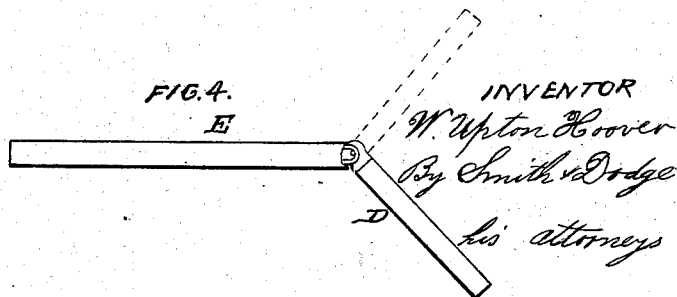
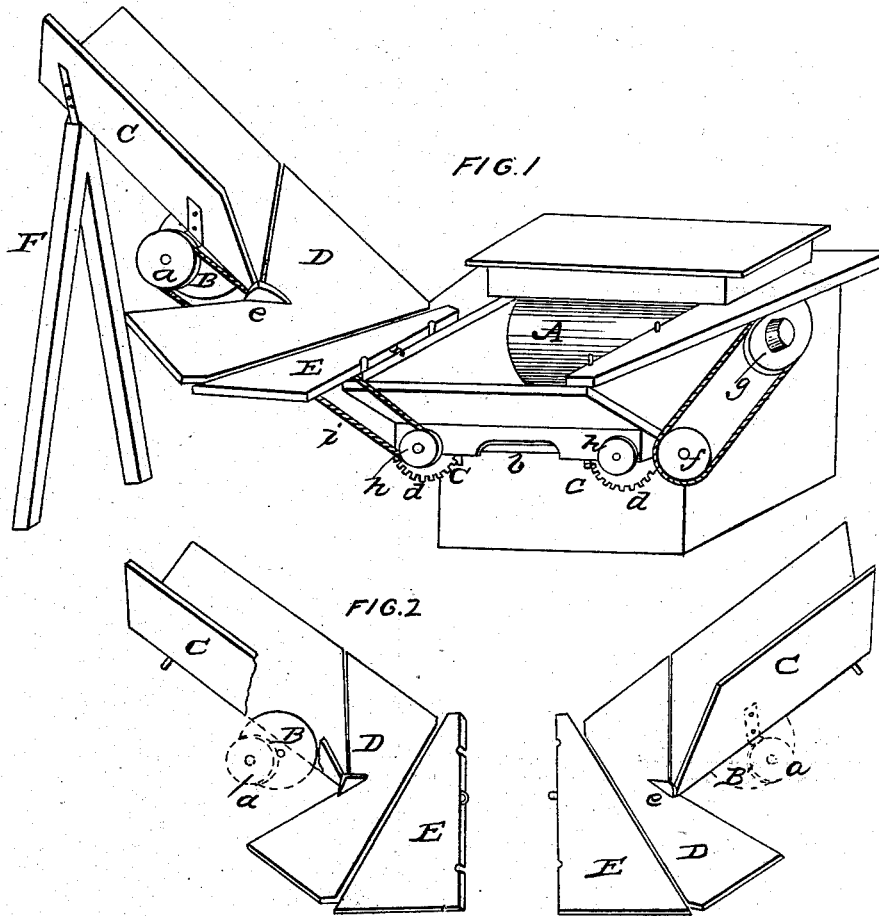


W. U. HOOVER.
Band Cutter for Thrashing Machines.

No. 48,279.

Patented June 20, 1865.



WITNESSES
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UNITED STATES PATENT OFFICE.

W. UPTON HOOVER, OF MACOMB, ILLINOIS.

IMPROVEMENT IN BAND-CUTTERS FOR THRASHING-MACHINES.

Specification forming part of Letters Patent No. 48,279, dated June 20, 1865.

