

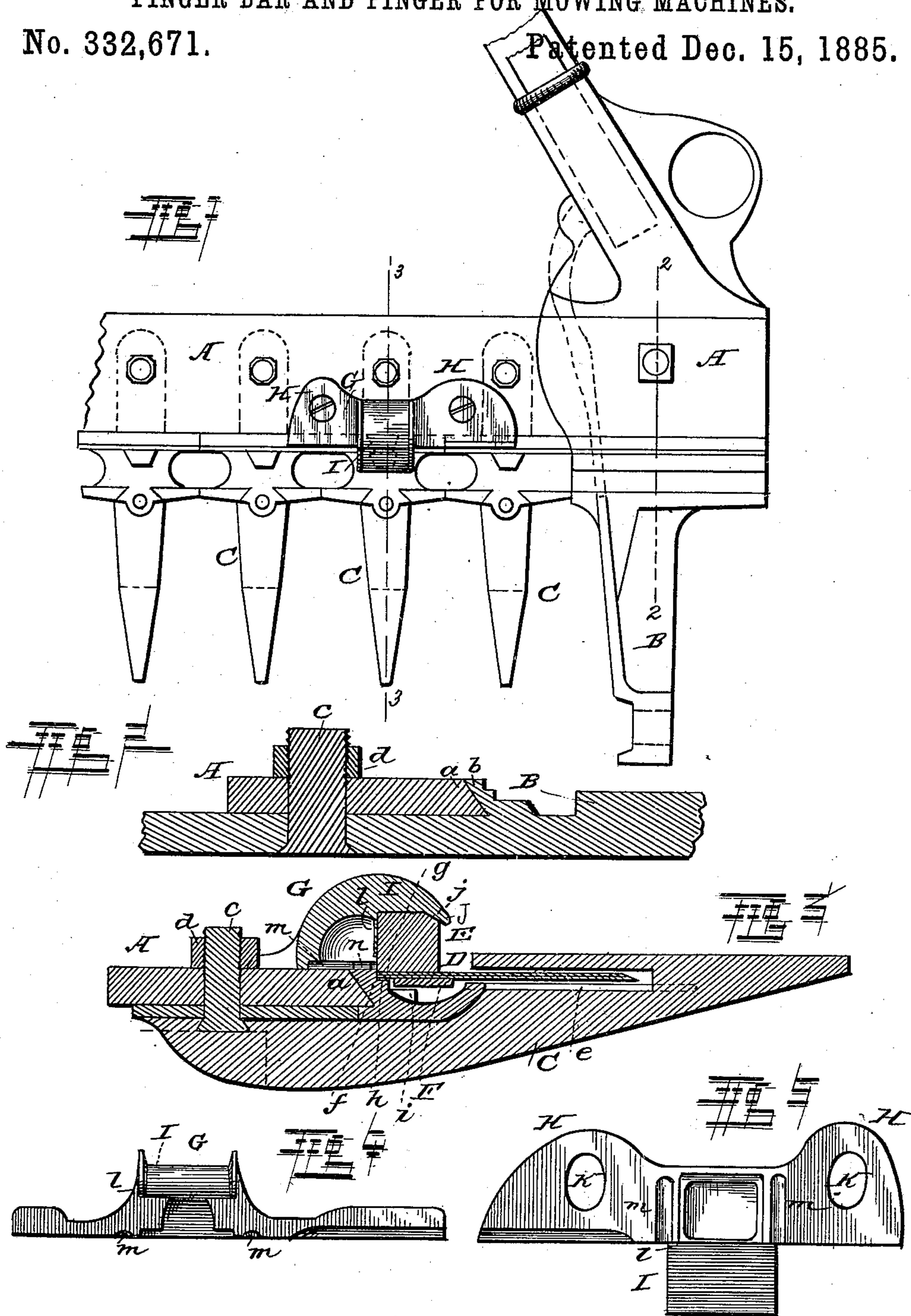
(No Model.)

D. C. MARKHAM.

FINGER BAR AND FINGER FOR MOWING MACHINES.

No. 332,671.

Patented Dec. 15, 1885.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## FINGER-BAR AND FINGER FOR MOWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 332,671, dated December 15, 1885.

Application filed July 15, 1884. Serial No. 137,749. (No model.)

