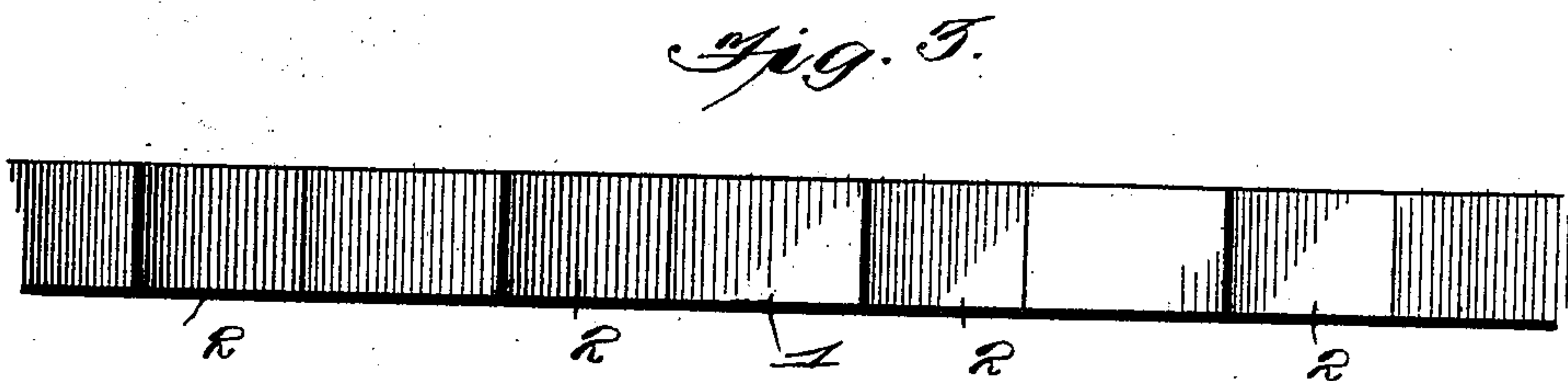
