

M.B. Figgs. Harvester Cutter.

No 34267

Patented. Jan. 28. 1862.

Fig. 4.

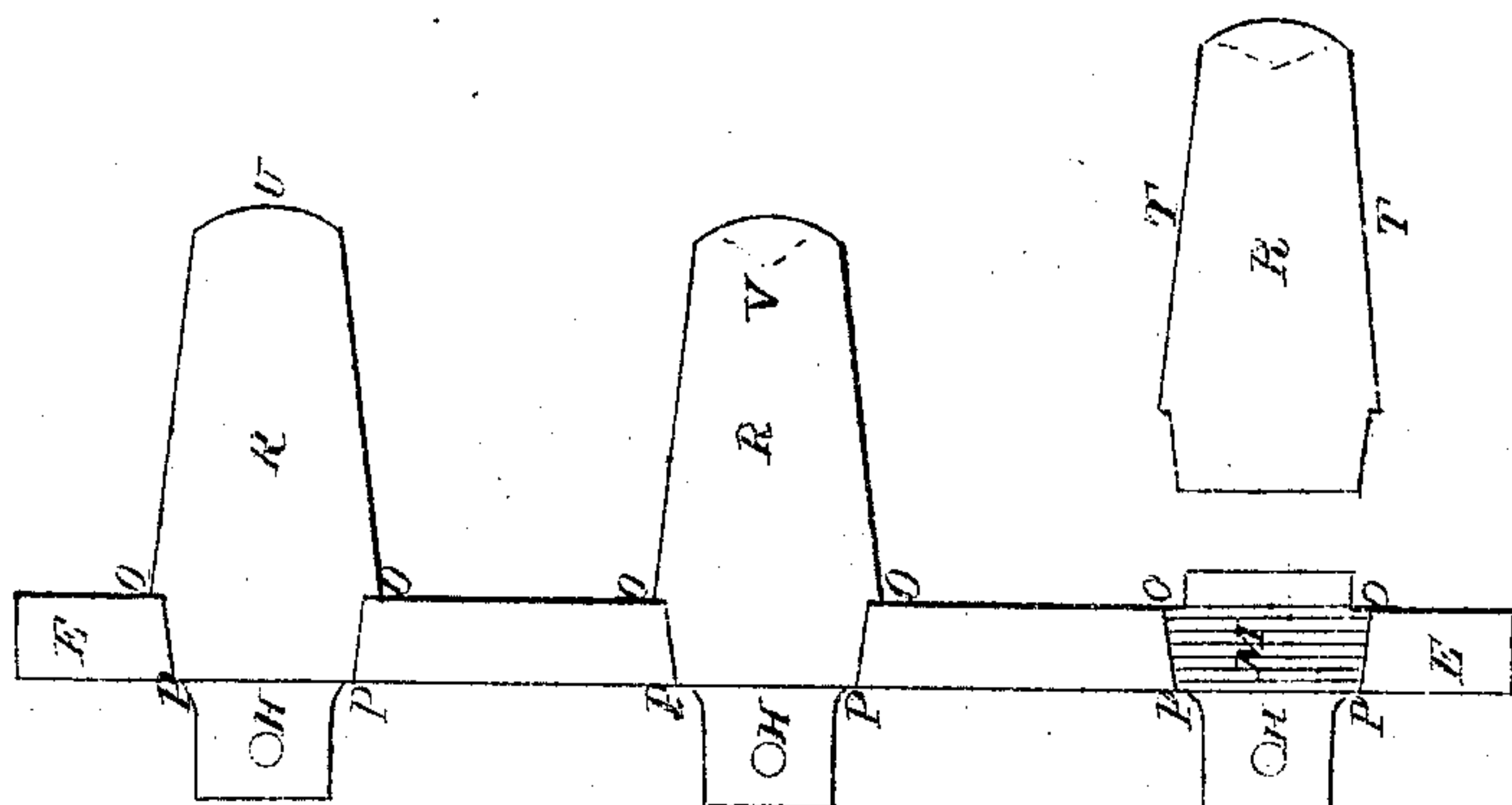


Fig. 5.



Fig. 6.



Fig. 1.