*To all whom it may concern:*

Be it known that I, DEWITT C. MARKHAM, a citizen of the United States, residing at Towanda, in the county of Bradford and State of Pennsylvania, have invented certain new and useful Improvements in Finger-Bars and Fingers for Mowing-Machines; 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 present invention relates to the attachment of the finger-bar of a mowing-machine to the shoes and to the knife-keepers for retaining the knives in position. The method of the attachment of the finger-bar to the shoes is especially applicable to front-draft mowing-machines, similar to that described in Letters Patent No. 304,837, granted to me September 9, 1884; but the knife-keepers are adapted to any kind of machine or finger-bar.

In the accompanying drawings, which illustrate my invention and form part of this specification, Figure 1 is a plan view of a portion of the finger-bar of a mowing-machine, the knife being removed. Fig. 2 is a vertical section in a plane indicated by the line 2 2, Fig. 1, showing the attachment of the finger-bar to the shoe. Fig. 3 is a vertical section in a plane indicated by the line 3 3, Fig. 1, showing the location of the knife-keeper, in this view the knife being shown. Fig. 4 is a front view of the knife-keeper detached, and Fig. 5 is a bottom view of the knife-keeper.

Like letters designate corresponding parts in all of the figures.

The finger-bar A is beveled downwardly on its forward side, as shown at *a*, and the shoe B is made with an overlapping part, *b*, which exactly fits over the beveled edge *a*, when the finger-bar is in place. The finger-bar is further fastened to the shoe by a bolt, *c*, passing through the finger-bar and shoe, which is secured by a nut, *d*. Secured to the finger-bar at proper intervals are the usual guards, C C, provided with guard-plates *e*. These guards are also formed with overlapping portions *f*, which exactly fit over the beveled edge *a* of the cutter-bar, and are by

this means more securely held in position. 50  
The knife D is formed with a knife-head, E, above, and with a bottom plate, F, which is set forward of the rear edge of the knife, as shown, so as to form a bearing-surface, *g*, along the knife. This bearing-surface *g* rests 55  
upon a ledge, *h*, formed in the guards C C, and the bottom plate, F, also rests upon a ledge, *i*, formed in the guards, these ledges, *h i* constituting the bed or channel along which the knife slides. The shoe B, as well 60  
as the guards, is formed with similar ledges, *h i*. The knife-head E is beveled on its upper front edge, as shown at *j*. The knife-keepers G G are secured by bolts at suitable intervals to the finger-bar. Each knife-keeper 65  
is formed with side wings or flanges, H H, extending alongside the knife-channel, provided with bolt-holes *k k*, by means of which it is secured to the finger-bar, and with an upwardly and forwardly extending projec- 70  
tion, I, located centrally between said flanges, which, when the knife-keeper is in position passes closely over the knife-head, and prevents any vertical movement of the knife. Each knife-keeper is secured in such position 75  
so that the vertical side *l* of the projection I forms a back guide for the knife-head E.

To insure the proper and exact position of the knife-keeper, it is formed on its under side with grooves *m m*, which fit over projec- 80  
tions *n n*, formed either on the finger-bar or on the overlapping part *f* of the guards C C. The projection I of the keeper is formed with a lip, J, which extends downward over the beveled edge *j* of the knife-head, in order to 85  
prevent any forward movement of the knife. The knife is thus held by the keeper with its projection I and lip J by the flanges H H, and by the ledges formed in the guards, and these parts form the guides between which 90  
the knife reciprocates easily and exactly.

I claim as my invention—

1. The finger-bar of a mowing-machine formed with a downwardly-beveled front side, *a*, in combination with the shoes of a mow- 95  
ing-machine, upon which the ends of said finger-bar rest and to which said bar is secured, said shoes being formed in front of

said bar with an upwardly-extending overlapping part, *b*, which fits over the beveled side of the finger-bar, substantially as set forth.

2. A finger-bar formed with projections *n*  
5 *n* and a knife with its knife-head *E*, which is beveled on its upper front edge, *j*, in combination with a knife-keeper having flanges *H*, *H*, bolt-holes *k k*, grooves *m m*, projection *I*, and lip *J*.

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

DEWITT C. MARKHAM.

Witnesses:

M. W. Ross,  
JOHN E. FOX.