

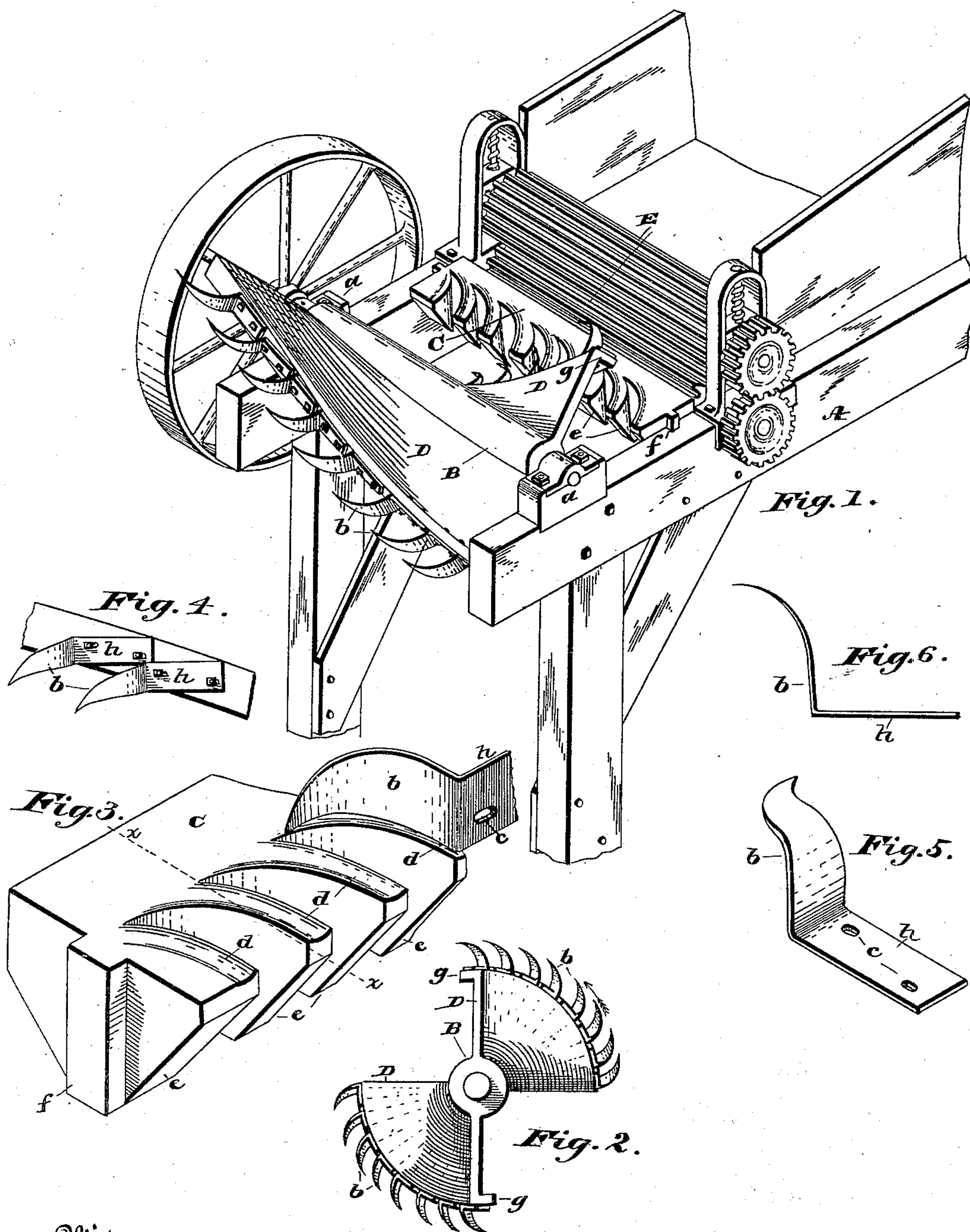
(No Model.)

J. S. WISSLER.

FODDER CUTTER.

No. 396,794.

Patented Jan. 29, 1889.



Witnesses=

*C. G. Lamm*

*Ed. Smith*

*Inventor*  
*Jacob S. Wissler*

*By Bond & Wise*

*Attorneys.*



# UNITED STATES PATENT OFFICE.

JACOB S. WISSLER, OF CANTON, OHIO.

## FODDER-CUTTER.

SPECIFICATION forming part of Letters Patent No. 396,794, dated January 29, 1889.

Application filed October 8, 1888. Serial No. 287,543. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB S. WISSLER, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Fodder-Cutters; and I do hereby declare that the following is a full, clear, and exact description 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, in which—

Figure 1 is an isometrical view showing a portion of the frame. Fig. 2 is an end view of the cylinder, showing the cutting-knives attached thereto. Fig. 3 is a detached isometrical view of a portion of the cutter-bar, showing a cutting-knife in proper position to commence cutting. Fig. 4 is a view of a portion of the cylinder, showing the manner of attaching the cutting-knives thereto. Fig. 5 is a detached view of one of the cutting-knives. Fig. 6 is a top view of one of the cutting-knives.

