

(No Model.)

J. MOORE & A. J. O'LEARY.

CLAW BAR.

No. 287,561.

Patented Oct. 30, 1883.

Fig. 1.

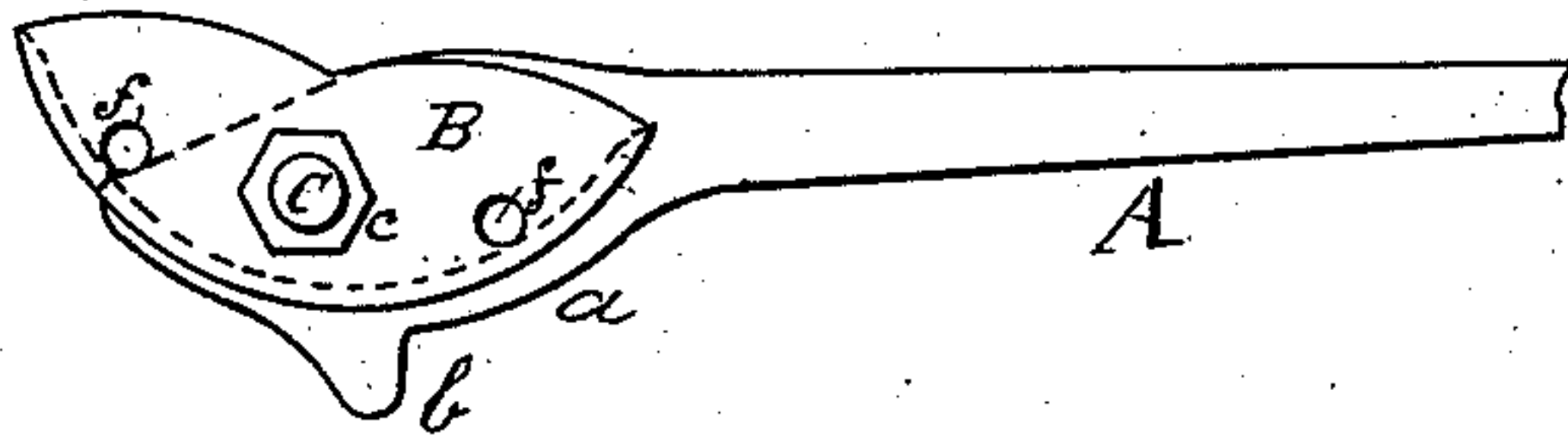


Fig. 2.

