drying the plants on a tarpaulin or floor, and threshing them. The cost of collecting seed has been high, but, fortunately, low rates of seeding have been satisfactory.

A good stand of *Chamaecrista fasciculata* makes an abundance of soil cover during the summer. The shattered leaves and pods provide excellent cover during the winter. Yields of green material have ranged up to 10,437 pounds per acre.

Seedings made in later winter have produced the largest yields and the best soil-protecting cover; later seedings have shown significant decreases in yield of green material. Ten pounds of seed per acre have given good stands in broadcast seedings and 5 pounds per acre in alternate rows with corn.

The plant seems well adapted to a wide range of soil conditions, but doubtless will be most useful on the poorer sandy soils where other soil-conserving crops are less successful.

Some positive responses to fertilizer have been shown, particularly to phosphate and potassium.

*Chamaecrista fasciculata* is relatively free from insect pests and diseases, although a wilt disease of the stems and leaves has given some damage.—Ozell A. Atkins and W. C. Young, *U. S. Dept. of Agriculture Soil Conservation Service, Auburn, Alabama.*

**NURSERY PLANTER**

The interest shown in an endless-belt nursery planter by visiting field research workers at the Iowa Agricultural Experiment Station prompts the author to offer the accompanying description and information on its operation.

This planter, shown in Fig. 1, has combined precision in planting and speed of operation to a greater degree than any other nursery planter used at this station. It embodies some of the features of the seed dropper described by Burnett and also utilizes the v-type rubber belt described by Kemp.

The rubber belt operates on two pulleys, the front pulley being actuated by a chain drive from the front wheel of the planter. Slanting metal sides provide an increase in capacity of the belt when heavy rates of seeding of large-seeded species are planted and also protection from the wind as needed when planting seeds of light weight.

An adjustable gate (Fig. 2A) terminates the portion of the belt required to pass over the front pulley for particular length of row to be seeded. A given amount of seed, previously weighed or counted and placed in an envelope, is distributed evenly along this length of belt. As shown at Fig. 2 B, a roller ball valve prevents seed from rolling down into the shoe before the belt begins to turn and facilitates

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3 Kemp, H. J. Mechanical aids to crop experiments. Sci. Agr., 15:488-506. 1935. The endless-belt type of seeder herein described was later equipped with a v-type rubber belt.