JOHN H. DICKINSON.

Straw Cutters.

No. 116,033. Patented June 20, 1871.

Fig. 1.

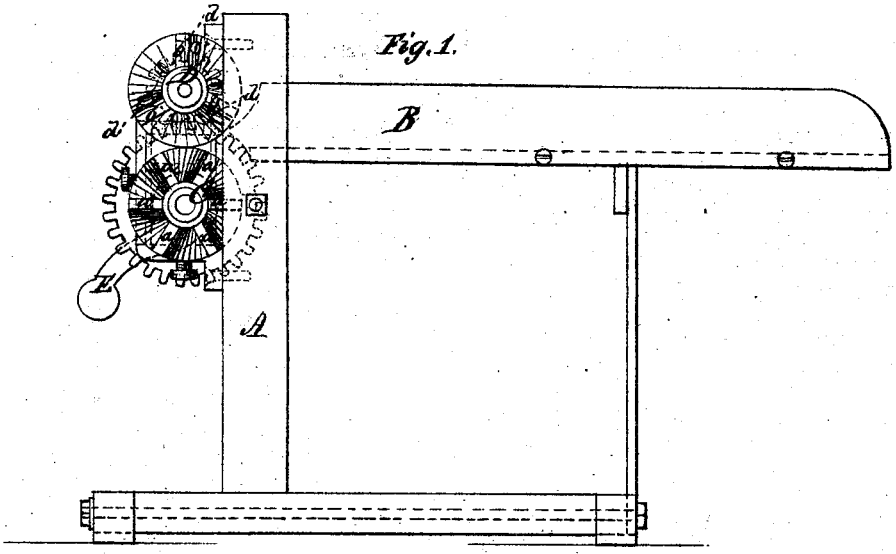
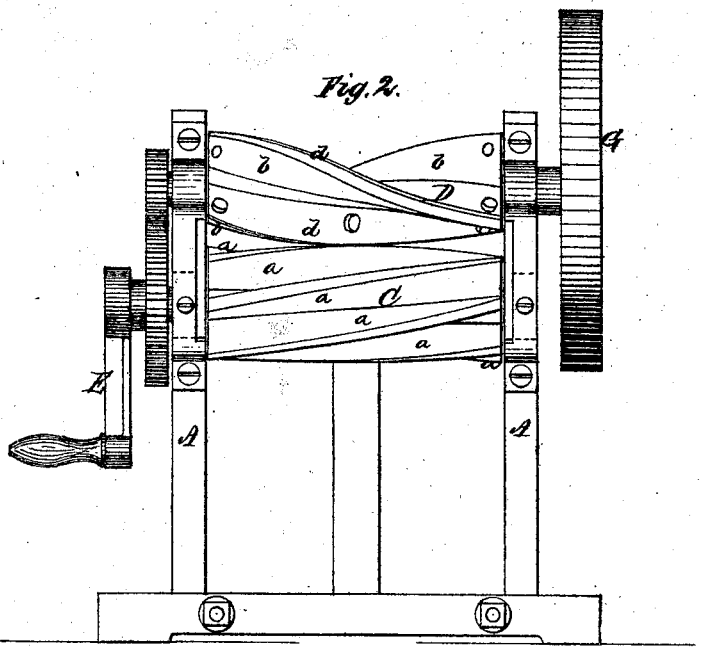


Fig. 2.



Witnesses.
John A. Ellis
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UNITED STATES PATENT OFFICE.

JOHN H. DICKINSON, OF CHICOPEE FALLS, MASSACHUSETTS.

IMPROVEMENT IN STRAW-CUTTERS.

Specification forming part of Letters Patent No. 116,033, dated June 20, 1871.

To all whom it may concern:

Be it known that I, JOHN H. DICKINSON, of Chicopee Falls, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Straw-Cutters; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon which form a part of this specification.

The nature of my invention consists in the construction and arrangement of the cutting devices for a feed-cutter, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation, partly in section, and Fig. 2 is a front view of my machine.

A A represent the standards at the front end of the feed-box B, and to which the cutting device is attached. This cutting device consists of two rollers, C D, connected by means of gear-wheels, as shown. The lower roller C is provided with a series of flanges, *a*, running in spiral form around the same, the outer edges of said flanges being flat or forming a flat surface. The upper roller D is also provided with spiral flnges *b b;* but said flanges run in opposite direction to those on the lower roller, and their outer edges, instead of being flat, are beveled on one side; or the entire flange is beveled on one side, while the other side is at all points perpendicular with the center of the roller. On these perpendicular sides of the flanges *b b* are attached spiral knives or cutters *d d*. The two rollers C D are so arranged that, as they revolve in opposite directions, each knife or cutter *d* will come against the outer flat-surface edge of a flange, *a*, commencing at one end, and continuing spirally along the entire flange and knife to the other end, making at all times a surface and draw-cut. Upon one of the journals of the lower roller C is a crank, E, by means of which the rollers are revolved; and on the opposite journal of the upper roller D is a fly-wheel, G, as shown. This arrangement of surface-cut cutting device is applicable to any feed-cutter, as well as to many other cutters.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The roller D, with its flat-faced spiral flanges, in combination with roller C, furnished with square-faced spiral cutters *a a*, so arranged that the faces of the cutters will press against those of the flanges, and, by the more rapid motion of the former over the latter, impart a surface draw-cut upon the straw passing between the rollers, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOHN H. DICKINSON.

Witnesses:

GEO. D. ROBINSON,

N. L. SHERMAN.