No. 785,563. PATENTED MAR. 21, 1905.

H. A. MEIKRANTZ.

CLAW BAR FOR RAILROAD SPIKES.

APPLICATION FILED MAR. 29, 1904.

Fig. 1.

Fig. 2.

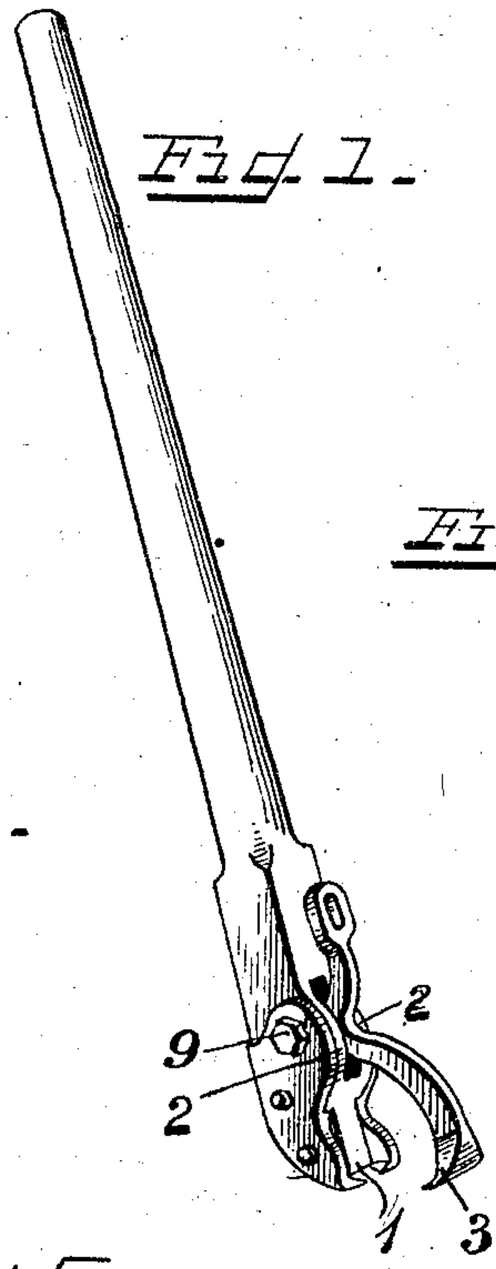


Fig. 3.

Fig. 5.

Fig. 4.

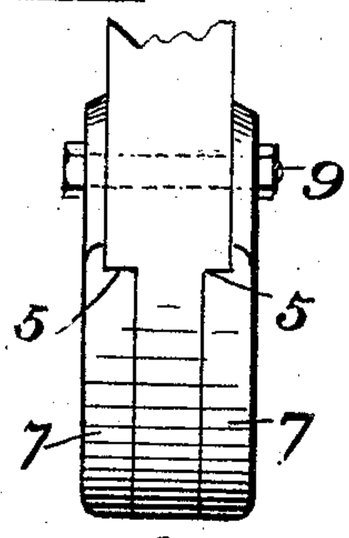


Fig. 5a.

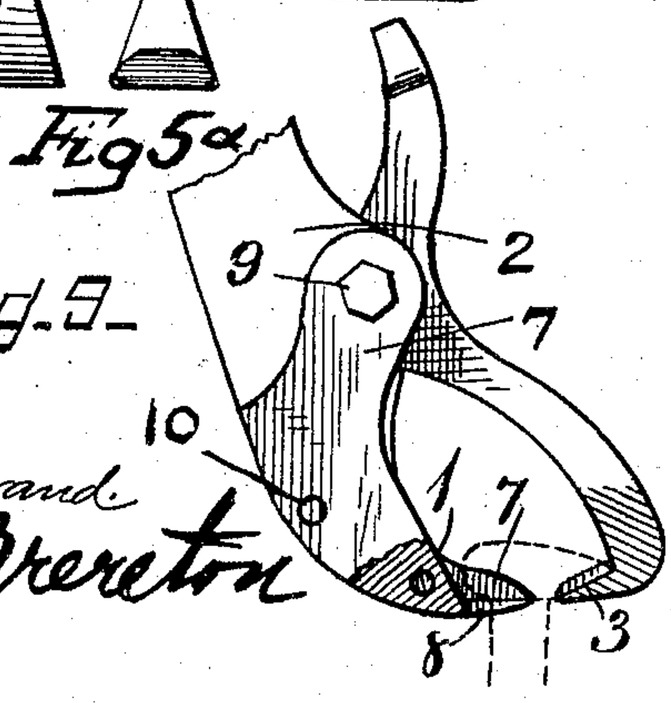


Fig. 9.

Fig. 7.

