

UNITED STATES PATENT OFFICE.

SAMUEL MEPHAM, OF FAYETTE, OHIO.

IMPROVEMENT IN STRAW-CUTTERS.

Specification forming part of Letters Patent No. **192,927**, dated July 10, 1877; application filed April 9, 1877.

To all whom it may concern:

Be it known that I, SAMUEL MEPHAM, of Fayette, Fulton county, Ohio, have invented a new and Improved Feed-Cutter, of which the following is a specification:

Figure 1 is a side elevation of my improved feed-cutter. Fig. 2 is a rear elevation.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide a feed-cutter for cutting straw, corn-stalks, &c., which is simple in construction, easily operated, and easily kept in repair.

In the drawing, A is a box for containing the straw, or other feed to be cut, and *a a* are standards that support the same, and also the journal-boxes of shaft B. This shaft is arranged parallel to the side of box A, and upon it, at the front end of the box, the wheel C is secured. Knives D, having edges that are convex in the direction of their length, are attached, by means of bolts, to two opposite arms of the said wheel, and are adjusted by set-screws so as to lightly touch the lower side of the mouth of the box A, as the wheel is revolved.

E is a plate that is hinged in the mouth of the box A at *b*, and is pressed downward by a spring, *c*, that is attached to a cross-bar, *d*, that connects the sides of the box A at its mouth.

F F are corrugated rollers, whose shafts are journaled in the sides of box A. The upper surface of lower roll F projects slightly above the bottom of box A, and the upper

roll F' is placed a sufficient distance above the lower roll to admit of the passage of as much as can be cut by the knives D. The rolls F F' are caused to rotate, simultaneously, but in opposite directions, by the spur-wheels *e*, attached to their shafts.

Upon the shaft of the upper roll F' a spur-wheel, G, is placed, which takes its motion from a pinion, H, in the shaft I. This shaft is journaled below the box A, and upon the end opposite the pinion H a bevel-wheel, J, is secured, which takes its motion from a pinion, K, on the shaft B. A crank, L, is placed on the shaft B in front of the wheel C, for operating the machine. An extension, M, is secured to the box A by hooks *f*, for supporting corn-stalks, or other long feed.

By turning the crank L, the knives D are carried across the mouth of the box A, and their curved edge produces a drawing cut.

The feed is carried forward toward the knives by the rolls F F', and it is compressed by the plate E so as to present a compact body of the feed to the knives.

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

The combination, with box A, of the wheel C, having knives D, the spring-held hinge-plate E, and rolls F F', all arranged as shown and described, for the purpose specified.

SAMUEL MEPHAM.

Witnesses:

FRANK VERRIER,
PERRY WOOLLACE.