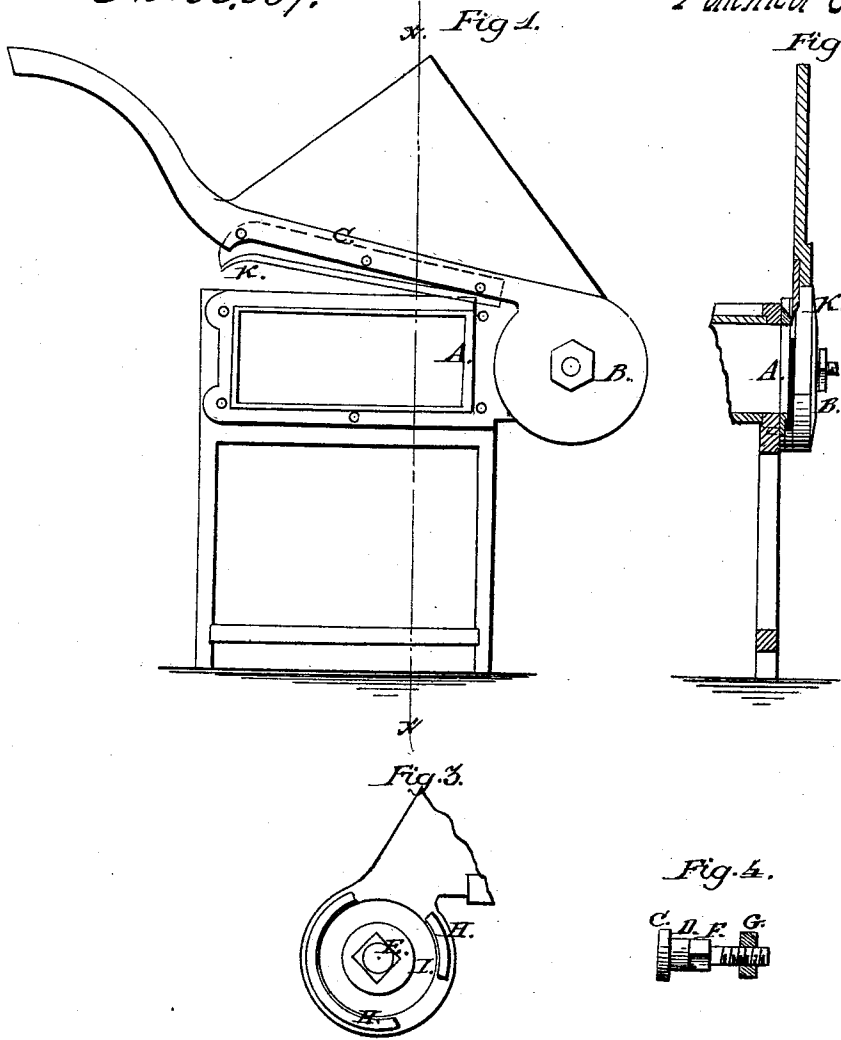


W. Elder,

Straw Cutter.

No. 95,887.

Patented Oct. 19, 1869.



WITNESSES:
Jno. H. Brooks
Alex. F. Roberts

INVENTOR:
W. Elder
per
M. M. Co.
Attorneys

United States Patent Office.

WILSON ELDER, OF MILL HALL, PENNSYLVANIA.

Letters Patent No. 95,887, dated October 19, 1869.

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, WILSON ELDER, of Mill Hall, in the county of Clinton, and State of Pennsylvania, have invented a new and useful Improvement in Straw-Cutters; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in straw-cutters, whereby it is designed to provide more durable and efficient cutters of that class in which a vibrating knife is worked by hand, than now in use.

The invention consists in the peculiar construction and arrangement of parts, as hereinafter set forth.

Figure 1 represents an end view of my improved cutter;

Figure 2 represents a section taken on the line $x x$ of fig. 1;

Figure 3 is an inside view of the end of the cutter-lever, which works on the fulcrum; and

Figure 4 is a view of the fulcrum-pin.

Similar letters of reference indicate corresponding parts.

The metallic plate A, which is fitted to the end of the box, and has the large opening, through which the straw passes to be cut, is provided with a large circular end around the hole, for the fulcrum-pin, and the end B of the lever C is correspondingly enlarged, so that when they are clamped together lateral movement of the lever will be prevented as much as possible.

The hole through the said enlargement of the part A, for the fulcrum-bolt O, is round, and the bolt, which is inserted from the rear side thereof, is correspond-

ingly rounded, as shown at D; but the hole in the lever at the inner side is of square or other angular form, as shown at E, and the bolt similarly squared at F, and the tightening-nut G is screwed up against the part B.

By this arrangement, the bolt and nut turn with the lever, and the nut is prevented from working loose.

On the inside of the enlarged part B are curved projecting ribs or bearings H fitted into grooves, in which, behind the ribs, I place India rubber, or other yielding, or springing substance, to prevent too great pressure of the projections H against the plates A when screwed up, and when thus screwed up against the springs, the two parts are sufficiently confined to prevent any lateral movement of the lever, and the knife is not pressed too strongly against the plate A.

I is an annular groove formed in both the parts A and B, the object of which is to afford as small an amount of frictional surface as possible between said parts.

I propose to curve the knife at the end K, whereby it has, in a greater measure, the action of a shear-cut at the commencement, which is less laborious than if straight.

Having thus described my invention,

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

The enlarged part B of the lever C, elastic bearing-ribs H H, annular groove I, plate A, and bolt O, all combined, constructed, and arranged as specified.

WILSON ELDER.

Witnesses:

FRANCIS PLATT,
JAMES STIVER.