

(No Model.)

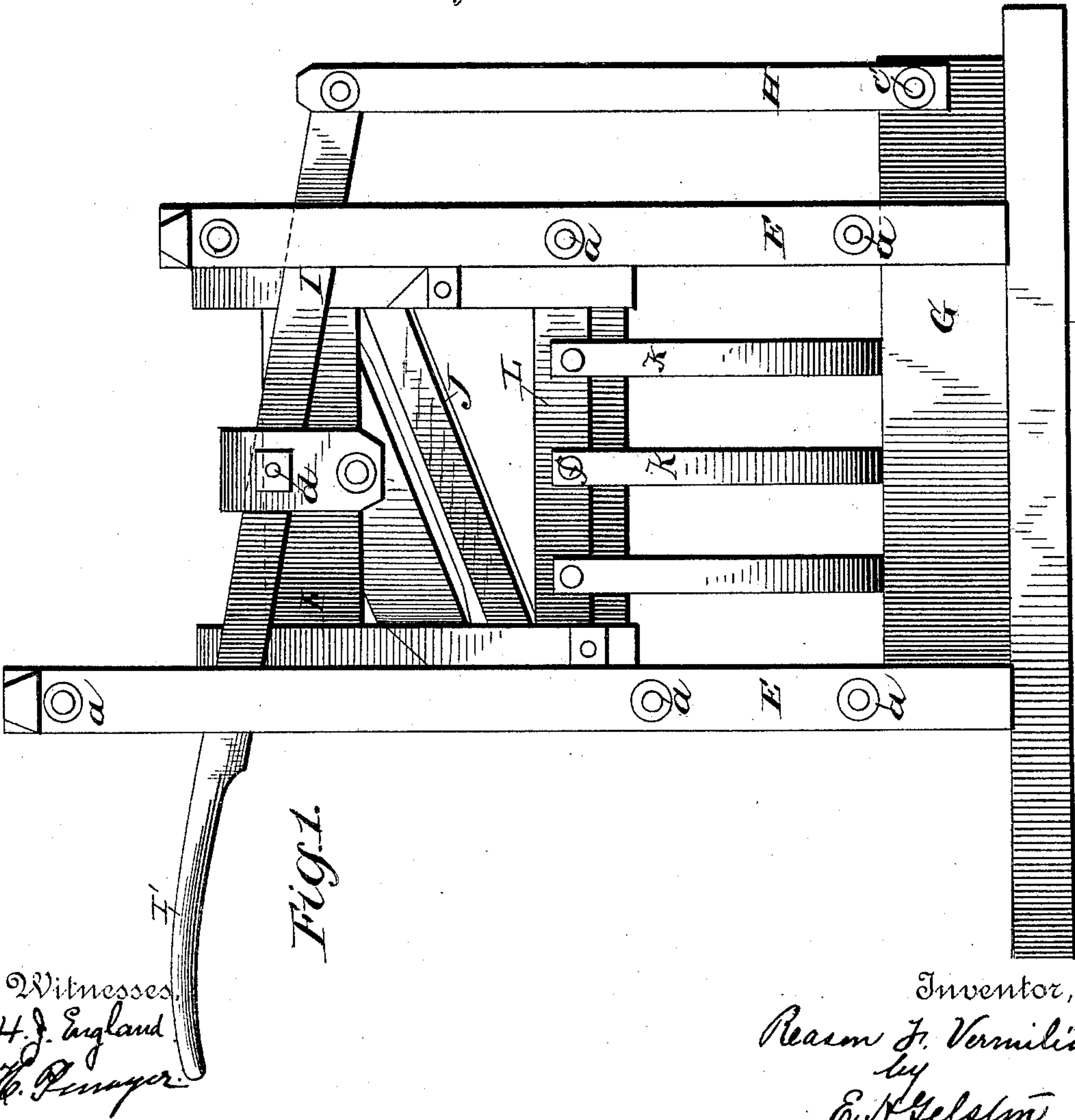
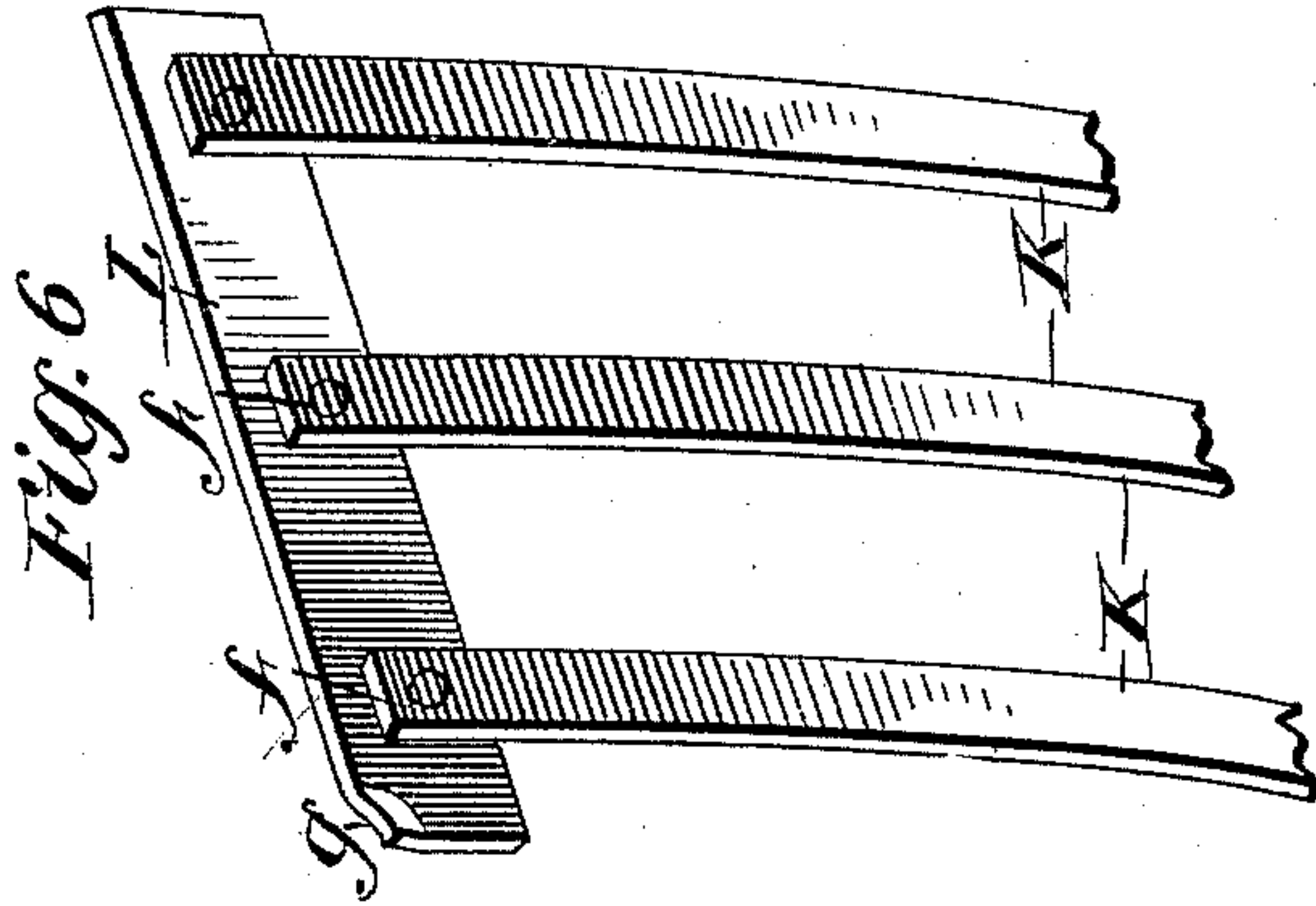
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R. F. VERMILION.

