E. F. HOLLOWAY.

Straw Cutter.

No. 48,403. Patented June 27, 1865.

FIG. 1.

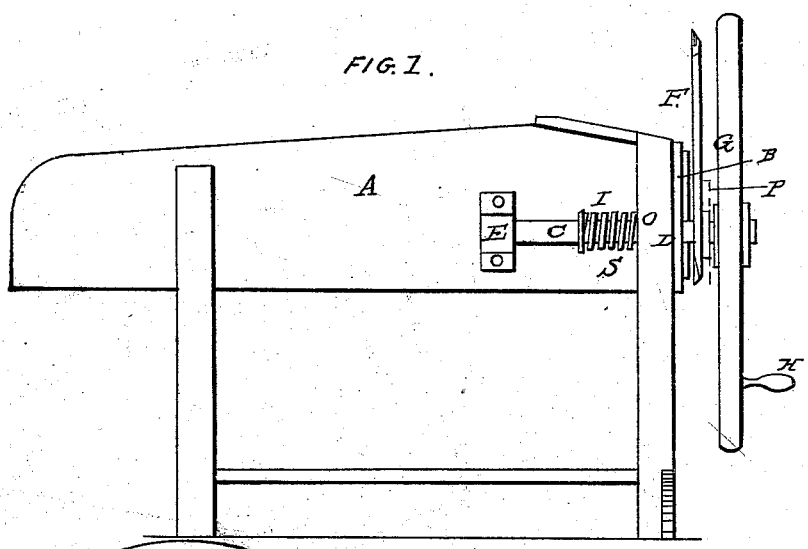


FIG. 2

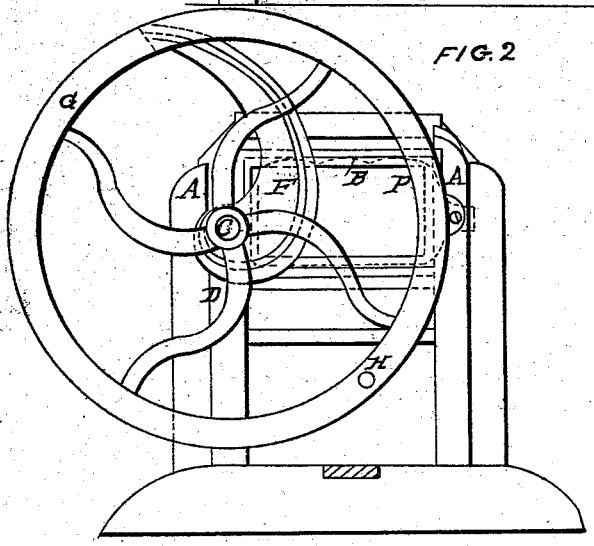
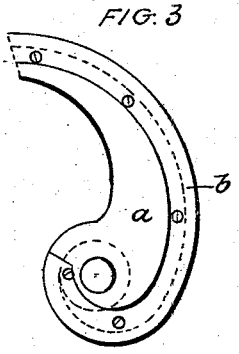


FIG. 3



WITNESSES

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EDWD. F. HOLLOWAY, OF KNIGHTSTOWN, INDIANA.

IMPROVEMENT IN STRAW-CUTTERS.

Specification forming part of Letters Patent No. **48,403**, dated June 27, 1865.

To all whom it may concern:

Be it known that I, EDWARD F. HOLLOWAY, of Knightstown, county of Henry, and State of Indiana, have invented new and useful Improvements in Straw-Cutters; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of the same, and to the letters of reference marked thereon.

Figure 1 is a side elevation of the cutting-box. Fig. 2 is the front end elevation. Fig. 3 is a view of the knife, showing the side next to the box.

The nature of my invention consists in providing a knife the cutting-edge of which is of such form and arranging it in such relation to the other parts of straw-cutters as that the edge of the knife is drawn against the straw as it cuts, thus causing it to cut with greater ease to the operator and with less strain upon the machine.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The box A is made in the common or usual form, having an iron front or mouth-piece, B, which is also not new. A shaft, C, is attached at the right hand of the box, having one of its bearings in post D and the other at E. The knife, Fig. 3, and F, Figs. 1 and 2, is secured on shaft C close against the metal front B, and is formed on the outer or cutting edge as an eccentric or involute, which form causes it to have a drawing cut against the straw as it is revolved. The knife is composed of two pieces, *a* and *b*, *a* being of cast-iron, rabbeted on the outer edge, so as to receive the blade *b* or cutter flush with the surface of the cast-iron piece *a* on the side next to the box. The steel blade *b* is secured to the cast-iron piece *a* by screws, that it may be easily removed to sharpen or repair. Fly-wheel G is on the outer end of shaft C. In the rim of the fly-wheel is handle H, by which the machine is operated. There is a fixed collar, I, on shaft C, between which and the washer O is a coiled spring, S, which serves to keep the knife close against the metal front B. A guard, P, (shown in red dotted lines,) serves to prevent the straw from being shoved too far through, and thus the straw is cut the proper length.

The straw being placed in the box and shoved forward against the guard, and the knife rotated, it commences to cut at the heel of the knife with a drawing cut (being of an eccentric or involute form) against the straw, which causes it to cut with ease to the operator and less strain upon the other parts of the machine.

What I claim as new, and desire to secure by Letters Patent, is—

The combination and arrangement of the knife F, shaft C, coiled spring S, collar I, metal front B, box A, fly-wheel G, and guard P, substantially as shown and described.

E. F. HOLLOWAY.

Witnesses:

THOMAS JAMES,

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