

(No Model.)

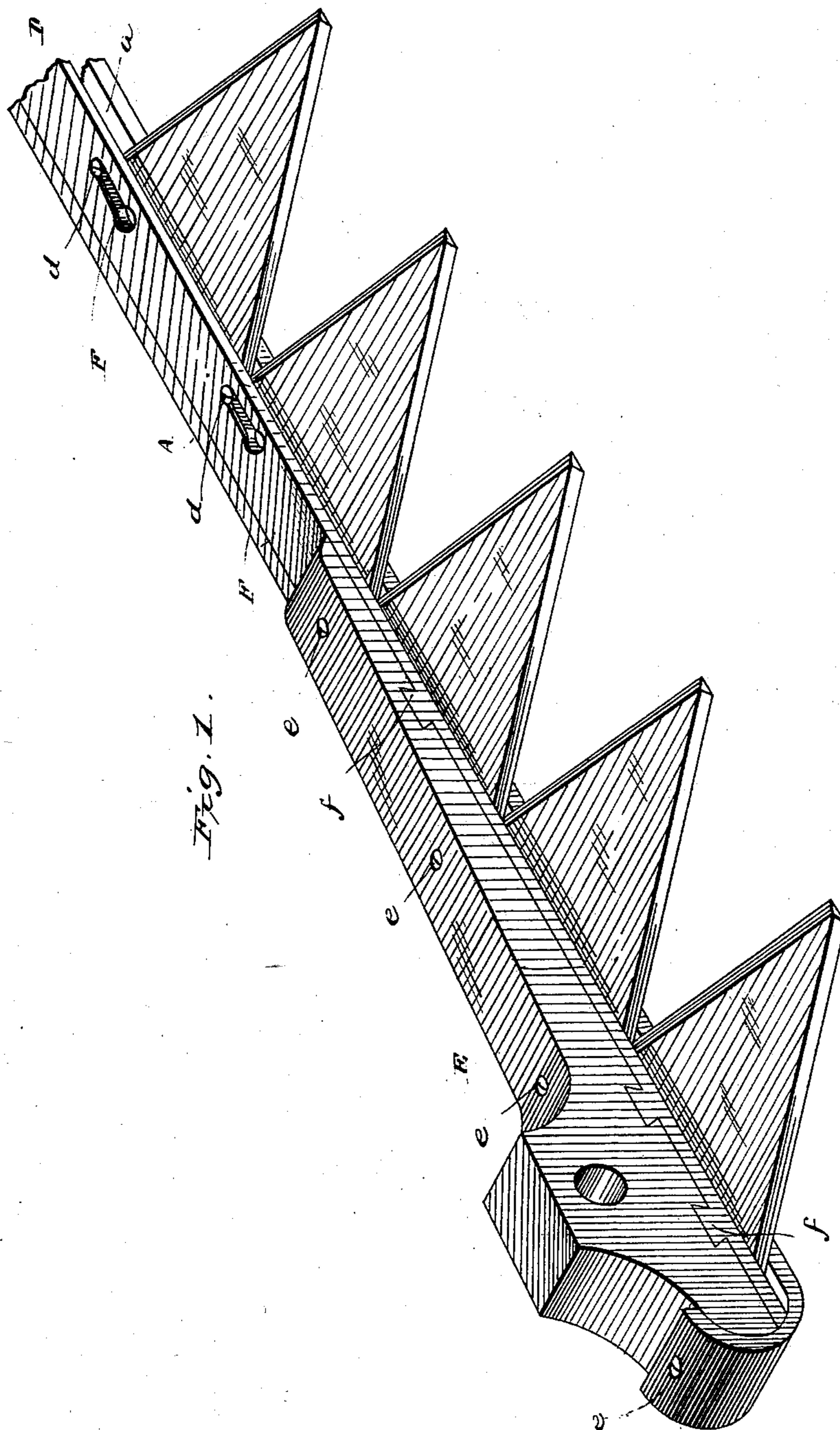
2 Sheets—Sheet 1.

C. H. MYERS.

CUTTER BAR FOR MOWERS AND REAPERS.

No. 285,361.

Patented Sept. 18, 1883.



Witnesses.

Ottumwa L. Jewell.

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Inventor.

