(No Model.)

W. McCARTHY.

CLAW BAR.

No. 566,606. Patented Aug. 25, 1896.

FIG. 1.

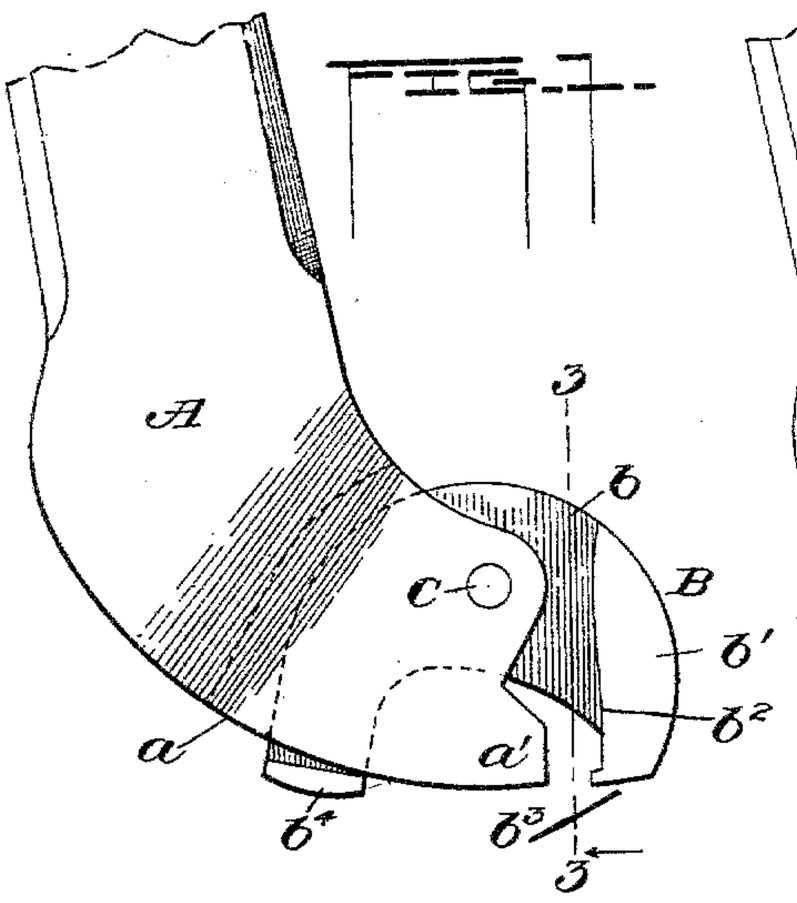


FIG. 5.