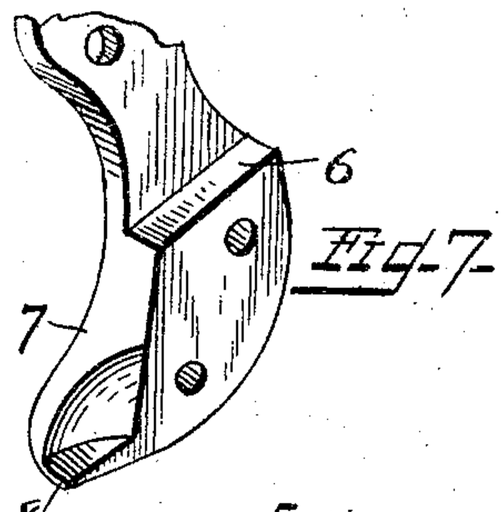
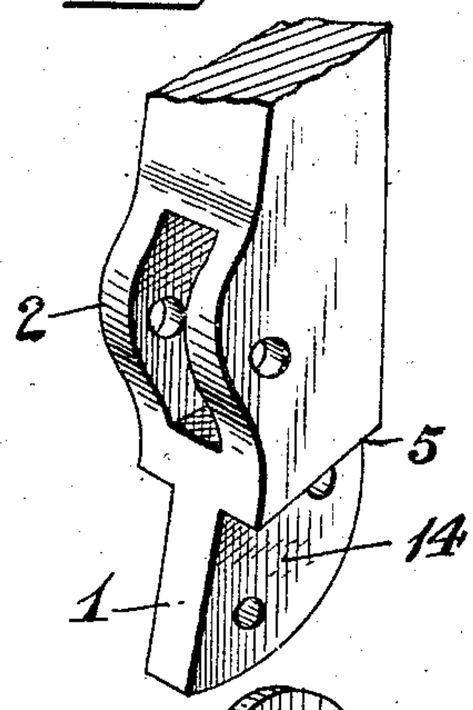


Fig. 6.



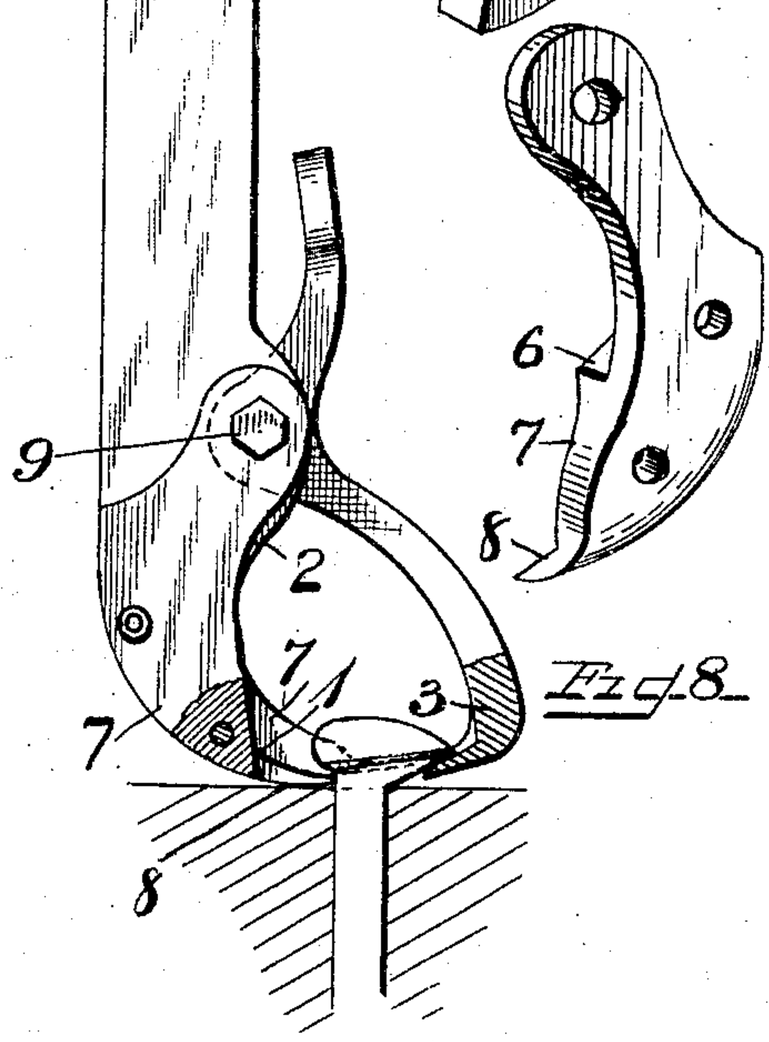


Fig. 8.

Witnesses

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No. 785,563. Patented March 21, 1905.

UNITED STATES PATENT OFFICE.

HENRY A. MEIKRANTZ, OF WAPWALLOPEN, PENNSYLVANIA.

CLAW-BAR FOR RAILROAD-SPIKES.

SPECIFICATION forming part of Letters Patent No. 785,563, dated March 21, 1905.

Application filed March 29, 1904. Serial No. 200,551.

To all whom it may concern:

Be it known that I, HENRY A. MEIKRANTZ, a citizen of the United States, residing at Wapwallopen, in the county of Luzerne, State of Pennsylvania, have invented certain new and useful Improvements in Claw-Bars for Railroad-Spikes, of which the following is a description, reference being had to the accompanying drawings and to the figures of reference marked thereon.

