

W. SCHRECK.

Straw Cutter.

No. 68,243.

Patented Aug. 27, 1867.

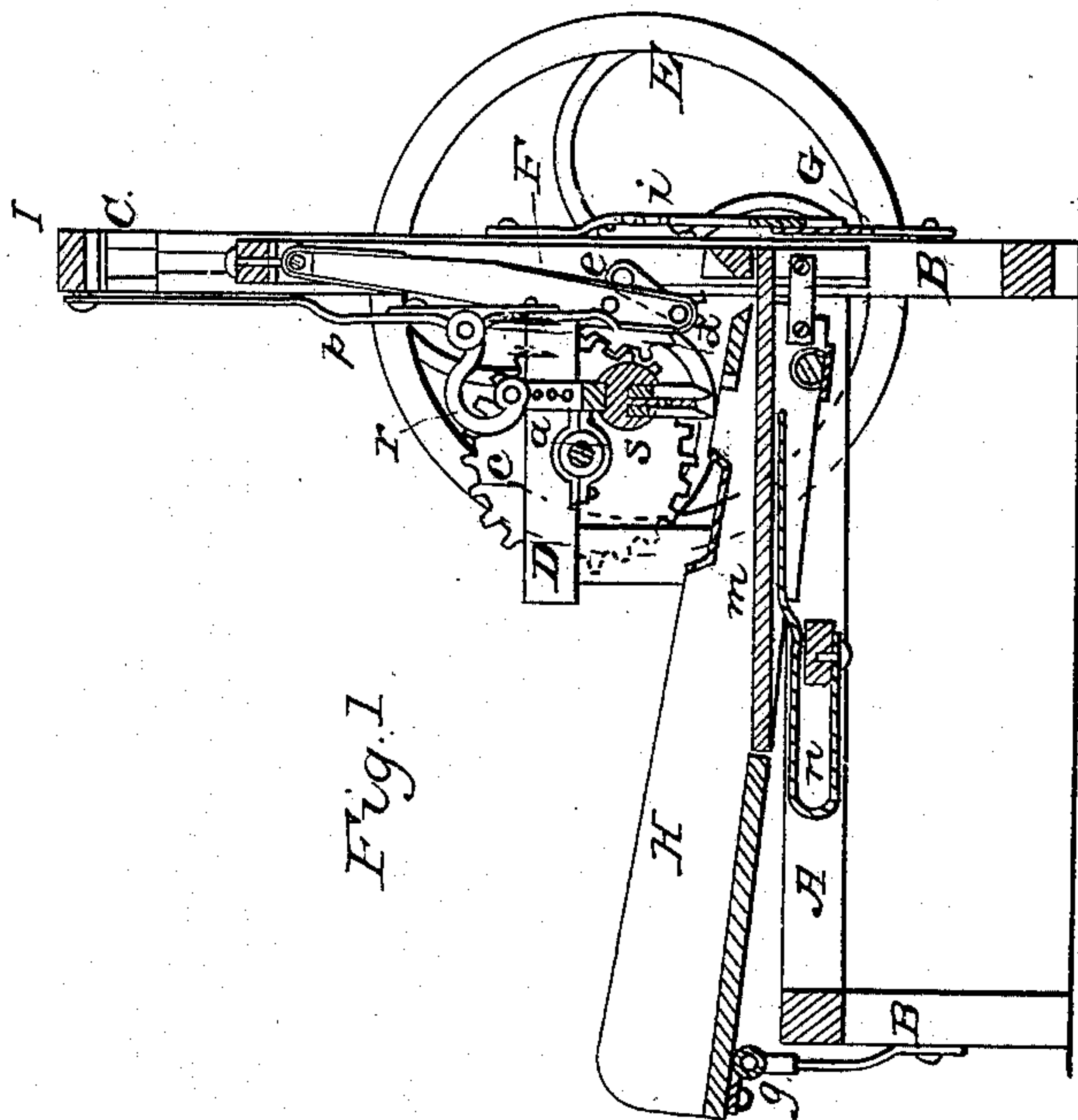
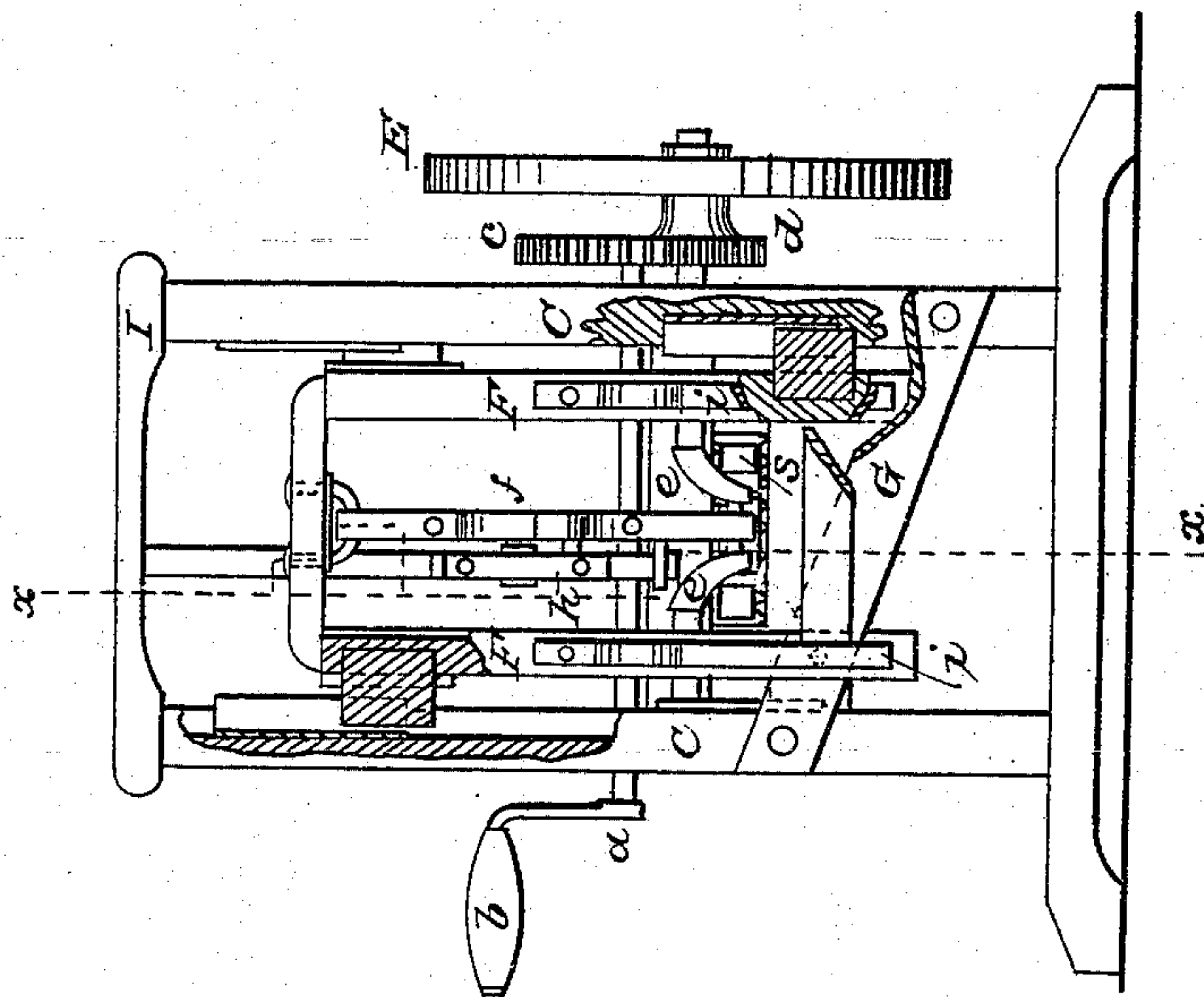


