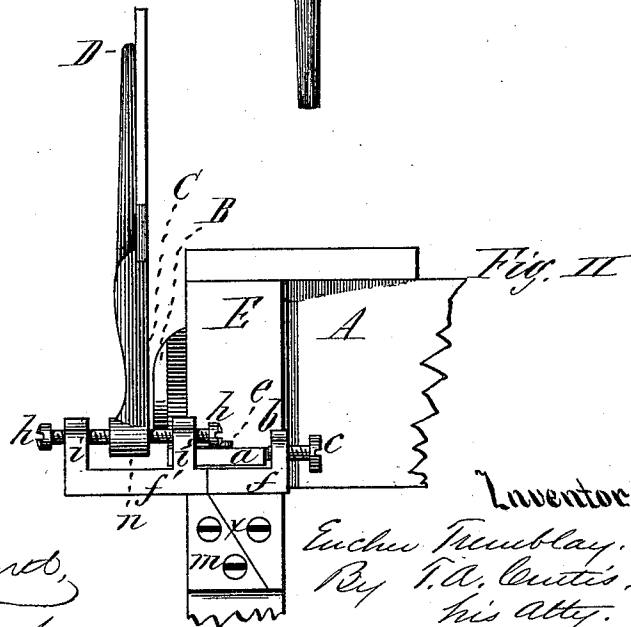
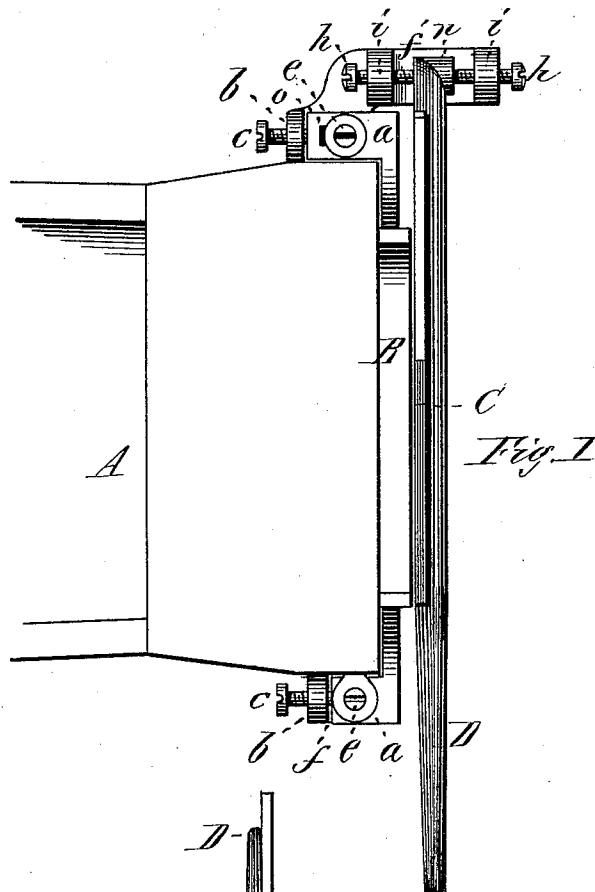


E. TREMBLAY.

HAY-CUTTER.

No. 177,364.

Patented May 16, 1876.



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UNITED STATES PATENT OFFICE.

EUCHER TREMBLAY, OF CHICOPEE FALLS, MASSACHUSETTS.

IMPROVEMENT IN HAY-CUTTERS.

Specification forming part of Letters Patent No. **177,364**, dated May 16, 1876; application filed February 23, 1876.

To all whom it may concern:

Be it known that I, EUCHER TREMBLAY, of Chicopee Falls, in the State of Massachusetts, have invented a new and useful Improvement in Hay-Cutters; and that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, and to the letters of reference marked thereon.

The object of my invention is to make the mouth-piece of a hay-cutter, against which the knife moves in cutting, adjustable to the knife, so that the latter may remain more rigidly fixed in a uniform position, the mouth-piece—having the support of the frame—being better enabled to resist any undue strain and consequent liability to get out of adjustment when once adjusted.

To this end my invention consists of a cutter, having a mouth-piece provided with side flanges, slotted, and having a bearing upon a step secured to each side of the machine. These steps are each provided with a lug having a set-screw therein, to be turned in against the flanges to keep the mouth-piece forced out against the knife, which is pivoted at one end in a support made either in one piece with one of the steps, or is made separate therefrom and secured to the side of the frame, all which will be more fully hereinafter described.

Figure I is a plan view of the mouth-end of the machine, showing the adjustable mouth-piece and the adjusting mechanism and knife, and Fig. II is a side elevation of the same.

In the drawings, A represents the body of the machine, upon each side of which, to the frame E, is bolted the step *f*, which has a hole therein, so that a screw or bolt, *e*, may be inserted, and which is provided with a lug, *b*, having a threaded hole therein, in which is turned an adjusting-screw, *c*. The mouth-piece B is provided with two flanges, *a*, one on each side, which are slotted at *o*, through which is inserted a bolt, *e*, to secure the flange firmly in position upon the step when properly adjusted. One of the steps *f* is elongated or carried forward, forming the support *f'*, which is provided with two lugs, *i*, through each of which is turned a pivot-screw, *h*, the end of each screw entering a small recess in

the pivot-bearing *n* of the knife, forming the pivot upon which the knife vibrates.

Instead of one of the steps being elongated to form the support *f'*, however, the latter may be made separate from the step *f*, and bolted to the frame E, as shown in Fig. II, the division-line between said support and the step being shown at *x*.

The operation of my invention is as follows:

The steps *f* are both bolted in place to the frame E, one on each side, with the support *f'* in position, as shown in Fig. II, and the knife C secured in its bearings between the two screws *h*. The knife is then turned back and the mouth-piece B placed in position, with the flanges *a* resting upon the steps *f*. The knife is then brought forward into position in front of the mouth-piece, and the latter moved out so that its outer edge is brought against the edge of the blade firmly, and the bolt *e* is then inserted through the slot *o* of each flange *a*, and turned into or firmly secured to the step *f*, and the set-screws *c* are then turned in against the flanges *a*, and the machine is ready for use.

If the knife or the edge of the mouth-piece should wear away by long usage, either screw *e* may be loosened slightly, and the set-screw *c* turned in a little, forcing the mouth-piece farther out against the knife until the proper adjustment is made, and the bolt *e* again tightened.

I am aware that hay-cutters of this class have heretofore been made, in which the knife was made movable and adjusted to a fixed mouth-piece; but, inasmuch as the knife is only secured at one end, and its bearing at a greater distance from the resistance in cutting, the knife is more liable to, and often does, get out of adjustment with the mouth-piece from any undue strain brought upon it.

In my device the mouth-piece, having a firm support at both ends, and those supports being quite near to the resistance offered in cutting, is much better calculated, when made movable, to keep its place and proper adjustment with the knife.

I make no claim whatever to any arrangement of adjustable leger-knife used in combination with a rotary knife or knives, but limit

my invention and claim to the mouth-piece made adjustable to the pivoted lever-knife vibrating vertically.

Having thus described my invention, what I claim as new is—

1. In a hay-cutter, the movable mouth-piece B, arranged to be adjusted to and used in combination with the pivoted lever-knife C, vibrating vertically, substantially as described.

2. The combination of the mouth-piece B, provided with flanges *a*, the steps *f*, provided with lugs *b* and set-screws *c*, as a means of adjusting said mouth-piece to the knife C, all substantially as described.

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