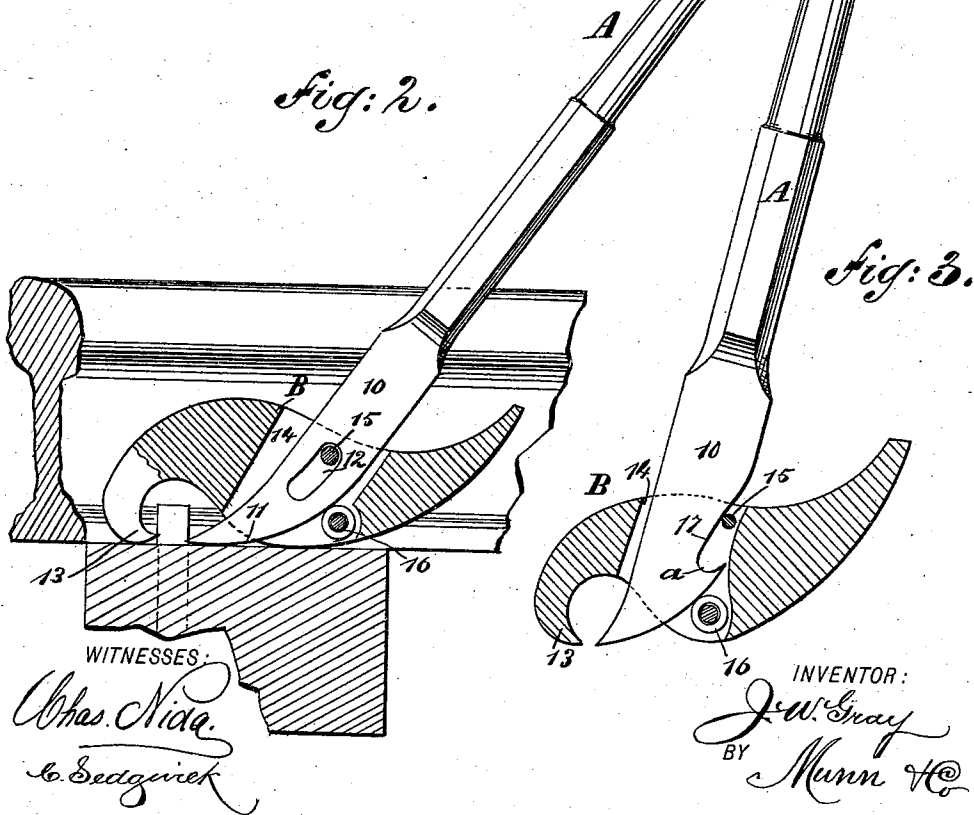
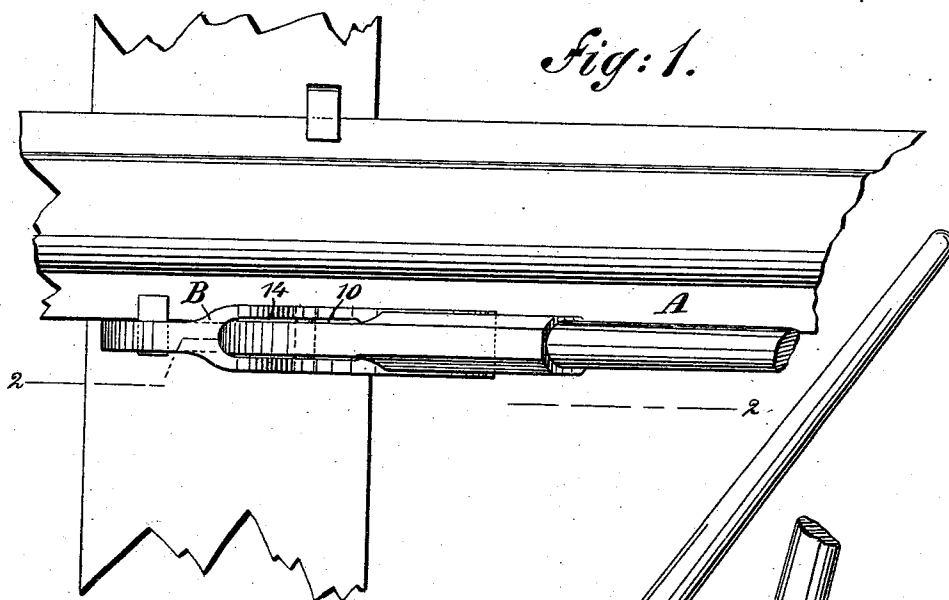


(No Model.)

J. W. GRAY.
CLAW BAR.

No. 478,855.

Patented July 12, 1892.



UNITED STATES PATENT OFFICE.