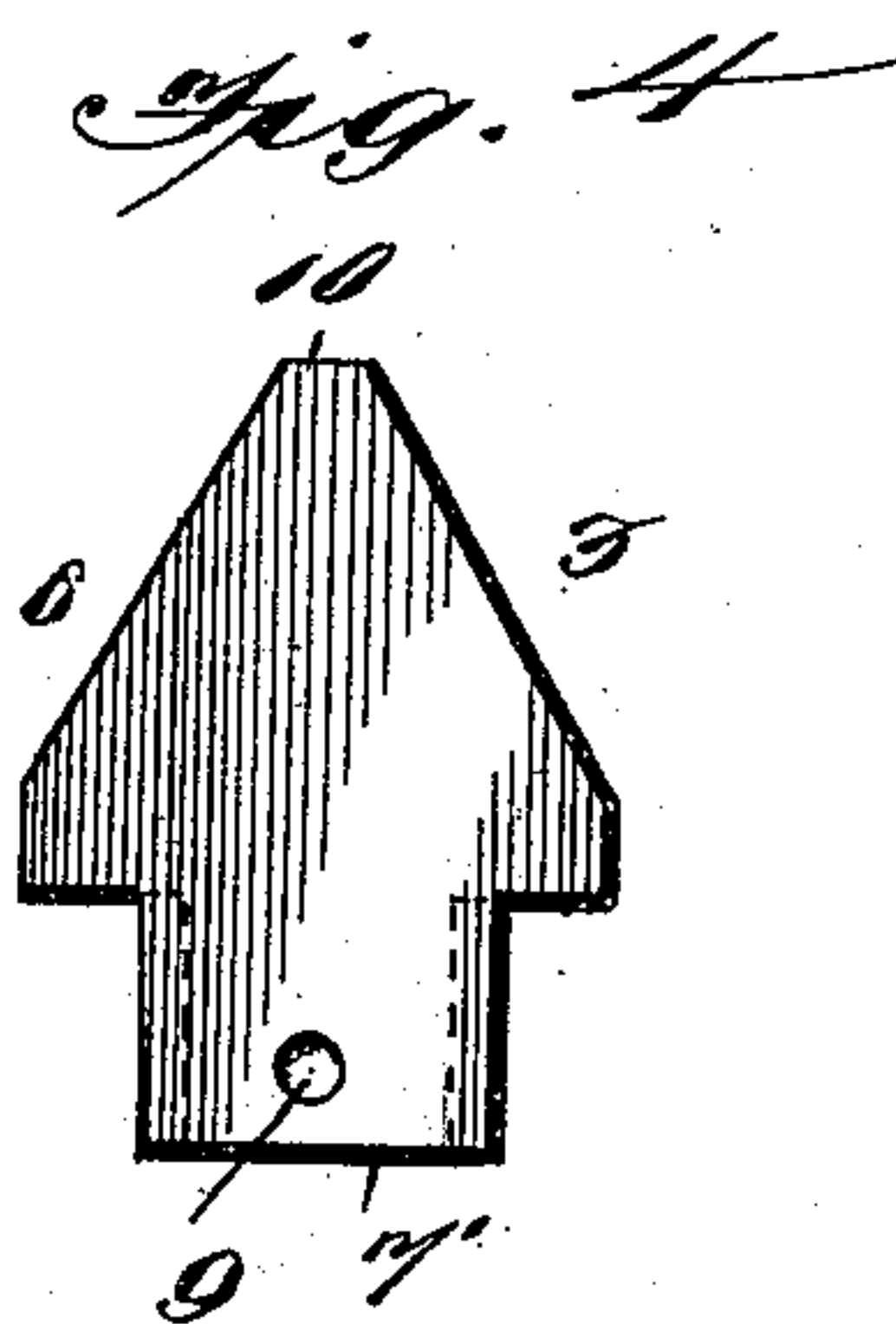
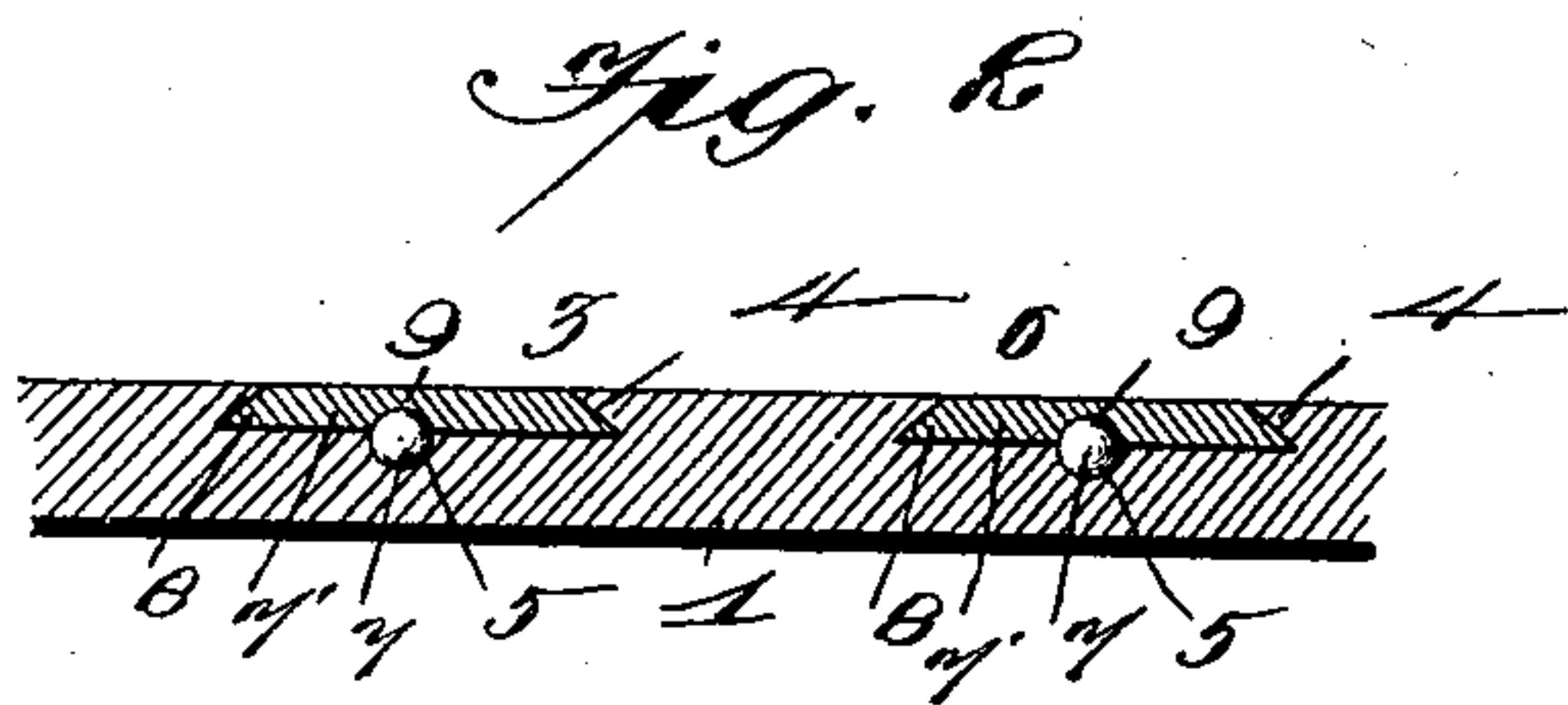