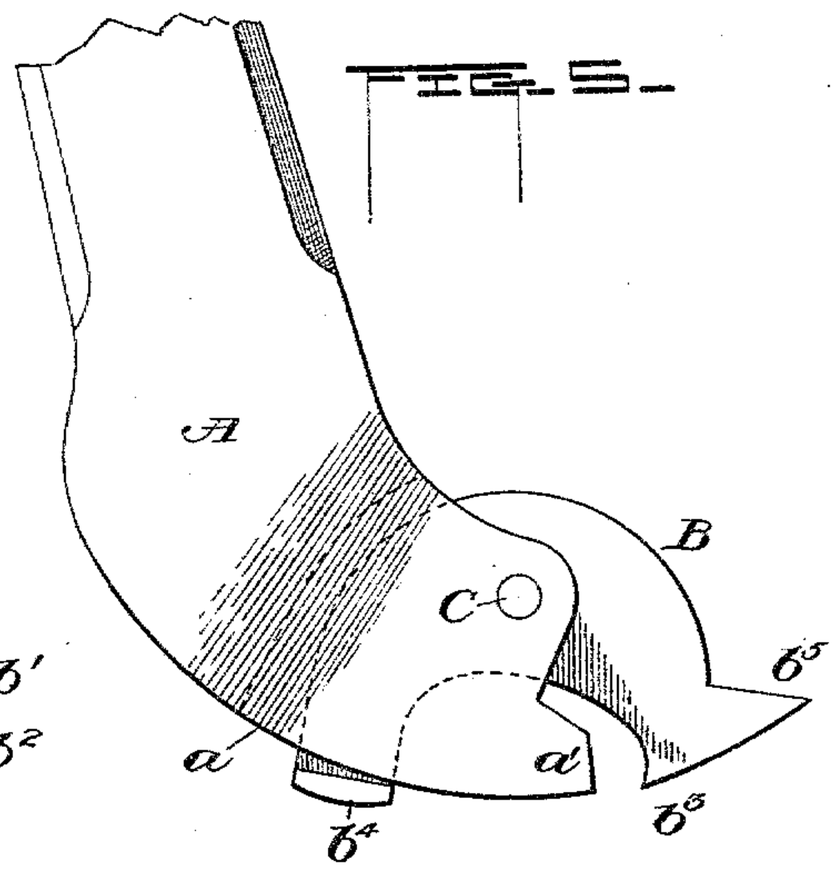


FIG. 2.

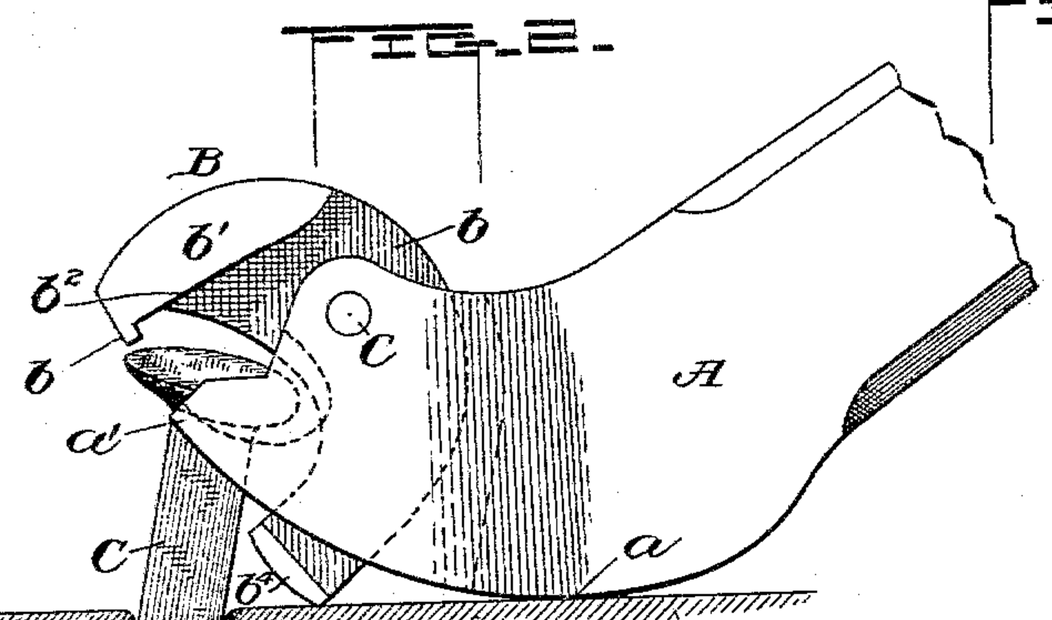


FIG. 3.