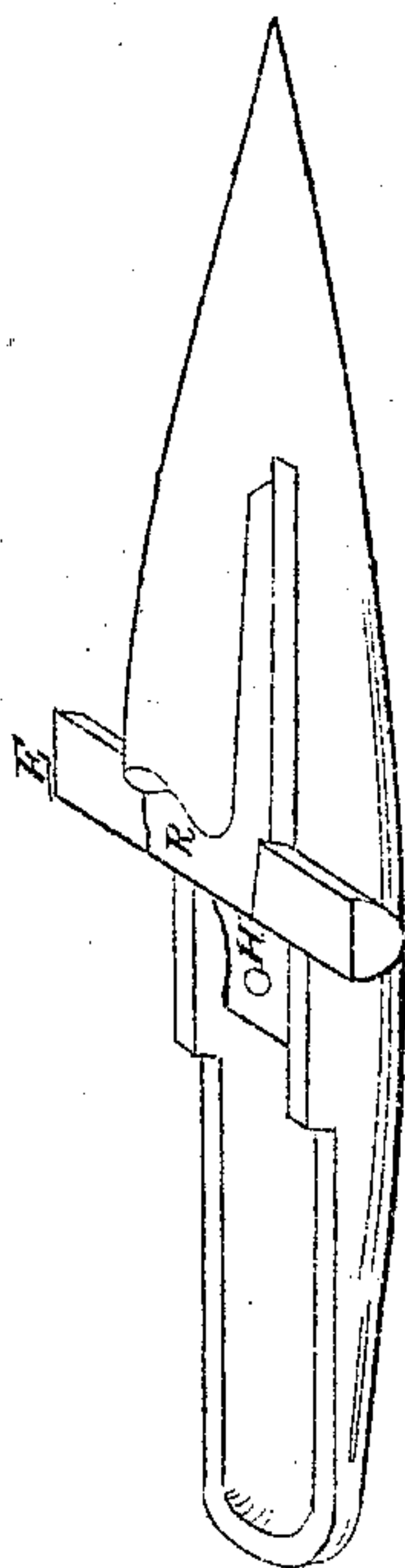


Fig. 2.

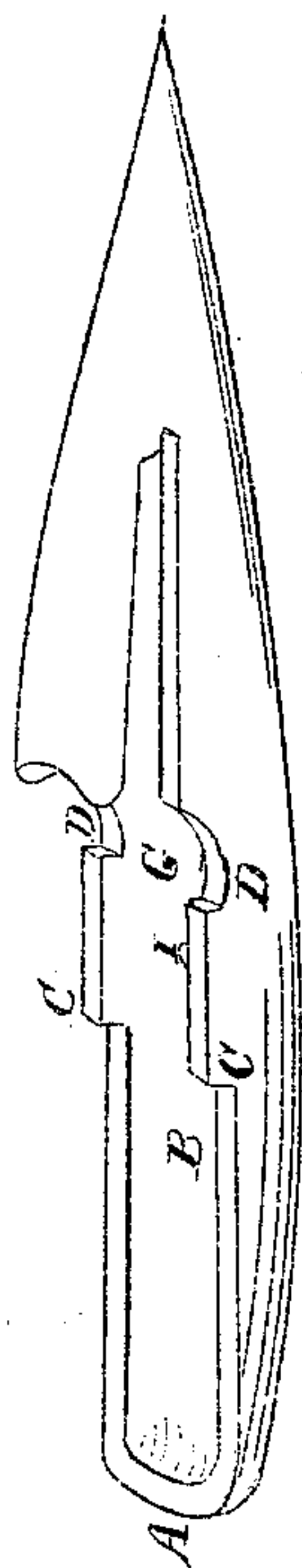


Fig. 3.

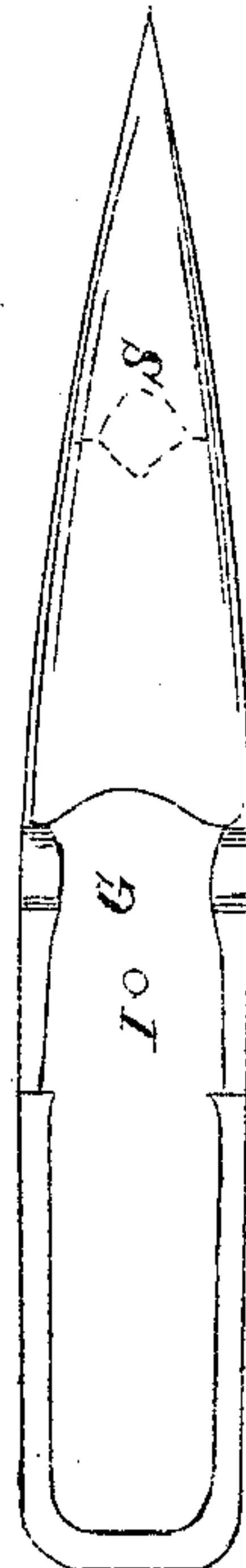
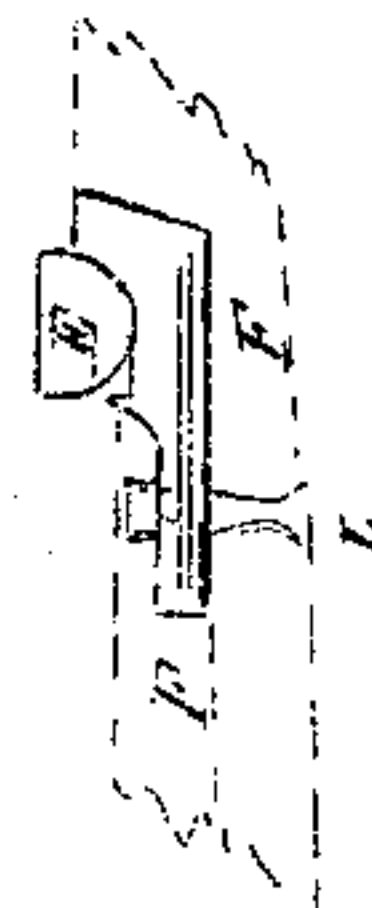