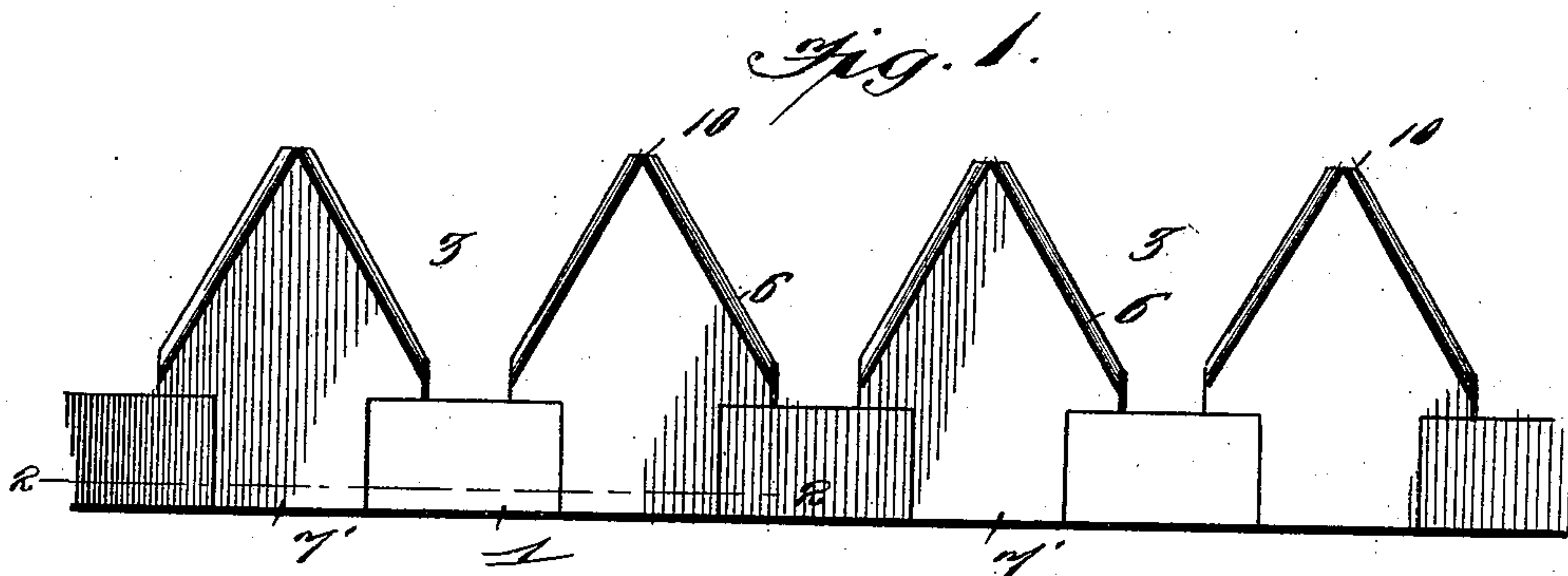