Fig. 1.

Witnesses.
J. A. Service.
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WILLIAM SCHRECK, OF DES MOINES, IOWA.

Letters Patent No. 68,243, dated August 27, 1867; antedated August 23, 1867

IMPROVEMENT IN STRAW-CUTTERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM SCHRECK, of Des Moines, in the county of Polk, and State of Iowa, have invented a new and improved Straw-Cutting Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal vertical section of my improved straw-cutting machine, taken in the line *x x*, fig. 2.

Figure 2 is a front end view, with parts of the framing removed.

Similar letters of reference indicate like parts.

This invention relates to an improvement in the construction of machines for cutting straw, hay, &c., for feed for animals; and consists in an arrangement of the machinery by which the feed-box has a reciprocating movement up and down at the cutter end, working upon a hinge at the rear end, thus bringing the ends of the straw down upon the edge of a straight, flat, and stationary knife, set obliquely on the front side of the frame. Under the feed-box is a spring, which throws up a flap in the bottom, for compressing the straw as the knife cuts, and at the mouth of the feed-box is an adjustable feeder, which operates when the straw is loose in the feed-box, after the spring ceases to act on it.

A is a rectangular bed-frame, supported on legs B B in the usual manner. C C are high standards in front, on the back side of which are side frames D D, upon which is hung the transverse driving-shaft *a*, operated by the crank *b* on the right-hand side of the machine, and carrying on the end at the left hand a spur-wheel, *c*, which gears into a pinion, *d*, on the transverse crank-shaft *e*, hung in boxes attached to the back side of the standards C C, and carrying on its end, outside of the pinion *d*, the fly-wheel E. The inner sides of the standards C C are grooved vertically, to receive a long rectangular sliding-frame, F, in the middle of which is suspended to the upper bar the pitman *f*, attached at the lower end to the crank on the shaft *e*. G is a flat cutting-knife, placed obliquely on the front of the standards C C, and *i i* are flat metal guides, set on the face of the standards C C, the lower ends of which slip over the edge of the cutting-knife when the machine operates. The front end of the feed-box H is narrower than the rear end, and is fastened to the lower end of the sliding-frame F. The bottom of the feed-box is stationary at the rear part, and is hung upon a hinge, *g*, on the under side of the back end, to give the feed-box a reciprocating motion in front with the rise and fall of the sliding-frame F. To the front part of the bottom of the feed-box is a flap, *m*, pivoted or hinged at the rear end, and under it is a strong spring, *n*, that bears up the flap *m* against the straw, to compact it when the front of the feed-box descends upon the cutting-knife G. Behind the sliding-frame F is suspended, to the top rail I of the standards C C, a vertical spring-rod, *p*, which is connected by a pivoted arm, *r*, to the head of a rocking straw-feeder, *s*, and which receives a stroke or cam-motion from the pitman *f* at every revolution of the crank-shaft *e*, to work the feeder *s*, and set it forward when the front end of the feed-box is elevated and the straw is loose, by the release of the flap *m* from the spring *n*. The feeder may be adjusted to cut the straw long or short by shifting the arm *r* in holes in the head of the feeder.

The operation of the machine is manifest.

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

1. The sliding-frame F, working in the vertical standards C C, in combination with the pitman *f*, the reciprocating feed-box H, the spring-rod *p*, and the feeder *s*, arranged and operating as and for the purposes herein described.

2. The flap *m* in the bottom of the feed-box H, in combination with the spring *n*, arranged and operating as and for the purpose specified.

WILLIAM SCHRECK.

Witnesses:

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JNO. MILLS.