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Attorney

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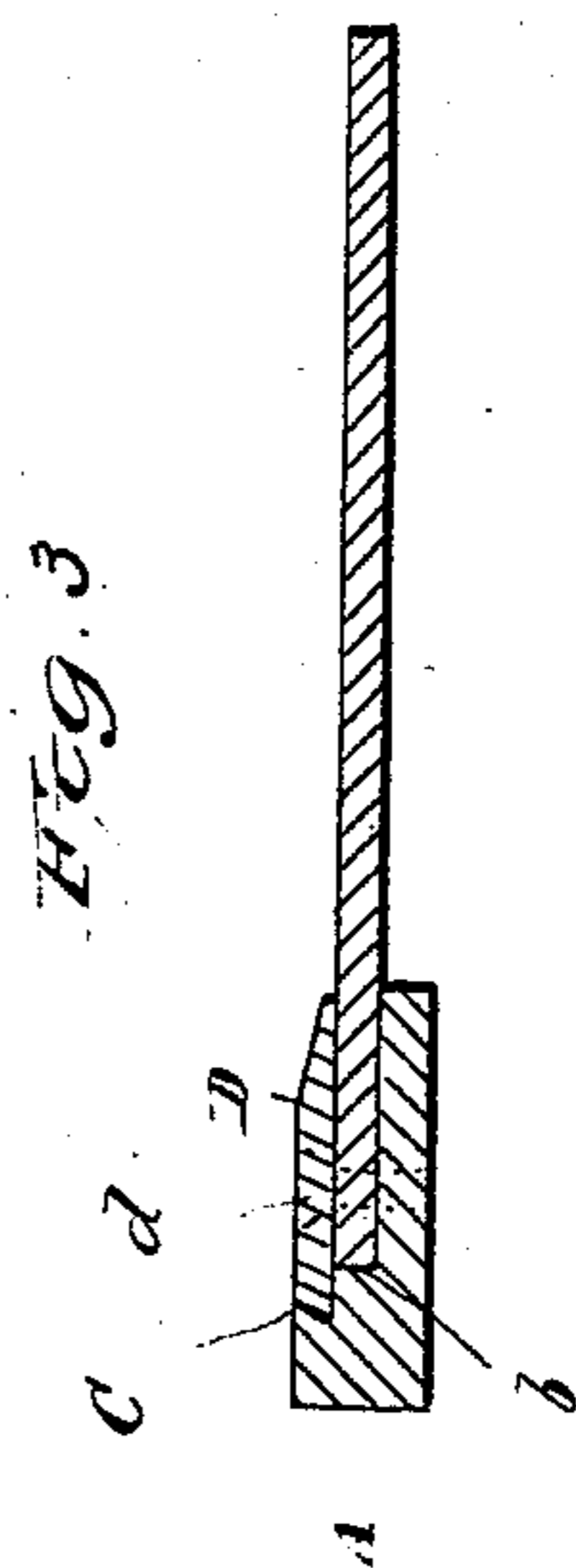
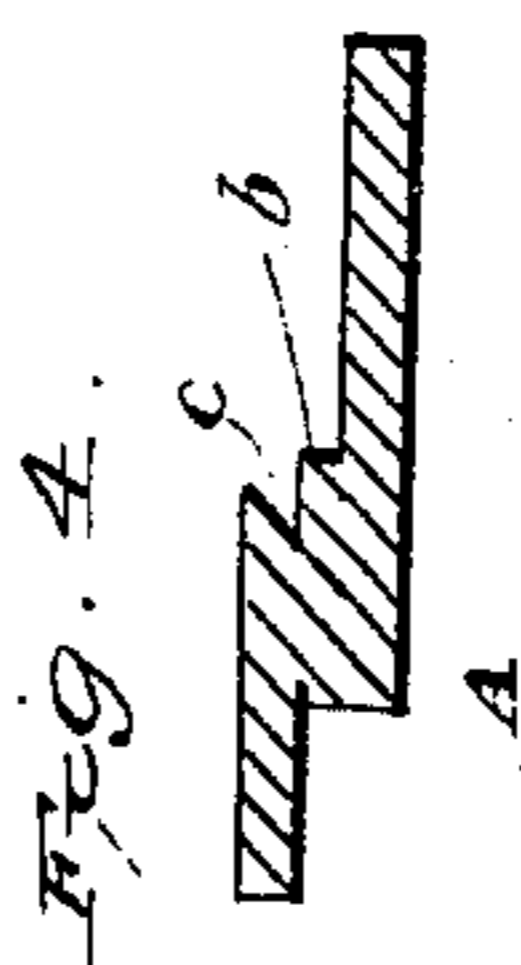
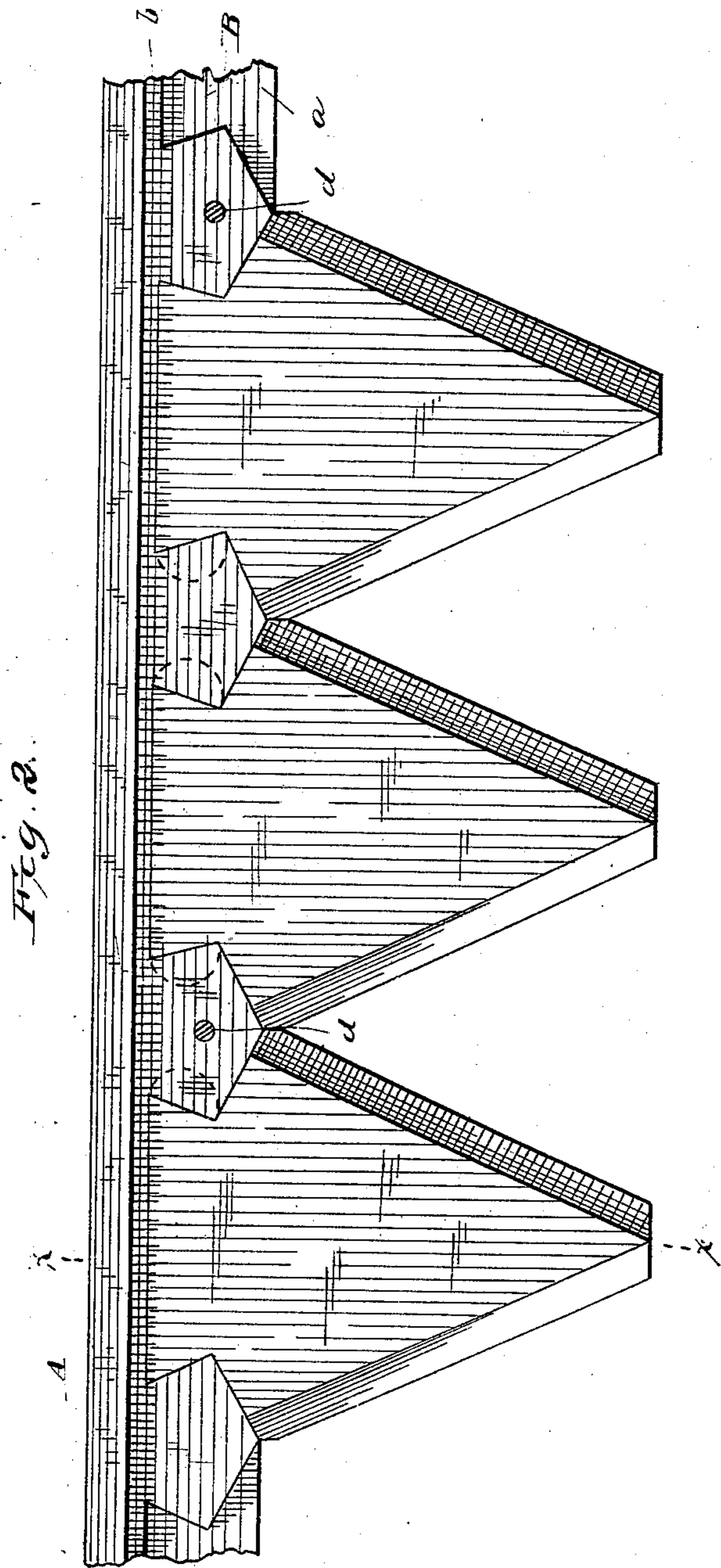
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Witnesses.
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UNITED STATES PATENT OFFICE.

