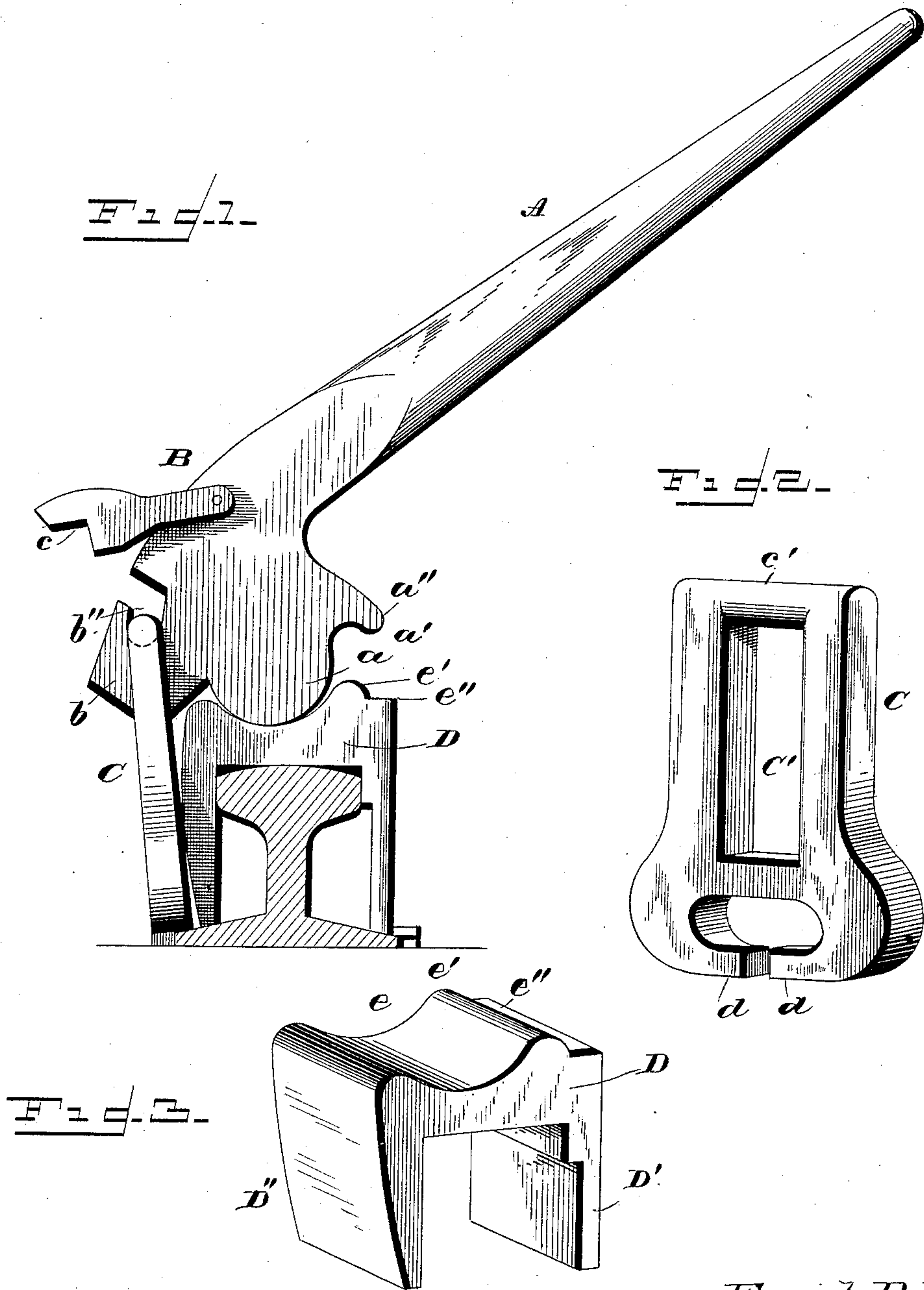


(No Model.)

F. P. WEST.
SPIKE PULLER.

No. 359,194.

Patented Mar. 8, 1887.



WITNESSES

G. S. Elliott,
M. Johnson

Frank P. West.

INVENTOR

[Signature]
Attorney

UNITED STATES PATENT OFFICE.

FRANK P. WEST, OF GLENDIVE, MONTANA TERRITORY.

SPIKE-PULLER.

SPECIFICATION forming part of Letters Patent No. 359,194, dated March 8, 1887.

Application filed November 4, 1886. Serial No. 217,974. (No model.)

