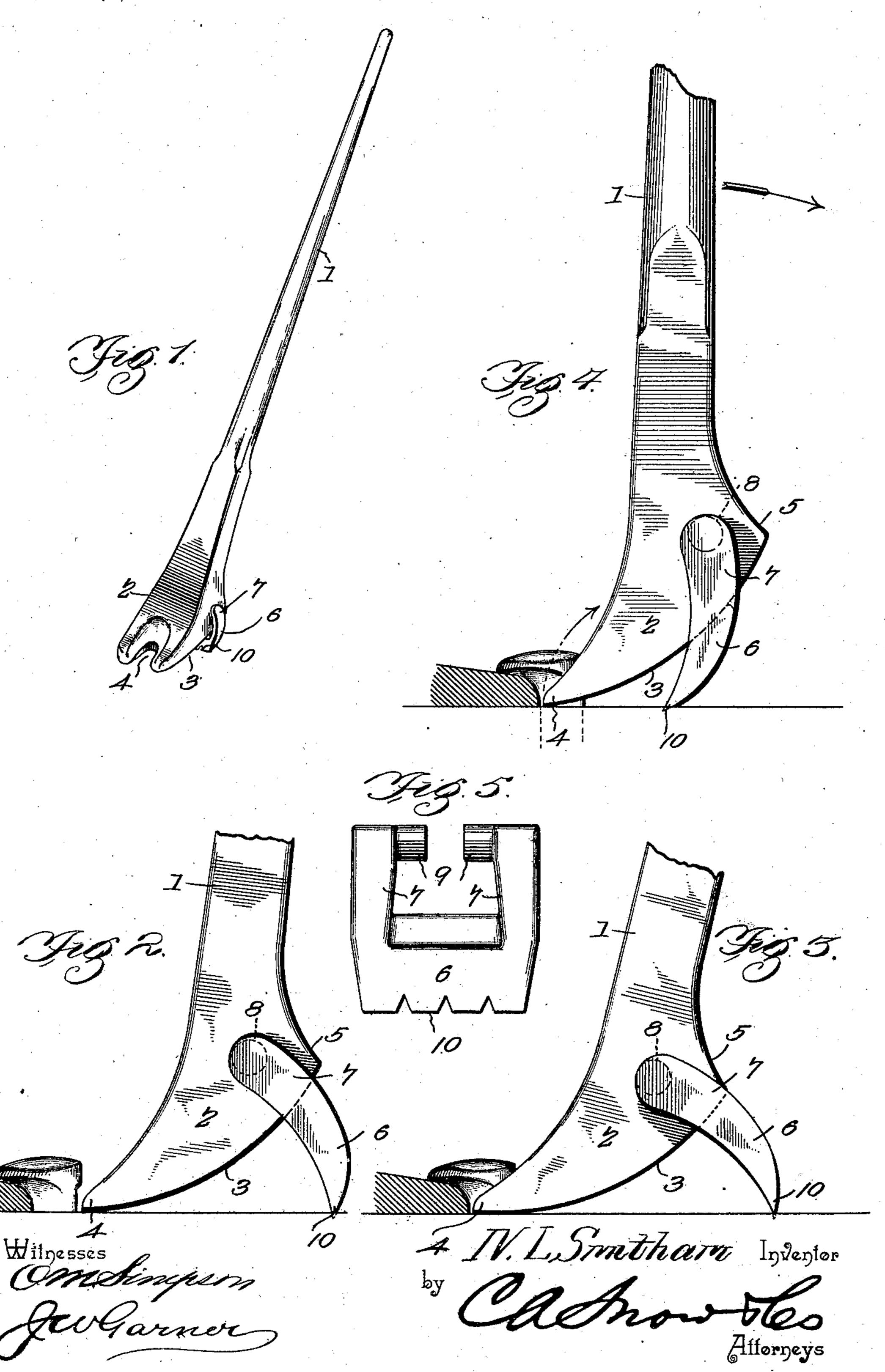
## N. L. SMITHAM.

## CLAW BAR FOR DRAWING RAILROAD SPIKES.

(Application filed June 3, 1901.)

(No Model.)



## United States Patent Office.

NICHOLAS L. SMITHAM, OF TERRELL, TEXAS.

## CLAW-BAR FOR DRAWING RAILROAD-SPIKES.

SPECIFICATION forming part of Letters Patent No. 686,155, dated November 5, 1901.

Application filed June 3, 1901. Serial No. 62,942. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS L. SMITHAM, a citizen of the United States, residing at Terrell, in the county of Kaufman and State of 5 Texas, have invented a new and useful Claw-Bar for Drawing Railroad-Spikes, of which the following is a specification.