Fig. 7.



Witnesses
J. Bramerd
A. Mehlman

Inventor
M.B. Figgs

UNITED STATES PATENT OFFICE.

MILES B. RIGGS, OF NEW YORK, N. Y.

IMPROVEMENT IN GUARD-FINGERS FOR HARVESTERS.

Specification forming part of Letters Patent No. 34,267, dated January 28, 1862.

To all whom it may concern:

Be it known that I, M. B. RIGGS, of the city of New York, in the county of New York and State of New York, have invented new and useful Improvements in Guard-Fingers for Mowing and Reaping Machines; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view. Fig. 2 is a perspective view with the center part removed. Fig. 3 is a top view with the center part removed, and Figs. 4, 5, 6, and 7 are detached parts.

The nature of my invention relates to the herein-described construction of the guard-finger and the mode of attaching a stationary steel cutter in each finger, which, in conjunction with the movable cutters, operates upon the principle of shear-blades.

The body of the guard-fingers, Figs. 2 and 3, are made from cast metal, in the form represented in the figures, (but may be of any other desired shape,) the heel A being about one inch and a half broad and half an inch thick. The upper side is hollowed out, as seen at B, by which means both lightness and strength are combined, together with facility in fitting to the finger-bar. About three inches from the heel A the guard increases in thickness one-fourth of an inch, as seen at C, thus forming the seat of the finger-bar.

At D there is a curved seat formed for the reception of the rod E, Figs. 1 and 4, and which extends from finger to finger, being composed of one entire piece of malleable iron; or it might be made in sections. At equal distances on this bar, and corresponding with the position of the fingers on the finger-bar, there are semicircular enlargements or lugs, as seen at F, which fit into the cavity of the finger at G, Figs. 2 and 3, and are secured by a screw-bolt or rivet, H, Fig. 1, the bolt or rivet passing through the hole I in Fig. 4, and through the hole J of the finger, as seen in Figs. 2 and 3. The hole on the under side of the finger is countersunk, and the rivet or

bolt has a head, which rests upon the top of the projection F', Fig. 7, as seen in the figure; then, by hammering the lower end, it can be made to fit the countersunk hole in the finger, as at L, Fig. 7. When the fingers and bar are thus fastened together, they are firm and secure; but the fingers can be removed from the bar E by cutting off the head of the bolts with a cold-chisel, when the body of the bolts can be driven downward through the bar and finger. The upper surface of the enlargement F falls about one-eighth of an inch, as seen at M, Figs. 4, 5, and 6, being wider in front, as at O, than in the rear, as at P, Fig. 4, and dovetailing, as at Q, Figs. 5 and 6. Into this dovetail depression is fitted the steel plate R, the forward end of which plate fits into the cavity B, as indicated by the dotted lines in Fig. 3. This plate R is shown in place in Fig. 1. The upper side is made smooth and level or slightly concave, the edges T T being beveled like the blades of shears, the upper edge being the cutting-edge. The forward end may be rounded, as at U, Fig. 4, to fit the cavity in the finger at S, or it may be angled inward, as at V, and the cavity in the finger made to correspond.

In putting the parts together after having been properly fitted, the blades R are put into the dovetailed depression M, and the bar E adjusted to the finger-body, as seen in Fig. 1, and riveted, as before described. The rivets may be inserted from the under side of the finger-body, and the head formed by hammering down the point on the top of the lug F.

I do not claim the counter-cutting plate *per se*, the same having been used in mowing and reaping machines before; but

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

The bar E, made either entire or in sections, and provided with the lugs F, as described, when arranged in combination with the fingers and counter-cutters, in the manner and for the purpose specified.

M. B. RIGGS.

Witnesses:

J. BRAINERD,
A. McCLELLAND,