

(No Model.)

W. & J. SCHWARTZ.

RATTLE RAKE FOR THRASHING MACHINES.

No. 318,310.

Patented May 19, 1885.

FIG.1.

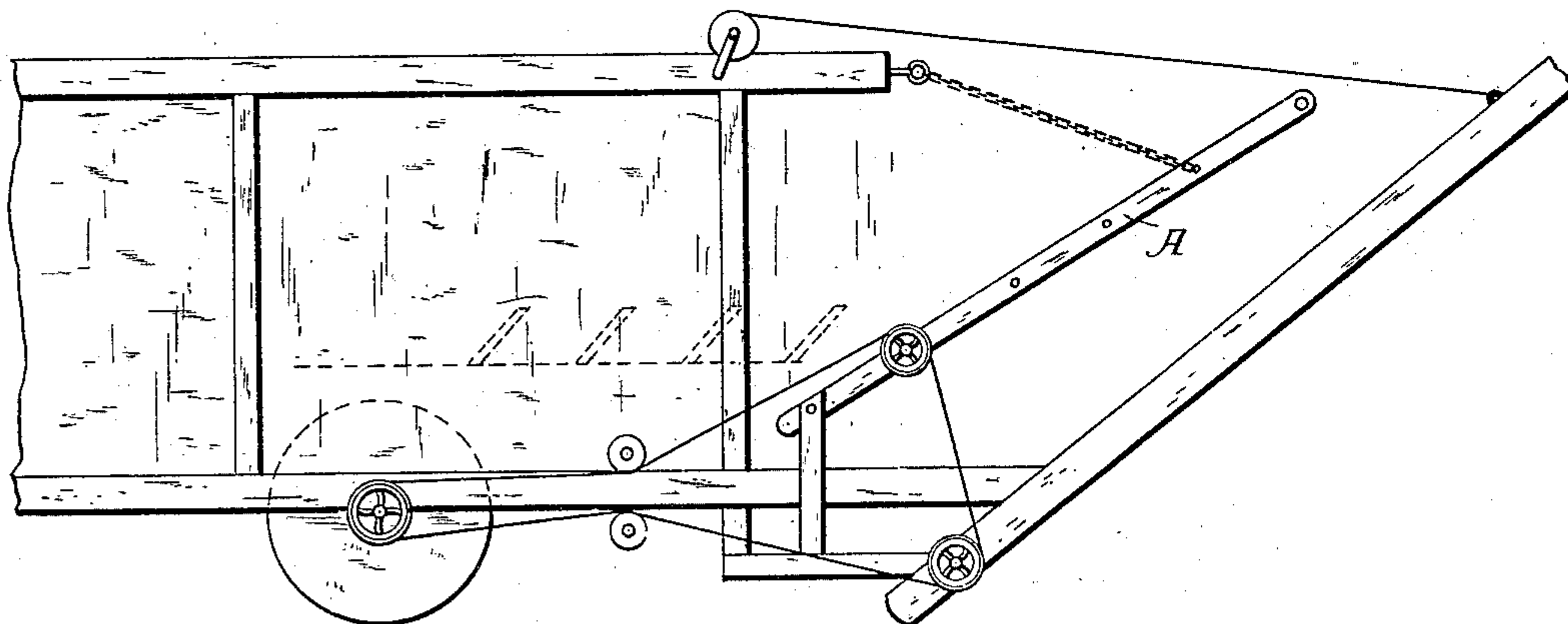


FIG. 2.