My invention is an improved claw-bar for drawing railroad-spikes, the object of my in-10 vention being to provide the bar with a pivoted fulcrum-piece which is adapted to facilitate the engagement of the toe or claw of the bar with the head of a spike, to increase the leverage of the bar in withdrawing the 5 spike, and to provide means to relieve the pivots or trunnions of the fulcrum-piece of stress when the bar is being operated to draw a spike.

To these ends my invention consists in the peculiar construction and combination of de-20 vices hereinafter fully set forth and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a claw-bar constructed in accordance with my invention. Fig. 2 is a side elevation of the same in its initial po-25 sition for operation prior to the engagement of the claw or toe of the bar with the head of a spike. Fig. 3 is a similar view of the same, showing the claw or toe of the bar in engagement with the head of a spike. Fig. 4 is a 30 similar view showing the claw-bar disposed in position to withdraw the spike with the fulcrum-piece swung under the foot of the clawbar and with the latter bearing on the fulcrum-piece and the pivots or trunnions of the 35 fulcrum-piece relieved of stress. Fig. 5 is a detail view of the fulcrum-piece.

In the embodiment of my invention I provide the bar 1 with a foot 2, the lower side of which is curved, as at 3. At the front end or 40 toe of the foot is a claw 4, which is suitably fashioned to adapt the same for engagement with the head of a railway-spike. The foot is further provided with the heel 5, which projects in rear of the bar 1. I also provide a 45 fulcrum-piece 6. The same is of the curved | be swung forward under and in contact with form here shown and is provided on its upper side with curved arms 7, which are disposed on opposite sides of the heel 5 and pivoted thereto, as at 8. The pivots may be of 50 any suitable construction. As here shown, the arms 7 are formed integrally with the fulcrum-piece and are provided with trunnions

9, which engage openings with which the claw-bar is provided. It will be observed by reference to the drawings that the fulcrum- 55 piece is adapted to be swung outwardly in rear of the heel of the claw-bar and is also adapted to be moved forwardly under and in contact with the foot of the claw-bar.

In operation my improved claw-bar is ini- 60 tially disposed, as shown in Fig. 2, with the fulcrum-piece turned rearwardly and disposed at a suitable angle under the heel of the clawbar and with its biting lower edge 10 embedded in the upper side of the cross-tie. 65 The toe or claw of the draw-bar may then by turning the upper end of the claw-bar rearwardly, as shown in Fig. 3, be brought into engagement with the head of the spike. With the toe of the claw-bar thus in engagement 70 with the head of the spike the claw-bar is turned upwardly to approximately a vertical position and the fulcrum-piece moved forwardly under the same until it contacts with the lower side of the foot of the claw-bar, as 75 shown in Fig. 4. Thereby the pivots or trunnions of the fulcrum-piece are relieved of all stress. The fulcrum-piece affords increased leverage for the claw-bar, and by then operating the latter as indicated by the arrows in 80 Fig. 4 the claw-bar readily withdraws the spike.

It will be understood from an inspection of Fig. 4 of the drawings that after the fulcrumpiece has been moved forwardly under and 85 in contact with the lower side of the foot of the claw-bar said fulcrum-piece rocks upon its lower edge 10 with the claw-bar as the upper end of the latter is moved rearwardly in causing its claws to draw the spike.

Having thus described my invention, I claim-

1. A claw-bar of the class described having a foot with a rearwardly-projecting heel, a forwardly - curved fulcrum - piece pivotally 95 connected to the heel thereof, and adapted to the foot of the claw-bar to relieve the pivots of the fulcrum-piece of stress and to afford leverage for the claw-bar when withdrawing 100 a spike, said fulcrum-piece when moved forward under and in contact with the lower side of the claw-bar foot forming a rocking support for the claw-bar, which turns with the

latter when drawing a spike, substantially as described.

2. A claw-bar of the class described, having a foot provided with a heel and toe, and a forwardly - curved fulcrum - piece pivotally connected to the heel of the claw-bar and adapted to be swung forwardly under the foot of the claw-bar and to contact therewith prior to the operation of the bar in withdrawing the spike, to relieve the pivots of the fulcrumpiece of stress and to afford leverage for the claw-bar, said fulcrum-piece, when moved

forward under and in contact with the lower side of the claw-bar foot forming a rocking support for the claw-bar, which turns with 15 the latter when drawing a spike, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

NICHOLAS L. SMITHAM.

Witnesses:

JOSEPH H. SMITHAM, JOHN HINES.