(No Model.)

E. H. SELLERS.

MOWING MACHINE KNIFE.

No. 354,747. Patented Dec. 21, 1886.

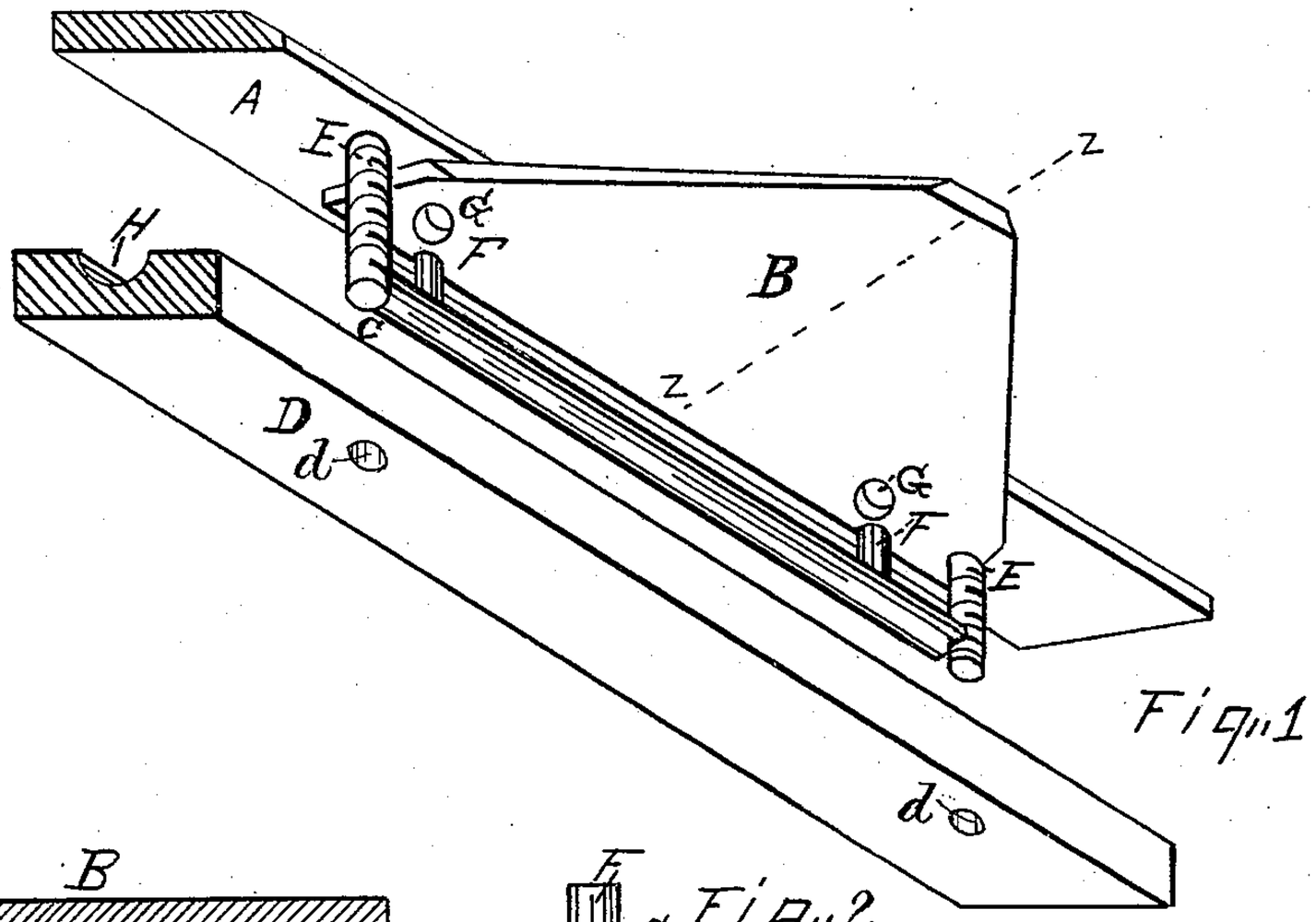

Fig. 1

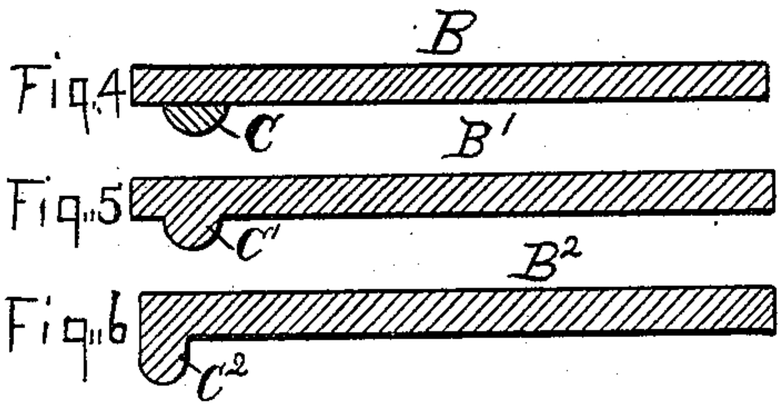

Fig. 4

Fig. 5

Fig. 6