FEED CUTTER.

No. 387,126.

Patented July 31, 1888.



Witnesses.  
H. J. England  
W. Penner

Inventor,  
Reuben J. Vermilion.  
by  
E. H. Helston.  
Attorney.

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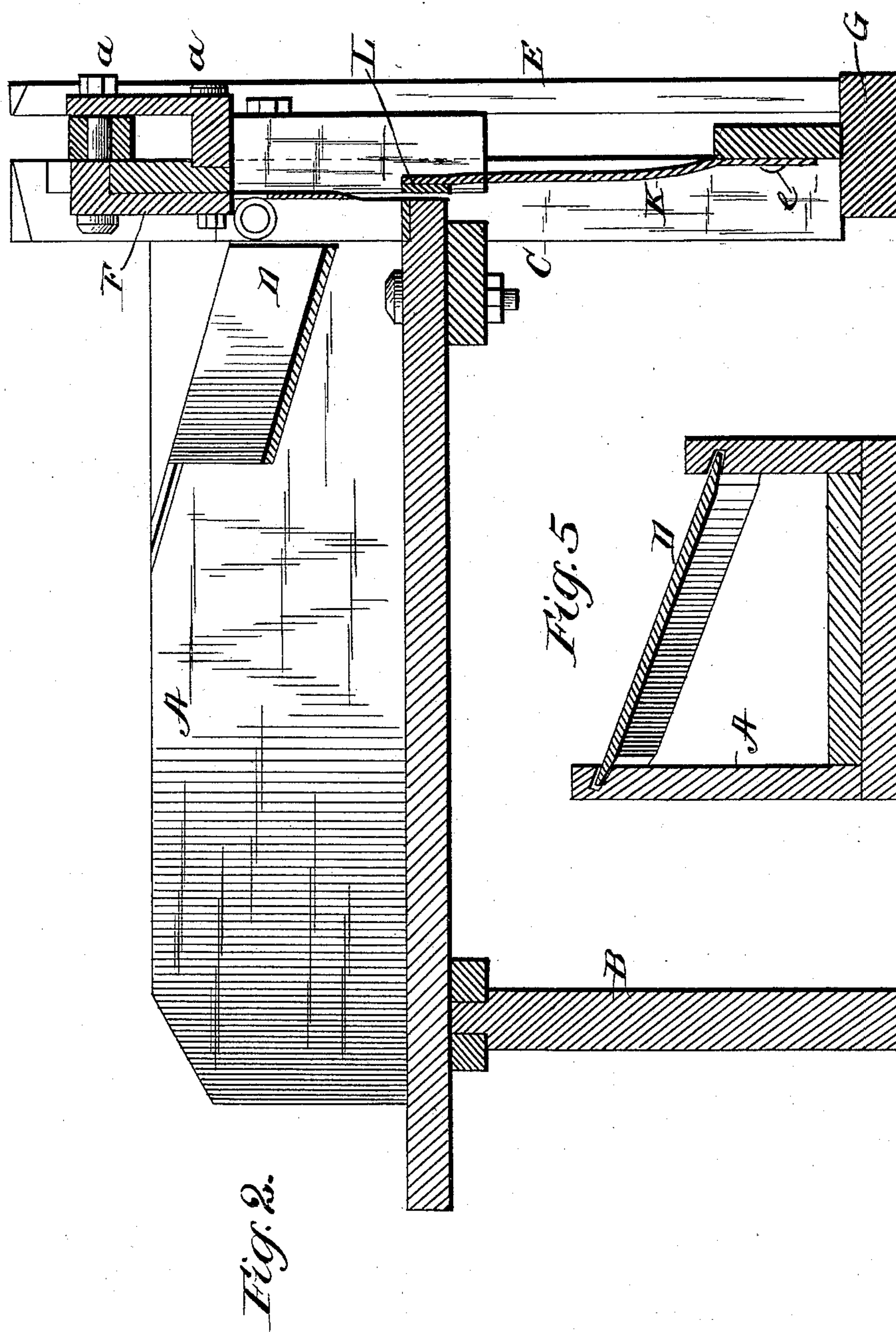