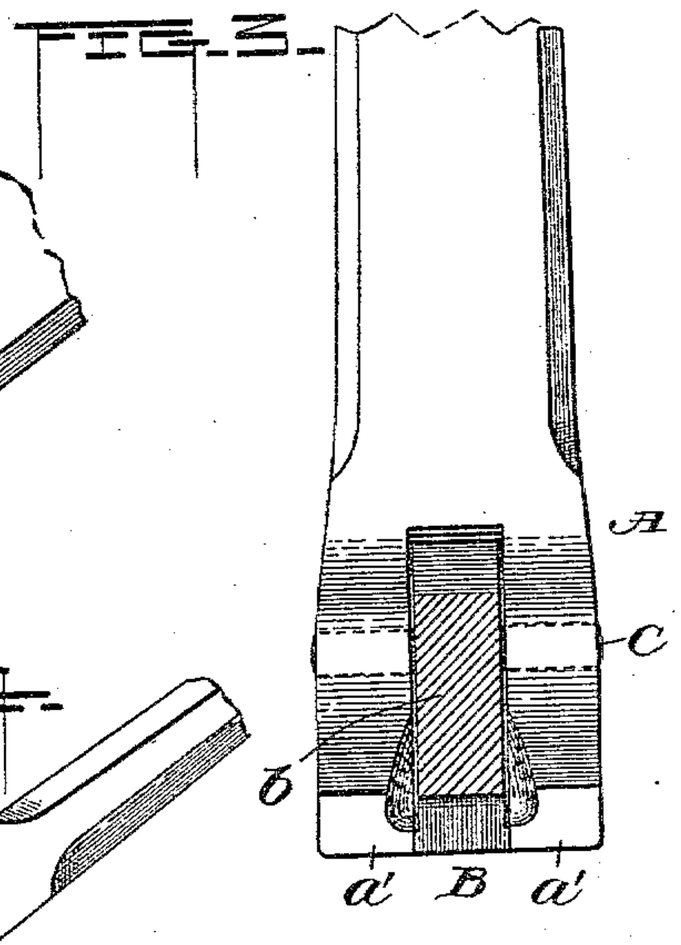


FIG. 4.

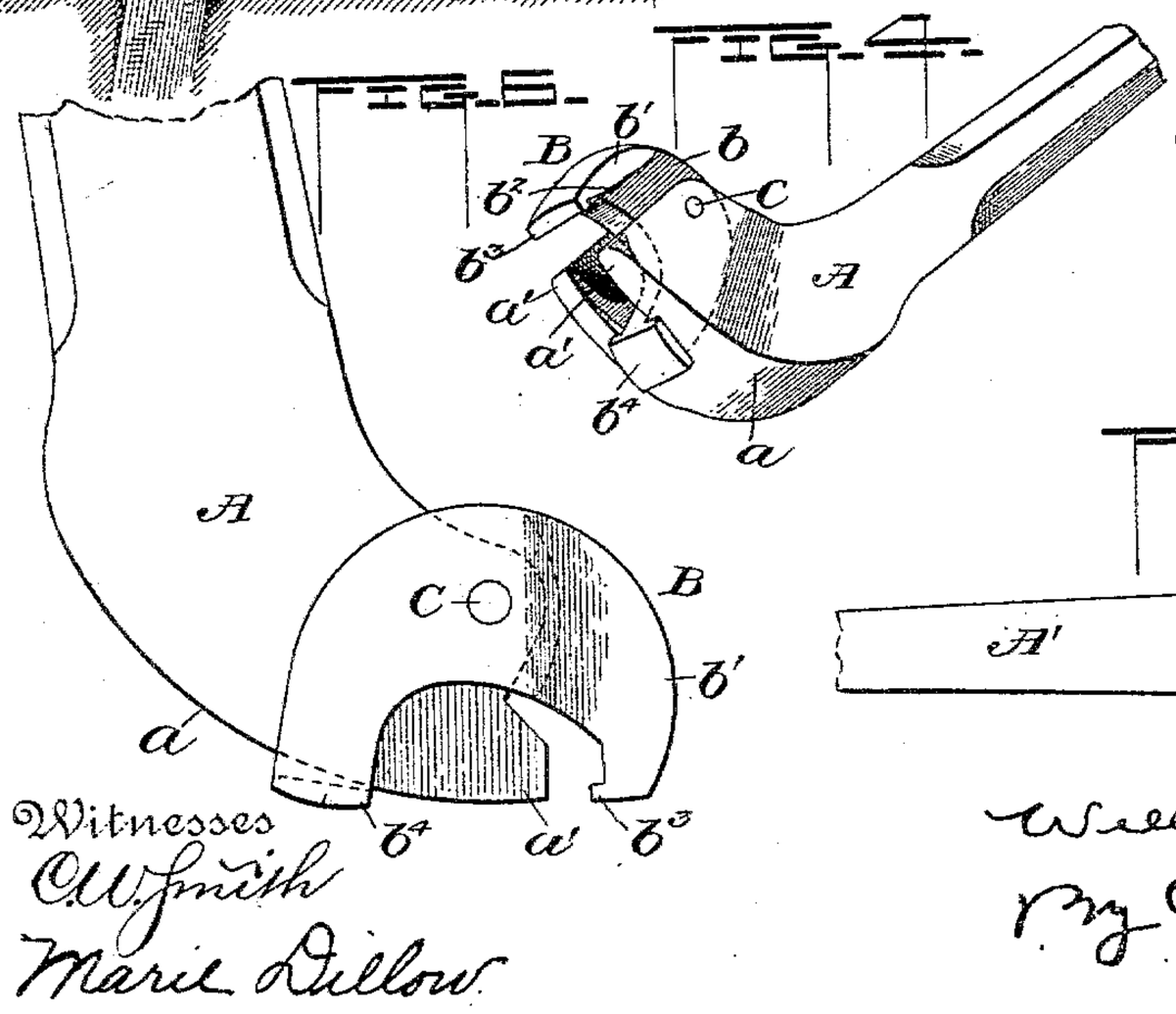
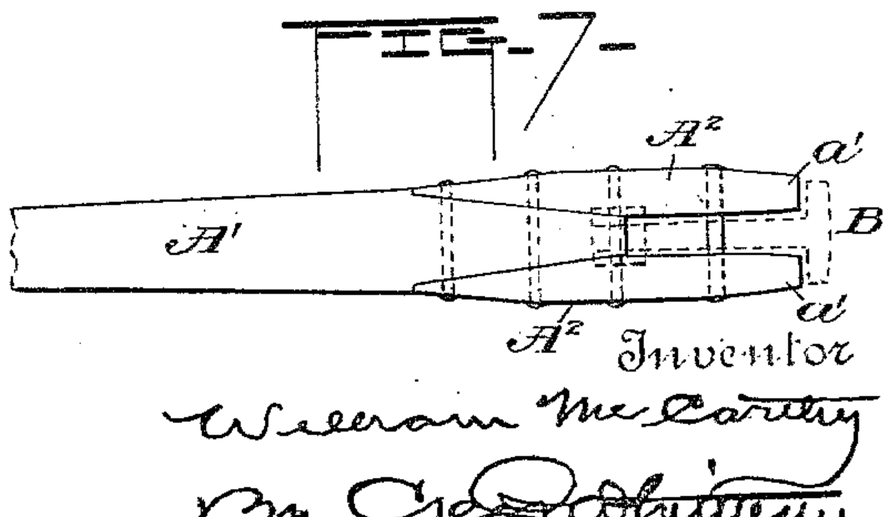