To all whom it may concern:

Be it known that I, W. U. HOOVER, of Macomb, in the county of McDonough and State of Illinois, have invented certain new and useful Improvements in Thrashing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a perspective view of a portion of a thrashing-machine with my improvements attached. Figs. 2 and 3 illustrate the manner of applying my improved band-cutter either on the right or the left of the machine; and Fig. 4 is a view of a portion of the same detached, for the purpose of more clearly showing its mode of operation.

The nature of my invention consists, first, in an improved device for cutting the bands of sheaves of grain by mechanism connected to and operated by the thrashing-machine proper; and, second, in an arrangement of the mechanism for operating the same.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

A represents the cylinder of a thrasher, mounted in a suitable frame. Attached to one side of this frame, in front of the cylinder A, is the band-cutter. This cutter consists of a rotary cutting-disk, B, having its edge either smooth or serrated, and so mounted under the spout or trough C as to protrude upward through an opening therein, as shown in Fig. 2, in which a portion of the spout is broken away, for the purpose of showing it more clearly. The trough C is supported at its rear end by the forked standard F, and is connected at its other end to the board D, by pins or cleats, in such a manner as to permit of its being readily detached whenever desired, and still be rigidly held in position when united. The board D is hinged to the board E in such a manner that it can be inclined either up or down, as shown in Fig. 4. The board E is attached to one side of the frame by means of pins and hooks, as shown in Fig. 1, the board E being parallel with the top of the frame, to which it is secured, while the board D and trough C are inclined upward, as there shown.

The cutter B is secured upon a shaft centrally of the spout C, and a pulley, *a*, is secured at each end of the shaft. A shaft, *b*, is placed underneath the front end of the main frame, parallel with cylinder A, and to each end of this shaft *b* is secured a pulley, *f*, to which motion is imparted by a belt driven by the pulley *g*. Upon the shaft *b* are mounted two beveled-gear wheels, *c c*, one near each end, and these gear into similar wheels, *d*, mounted on short transverse shafts, upon the outer end of which is a pulley, *h*, one on each shaft; as shown in Fig. 1. From pulley *h* a cord or belt, *i*, extends to pulley *a* on one end of the shaft upon which the cutter B is mounted, a similar pulley, *a*, being secured to the opposite end of said shaft, whereby the cutter may be driven in a similar manner when placed on the opposite side of the machine, as hereinafter explained, the belt or cord *i* being in that case driven by the other pulley *h*.

The operation is as follows: The machine being suitably located, the spout C is attached on the side nearest the supply of grain to be thrashed. The machine being set in motion, the bundles of grain are placed in the upper end of spout C, down which they slide endwise by their gravity. This sliding movement carries it directly over the rapidly-revolving cutter B, which severs the band of the bundle or sheaf, whence the loosened grain slides still farther down, until it comes in contact with block *e* at the lower end of spout C, by which it is thrown around sidewise, and landed upon the board or platform E in a proper position to be fed at once into the machine by the attendant.

When it is desired to change the spout C with its fixtures to the opposite side of the machine the spout is detached from D, and E being unhooked, is then turned upside down, as indicated by Fig. 3, where it is secured the same as before. The spout C is then secured as before, it being, of course, attached by its opposite side to D, and the belt *i* being changed to correspond, when it is again ready for operation.

By these means I am enabled to produce a very efficient, compact, and simple device for the purpose intended.

Having thus described my invention, what I

claim as new, and desire to secure by Letters Patent, is—

1. The combination of the rotary cutter B and spout C, constructed and operating as and for the purpose set forth.

2. The reversible platform E and hinged board D, in combination with spout C, arranged to operate as and for the purpose herein described.

3. The combination and arrangement of shaft *b*, provided with pulleys *f* and wheels *c*, with the transverse shafts provided with the wheels *d* and pulleys *h*, for the purpose of driving the cutter B, as set forth.

W. UPTON HOOVER.

Witnesses:

W. E. WITHROW,
ED. B. BALL.