CHARLES H. MYERS, OF PHELPS, NEW YORK.

CUTTER-BAR FOR MOWERS AND REAPERS.

SPECIFICATION forming part of Letters Patent No. 285,361, dated September 18, 1883.

Application filed February 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. MYERS, of Phelps, in the county of Ontario, and in the State of New York, have invented certain new and useful Improvements in Adjustable Knife-Cutting Bars for Mowers and Reapers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain new and useful improvements in harvester cutter-bars, and it has for its object to provide means whereby the knives may be firmly held in the bar and easily and quickly removed for the purpose of sharpening or grinding the same.

It consists in providing the cutter-bar with depressions in which are adapted to fit the heels or shanks of the blades, and with raised portions or lugs, which serve to brace the edges of the shanks of the blades; also in providing means for holding such blades securely in the depressions, and, further, in providing for the ready connection of the eye-bar with the body of the cutting-bar, the peculiarities of which will more fully hereinafter appear.

In the accompanying drawings, forming a part of this specification, and on which like reference-letters indicate corresponding features, Figure 1 represents a perspective view of my improved cutter-bar, showing the construction and the relative position of the several parts, a portion thereof being broken away. Fig. 2 represents a plan view of the portion of a cutter-bar constructed after the manner of my invention, and having a series of harvester-knives or blades fitted thereto, the plate for securing said blades in their seat being in this instance removed; Fig. 3, a sectional view on the line *x x* of Fig. 2, showing the relative position of the several parts; and Fig. 4, a sectional view of the cutter-bar proper, showing one form of the same, some of the features shown in the other figures being in this instance removed or omitted.

