

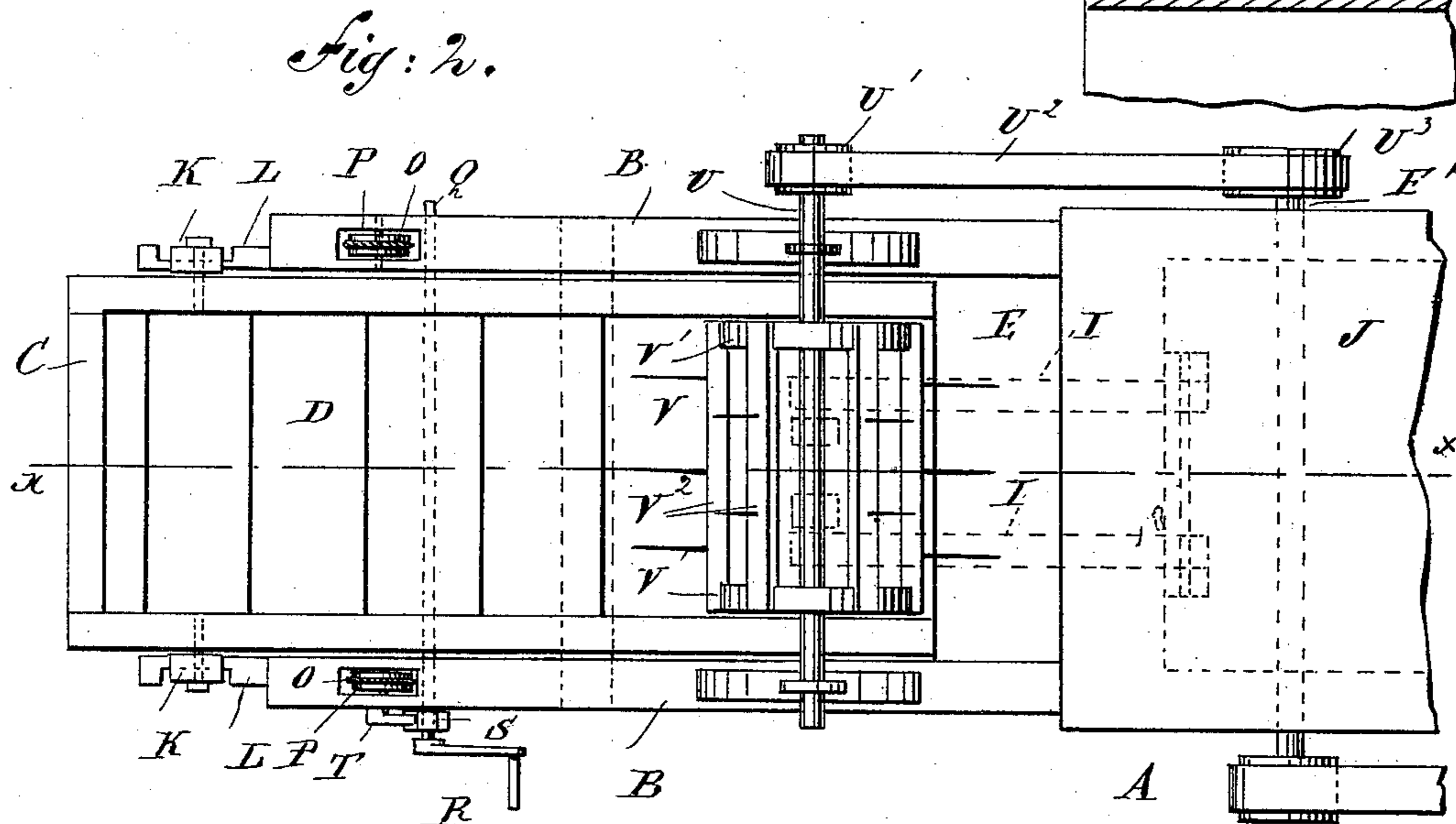
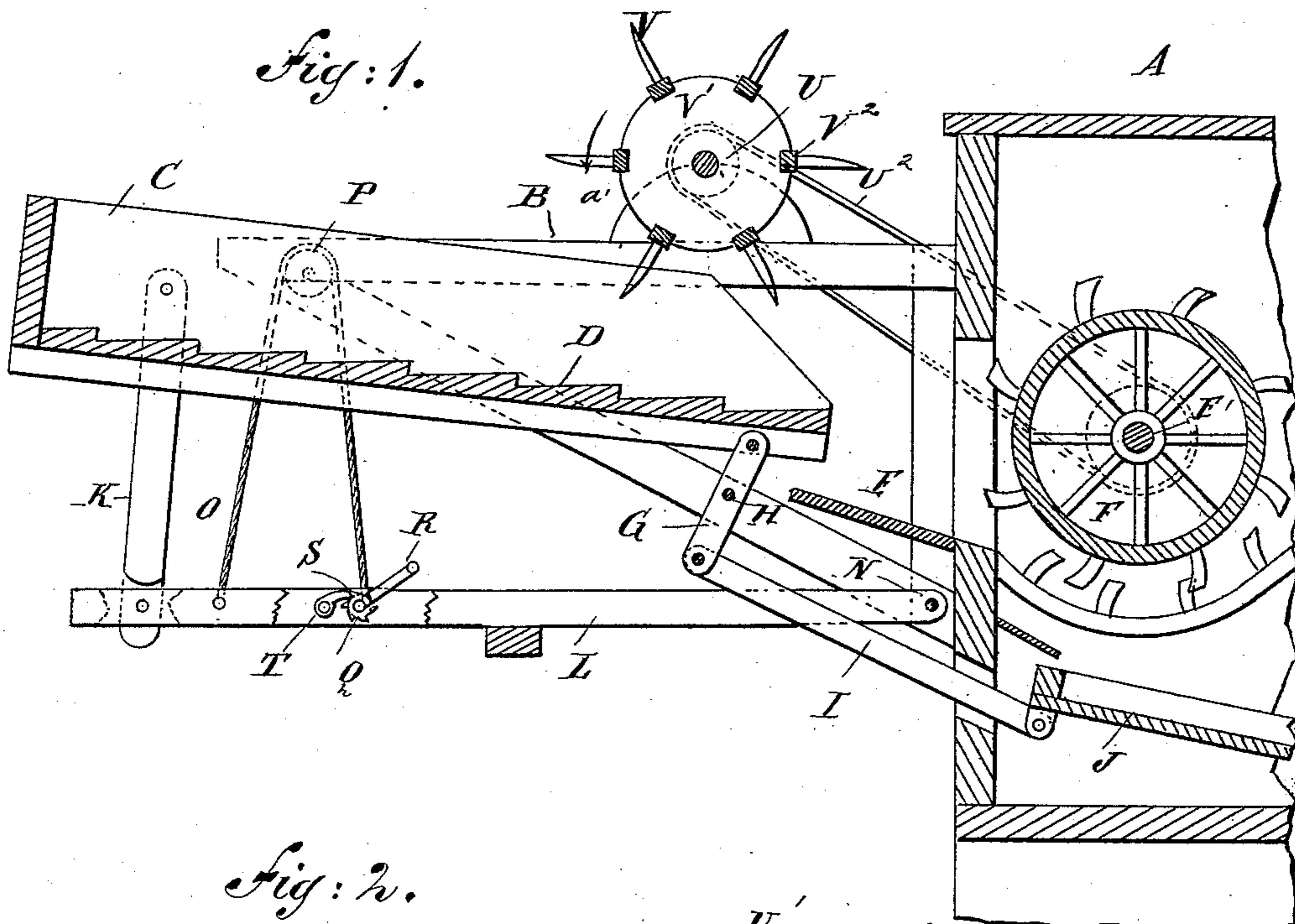
(No Model.)