This invention relates to improvements in claw-bars, and particularly to tools of that class employed in railway construction and repair-work where rail-spikes must be removed.

The principal object of the invention is to provide a device of this class in which the spike-head may be caught and held at all points of the circumference, and thus lessen danger of breakage of the claw-bar and spike and the danger of slipping of the bar or flying of the spike-head, which at times occurs when ordinary bars are used.

A still further object of the invention is to provide a device of this character in which provision is made for the ready repair of the claw-bar should accident happen when a construction or repair gang is at work at a point distant from a blacksmith-shop or depot of supply, and in this connection a further object is to provide a construction of bar in which the bar is made of parts interchangeable in their character and renewable at minimum expense.

A still further object of the invention is to provide a claw-bar that is so constructed as to correspond to the contour of the head of the standard spike, and thus permit the firm gripping of the spike and its ready removal by an unskilled workman.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in the novel construction and combination of parts hereinafter described, illustrated in the accompanying drawings, and more particularly pointed out in the claim, it being understood that various changes in the form, proportions, and details of construction may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a perspective view of a claw-bar constructed in accordance with the invention. Fig. 2 is a side elevation of the same, portions of the claw being shown in section in order to more clearly illustrate the construction. Fig. 3 is a front elevation of the bar with the auxiliary front claw removed. Fig. 4 is a rear elevation of the lower portion of the bar. Figs. 5 and 5ª illustrate the construction of the auxiliary claw in front and rear elevation. Fig. 6 is a detail perspective view of the lower end of the claw-bar with the claw members detached. Figs. 7 and 8 are similar views of the side claw members. Fig. 9 is a detail view showing the manner in which the claw-bar conforms to the standard rail-spike.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

In claw-bars for the removal of driven fastening devices, and especially those used for the removal of rail-spikes when rails are to be removed, the claws frequently break and after the return of a construction-car many of the tools must be carried to the blacksmith's to be repointed. In the heavier bars this leads to considerable expense, the blacksmith being usually unable to devote the necessary time to the proper repair of the tools. A further disadvantage of the ordinary bar is that the ordinary unskilled laborer will exert purchase strain whenever he "feels" the spike without regard to the grip of the tool, and this in many cases ruins the claw-bar in a very short time. To overcome these and other difficulties which are apparent to those skilled in the art, I have devised a claw-bar in which the grip on the spike is such that the strain is evenly distributed and in the event of breakage any of the parts may be replaced in the tool-car.

The claw-bar forming the subject of the invention is of the extra-heavy type, and at its lower end the integral bar-body is reduced to a spike-engaging point 1 of a width about one-third of that of the bar proper, and an intermediate point of the bar is recessed between two outstanding lugs 2 for the reception of an auxiliary claw member 3, the construction of

which will be more fully described hereinafter. At the two sides of the spike-engaging point 1 are recesses 4, having shoulders 5, against which abut shoulders 6, formed on side claws 7, these being shaped at their lower ends to conform to the sides of the head of a standard spike, as indicated at 8. These side members, being reinforced by the abutting shoulders 5 and 6, extend thence upward on opposite sides of the claw-bar and in part are held thereto by a transverse pivot-bolt 9, but in addition to this are confined in place by rivets, bolts, or similar fastening devices 10, which follow the contour of the heel of the bar. These side claw members are renewable without the necessity of repointing the bar and are so shaped that they engage the opposite beveled sides of the spike-head, the claw-bar being used in the usual manner and introduced at the rear of the head or at that point farthest from the rail.

In many cases a spike-head is worn and cannot be gripped with an ordinary bar in such manner as to effect its withdrawal. To overcome this difficulty, the auxiliary claw 3 is employed.

The claw 3 is shaped to conform to the front or rail-gripping portion of a spike. As is well known, the standard spike is provided with a forward projection inclined a trifle less than the inclination of the foot of the rail and when driven firmly into a tie will hold the rail under ordinary conditions.

In the ordinary claw-bar the sides only of the spike are engaged, and if there is much oxidation the spike cannot be withdrawn. In the present case the auxiliary claw 3 has its lower spike-engaging face shaped to conform to that of the spike and is somewhat lower than the claw members proper. Its outer face is rounded, so that when placed in position it will ride out by contact with the rail or tie to proper position and then on the movement of claw-bar to effect withdrawal of the spike will engage with the forward end of the spike before there is any effectual purchase on said spike.

The claw 3 is pivoted on the bolt 9 and is held from lateral play by the side claws 7, and this claw member can also be renewed, if worn or broken, without recourse to the blacksmith.

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

A claw-bar having the opposite sides of its operating end provided with recesses, detachable side claws fitting in the recesses and having shoulders abutting against the upper walls of the recesses, said side claws being extended upward along the sides of the bar and having pivot-bolt-receiving openings in alinement with a similar opening in the bar, a pivot-bolt extending through said opening and serving as a securing device for the side claws, and an auxiliary claw member mounted on said pivot-bolt.

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

HENRY A. MEIKRANTZ.

Witnesses:
M. O. EDWARDS,
E. E. JONES.