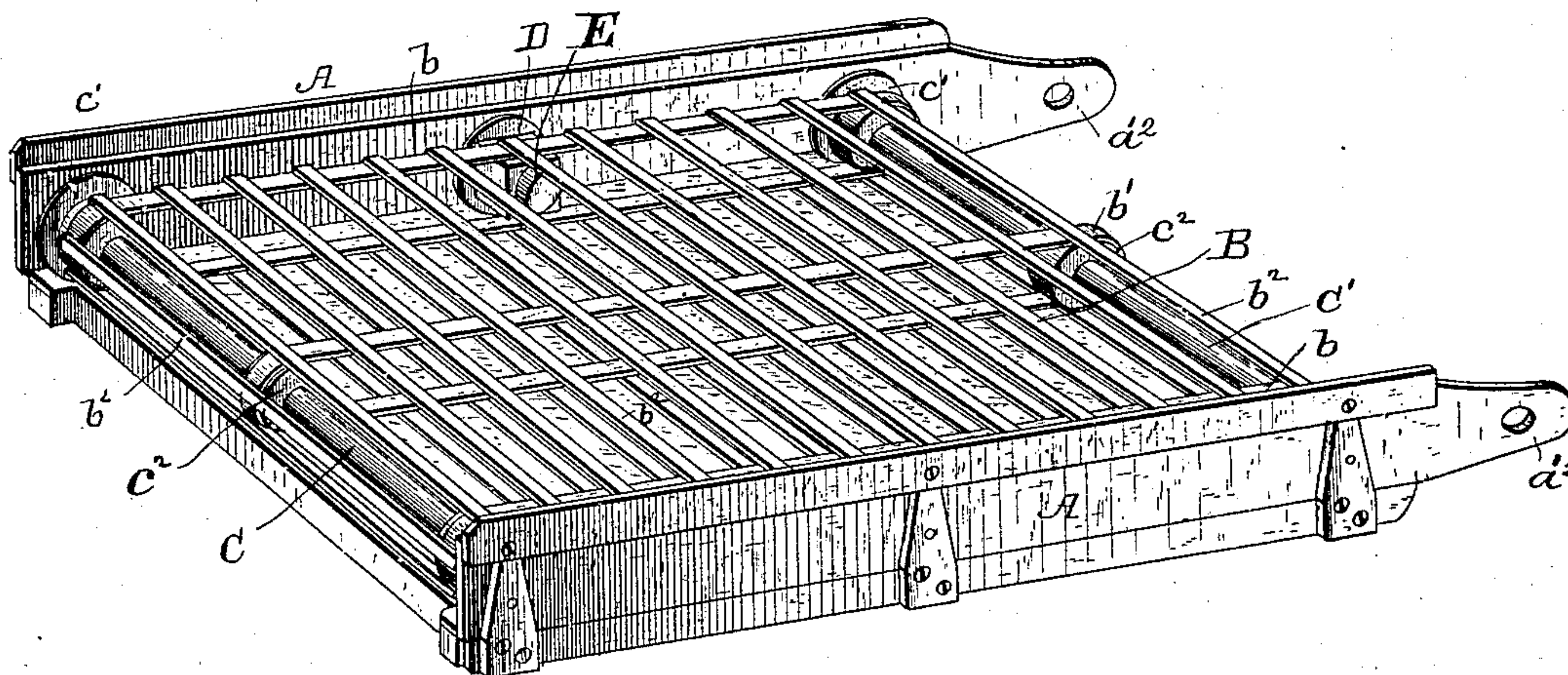


FIG.3.

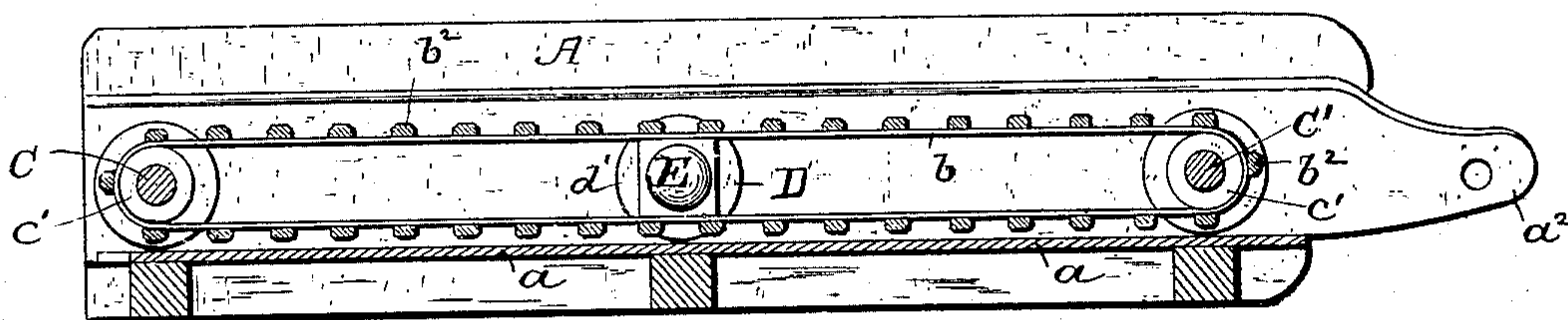
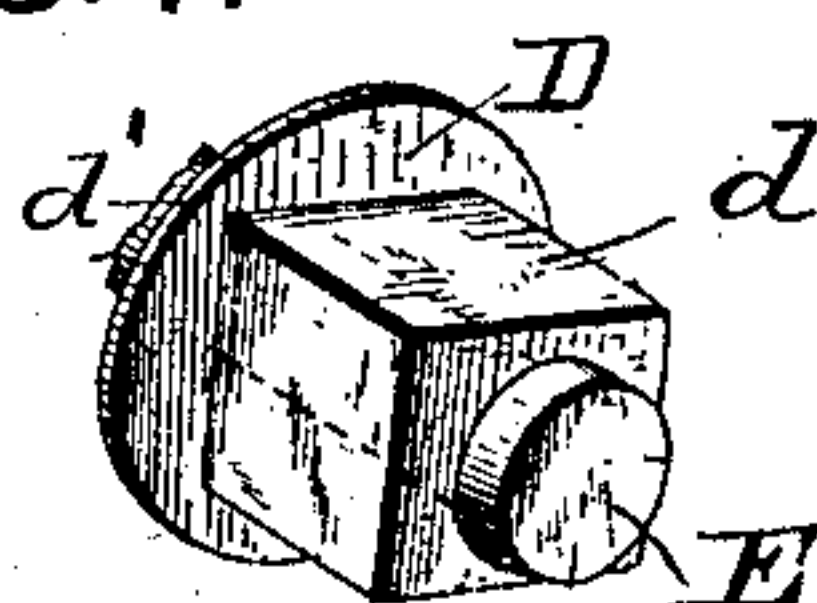


