

(No Model.)

W. L. BROBST.
CUTTING APPARATUS FOR MOWING AND REAPING MACHINES.
No. 577,614.

Patented Feb. 23, 1897.

Fig. 1.

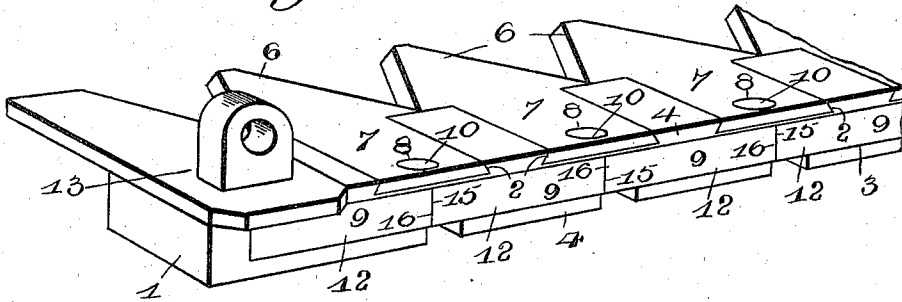


Fig. 2.

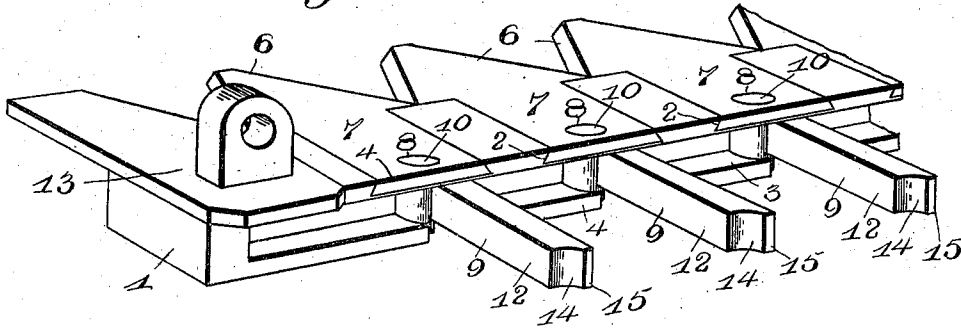
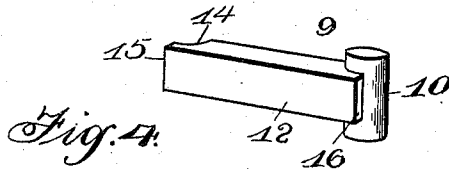
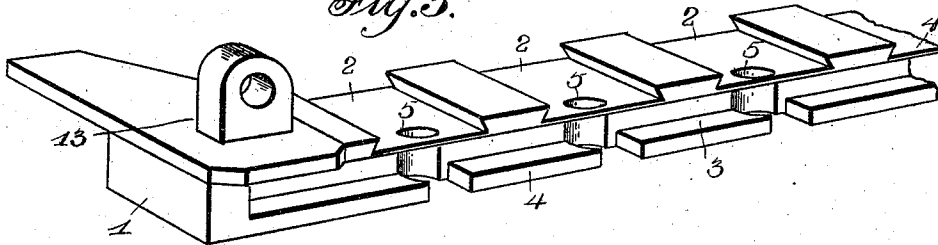


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM L. BROBST, OF OLEONA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF
TO JAMES IMPSON AND DELL IMPSON, OF SAME PLACE.

CUTTING APPARATUS FOR MOWING AND REAPING MACHINES.

SPECIFICATION forming part of Letters Patent No. 577,614, dated February 23, 1897.

Application filed July 18, 1896. Serial No. 599,737. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. BROBST, a citizen of the United States, residing at Oleona, in the county of Potter and State of Pennsylvania, have invented certain new and useful Improvements in Cutting Apparatus for Mowing and Reaping Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to improvements in cutting apparatus for mowing and reaping machines, and the object is to provide a simple, durable, and reliable means for securing the knives in the cutter-bar.

To this end the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same figures of reference indicate the same parts of the invention.

Figure 1 is a perspective view of my improved cutter-bar with the knives secured in place. Fig. 2 is a similar view with the locking-levers opened at a right angle to the bar. Fig. 3 is a similar view with the locking-levers detached and the knives removed from the bar, and Fig. 4 is a perspective view of one of the locking-levers removed from the cutter-bar.

1 is the cutter-bar, and in size and shape it corresponds to the usual cutter-bar employed in the standard makes of mowing and reaping machines. This bar is formed with a series of transverse dovetail slots 2, extending entirely across its face, and along its rear end is a continuous rectangular recess 3, on the top and bottom of which is a continuous flange 4 4. In the rear end of the dovetail slots 2 is located a circular orifice 5, which extends vertically through said bar, intersecting the recess 3 and passing through the flanges 4 4.

6 represents the cutter-knives, and they are formed with a dovetail shank 7 and a circular orifice 8, which, when the knife is in place in the bar, is in line with the orifice 5 in the bar.

9 is a lever-key formed with a cylindrical

hub 10 and a radial arm 12, extending tangentially at a right angle from the center of said hub.

To insert the knives in the bar, the shank 7 is inserted into the dovetail slot 2, beginning at the slot nearest the head 13, and so on down to the outer end of said bar. A locking or lever key 9 is then inserted in the bar from the rear, so that the upper end of its cylindrical hub enters the orifice 5 in the face of the bar and the similar orifice 8 in line with it in the shank of the knife. The arm 12 is then swung around to the left, so as to lie flat in the recess 3 and flush with the flanges 4 4. A second locking-lever is then inserted, as in the first instance, and when the end of its arm 12 is pressed into the recess 3 the circular recess 14 rests against the hub of the first hub and its angular locking end 15 engages the angular shoulder 16 on the first lever-key and locks it in place, each key as it is inserted and its arm turned into the recess 3 locking the preceding one. When all are in place and the cutter-bar placed in its guide-bar, the whole series of knives and locking-levers are rigidly secured against displacement.

To remove the knives, it is only necessary to raise the cutter-bar from the groove in the guide-bar and, beginning at the outer end, open out and remove the locking-levers one by one, each one as it is opened out releasing the one in front of it. When it is desired to remove or replace any particular knife, the levers can be opened out at a right angle up to that one and it withdrawn to release that particular knife without disturbing any of the others.

Although I have specifically described the construction and relative arrangement of the several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention without departing from the spirit thereof.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

The cutter-bar 1 provided with a series of

transverse dovetail slots 2, a continuous recess 3, and a series of vertical orifices 5, in combination with the knives 6 having dovetail shank 7 and circular orifice 8, the series
5 of locking-levers 9 comprising the cylindrical hub 10 and the integral arm 12 formed with an angular shoulder 16, its outer end terminating in a circular recess 14, and an angular

locking end 15, substantially as and for the purpose set forth. 10

In testimony whereof I hereunto affix my signature in presence of two witnesses.

WILLIAM L. BROBST.

Witnesses:

OTTO BRAUN,

RUDOLPH C. STROELE.