To all whom it may concern:

Be it known that I, FRANK P. West, a citizen of the United States of America, residing at Glendive, in the county of Dawson and Territory of Montana, have invented certain new and useful Improvements in Spike-Pulling Devices; and I do hereby 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 letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in spike-extractors, the object of said invention being to provide a cheap, simple, and effective means of removing spikes from railroad-ties; and it consists in the combination of a lever having a curved fulcrum which is adapted to bear upon a block which is placed above the railroad-rails so as to bear thereon and upon the tie, the lever having pivotally attached thereto a claw, as will be hereinafter fully set forth, and specifically pointed out in the claim.

In the accompanying drawings, which illustrate my invention, Figure 1 is a side view of my improved spike-extractor. Fig. 2 is a detail perspective view of the claw, and Fig. 3 is a perspective view of the bearing-block.

The nail-extractor as devised by me is intended especially for removing railroad-spikes from railroad-ties, and it is constructed solely with the above end in view, so that the lever and claw can be employed with the block which rests above the rail, or without the same, said block being constructed so that the lever and claw can be used for removing the spikes when the block is placed to one side of the rail so as to form a bearing for the lever.

A refers to the handle of a lever, which is of a suitable length, said lever having a semicircular or curved portion, *a*, and a recess, *a'*, which form together an ogee curve, adjacent to which is a projecting portion, *a''*. The opposite side of the lower end of the lever has an outwardly-projecting portion, *b*, the upper part of which is provided with a recess, *b''*, the lower portion of which is curved, and either one or both sides of the upper edge of the

lever have pivoted thereto latches B, the ends of which are notched, as shown at *c*, so as to lie over the top and side of the cross-bar of the claw. The claw C is preferably made of a single piece of metal, and is provided centrally with a slot, *C'*, through which the projecting end *b* of the lever passes, while the cross-bar *c'* lies within the recess *b''*. The lower end of the claw is slightly enlarged and turned inwardly, so as to form jaws *d d*, between which the body of the spike may be passed, so that the upper edge will engage with the under side of the head.

The block D, which is usually placed over the tread of the rail, as shown in Fig. 1, so that its vertical members *D'* and *D''* will bear upon the flanges of the rail, is provided at its top with a semicircular recess, *e*, which is of a greater curve than that formed on the portion *a* of the lever, and near one side the top of the block has a raised curved portion, *e'*, adjacent to which is a horizontal portion, *e''*. The member *D'* extends downwardly, so as to bear upon one of the flanges of the rail. The opposite member, *D''*, has its outer edge turned inwardly, so that ample space will be provided between the lower portion of the same and the head of the spike.

When it is desired to withdraw a spike from a railroad-tie, the block may be placed in the position shown in Fig. 1 of the drawings over the rail, and the claw is first slipped over the head of the spike, and by depressing the end of the lever the spike will be drawn from the tie by a straight pull, which will not injure said spike and will permit the same being again used.

If a spike should occupy a position which would not permit the block D being employed, the lever could bear directly upon the tread of the rail; but a better result could be obtained by placing the block upon the tie at one side of the rail, so as to form a fulcrum for the lever.

It will be noticed that by making the curved portion of the lever and the curved portion of the block of different diameters I provide a rolling fulcrum, and that the parts have but a small contact-surface, and that as the lever is depressed and the spike drawn upward the claw will swing upon its pivot, so that the draft will be in a straight line, thereby obvi-

ating bending the spike or increasing the size of the hole which the spike occupies in the tie.

I am aware that it has been proposed to make a spike or nail extractor with a claw pivoted thereto, and I do not claim a claw in combination with a lever, broadly. By providing the lower end of the lever with a recess, *b''*, the claw can be readily removed from the lever, and when in use said claw will be held securely in place by means of the pivoted latches. The projection *a''* on the lever will prevent said lever slipping off the block at the limit of the movement of said lever.

I claim—

15 In a spike-extractor, the combination of a lever, A, provided with a projecting portion, *b*, having a notch, *b''*, formed therein, a pivoted latch, B, a curved portion, *a*, extending

below the projecting portion *b*, a recess, *a'*, and projecting portion *a''* at the heel of the lever, a claw provided at its lower portion with inwardly-projecting edges, a central slot, C', and upper cross-bar, *c'*, which slides within the recess *b''* of the lever, a block, D, having depending members D' and D'', one of said members being curved inwardly, a curved top portion, *e*, and raised portion *e''*, the parts being adapted for use conjointly with each other, substantially as shown, and for the purpose set forth.

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

FRANK P. WEST.

Witnesses:

C. W. HICKMAN,
P. PETERSON.