The present invention has relation to fodder-cutters; and it consists in the different parts and combination of parts hereinafter described, and particularly pointed out in the claims.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, A represents the frame of the fodder-cutter proper, which may be substantially of the form shown, or it may be of any other desired construction, reference being had to attaching the different parts thereto. To the frame is properly journaled the cylinder B by means of the boxes *a*. To the cylinder B are securely attached the cutting-knives *b* by means of suitable clamping-bolts or their equivalents. For the purpose of adjusting the cutting-knives *b* laterally the elongated slots *c* are provided.

The cutter-bar C is provided with the bent or curved fingers *d*, which are located and arranged substantially as illustrated in the drawings, and for the purpose of strengthening these fingers the braces or ribs *e* are provided. These fingers *d* and the braces or ribs *e* are preferably formed integral with the bar C.

The cutter-bar C is placed in the frame A substantially as illustrated, and for the purpose of security and rigidly holding the cutter-bar C in proper position the ends of said cutter-bar are provided with the ribs *f*, said ribs fitting in corresponding grooves located in the frame.

The cylinder B consists of the curved wings D, said wings being located and arranged substantially as illustrated in the drawings, and are integral parts of the cylinder proper. These wings D are twisted substantially as illustrated, and in this instance said ribs are twisted about one-fourth around, or what is commonly known as a "quarter-twist."

For the purpose of attaching the cutting-knives *b* to the wings D the ribs *g* are provided, said ribs being located substantially as illustrated in Fig. 2. The cutting-knives *b* are bent or curved laterally to the cylinder proper, said curvature corresponding with the curvature of the fingers *d*. For the purpose of causing the knives *b* to cut in a shearing manner the outer ends of said knives are bent or curved in such a position that will cause the point of said knives to enter the spaces between the fingers *d* in advance of the heel portions of the knives, thereby causing said knives to cut in an easy manner.

For the purpose of causing the cutting-knives to enter between the fingers *b* at an angle to said fingers the center or shaft of the cylinder proper is located somewhat higher than the top of the cutter-bar C. In order to assist in holding the fodder laterally on the cutter-bar C and fingers *d*, said fingers are slightly concaved, as illustrated in Figs. 1 and 3. It will be seen that by concaving the top of the fingers *d* the edges of said fingers will present sharp corners, thereby holding the fodder thereon. For the purpose of providing a continuous cut the fingers *d* are curved to such an extent that will bring the rear portion of said fingers to one side of the forward ends of said fingers, as illustrated by the dotted line *x x*, Fig. 3.

For the purpose of providing a strong and secure attachment for the knives *b* the shanks *h* are formed of such a length that will provide a strong attachment to the wings D, said shanks overlapping each other, as illustrated in Fig. 4. The object and purpose of lapping



the shanks are to provide a shank longer than the spaces between the cutting-knives *b*.

It will be understood that the cylinder B and its wings D should be formed heavy enough to cause said cylinder to rotate and carry the knives without jarring. It will also be understood that rotary motion is to be communicated to the feed-rolls E in any convenient and well-known manner.

10 It will be seen that by providing the curved fingers *d* and the curved cutting-knives *b*, I am enabled to provide a continuous shear or cut, thus enabling me to cut hay or straw without any change of parts. By adjusting  
15 the cutting-knives so that their front or forward ends will enter between the fingers *d* in advance of the heel portions of said knives the fodder will be drawn forward. The cutting-knives *b* are so adjusted that the point  
20 of the next upper knife will commence to cut a little before the letting go of the heel of the next lower knife.

In Fig. 2 the end of the cylinder is transposed from the position shown in Fig. 1, so  
25 as to better illustrate the curvature of the cutting-knives *b*.

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

30 1. In a fodder-cutter, the combination of the cutter-bar C, provided with the bent or

curved fingers *d*, and the cylinder B, provided with the twisted wings D and having attached thereto the cutting-knives *b*, said cutting-knives being bent or curved to correspond  
35 with the curvature of the fingers *d*, substantially as and for the purpose specified.

2. In a fodder-cutter, the combination, with the cutter-bar C, provided with the concaved fingers *d*, of the cylinder B, the wings D, and  
40 the cutting-knives *b*, substantially as and for the purpose specified.

3. The cutter-bar C, provided with the bent or curved fingers *d*, the strengthening-ribs *e*, the cylinder B, provided with the twisted  
45 wings D, and the bent or curved cutting-knives *b*, substantially as and for the purpose specified.

4. The cutter-bar C, provided with the bent or curved fingers *d*, the cylinder B, provided  
50 with the wings D, and the cutting-knives *b*, having their outer ends bent below the heels of said knives *b*, substantially as and for the purpose set forth.

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

JACOB S. WISSLER.

Witnesses:

E. G. LANE,

E. A. C. SMITH.