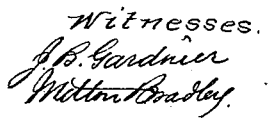


Straw Cutter.

Patented March 14, 1865.



John R. Whittemore

UNITED STATES PATENT OFFICE.

JOHN R. WHITEMORE, OF CHICOPEE FALLS, MASSACHUSETTS.

IMPROVED STRAW-CUTTER.

Specification forming part of Letters Patent No. 46,839, dated March 14, 1865.

To all whom it may concern:

Be it known that I, JOHN R. WHITEMORE, of Chicopee Falls, Hampden county, State of Massachusetts, have invented a new and Improved Hay and Straw Cutter; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Among the numerous devices used to cut hay and straw and other similar substances, one of the simplest and most economical, as well as one of the oldest, arrangements consists of a knife playing across the front of a box or hopper in which the hay is placed. This has in many ways been accomplished, but in my invention I claim to have greatly reduced the cost of manufacture without impairing its operation.

In the drawings, Figure 1 is a front view; Fig. 2, a side elevation; Fig. 3, a top view showing the manner of joining the parts F and d.

To the ordinary hopper, A, I attach a mouth-piece, B, of cast-iron, by the pieces D D D, as hereinafter described, the piece B being cast with the holes for screws *l l l l*, so that no drilling is required. The projection *d* is formed solid on the mouth-piece B, and is forked, as shown in Fig. 3, and has a part, *c*, raised at the side. On this the piece F, also forked or slotted, is secured by the bolt *a*, passing through it and *d* and secured by a nut, *b*, on the under side. The shaft E is shown as square in the drawings, the knife C fitting on it and secured by the wedge *h*. At the ends it is round, and passes into bearings in B and F.

The manner of adjustment of these parts is as follows: The knife C is placed on the shaft in the proper position and secured by the wedge *h*. It is then placed so that one bearing of the shaft E enters the piece B. The piece F is now put on, the other bearing of E entering the hole in F. This is now secured to *d* by the bolt *a* and nut *b*, and the knife is turned against the mouth of the hopper and the wedge *c* is driven, making the parts perfectly firm and secure. Cutters of this form

have been made in which the knife and shaft were made in one piece, and two pieces—one on each side of the shaft—were set up against it, forming bearings. The difficulty of these has been their liability to work loose when used, and thus rendering them inoperative.

It will be seen I have entirely overcome this difficulty and have a perfectly firm and rigid bearing.

The legs H H are secured to the mouth-piece B by the screws *l l l l*, and the hopper A is secured to them by the pieces D D D, two full-size views of which are shown in Figs. 4 and 5.

The pieces D D D are of cast-iron and have one end enlarged, forming a head, while the other end passes through the mouth-piece B and along the hopper, thus giving sufficient surface for a number of screws, as required, and forming a much stronger and more substantial manner of securing the two parts (formed of the mouth-piece and front legs of the cutter on one side and the hopper on the other) than screws or other similar contrivances used alone, and as the holes are cast in the mouth-piece for the heads of D D D to fit in, and also the holes for the screws are cast in D, no additional labor is needed.

Now, it will be seen by the description, all the parts being formed of cast-iron and wood without any machine-work, very little labor is required, except to put them together, and great economy is the result.

In the drawings keys are shown at *h* and *c*; but other similar contrivances—asset-screws—may be used, if required.

Now, having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the knife C, mouth-piece B, shaft E, bolt *a*, key *c*, and piece F, when constructed, arranged, and operating substantially as described.

2. Securing the mouth-piece B to the hopper A by the pieces D D D, as described.

JOHN R. WHITEMORE.

Witnesses:

J. B. GARDINER,
MILTON BRADLEY.