In the drawings, the letter A indicates my improved cutter-bar, the same consisting of a strip of metal having its inner end bent around and over the cap-plate and eye-bar, and se-

cured thereto in the manner to be presently mentioned, and provided with an alternate series of depressions or blade-seats, *a*, and lugs or raised portions B. The said depressions or seats *a* are of a depth about equal to the thickness of the blades, and of a size which agrees precisely with that of the shanks of the blades. The lugs B form the side walls of the depressions, and are cut so as to form a dovetail outline to the depressions for a portion of their length, the remainder being of flaring form, as indicated in Fig. 2. These lugs in some instances may be of a curved form, as indicated in dotted lines in Fig. 2, instead of the form already described, the object of the circular configuration being that the lugs are more easily constructed in this shape, as a rotating tool may be employed for this purpose. A suitable number of the said lugs are provided with headed studs, by which the cap-plate is partially secured in position, as will presently appear. The rear wall of the depressions is constituted by a bead or rib, *b*, formed integral with the body of the cutter-bar. The upper or rear portion of the said bar is provided on its front edge with an inclination or under-cut, C, under which is adapted to fit the rear edge of the cap-plate D. The said plate is provided, at intervals agreeing with the position of the studs *d*, with slots F, having one end thereof slightly enlarged, by means of which the plate is held down upon the shanks of the blades and over the studs. The said slots are slightly out of line with or divergent to the rear edge of the plate D, by which the plate is given a slight rearward movement, causing it to bind itself firmly under and against the under-cut C of the bar A. The plate D is also provided, near that end which connects with the eye-bar, with upwardly-extending dovetail lugs *f*, by which a connection is formed with the eye-bar E. This bar is provided on its under side with dovetail recesses which agree in size and position with the lugs on the plate D. It is further provided, as is also the plate D and the cutter-bar proper, with bolt-holes, in which are adapted to fit the bolts or screws *e*, whereby the parts are secured against displacement.

It is noticeable that by means of the under-

cut edge C and the correspondingly-shaped rear edge of the plate D a strong and firm union or connection of the cutter-bar and the said cap-plate is effected, the studs *d* serving
 5 to bring the plate to bear firmly upon the upper surfaces of the blades and against the under-cut C, thus, in connection with the angular edges of the lugs B, preventing the
 10 blades from displacement and rattling or shaking. The form of the cutter-bar proper, indicated in Fig. 4, (which, it will be observed, is provided with a rear overhanging portion,) is designed to be used in that class of machines
 15 wherein the rear ends or shanks of the blades are allowed to project to the rear of the cutter-bar, for the purpose of forming a slide which travels in ways adapted for the purpose.

It is also noticeable that by my invention I avoid the use of boring or otherwise forming
 20 apertures in the cutting-blades, thus reducing the cost of manufacture and preventing the liability of the blades to break.

Having thus fully described my invention, what I claim as new, and desire to secure by
 25 Letters Patent, is—

1. The combination of the cutter-bar provided with a series of alternating blade-seats or depressions and angular lugs on its upper side, and an upper rear portion having an
 30 under-cut edge with the blades having shanks to fit the angles of the lugs, and the cap-plate adapted to fit said under-cut edge, and be secured to the lugs by means of studs, substantially as shown and described.

2. The harvester cutter-bar provided with 35 a series of alternating depressions or blade-seats, and lugs whose opposite walls form dovetail and flaring outlines to said depressions, a shoulder and an upper rear portion having an uncut edge, substantially as shown 40 and described.

3. The combination of the cutter-bar provided with an overturned end and the locking-plate with dovetail lugs, of the eye-bar having recesses adapted to fit the lugs on the 45 plate, and means for securing it in position, substantially as shown and described.

4. The combination, with the cutter-bar provided with headed studs and a rear portion having an under-cut edge, of the locking- 50 plate provided with divergent slots and adapted to fit over said studs and beneath the under-cut edge, substantially as shown and described.

5. The combination, in a cutter-bar, of a bar proper provided with an overturned end, a 55 rear under-cut portion, headed studs, and a series of alternating blade-seats, and lugs with the cap-plate, having divergent slots and dovetail lugs, and the eye-bar provided with dovetail slots, the whole being constructed 60 substantially as shown and described.

In testimony whereof I affix my signature, in presence of two witnesses, this 13th day of January, 1883.

C. H. MYERS.

Witnesses:

WM. B. HOTCHKISS,
 JOHN H. HOLMES.