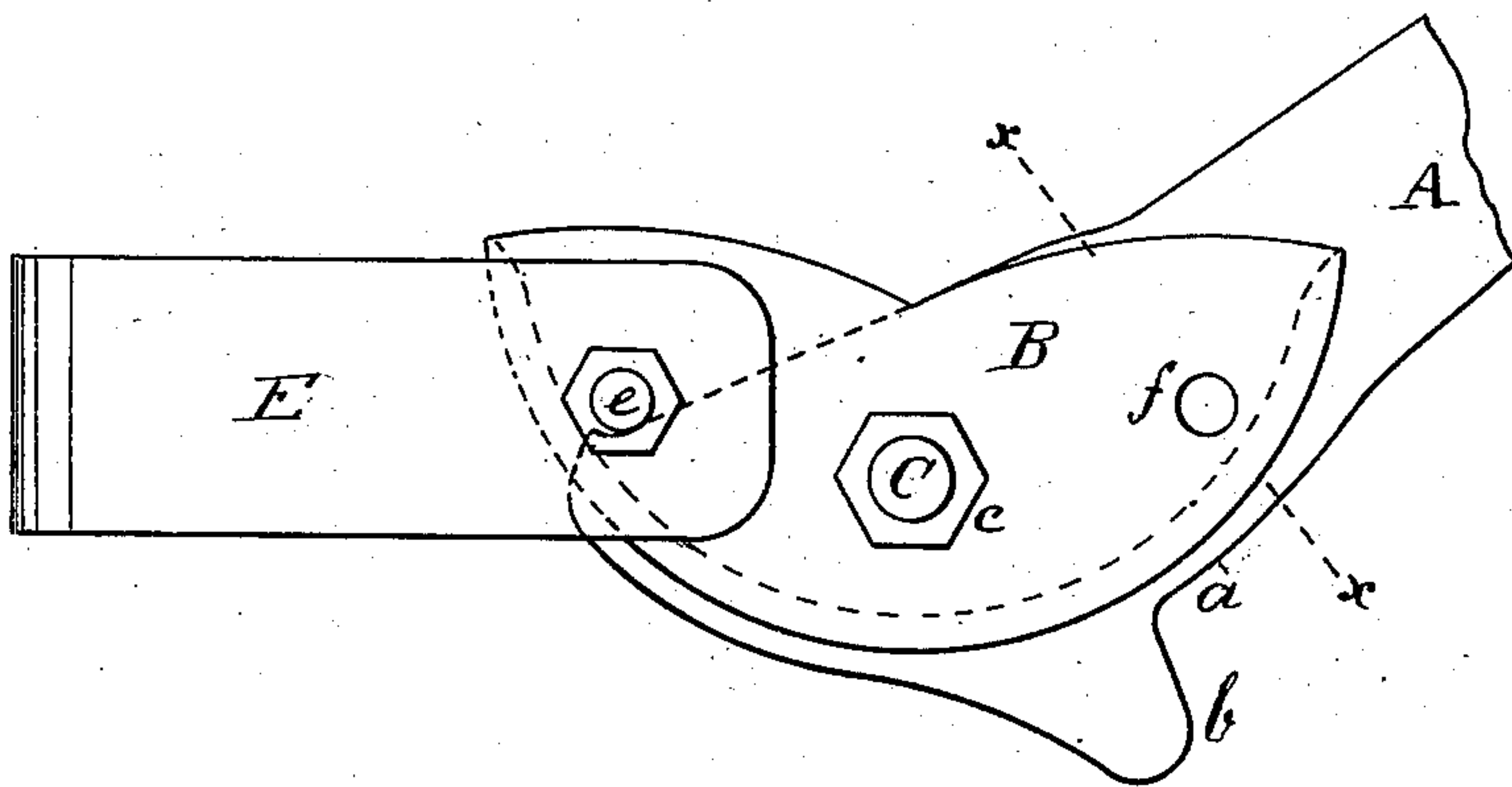


Fig. 3.