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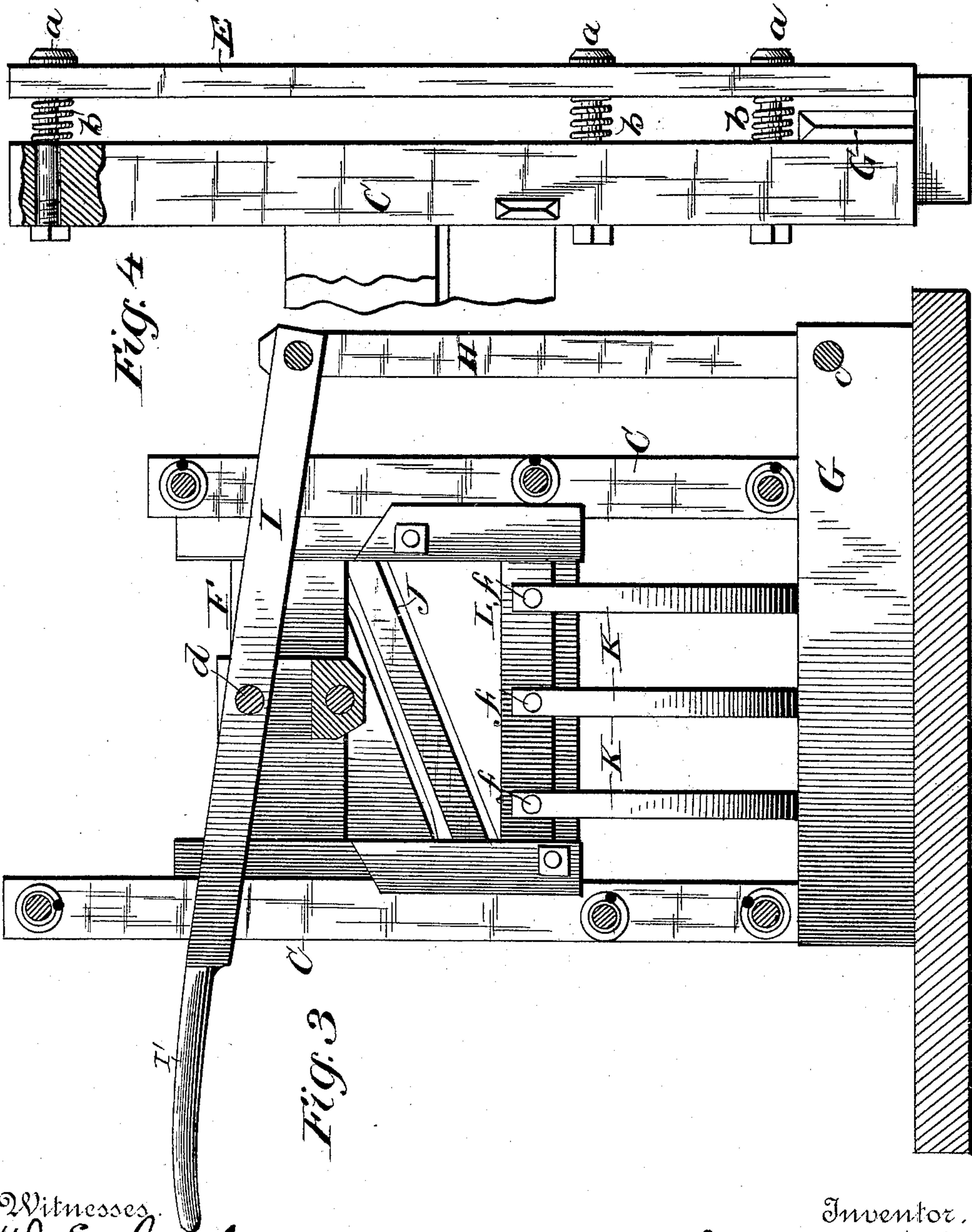
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# UNITED STATES PATENT OFFICE.

REASON F. VERMILION, OF MITCHELLSBURG, KENTUCKY.