L. EPPS & E. KIBBEE.

BAND CUTTER AND FEEDER FOR THRASHING MACHINES.

No. 452,266.

Patented May 12, 1891.



WITNESSES:

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UNITED STATES PATENT OFFICE.

LEVI EPPS AND ENOS KIBBEE, OF BEATTIE, KANSAS.

BAND-CUTTER AND FEEDER FOR THRASHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 452,266, dated May 12, 1891.

Application filed January 27, 1891. Serial No. 379,224. (No model.)

To all whom it may concern:

Be it known that we, LEVI EPPS and ENOS KIBBEE, both of Beattie, in the county of Marshall and State of Kansas, have invented a new and Improved Band-Cutter and Feeder for Thrashing-Machines, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved band-cutter and feeder specially designed for use on thrashing-machines, which is very simple and durable in construction, effective in operation, and easily attached to any one of the various kinds of thrashing-machines now in use.

The invention consists of certain parts and details and combinations of the same, as will be hereinafter fully described, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional side elevation of the improvement as applied and on the line xx of Fig. 2, and Fig. 2 is a plan view of the same.

The improved band-cutter and feeder is supported from the rear end of a thrashing-machine A, which is for this purpose provided at its end with rearwardly-extending brackets B, between which is hung a feed-hopper C, provided with a toothed bottom D, slightly inclined, as is illustrated in Fig. 1, and adapted to discharge at its front end onto the feed-board E, leading to the drum F of the thrashing-machine.

The forward end of the feed-hopper C is pivotally connected at its under side with two arms G, both centrally pivoted on the transversely-extending rod H, secured in the brackets B. Each of the two arms G is pivotally connected at its lower end by a link I with the grain-pan J of the thrashing-machine A. The rear end of the feed-hopper C is pivotally connected with upright arms K, pivoted on a longitudinally-extending frame L, pivoted at its forward end on a rod N, secured to the brackets B near the rear end of the thrashing-machine A, as is plainly illustrated in Fig. 1.