FIG. 7.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM McCARTHY, OF WYTHEVILLE, VIRGINIA.

CLAW-BAR.

SPECIFICATION forming part of Letters Patent No. 566,606, dated August 25, 1896.

Application filed January 27, 1896. Serial No. 577,030. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM MCCARTHY, a citizen of the United States, residing at Wytheville, in the county of Wythe and State of Virginia, have invented certain new and useful Improvements in Claw-Bars; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to claw-bars for the use of railroad-track repairers and others, and its object is to provide a claw-bar which will pull a spike without bending or breaking it.

In claw-bars heretofore made a pivoted hook has been used to engage with the head of the spike to supplement the action of the claws; but so far as my experience goes I have found that such bars bend the spikes or pull their heads off, thereby rendering them worthless.

My improved claw-bar has a pivoted hook or dog which engages with the spike to start it and draw it a short distance—in practice about one inch. The hook then disengages itself automatically, and the spike is drawn for the rest of its length by the claws on the claw-bar, as in the operation of the ordinary claw-bar.

In the drawings, Figure 1 is a side elevation of the lower end of my improved claw-bar. Fig. 2 shows how the hook lets go the spike when started. Fig. 3 is a front view, the hook being shown in section on line 3 3, Fig. 1. Fig. 4 is a perspective view. Figs. 5, 6, and 7 show modifications.