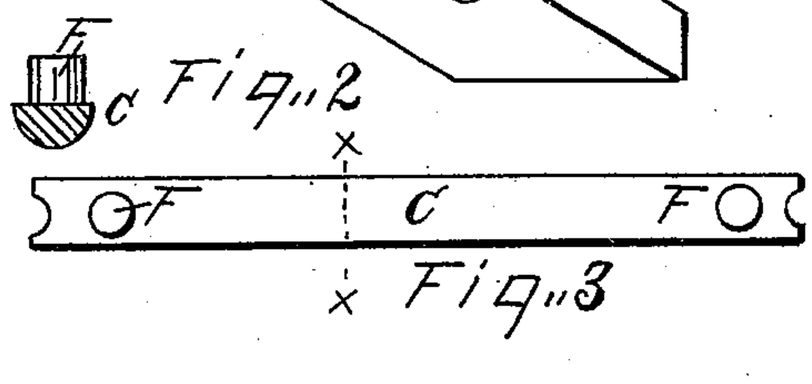

Fig. 2

Fig. 3

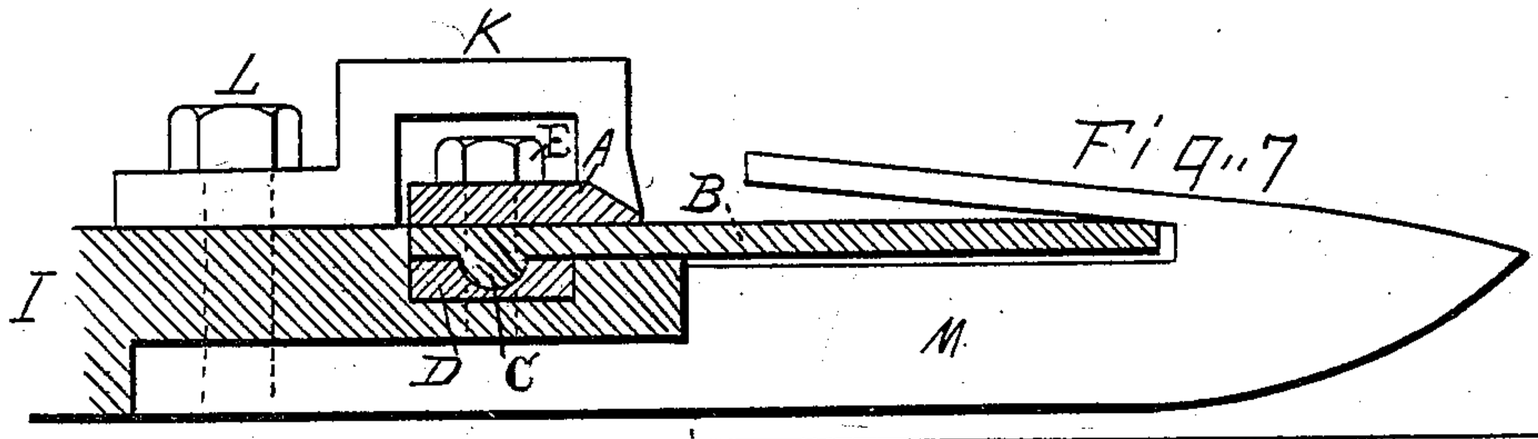

Fig. 7

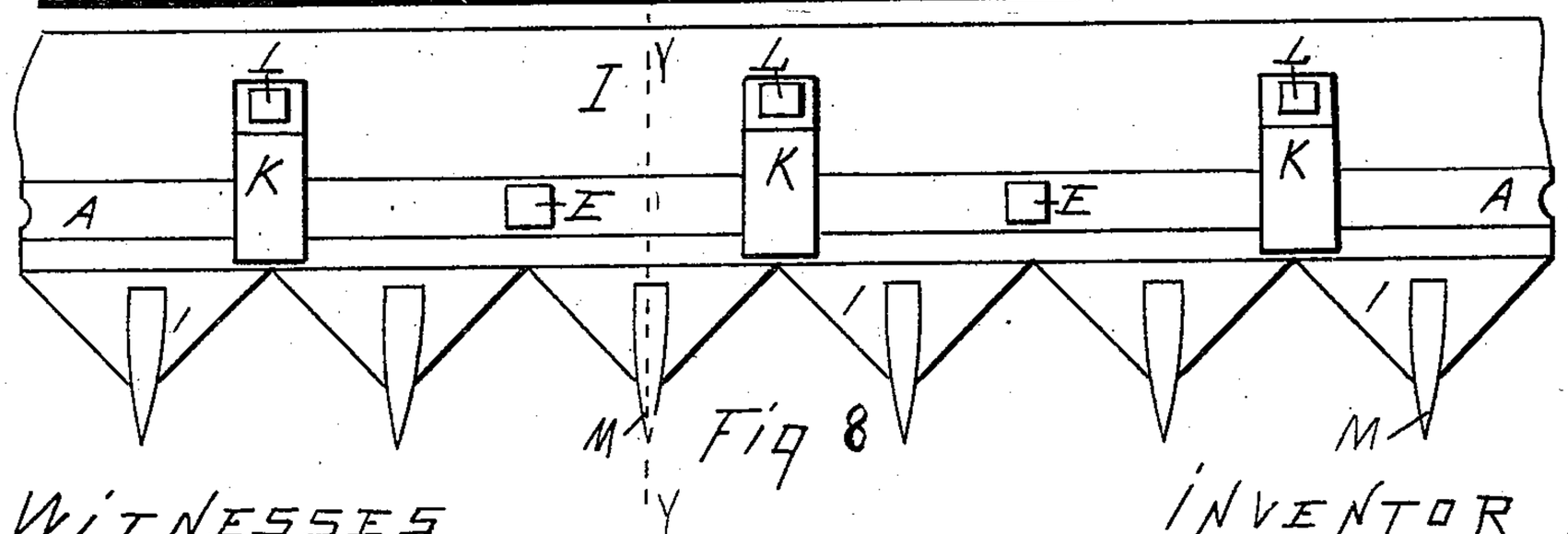

Fig 8

Y

Witnesses
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Atty.

UNITED STATES PATENT OFFICE.

ELIAS H. SELLERS, OF DETROIT, MICHIGAN.

MOWING-MACHINE KNIFE.

SPECIFICATION forming part of Letters Patent No. 354,747, dated December 21, 1886.