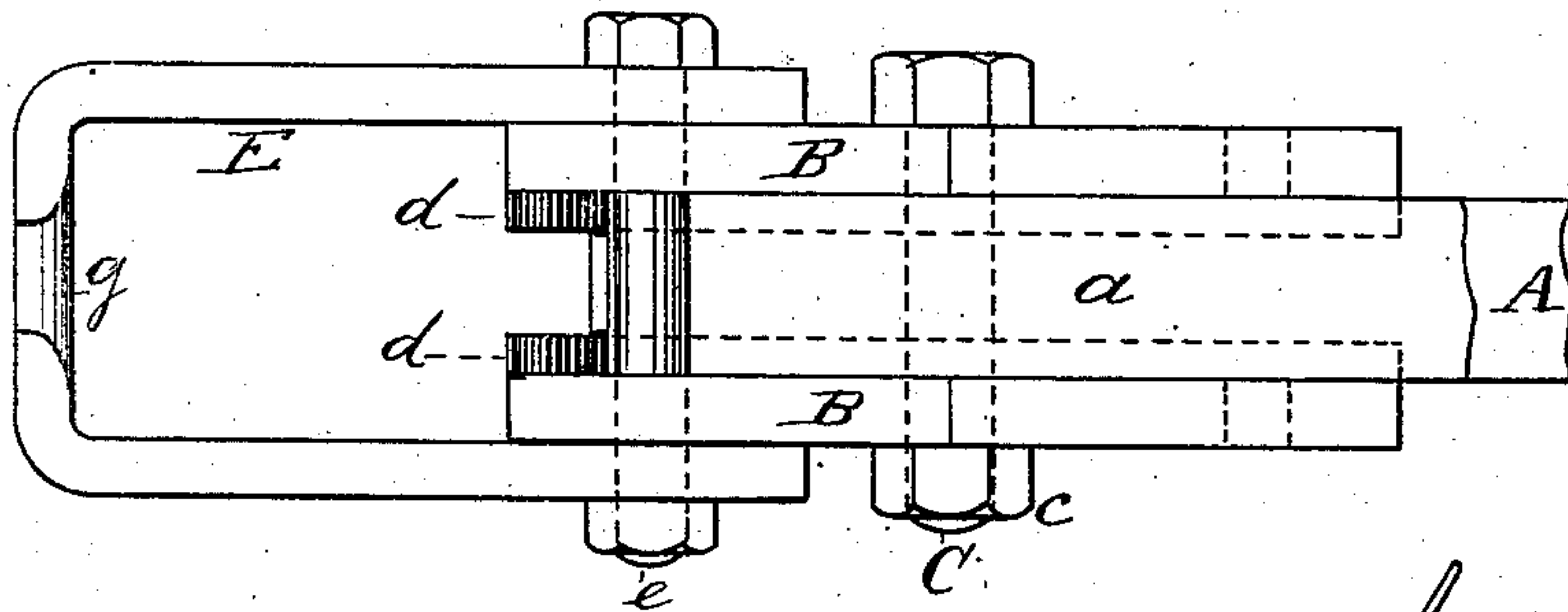


Fig. 4.

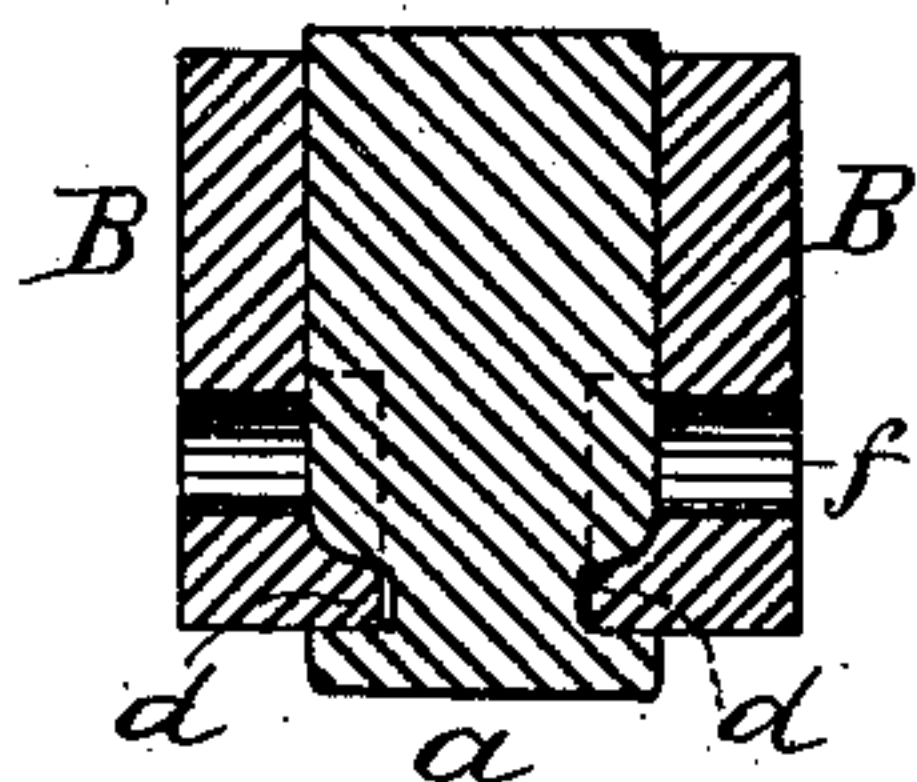


Fig. 5.