The claw-bar is substantially of the usual construction, having a thick strong heel A, formed with a curved under face a to serve as a rocking fulcrum. This heel is slotted to form two claws a', adapted to pass under the head of the spike on each side of the shank.

In the slot is located the hook, latch, or dog B, having a thin body b and a thickened head b', forming shoulders b^2 opposite the claws a' and having a blunt edge b^3 to fit under the head of the spike. The tail of the hook projects slightly below the under surface of the heel of the claw-bar and is preferably provided with a flat enlargement b^4 to give a broad bearing on the tie. A pivot-pin C passes through the nose of the claw-bar and the body b of the hook.

The operation of my improved claw-bar is as follows: The claws are engaged with the head of the spike D as usual, and the edge b^3 of the hook is caught under the opposite side of the spike-head. On pressing down the handle of the bar the weight is brought upon the end b^4 of the hook, thereby forcing the edge b^3 powerfully under and against the spike-head, which is thus firmly nipped between the claws a' and the hook. As the bar rolls on its heel or fulcrum a it starts the spike and pulls it by means of the claws and hook until the spike has lifted about an inch, when the bar will have rolled so far back that the tail of the hook is relieved of the weight, whereupon the strain on the hook automatically disengages it from the spike-head, and the pulling of the spike is completed by means of the claws alone, as in the ordinary claw-bar. This mode of drawing the spike avoids bending or breaking it, this result being due to the automatic release of the hook, as set forth. It is this feature of my invention which constitutes its main novelty.

In case the spike has no head, the hook bites into the shank with sufficient force to hold it firmly, and after the spike has been partly drawn it can be gripped between one of the claws a' and the shoulder b^2 on the head of the hook. A pull on the handle of the bar will cause the spike to be raised about an inch, and by repetitions of this operation the spike can be entirely drawn from the tie.

Instead of placing the hook between the claws a', I may arrange the body b at one side of the bar, as shown in Fig. 6, or it may be bifurcated and straddle the bar, a construction which would be represented also by Fig. 6.

To enable the tool to be used as a crowbar the hook may have a beak b^5 projecting out in front, as shown in Fig. 5. This enables the bar to be used to raise frogs, switches, rails, or any other object, and will be found of great practical value in railway-repair work.

The modification shown in Fig. 7 is a bar having a handle A′ made separate from the

claws, which are in the form of cheek-pieces A^2, riveted to the handle on each side. When used with my improved hook B, a space is left between the pieces A^2, as shown, to receive the body *b* of said hook. Each piece has a claw *a'* formed on it, and the advantage of this construction is that if one claw breaks the bar can be easily and cheaply repaired. Any of the hooks shown can be used with this bar, and without any hook it is regarded as an improvement upon the ordinary integral claw-bar.

A great advantage of my improved claw-bar is that it will pull spikes between guard-rail and stock-rail, or around frogs and switches, and in cuts, tunnels, and on bridges and other confined places. The ordinary claw-bar must be used at right angles to the rail, and hence it is not available when there is but little room outside the track; but my bar can be used lengthwise of the track, and therefore it is especially valuable in the cases mentioned above.

Having thus described my invention, what I claim is—

1. A claw-bar provided with a pivoted hook having one end adapted to engage with a spike and the other end projecting below the heel of the claw-bar and forming the forward part of the rocking fulcrum, substantially as described.

2. A claw-bar provided with a pivoted hook having one end adapted to coact with the claws on the bar and the other end projecting below the heel of the bar at a point slightly in the rear of said claws and forming the forward part of the rocking fulcrum, substantially as described.

3. A claw-bar having a rounded heel, in combination with a hook pivoted to said bar and having its rear end depending below said heel at a point near the claws of the bar and forming the forward part of the rocking fulcrum, substantially as described.

4. The combination with a claw-bar having the claws *a'*, of a hook pivoted between said claws, and having a head *b'* forming shoulders b^2 to coact with said claws, a blunt edge b^3, and a tail passing between the claws and having a flat enlargement b^4 just below the heel of the claw-bar, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WM. McCARTHY.

Witnesses:
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J. A. SHELTON.