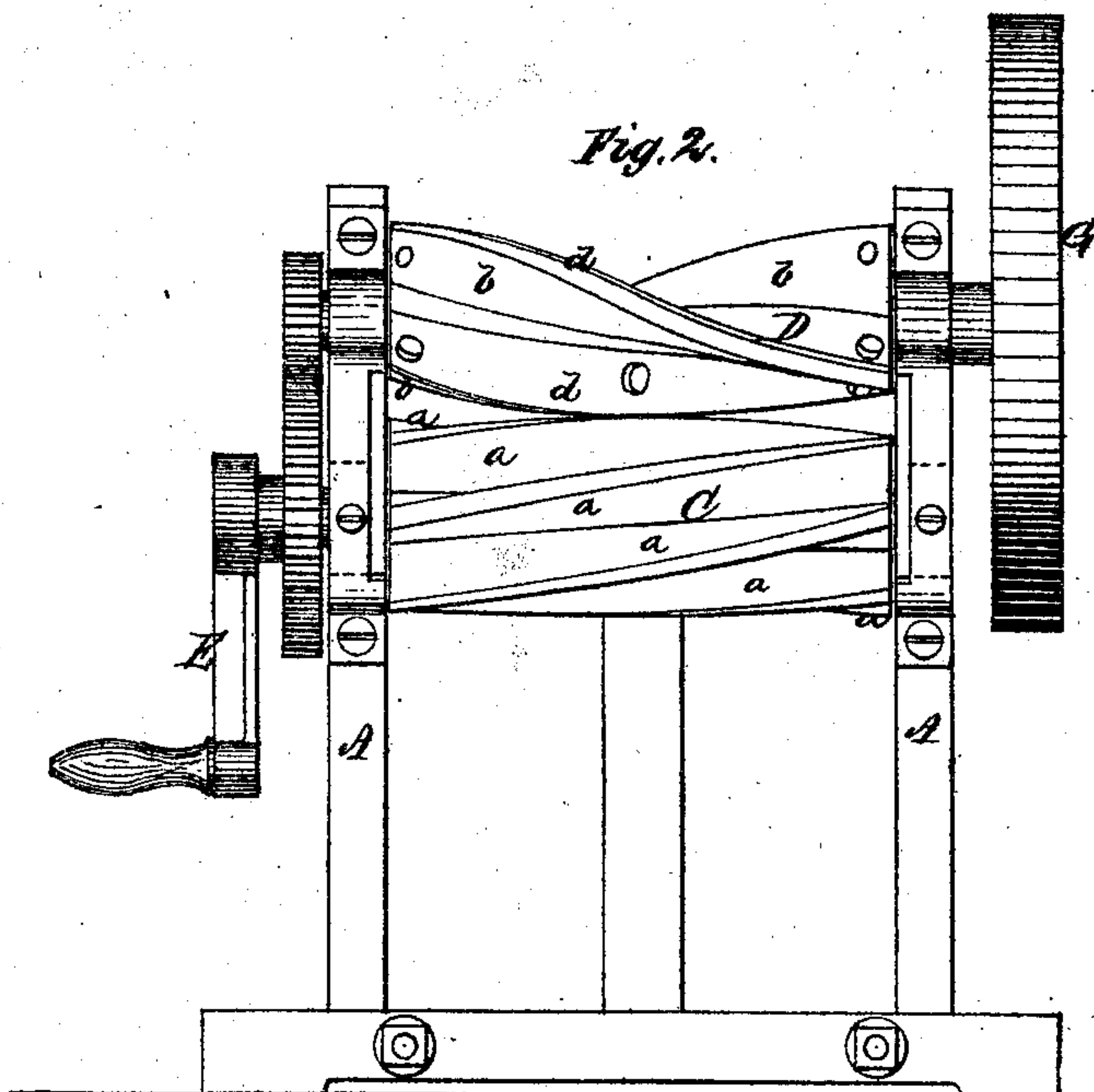
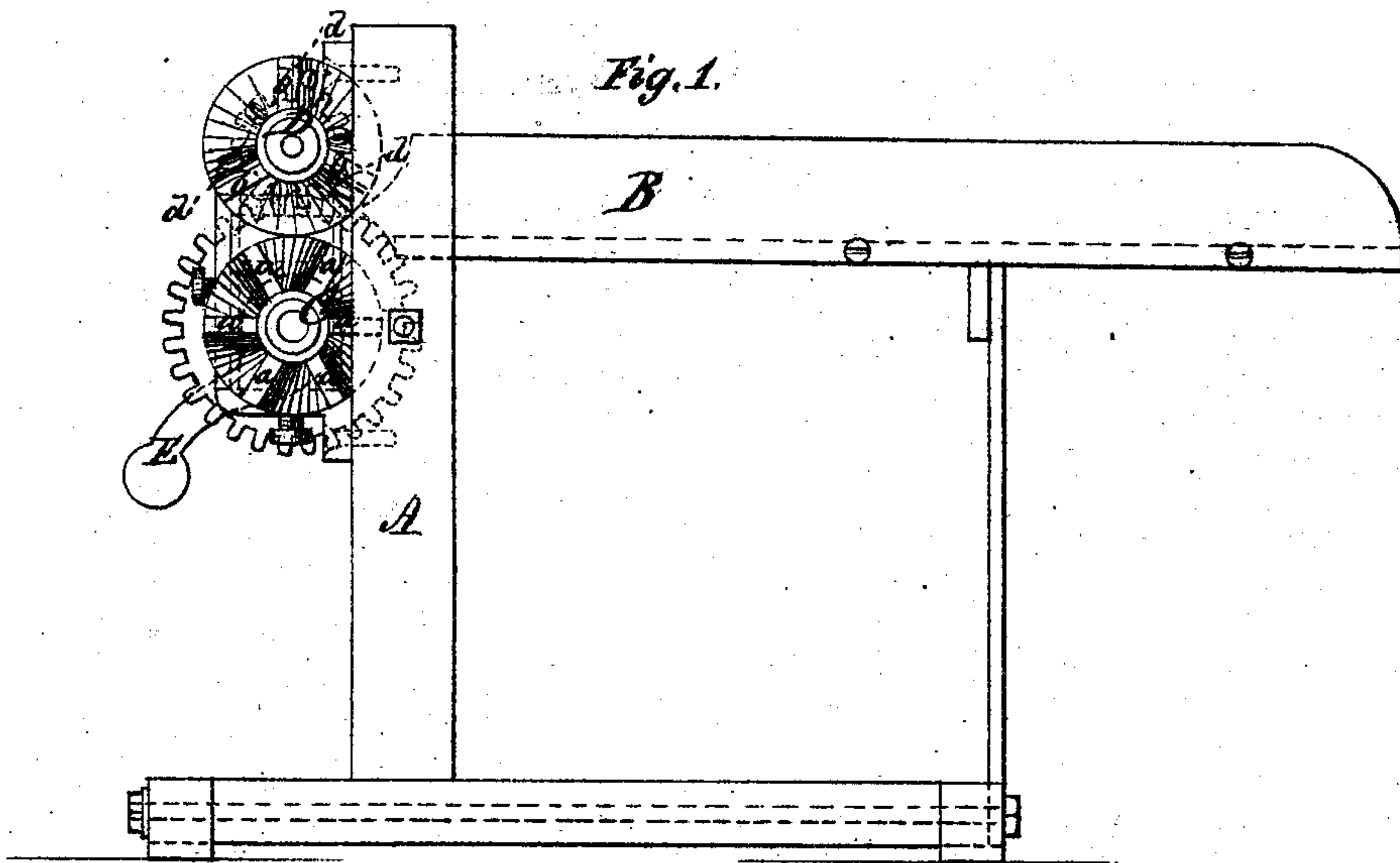


JOHN H. DICKINSON.

Straw Cutters.

No. 116,033.

Patented June 20, 1871.



Witnesses.
John A. Elliot.
J. F. White.

Inventor.
John H. Dickinson
Per
J. F. Alexander
Atty

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 flanges *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.