

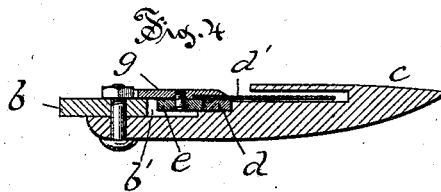
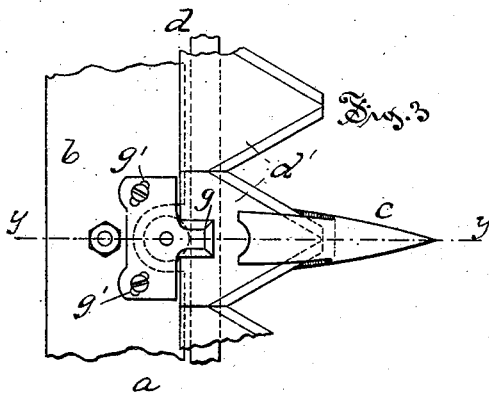
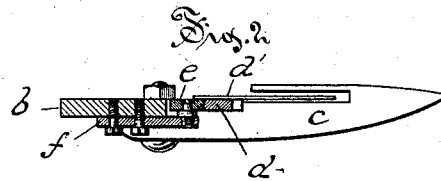
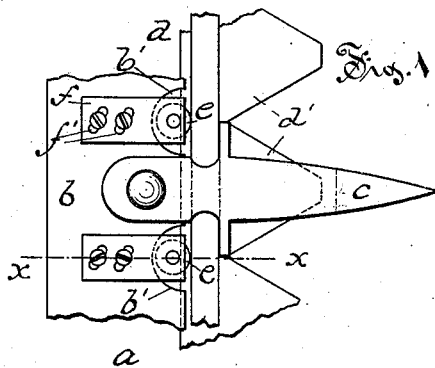
(No Model.)

G. A. WEAVER.

FINGER BAR FOR MOWING MACHINES.

No. 343,618.

Patented June 15, 1886.



Witnesses:
W. M. Parkman
S. P. Williams.

Inventor
George A. Weaver
by Simonds & Burdett,
attys

UNITED STATES PATENT OFFICE.

GEORGE A. WEAVER, OF NEWPORT, RHODE ISLAND.

FINGER-BAR FOR MOWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 343,618, dated June 15, 1886.

Application filed July 27, 1885: Serial No. 172,703. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. WEAVER, of Newport, in the county of Newport and State of Rhode Island, have invented certain new and useful Improvements in Cutter-Bars for Mowing-Machines, of which the following is a description, reference being had to the accompanying drawings, where—

Figure 1 is a plan view of a part of the cutter-bar of a mowing-machine. Fig. 2 is a view in cross-section through the bar on plane denoted by line *x x* of Fig. 1. Fig. 3 is a plan view of a portion of a cutter-bar, showing a modified form of my device. Fig. 4 is a view in cross-section of the latter device on plane denoted by line *y y* of Fig. 3.

My invention relates to that particular class of mowing-machines in which the cutter is composed of a finger-bar and a sliding cutter-bar.

Heretofore, in order to reduce the friction caused by the contact of the parts, rollers have been placed between them. These rollers have in some instances been journaled upon fixed non-adjustable pivots, and in others they have had no pivots at all, but were merely placed loosely between the parts. It is obvious that by either of these constructions no compensation for the wear of the rollers, their journals, and the bars can be made, and that after a short time the rollers will become useless, so far as their original object is concerned.

The object of my improvement, therefore, is to overcome these difficulties; and it consists, broadly stated, in the provision, between the adjacent edges of the two bars, of rollers having fixed but adjustable journals or pivots, as hereinafter more particularly described, and pointed out in the claims.

In the accompanying drawings, the letter *a* denotes a portion of the cutter of a mowing-machine; *b*, the finger-bar; *c*, the finger secured to the bar in the usual manner and position; *d*, the knife or blade bar, having the usual knives or blades, *d'*; and *e*, a roller supported on a suitable pivot adjustably connected to the finger-bar. This roller is preferably located between the adjacent vertical edges of the finger-bar and blade-bar. Any desired number of the rollers may be employed.

The preferred mode of securing the rollers

adjustably in the frame is by means of pivots or journals on blocks *f*, having slots *f'* extending diagonally to the direction of the length of the block, or diagonally to the general direction in which the rollers are moved to be adjusted, and suitable screws or bolts passing through the said slots and the finger-bar to fix the block in position. For the sake of compactness, these rollers may each lie in a socket or recess, *b'*, formed in the front edge of the finger-bar, with the edge of the roller extending beyond the front edge of the bar a sufficient distance to prevent the back of the blade-bar from coming in contact with it.

In Figs. 3 and 4, which illustrate a modification, the block is shown as having at its forward portion an extension, *g*, projecting over the knife-bar, to prevent the said bar from springing from its seat on the finger-bar.

The letter *g'* in Fig. 3 designates slots corresponding with *f'* in Fig. 1. The diagonal slots obviously give a firmer and more secure connection of the block with the finger-bar. The blocks may be secured either to the upper or lower side of the finger-bar.

The special advantage arising from my improvement is, that compensation for wear of the rollers, their journals, and the bars may readily be made, and consequently the parts kept in just the proper contact. The friction and rattling due from looseness of parts is thus entirely avoided.

Cutters constructed with my improvement will be found to wear better and to cut more easily and rapidly and with less expenditure of force than in the old forms.

What I claim is—

1. The combination, in the cutter of a mowing-machine, with the finger-bar and a reciprocating blade or knife bar, of a roller located between the two bars and turning upon an adjustable pivot or journal, substantially as described.

2. The combination, in the cutter of a mowing-machine having the finger-bar and a reciprocating blade or knife bar, of a roller bearing against the rear edge of the blade or knife bar, secured upon a journal or pivot on a removable block, said block being provided with the extension *g* on its forward edge, projecting over the knife or blade bar, for the purpose specified.

3. The finger-bar and reciprocating knife or blade bar, combined with rollers located between the adjacent vertical edges of the said bars and journaled upon removable blocks
5 secured to the finger-bar, substantially as set forth.

4. The finger-bar and reciprocating knife or blade bar, combined with rollers located between the adjacent vertical edges of the said
10 bars and journaled upon removable and adjustable blocks, substantially as and for the purpose described.

5. The combination, in the cutter of a mow-

ing-machine having the finger-bar and reciprocating knife or blade bar, of a roller bearing against the rear edge of the blade or knife
15 bar secured upon a journal or pivot on a removable block, said block being provided with diagonal slots, substantially as described, through which securing screws or bolts are
20 passed, as set forth.

GEORGE A. WEAVER.

Witnesses:

CHAS. L. BURDETT,

H. R. WILLIAMS.