JAMES W. GRAY, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-HALF TO
JOHN P. HEINDELL, OF SAME PLACE.

CLAW-BAR.

SPECIFICATION forming part of Letters Patent No. 478,855, dated July 12, 1892.

Application filed April 24, 1891. Serial No. 390,265. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. GRAY, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Claw-Bars, of which the following is a full, clear, and exact description.

My invention relates to an improvement in claw-bars, and has for its object to provide an implement especially adapted for drawing spikes from railroad-rail ties and capable of speedy and convenient adjustment to any size of spike-head.

A further object of the invention is to provide a means whereby one of the clamping-jaws may be utilized as a fulcrum for the bar in drawing the spike, and also to so construct the implement that it will be light, durable, and economic.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the device, illustrated as applied to a spike. Fig. 2 is a section taken practically on the line 2 2 of Fig. 1; and Fig. 3 is a section through the pivoted jaw of a bar, illustrating a modification in the construction thereof.

The bar proper A is provided with a flattened lower end 10, the extremity of the said flattened lower end being curved slightly, as at 11. In the flattened portion of the bar a longitudinal slot 12 is preferably produced, and in connection with the bar A a clamping-jaw B is employed. The jaw B is curved, the extremities being carried in opposite directions, and the jaw is of greatest thickness at the central portion thereof. The rear end of the jaw is curved upward and its forward end is curved downward and slightly in the direction of the center of the jaw, forming thereby a beak 13. The central portion of the jaw is provided with an opening 14, which extends through from top to bottom. This opening is adapted to receive the lower or flattened

end of the bar A, and is considerably wider than the width of the bar, as shown in Fig. 2. The jaw is pivoted to the bar through the medium of a pin 15, attached to the jaw and passed through the slot 12 of the bar. In order that the movement of the bar in the jaw may be as free from friction as possible, a roller 16 is journaled in the lower portion of the jaw-opening 14, engaging with the end of the convex side of the bar, as is also best shown in Fig. 2.

In Fig. 3 I have illustrated a slight modification in the construction of the bar. The jaw is practically of the same construction as heretofore described; but the bar, instead of being provided with the slot 12, has an inclined recess 17 formed in the rear or lower edge of the flattened portion 10, the said recess being so shaped that a pocket *a* is produced in the lower wall, and the jaw is pivoted to the bar by passing its pin 15 in engagement with the wall of the recess 17, and the bar is prevented from being lifted from engagement with the jaw by reason of the pin 15 entering the pocket *a*. The downward adjustment of the bar is not in the least interfered with, and the friction-roller 16 is also employed in connection with this form of the device. I desire it, however, to be understood that the friction-roller may be dispensed with if in practice it is found desirable.

It is evident from the foregoing description that the body-bar is readily adjustable in the clamping-jaw and that the device will accommodate itself to different sizes of spike-heads. The manipulation of the device is very convenient and expeditious, as the beak end of the clamping-jaw is made to engage with one side of the spike-head, the jaw resting upon the tie, as shown in Fig. 2, and the body-bar is thus pushed downward until it engages with the opposite side of the spike-head. This engagement having been secured, when the operator presses downward upon the upper end of the body-bar, employing the rear portion of the clamping-jaw as a fulcrum, the spike is neatly and cleanly drawn. The beak 13 of the clamping-jaw is so shaped that the lower extremity of the body-bar is within the plane of the outer surface of the beak.

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

1. The combination, with the jaw curved
5 on its under side to rock and having its forward end curved downward and inward to form a beak and a vertical longitudinal slot extending through the jaw in rear of its beak, of the bar extending downward through the
10 slot, having a sliding and pivotal movement therein and having its lower end curved forward toward the opposed beak 13, substantially as shown and described.

2. A claw-bar consisting of a body-bar having
15 its lower end forwardly curved, a jaw loosely and adjustably pivoted upon the lower end of the bar and having its ends curved in opposite directions, the rear end upward and the forward end downward and rearward and
20 forming a beak opposite the lower extremity of the body-bar, and a friction-roller jour-

naled in the jaw and engaging the rear edge of the body-bar, as and for the purpose specified.

3. The combination, with a body-bar hav- 25
ing its lower extremity forwardly curved, of a clamping-jaw curved at its extremities in opposite directions, the rear end upward and the forward end downward and inward, forming a beak, the said jaw being also provided 30
with a central opening extending through from top to bottom, a pivot-pin passed through the jaw and an opening in the body-bar, and a friction-roller journaled in the clamping-jaw and engaging with the lower rear edge of 35
the body-bar, as and for the purpose specified.

JAMES W. GRAY.

Witnesses:

J. FRED. ACKER,
C. SEDGWICK.