(No Model.)

H. M. LANDES.  
CUTTER BAR.

No. 594,747.

Patented Nov. 30, 1897.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

HENRY M. LANDES, OF AFTON, VIRGINIA, ASSIGNOR OF ONE-HALF TO  
C. B. PUGH, OF SAME PLACE.

## CUTTER-BAR.

SPECIFICATION forming part of Letters Patent No. 594,747, dated November 30, 1897.

Application filed February 6, 1897. Serial No. 622,282. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY M. LANDES, a citizen of the United States, residing at Afton, in the county of Nelson and State of Virginia, have invented certain new and useful Improvements in Cutter-Bars for Mowing Apparatus; and I do hereby 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 relates to certain new and useful improvements in attaching the knives or blades to the cutter-bar of mowing-machines and other cutting apparatus, the object being to provide an improved construction whereby the blade when dull or broken may be readily removed and a new blade substituted therefor.

To this end the invention consists in providing the cutter-bar with a slot having a beveled retaining edge and in providing the cutting-blade with a beveled lip adapted to engage the bevel of the slotted edge and both the bar and blade having a recess or countersink adapted to receive and hold a ball which when seated in the two recesses or countersinks securely attaches the blade to the bar, while permitting of its being readily removed.

In the accompanying drawings, Figure 1 is a top or plan view of a cutter-bar constructed in accordance with my invention. Fig. 2 is a longitudinal sectional view of the same on the line 2 2 of Fig. 1. Fig. 3 shows a plan view of the cutter-bar, the cutting-knife being removed; and Fig. 4 is an inverted plan view of the knife or cutting-blade.

Ordinarily the cutting blades or knives of cutter-bars of mowing apparatus and the like are rigidly attached to the bar by rivets or other fastening devices, so that should the blade be found dulled or broken its removal cannot be accomplished without a great deal of annoyance and inconvenience, it frequently becoming necessary to remove the entire cutter-bar from the mowing apparatus and transport the same to a blacksmith in order that the injured blade or knife may be removed and a new one riveted to the bar.

My invention has been devised to provide a simple and secure construction of device for attaching the knife or blade to the bar,

and which enables the said knife or blade to be readily removed whenever it is desired to sharpen or remove the same.

Referring to the drawings, the numeral 1 designates the cutter-bar, which in accordance with my invention is provided with a series of slots or recesses 2 along its length to receive the knives or blades 3. The bar at the edges of the said recess is beveled off, as shown at 4 in Fig. 2. The bar is also provided in the recess and adjacent the outer edge thereof with a countersink or opening 5, adapted to receive a ball 7, the purpose of which will be presently described. The cutter knife or blade 6 is provided with a narrow extension 7', having its side edges 8 inclined or beveled off, as shown in Fig. 2. This extension is provided on its under side with a countersink or opening 9.

The knife or blade is attached to the bar by engaging its beveled sides with the groove formed by the beveled side edges 4 of the recess 3 of the cutter-bar until the rear edge of the knife extension reaches the ball 7, seated in the countersink in said recess, whereupon by tapping the pointed end 10 of the knife or blade lightly with a hammer the said rear edge of the knife may be forced back, so as to spring over the ball until the countersink or opening 9 is immediately over the ball, whereupon the latter will be seated therein as well as in the opening 5 in the recess of the cutter-bar. By this means the knife or blade will be held securely from both lateral and longitudinal movement or disengagement.

When it is desired to remove the knife or blade to sharpen the same or to substitute a new blade therefor, it is only necessary to tap the rear end of the extension of the blade with a hammer or punch, whereupon it will be forced past the ball and may then be readily pulled out of engagement with the bar-recess.

My invention provides a simple and effective construction for attaching the knives or blades of the cutting apparatus to the cutting-bar and which entirely obviates the objections referred to in cases where the knife is riveted.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. In a cutting apparatus, the combination  
of a cutter-bar provided with a recess having  
5 grooves at the edges thereof and formed with  
a countersink or opening in said recess, a  
ball seated in said countersink or opening,  
and a knife or blade adapted to be seated in  
said groove and provided with a countersink  
10 or opening in its other side adapted to fit  
over upon the ball, substantially as described.

2. In a cutting apparatus, the combination  
of a cutter-bar having a recess therein formed  
with a countersink and the edges of said re-  
15 cess beveled to form a guide-groove, a knife

or blade having an extension provided with  
a corresponding countersink and with bev-  
eled edges adapted to be seated in said groove,  
and a ball seated in the countersinks in the  
recess of the cutter-bar and under side of the 20  
said blade to secure the two together, sub-  
stantially as and for the purpose described.

In testimony whereof I have signed this  
specification in the presence of two subscrib-  
ing witnesses.

HENRY M. LANDES.

Witnesses:

J. A. LEIGHTON,  
JAS. T. WATSON.