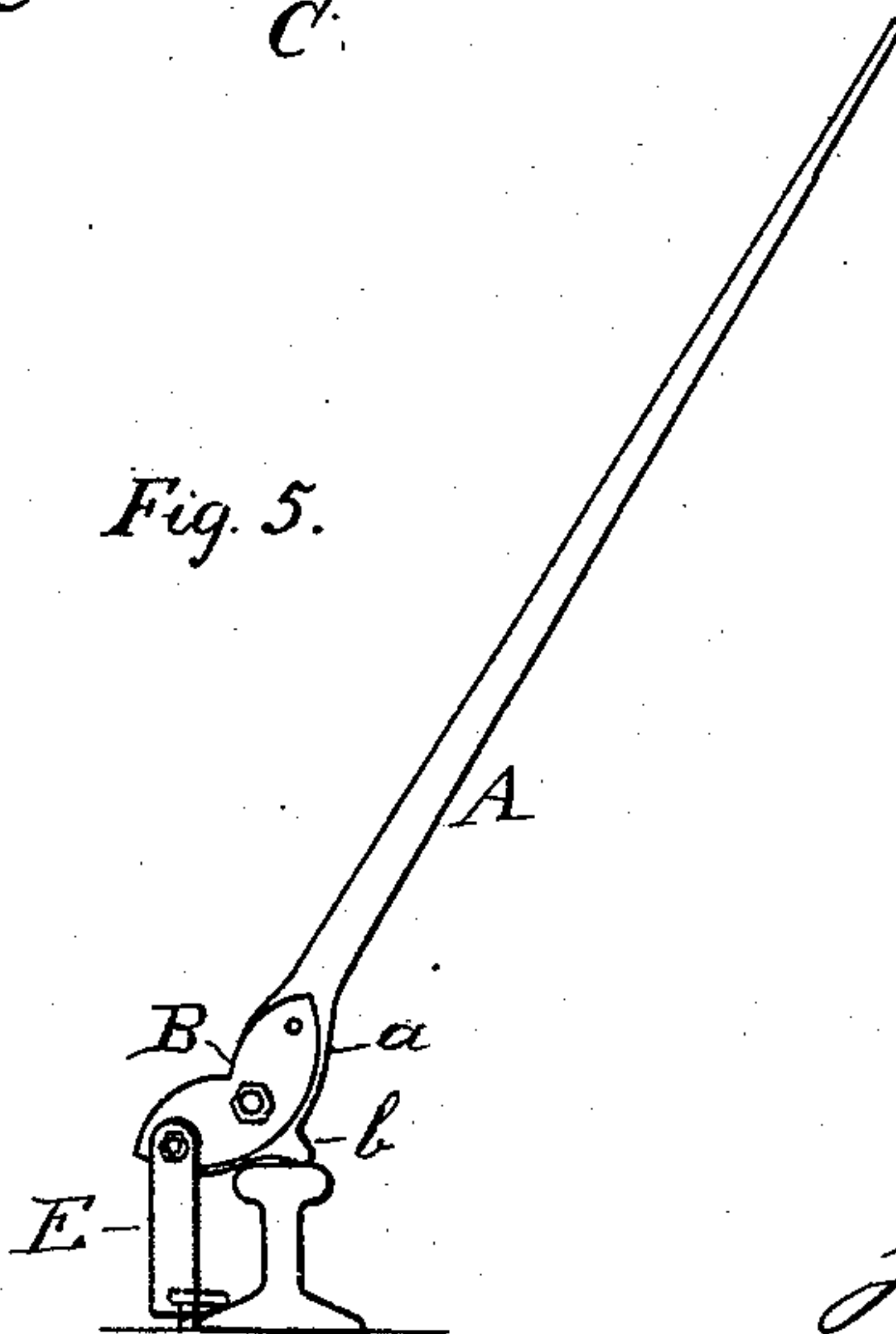
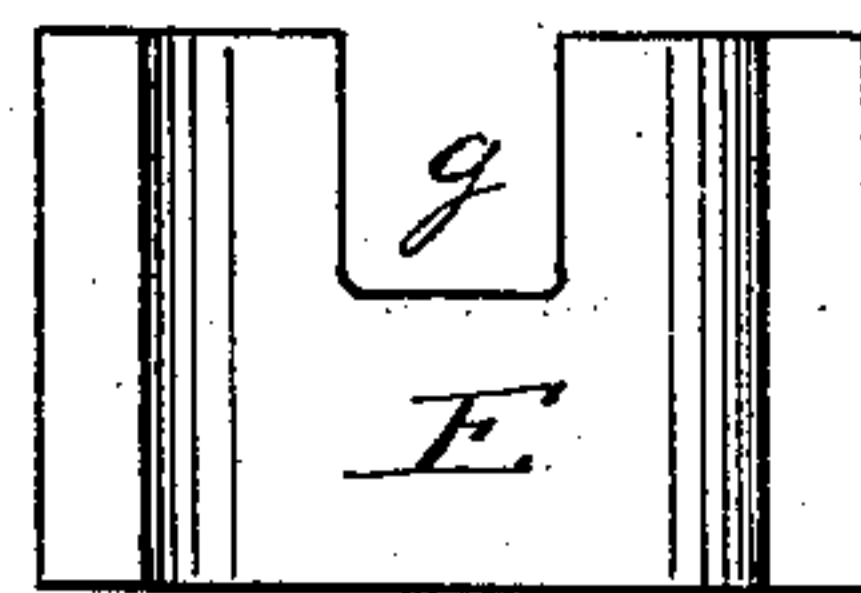


Fig. 6.



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# UNITED STATES PATENT OFFICE.

