2 Sheets—Sheet 1.

J. Q. CROSBY.

Straw-Cutter.

No. 211,835. Patented Feb. 4, 1879.

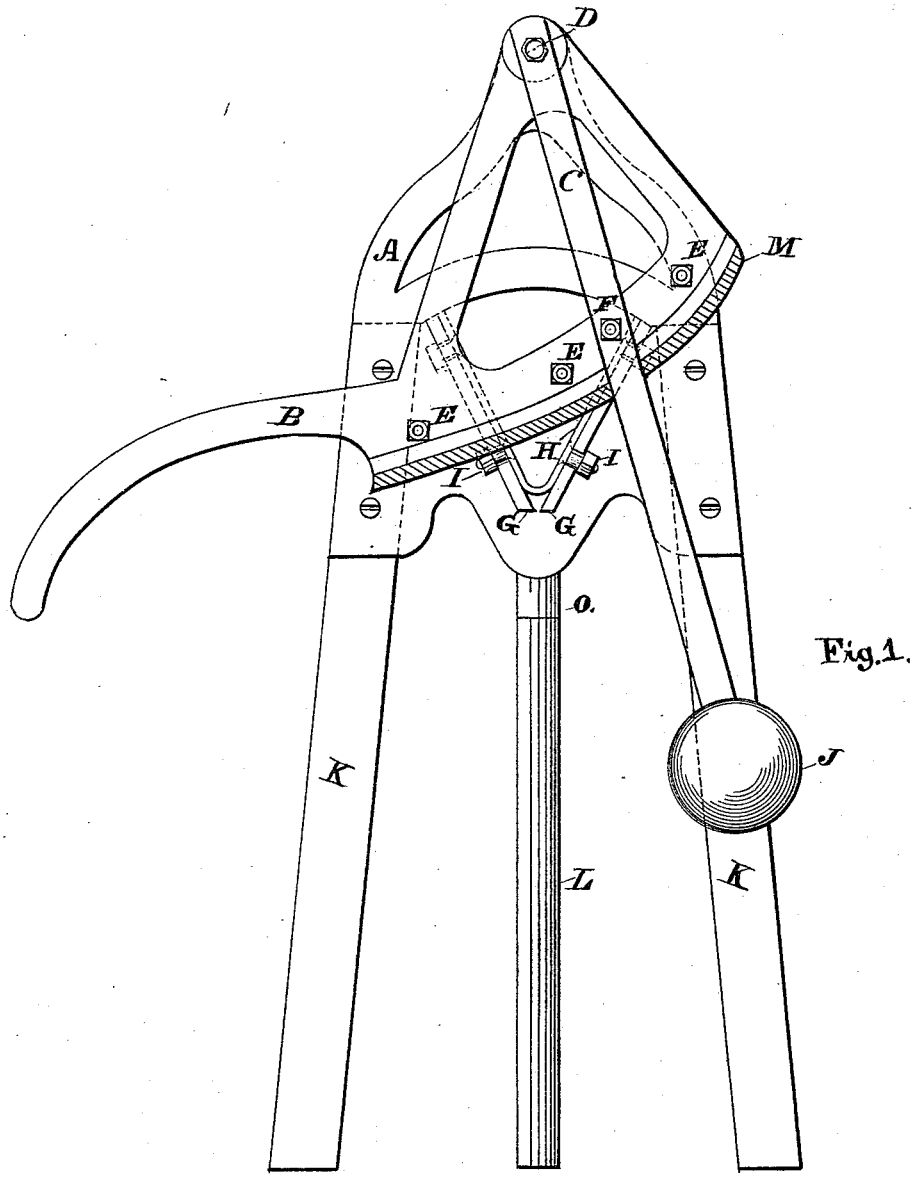

Fig. 1.