## FEED-CUTTER.

SPECIFICATION forming part of Letters Patent No. 387,126, dated July 31, 1888.

Application filed January 31, 1888. Serial No. 262,562. (No model.)

*To all whom it may concern:*

Be it known that I, REASON F. VERMILION, a citizen of the United States, residing at Mitchellsburg, in the county of Boyle and State of Kentucky, have invented certain new and useful Improvements in Feed-Cutters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-  
10 pertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

15 My invention relates to feed-cutters; and it consists in the construction and combination of parts, hereinafter fully described, and specifically pointed out in the claim, reference being had to the drawings accompanying this  
20 application, and forming part of the same, in which—

Figure 1 is a front elevation of my invention; Fig. 2, a longitudinal sectional elevation; Fig. 3, a sectional end elevation of the  
25 same; Fig. 4, a side elevation of the gate-frame in detail; Fig. 5, a cross-section through the feed-box and inclined press-board, and Fig. 6 a perspective of several of the parts, hereinafter described.

30 Similar letters refer to like parts throughout the drawings.

Referring to the drawings, A represents an oblong feed-box mounted on a rear standard, B, and the front end secured to a gate-frame, C, and near the opening or front end of said  
35 box is located an inclined press-board, D, which holds the stalks in shape as they are pushed forward to the knife to allow the knife to act squarely upon the stalks as they descend  
40 at an angle across the end of the box.

The upright gate-frame C is formed with outside parallel strips, E, said strips or guides being held in place by screw-bolts *a*, and between said strips E and the upright gate-frame  
45 C are interposed coiled springs *b*, that surround each screw-bolt *a*, the purpose being to press outward said strips E, when set at the right space, to permit the gate F to rise and fall without binding-friction. A foot cross-  
50 piece, G, extends across the base of frame C,

and to its outer end two connecting-rods, H, are secured by bolt C', and their upper ends are bolted to one end of lever I. Said lever extends across the front of the gate-frame C in the space between the outside strips, E, 55 and the uprights, and its free end is formed into a handle, I', which projects outside of the frame. A gate, F, is secured to the lever I by bolts *d*, and a knife, J, is bolted to the inner face diagonally across said gate, and is thereby 60 adapted to rise and fall or to be moved vertically by means of said lever.

To the inner face of foot cross-piece G are secured by set-screws *e* the ends of springs K, and the opposite ends of said springs are se- 65 cured by rivets or bolts *f* to a press-plate, L, that is held against the end of box A and against the knife J as it descends and rises between said plate L and the end of the box A. The upper corner of plate L, next to the 70 handle of lever I, is formed with an outward lip-projection, *g*, to permit the edge of the descending knife J to enter between said plate and the end of the box A. By this construction the knife J is kept clean, and a bearing- 75 surface is formed outside the path of the knife J, which prevents the stalks or straw that is being cut from bending down away from the knife J in its descent, but permits the knife J to cut cleanly through each straw or stalk in 80 its path.

Three separate springs, K, hold the press-plate L against the end of the floor of the box A to prevent the throat or opening through which the knife passes from becoming clogged 85 or obstructed by pieces of stalk being broken down or bent over the edge of the box, and a lateral freedom of adjustment of the said plate L to bear or follow closely the edge of the inclined knife as it descends is thus effected 90 without injury to the edge of the knife.

The operation of my device is obvious, and needs no description.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, 95 is—

A feed-cutter consisting of a gate-frame, a rear standard, a box secured to said frame and mounted on said standard, a vertical and horizontal guide at the mouth of the box, a 100

gate carrying an inclined knife, a lever for  
operating said gate, guide-strips, bolts to se-  
cure said strips in place, coiled springs be-  
tween the strips and gate-frame, a press-plate,  
5 and springs attached to the press-plate and  
the foot cross-piece of the gate-frame, the parts  
being combined substantially as set forth.

In testimony whereof I affix my signature in  
presence of two witnesses.

REASON F. VERMILION.

Witnesses:

REED S. NICHOLS,  
ROBT. HARDING.