JOHN MOORE AND ARTHUR J. O'LEARY, OF CHICAGO, ILLINOIS.

## CLAW-BAR.

SPECIFICATION forming part of Letters Patent No. 287,561, dated October 30, 1883.

Application filed June 12, 1883. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN MOORE and ARTHUR J. O'LEARY, citizens of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Claw-Bars, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to implements for extracting spikes that hold the railway-rails to the cross-ties; and it is our object to construct such an implement in a manner to have great strength at the points most needed—where it grasps the spike-head—to enable the pulling of a spike without bending it; to have claw-plates that are reversible, for using the other end after one end has been worn, and that is provided with an attachment for pulling spikes from narrow corners between rails.

Our invention, therefore, consists of the novel devices and combinations of devices hereinafter described and specifically claimed.

In the drawings, Figure 1 represents an elevation of the claw-bar; Fig. 2, an elevation of the claw-bar head with attachment; Fig. 3, a plan view of the same; Fig. 4, a section on line *x x* in Fig. 2; Fig. 5, the draw-bar with attachment in position for pulling a spike, and Fig. 6 an end view of the attachment.

Corresponding letters in the several figures of the drawings designate like parts.

A denotes the bar, the head *a* of which is provided with a heel, *b*, that forms the fulcrum on which such bar will rest and swing with pulling a spike. Against each side of the head *a* of this bar is detachably secured a claw-plate, B, by a bolt, C, that is passed through a hole in such claw-bar head and through a central hole in the claw-plates B, and is tightened by a nut, *c*. These claw-plates B are formed each a segment of a circle, and have to the edge of their arc each an inwardly-projecting flange, *d*, that extends from end to end in a manner that both ends of such plates are shaped alike, and that such plates can be reversed for either ends to engage the spikes to be pulled. The flanges *d* at the ends of the two plates B that project will engage the spike under its head, and will grasp it rigidly for extracting. The claw-plates only project

a short distance beyond the end of head *a*, or about sufficient for grasping a spike-head, and the remaining flanges *d* of such plates enter corresponding segmental grooves or cavities in the sides of the draw-bar head, and thus provide shoulders for holding the claw-plates rigid with a single bolt.

The bar as far as described is for pulling spikes along the track where is ample room for setting its heel upon the cross-tie and for swinging it without interfering with adjacent rails, while in places where switches, frogs, or crossings interfere with extracting of the spikes in the manner described, a stirrup-shaped strap, E, is coupled to the end of bar-head *a* by a bolt, *e*, passed through holes *f* in the claw-plates B, which stirrup has a notch, *g*, in one edge of its end, that will grasp the spike under its head, while the heel *b* of the bar is placed on top of the rail from which the spike is to be pulled, as shown in Fig. 5. In either case, with the claw-plates direct or with the stirrup attached, a spike is pulled perfectly perpendicular and without bending it, to be in condition for immediate use again.

The claw-plates B, as constructed each of a broad-faced plate having a spike-head-gripping flange to its bottom edge, give great strength and durability to the parts that are exposed to the utmost strain, and that in former bars for like purposes, in which the spike-head was grasped to be entirely above the claw-points, were constantly wearing and breaking. The flange *d* of each plate B entering a recess or circular groove the entire distance that such plates B bear against the sides of head *a*, such flanges form shoulders in such grooves that will hold the plates steady, and therefore a single bolt C is sufficient for securing them to the bar-head. Both ends of the claw-plates B being uniformly shaped, they can be reversed after one end has been worn, and thus frequent repairing is obviated.

The stirrup E can be carried by one of the track-layers in his pocket, to be instantly attached whenever necessary to pull a spike from a close place.

What we claim is—

1. A claw-bar lever having a head, grooved as described, in combination with two segmental plates, said plates provided with in-

wardly-projecting flanges adapted to engage a spike and to enter the grooves of the lever-head, as and for the purpose set forth.

2. The combination of a claw-bar lever and two segmental plates, the parts grooved and flanged, respectively, and held firmly but detachably together by a single bolt, as described and shown.

3. A grooved claw-bar lever and two flanged segmental plates, the parts held together by a single bolt, and in combination with a stirrup

notched on its lower end and detachably secured to said plates, as and for the purpose set forth.

In testimony whereof we affix our signatures 15 in presence of two witnesses.

JOHN MOORE.

ARTHUR J. O'LEARY.

Witnesses:

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