FIG.4.



ATTEST.

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RATTLE-RAKE FOR THRASHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 318,310, dated May 19, 1885.

Application filed January 26, 1885. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM SCHWARTZ and JOHN SCHWARTZ, citizens of the United States, residing at Lake Prairie, in the county of Nicollet and State of Minnesota, have invented certain new and useful Improvements in Rattle-Rakes for Thrashing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 is a side elevation showing rattle-rake attached to a thrashing-machine. Fig. 2 is a perspective view of our improved straw-shaker and grain-separator complete. Fig. 3 is a vertical section taken longitudinally through the same. Fig. 4 is a perspective view of one of the prismatic shakers or tappets.

This invention belongs to that class of thrashing-machines in which a rattler or straw-shaker is used; and the novelty in the present instance consists in the construction and combination of the parts, all as will now be more fully and specifically set forth and described.

In the accompanying drawings, A designates the frame of our improved rattler or intermediate shaker, which is made trough-shaped, as shown in Fig. 1, consisting of a floor, a , and two side cheeks, a' a' , perpendicular thereto. The rear extensions, a^2 a^2 , of said cheeks are perforated for the purpose of attaching the trough to the sides of a thrashing-machine by pivotal bolts.

Inside of the carrier-trough is an endless carrier, B, composed of endless bands b b' and transverse bars or slats b^2 , suitably secured to the said bands and preferably beveled, as shown in the vertical section, Fig. 2. The bands b b' are passed around flanged rollers or pulleys c' on shafts C C', and the band b' is passed around intermediate rollers or pulleys, c^2 , on said shafts C C'. Now, our object is to give this endless straw-carrier a rapid shaking or rattling motion, for the purpose of tossing the straw on its passage to the main carrier and separating any good grain which may have escaped from the riddles of the thrashing-machines, and which would, without my device, be carried off with the stacker. We accomplish this result by means of the angular or prismatic shakers or tappets D D,

which are located between the flanged rollers or pulleys c c , as clearly shown in Figs. 1 and 2 of the annexed drawings. Each one of said shakers D consists of a prismatic hub, d , preferably square, (although it may be made polygonal,) having a flange, d' , formed on one end, which flange is of sufficient diameter to effectually prevent the carrier from impinging against the cheeks of the trough A.

The two shakers or tappets D D are loosely applied on headed studs E E, so that they will rotate freely thereon, which studs are rigidly fixed to the cheeks of the trough A in any suitable manner. Now, it will be observed that when the endless straw-carrier is put in motion by belting the pulley C² on the shaft C with the main driving-power of the thrashing-machine and straw-bearing, more or less good grain is delivered upon this carrier, the prismatic hubs, shakers, or tappets will be caused to rotate and vibrate the carrier, and thus shake out any grain which is mixed with the straw, which grain, with some chaff, will be conducted back to the winnower.

We have above stated that the carrier-trough is connected to the thrashing-machine by pivotal bolts; but, if desired, this trough may be rigidly fixed to the machine. If, however, the trough is pivoted, we may employ means for giving it a bodily shaking motion, which will greatly add to the separating capacity of the device.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination, with the trough A and an endless slatted carrier, of the angular rotary tappets having guide-flanges for the carrier on their outer ends, and the headed journal-studs E, rigidly secured to the cheeks of the said trough, substantially as and for the purposes described.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM SCHWARTZ.

JOHN ^{his} X SCHWARTZ.
mark.

Witnesses:

JNO. V. I. DODD,
HENRY MOLL.