W. KAEHNI.

STRAW-CUTTER.

No. 180,597. Patented Aug. 1, 1876.

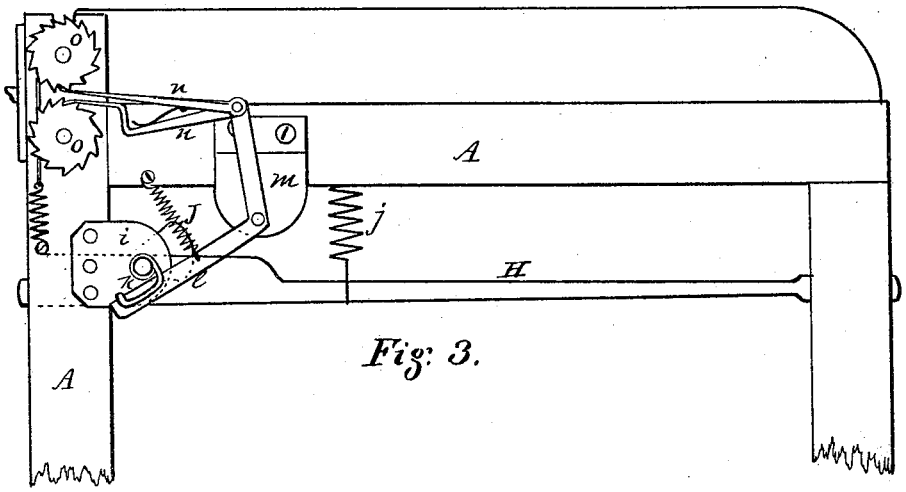

Fig. 3.

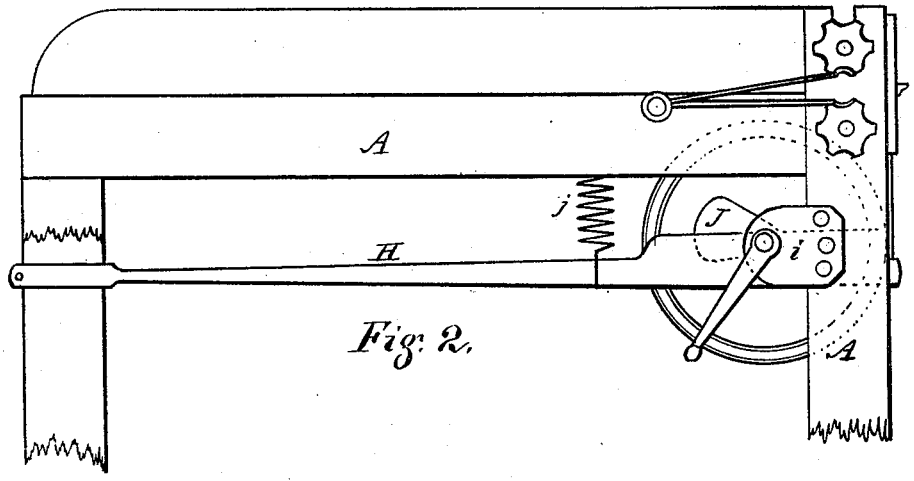

Fig. 2.

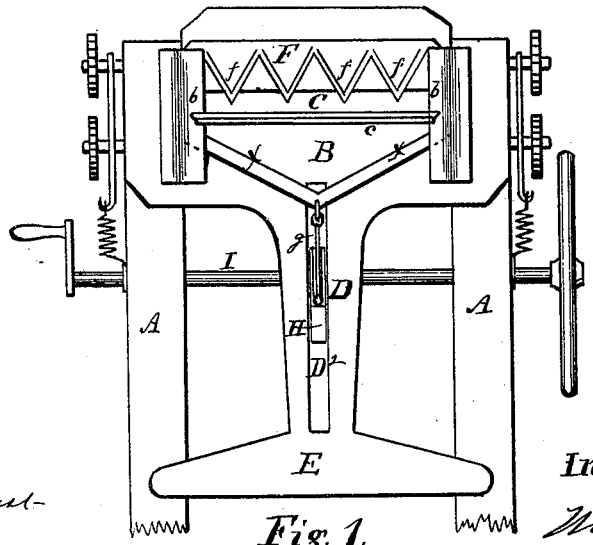

Fig. 1.

Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM KAEHNI, OF CLEVELAND, OHIO.

IMPROVEMENT IN STRAW-CUTTERS.

Specification forming part of Letters Patent No. **180,597**, dated August 1, 1876; application filed August 18, 1875.

To all whom it may concern:

Be it known that I, WILLIAM KAEHNI, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain Improvements in Straw-Cutters, of which the following is a specification:

This invention relates to certain improvements in straw or feed cutters; and consists, first, in the peculiar construction and operation of the knife; second, in the mechanism for operating the knife; and, third, in the mechanism for feeding the straw to the knife, combined and arranged as hereinafter described and claimed.

To enable others to fully understand my invention, I proceed to describe the same in detail with the aid of the accompanying drawing, in which—

Figure 1 is an end view. Fig. 2 is the right side, and Fig. 3 is the left side, of the machine.

A is the frame, surmounted by a box or trough, from which the straw is fed to the knife. To the front end of the machine is placed a plate, B, reaching across from side to side, and having a horizontal slot or aperture, C, in line with the bottom of the said box or trough, and through which the straw is fed. The central portion of said plate B has an arm, D, reaching downward, and secured at the lower end to a cross-bar, E. Said arm D has a vertical slot, D^2, for a purpose hereinafter shown. At the sides of said plate B are placed slides *b b*, which are connected by a bar, *c*, lying on a line with the lower side of the aforesaid slot C, and a sufficient distance from it to allow the knife to slide between them. F is the cutting-knife, and consists of a blade having teeth, *f f*, in the form of a saw, said teeth being sharpened like reaping-machine teeth. Said knife is attached to a frame, *x*, which slides vertically in the slides *b b*, the teeth cutting the straw across the lower edge of the slot C. The lower side of the knife-frame is connected, by a connecting-rod, *g*, to the end of a lever, H, the end of which plays up and down in the slot D^2, by which movement is imparted to said knife. The rear end of the lever H is pivoted to a bar across the rear end of the machine. I is the crank-shaft, having its bearings in boxes *i i*, attached to the front posts. On said crank-shaft is placed a cam, J, which operates the lever H for pushing it down. A spring, *j*, fixed between it and the bottom of the box, serves to draw the lever up. Feed-rollers are placed in the front end of the feed-box, in the usual manner, and are operated by a cam, *k*, on the crank-shaft, the cam working in connection with a lever, *l*, pivoted to a hanger, *m*, the upper end of the lever operating dogs *n n*, which work in connection with ratchet-wheels *o o* on the end of the feed-roller journals.

Having described my invention, I claim—

The combination of the shaft I, provided with the cams J and *k*, the lever H for operating the cutting-frame *x* and horizontal knife F, the angular lever *l*, spring-sustained ratchets and wheels *o o* on the journals of the feed-rollers, all substantially as and for the purposes herein set forth.

WILLIAM KAEHNI.

Witnesses:

GEO. W. TIBBITTS,

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