The rear end of the frame L is connected with the ends of two ropes O, extending upwardly and passing over pulleys P, journaled

in the outer ends of the brackets B. The ropes O extend downward from the pulleys P and wind on a drum Q, extending transversely and journaled in the frame L. The drum Q is provided on one end with a crank-arm R for conveniently turning the said drum Q to wind up or unwind the ropes O, so as to raise or lower the pivoted frame L, and consequently raise or lower the rear end of the feed-hopper C, it being understood that the said feed-hopper C swings on the arms G as a center of motion.

In order to lock the drum Q in place after the hopper C has been properly adjusted, the said drum is provided next to the crank-arm R with a ratchet-wheel S, engaged by a pawl T, fulcrumed on a frame L. Above the front end of the hopper C is journaled, in suitable bearings on the brackets B, the transversely-extending shaft U, supporting between the said brackets and above the feed-hopper C an open feed-drum V, composed of two end disks V' and transverse bars V², connecting the peripheries of the said disk with each other.

Knives are attached to the transverse bars V² for cutting the bands.

On one outer end of the transversely-extending shaft U is secured a pulley U', over which passes a belt U², also passing over a pulley U³, secured on the shaft F' of the drum F of the thrashing-machine A.

The operation is as follows: When the thrashing-machine A is set in motion, the drum F is rotated in the usual manner and by its shaft F' the pulleys U³ U', and the belt U² imparts a rotary motion to the shaft U, so that the feed-drum V is rotated in the direction of the arrow a' . When the thrashing-machine is set in motion, a vibratory motion is imparted to the grain-pan J in the usual manner, so that this pan J imparts a swinging motion to the feed-hopper C by the links I and arms G, it being understood that the feed-hopper C swings forward and backward on the arms K, previously mentioned. The sheaves of grain are passed into the rear end of the feed-hopper C, and by the swinging motion of the latter are gradually fed forward, so that the sheaves finally come in contact with the revolving feed-drum V, which cuts the bands and at the same time regu-

lates the amount of grain passing over the front end of the feed-hopper C onto the feed-board E and from the latter in proper quantities to a drum F. The amount fed to the drum F can be increased or diminished by adjusting the frame L by means of the drum Q and the ropes O, so that the hopper C assumes a more or less inclined position. In case the hopper is more inclined the grain passes faster over its front end onto the feed-board E, and if less inclined or nearly horizontal travels very slowly forward. It will be seen that this device is very simple and durable in construction, can be readily applied to the various kinds of thrashing-machines now in use, and at the same time is entirely automatic in operation, it only being required to fill the hopper C with the sheaves of grain.

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

1. In a band-cutter and feeder for thrashing-machines, the combination, with a pivoted and adjustable frame, of a feed-hopper having one end pivotally connected with the said frame and its other end adapted to be connected with the grain-pan of a thrashing-machine, substantially as described.

2. In a band-cutter and feeder for thrashing-machines, the combination, with a rotary feed-drum, of a pivoted and adjustable frame, a feed-hopper having one end pivotally connected with the said frame, and means for connecting the said hopper with the grain-pan of the thrashing-machine, substantially as described.

3. In a feeder for thrashing-machines, the combination, with a feed-hopper, of arms pivotally connected with the rear end of the said feed-hopper, a second set of arms pivotally connected with the front end of the said feed-

hopper, and links connected with the said second set of arms and adapted to connect with the grain-pan of the thrashing-machine to impart a longitudinal swinging motion to the said feed-hopper, substantially as shown and described.

4. In a feeder for thrashing-machines, the combination, with a feed-hopper, of pivoted arms pivotally connected with the rear end of the said feed-hopper, a second set of arms pivotally connected with the front end of the said feed-hopper, links connected with the said second set of arms and adapted to connect with the grain-pan of the thrashing-machine to impart a longitudinal swinging motion to the said feed-hopper, a pivoted frame pivotally connected with the first-named set of arms, and means, substantially as described, for supporting the free end of the said pivoted frame, substantially as set forth.

5. In a feeder for thrashing-machines, the combination, with a feed-hopper, of pivoted arms pivotally connected with the rear end of the said feed-hopper, a second set of arms pivotally connected with the front end of the said feed-hopper, links connected with the said second set of arms and adapted to connect with the grain-pan of the thrashing-machine to impart a longitudinal swinging motion to the said feed-hopper, a pivoted frame pivotally connected with the first-named set of arms, means, substantially as described, for supporting the free end of the said pivoted frame, and means, substantially as described, for raising and lowering the said pivoted frame, as desired.

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