NOTES
TWO IMPROVED NURSERY THRESHERS

The recent inclusion of light-seeded grasses and legumes in varietal experiments at Pullman, Wash., has created a demand for better threshing equipment at this station. In an attempt to meet these needs a toothed-cylinder type of nursery thresher and a small roller-belt thresher have been constructed. The cylinder thresher is an improved model of one previously described.

THE TOOTHED-CYLINDER THRESHER

The toothed-cylinder nursery thresher was designed to thresh a wide range of crop plants and to separate the seeds or fruits from the other plant parts rather completely or at least sufficiently to facilitate subsequent recleaning. A sketch of this machine is shown in Fig. 1, and photographs of the two sides are shown in Fig. 2. The principal features of the machine are as follows:

1. Over-shot cylinder, with hinged concave unit that is raised easily without stopping the machine, and which rises automatically when a foreign object gets caught in the cylinder accidentally, thus avoiding excessive damage to the teeth.

2. Beater with blades which practically stops the rebounding of grain out of the end of the short shaker, and which partly regulates the flow of material onto the shaker.

3. Short screenless shaker which carries the threshed material into the air stream.

4. Air blast cleaning system which usually cleans wheat, oats, peas, etc., sufficiently to permit the recording of yield weights without recleaning.

5. Sacking device to replace the grain pans for seeds that roll or slide easily.


7. Hinged feed board supported by a spring so as to be raised easily for cleaning.

8. Automatically controlled damper in feed chute to prevent seed from spitting back from the cylinder.

9. V-belts and assorted pulleys to permit the varying of the relative speeds of the cylinder and other moving parts.

10. Adjusting screws to level the machine on uneven floors (not used when the thresher is mounted on the trailer).

11. Recleaner attachment, consisting of a ½-inch mesh screen-bottomed box and a fan to permit the recleaning of one sample while another is being threshed.

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