E. L. BEARD.

Band-Cutter for Thrashing-Machines.

No. 163,964. Patented June 1, 1875.

Fig. 1

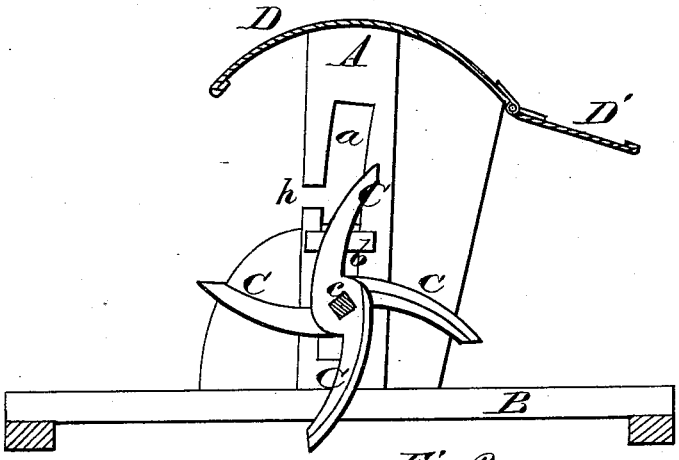


Fig. 2

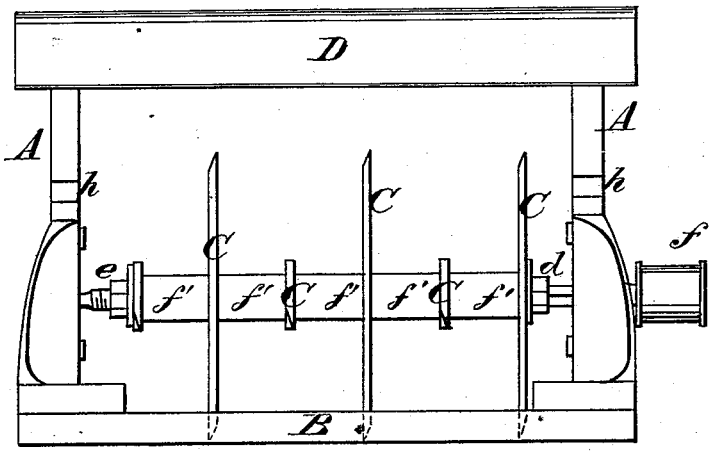
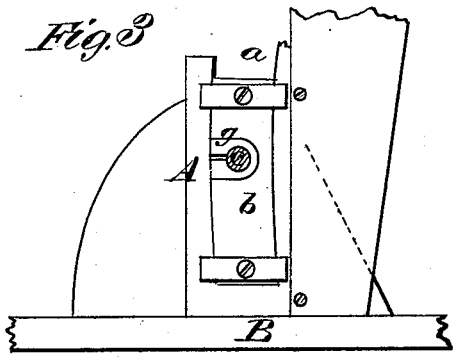


Fig. 3



WITNESSES

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UNITED STATES PATENT OFFICE.

EVAN L. BEARD, OF THORNTOWN, INDIANA.

IMPROVEMENT IN BAND-CUTTERS FOR THRASHING-MACHINES.

Specification forming part of Letters Patent No. **163,964**, dated June 1, 1875; application filed April 17, 1875.

To all whom it may concern:

Be it known that I, EVAN L. BEARD, of Thorntown, in the county of Boone and State of Indiana, have invented a new and valuable Improvement in Sheaf-Band Cutters for Thrashing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a vertical section of my band-cutter, and Fig. 2 is a plan view of the same. Fig. 3 is a side view.

This invention has relation to means for cutting the bands of sheaves on their way to a thrashing-machine; and the nature of my invention consists in a series of curved knives having sickle-edges and secured on a revolving shaft by means of thimbles and a clamping-nut, said shaft having its bearings in boxes which are free to play in curved slots, as will be understood from the following description.

In the annexed drawings, A A designate standards rising from two sills, B B, which are adapted to be secured to a thrashing-machine at the point where the grain in the straw is to be fed therein. These standards are provided with broad side guards, and they have curved slots *a* in them in which bearing-blocks *b* are free to rise and descend. The blocks *b* afford bearings for the ends of a square shaft, *c*, which is free to rotate, and which is rotated by means of an endless band passed around a pulley, *f*, and also around a driving-wheel, not shown. The slots *a* are concentric to the axis of the driving belt-wheel for the purpose of allowing the shaft *c* to rise and descend freely without binding or affecting the tension of the driving-belt. Near one end of the shaft *c* an enlargement, *d*, is formed, and between this enlargement and a nut, *e*, cutters C and spacing-tubes or thimbles *f'* are applied on said shaft and firmly secured. The cutters C are formed in pairs diametrically opposite each other, and they are constructed with beveled and serrated cutting edges, which sever the bands around the sheaves to a much better advantage than if the cutting edges were not serrated. The tubes between which the cutters are confined prevent them from receiving lateral play. The journal-boxes *g*, in which the shaft *c* turns, are removable with their shaft through slots *h* in the standards A. This allows the shaft *c* to be detached from its standards, when it is desired to sharpen the cutters. To prevent the grain from flying out of the machine by the action of the cutters in severing the sheaf-bands, I arrange a curved guard, D, over the cutters and secure it to the upper ends of standards A, and to the back edge of this guard D I hinge an apron, D'.

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

A series of curved band-cutting knives, C, secured upon a shaft, *c*, mounted in bearings *b*, free to play up and down in curved slots *a*, in uprights A, substantially as and for the purpose described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

EVAN L. BEARD.

Witnesses:

J. W. PAULEY,

GEO. E. CONRAD.