Witnesses:

Robert E. Vandeveer

W. S. Connell

Inventor:

John Q. Crosby

2 Sheets—Sheet 2.

J. Q. CROSBY.

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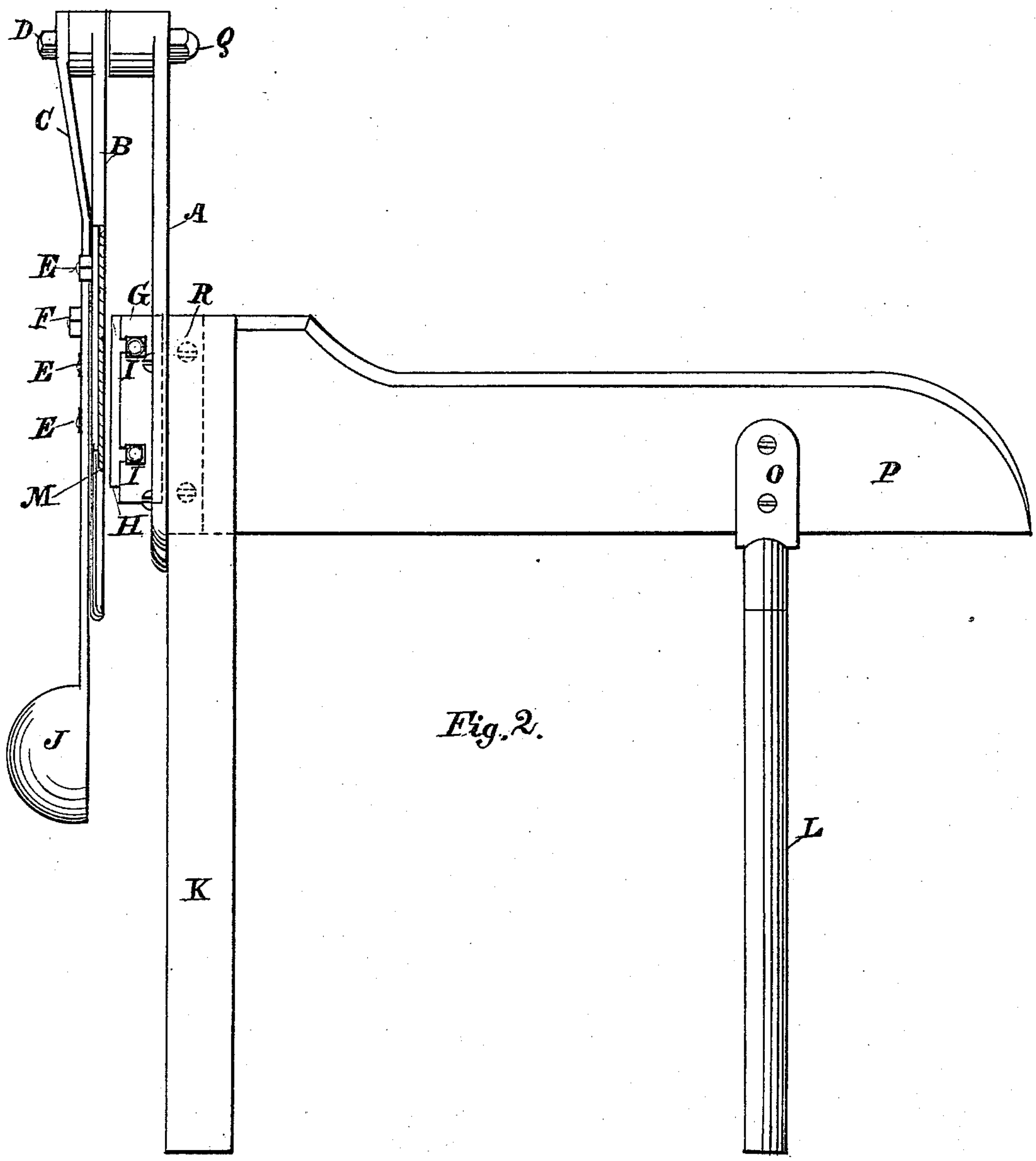

Fig. 2.

Witnesses:

Robert E. Vanderveer

[illegible]

Inventor:

John Q. Crosby

UNITED STATES PATENT OFFICE.

