soils and Agricultural Engineering, Agricultural Research Administration, U. S. Dept. of Agriculture, and the Minnesota Experiment Station. Paper No. 633 of the Misc. Journal Series, Minnesota Agricultural Experiment Station.