Application filed May 1, 1885. Serial No. 164,117. (No model.)

To all whom it may concern:

Be it known that I, ELIAS H. SELLERS, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Mowing-Machine Knives, of which the following is a specification.

My invention consists in an improvement in the mode of fastening mowing-machine knives to cutter-bars, and is fully pointed out in the claims.

Figure 1 is a bottom perspective of part of the cutter-bar and a knife, showing the parts separated. Fig. 2 is a section through a fastening adapted to be used with knives already made, and Fig. 3 is a plan view of said fastening. Figs. 4, 5, and 6 are sections through a knife on the line *z z*, Fig. 1, showing different forms of fastening. Fig. 7 is a section on line *y y*, Fig. 8; and Fig. 8 is a plan view of part of the cutter-bar.

I represents the finger-bar, and M the fingers, of an ordinary mower.

A D represent the cutter-bar, consisting of two metal bars, instead of one, fastened together by bolts and nuts E. The lower half of the cutter-bar, D, rests and slides in a groove cut in the upper surface of the finger-bar, as clearly shown in Fig. 7. In the upper surface of the lower half, D, of the cutter-bar is formed a channel, H, which may be of the semicircular form shown or of any other form.

B represents one of the sectional knives commonly used. The heel of the knife is placed between the two parts A D of the cutter-bar, and a projection, C, on the under side of the knife fits into the channel H, so that when the two parts A D are drawn firmly together by the bolts and nuts E the knives are clamped firmly between them, and are held rigidly in place by the engagement of the projection C with channel H. This projection or lug C may be made in several ways. As now made, the knives have two holes, G, made in the heel, through which pass rivets by which said knives are riveted to the cutter-bar. To fit knives so made for use with my invention, I make the projection C as shown in Figs. 1, 2, 3, in which it consists of a metal bar made to fit channel H on one side, and on the other side made flat and provided with two projecting rivets, F, adapted to pass through the holes G in the knife, whereby the piece C can be easily riveted to a knife. When knives are made especially for use with my invention, the projection can be made with the knife, as shown at C′ C², Figs. 5 and 6.

K K K represent guides bolted to the finger-bar by the bolts L L L, and adapted to hold the cutter-bar down to its place. These guides are so made as to bridge over the nuts E and press on the forward edge of the upper part, A, both guide and A being beveled, as shown in Fig. 7, and this construction allows the whole cutter-bar and the knives to be withdrawn from the finger-bar. When it is not desired to have the cutter-bar removable, the guides K need not bridge over the nuts E, as said nuts can be placed farther apart than the stroke of the cutter-bar, in which case guides resting on the upper surface of part A will not interfere with the motion of the cutter-bar.

d d represent holes through the lower part, D, of the cutter-bar to receive the bolts E, and the heads of these bolts should be flush with the under surface of D.

An obvious mechanical equivalent for the construction shown is to form the channel H on the under surface of A.

The object of my invention is to facilitate replacing broken knives and sharpening dulled knives.

With my invention any or all the knives can be taken out by simply loosening the nuts E, so that the two parts A D of the cutter-bar, will separate far enough to permit the passage between them of the knife B and lug C. This can be done by removing the cutter-bar, or by removing the guides K, which is readily done by loosening the bolts L, and either taking off the guides or turning them off from the cutter-bar. It is obvious that this greatly facilitates the replacing of broken knives or the sharpening of dulled knives, as they can be ground separately or together.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In combination with the knife B, having therein the holes G, the lug C, having thereon the rivets F, substantially as shown and described.

2. In combination with the finger-bar I, the two-part cutter-bar A D, the part A being beveled on its forward edge, nuts and bolts E, and bridge-guides K, beveled to fit part A of the cutter-bar, substantially as shown and described.

ELIAS H. SELLERS.

Witnesses:
CYRUS E. LOTHROP,
GEO. H. LOTHROP.