JOHN Q. CROSBY, OF YONKERS, NEW YORK.

IMPROVEMENT IN STRAW-CUTTERS.

Specification forming part of Letters Patent No. **211,835**, dated February 4, 1879; application filed November 21, 1878.

To all whom it may concern:

Be it known that I, JOHN Q. CROSBY, of Yonkers, in the county of Westchester and State of New York, have invented a new and useful Improvement in Hay-Cutters, of which the following is a specification:

The invention relates to hay-cutters actuated by a lever, and known as "lever-cutters." Heretofore such cutters have been made with a cast-iron throat or mouth-piece, bolted or screwed to the wood-work of the frame, and a lever, to which the cutting-knife has been bolted or otherwise secured. Said lever has been provided with some means of adjusting it to the cast mouth-piece or throat, which adjustment has been more or less complicated, and liable to get out of order. The knife has also generally cut against the cast-iron throat-piece or stationary cutter, which soon becomes rounded and thus destroys the efficiency of said cutters, and requires either facing off of the stationary cutter or replacing by an entire new throat or cutter. The method of cutting has also been objectionable by the knife not having enough shear-cut; also from lacking momentum, as is provided for in rotary cutters by the fly-wheel.

The object of my invention is to provide a simple and cheap cutter, which shall have an adjustable steel throat or cutting-plate, so made as to be reversible and easily adjusted to the knife, and to use a simple non-adjustable stud, on which the knife-lever shall rotate; also, to provide said knife-lever with a device so that momentum can be generated to help in cutting.

Another object is the arranging of the stud with the cutting-edge of the knife so as to give more of a shear-cut than is obtained by present cutters.

In the accompanying drawings, forming a part of this specification, in which like letters of reference indicate like parts, Figure 1 is a front elevation of my invention; Fig. 2, a side elevation.

Attached to the legs K K is the cast frame A, which is bolted to said legs K K. D is a stud or axial bolt, on which the knife-lever B rotates. This stud is screwed through the frame A, and kept from turning by the check-nut shown at Q, Fig. 2.

The knife-lever B is provided with a curved knife, M, so made as to give a shearing or draw cut. This knife M is secured to the knife-lever B by bolts or their equivalents, E E E.

The cast frame A has a V-shaped opening, on two sides of which are the slotted ribs G G. Fitting in this V-opening is the steel cutting-plate H, provided with bolts I I, which fit in the slots in ribs G G.

It will readily be seen that the cutting-edge H can be easily adjusted to the knife M by sliding in or out, as may be desired, and rigidly secured in any position most favorable to the proper working of the cutter; also, when the front edge of H is worn rounding, the steel edge may be readily taken out and ground or reversed.

Attached to the axial stud D is the wrought-iron bar C, to which is attached a weight, J. This bar is also bolted to the knife-lever B by the bolt F.

It will be seen that when the lever B is worked up or down, the bar C and weight J will describe a portion of a circle, and as it is lifted above its normal position its weight will assist in the cutting, and in its return motion bring the lever back for the next stroke or cut. This has been demonstrated to greatly help the working of this class of cutters.

The back edge of the V-shaped opening in the frame A has two lugs, R, to which the sides of the cutting-box, P, are screwed or bolted. The cutting-box P has also, at O, a V-shaped bracket and socket, in which the rear post, L, is fastened. This is also bolted or screwed to the side P.

It will readily be seen from the foregoing description that I have invented a very simple and practical method of adjusting the cutting-edge H to the knife M; also a steel cutting-edge, preferable to cast-iron, and a shearing cut to the knife M, which, in combination with the weighted bar C, greatly improves this class of cutters.

What I claim is—

The combination of the knife M, lever B, and weighted bar C with frame A, provided with ribs G G and adjustable stationary cutting-plate H, substantially as set forth and described.

Witnesses: J. Q. CROSBY.

ROBERT E. VANDERVEER,

WM. F. BONNELL.