

J. Ellis.

Nail Extractor,

No. 51,818.

Patented Jan. 2, 1866.

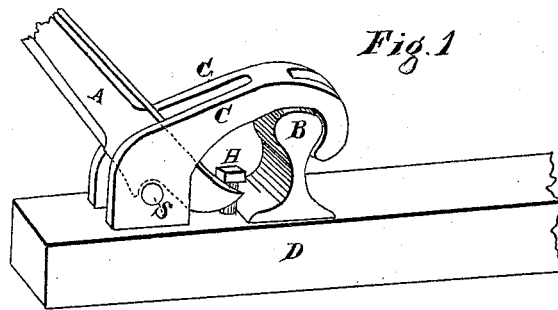


Fig. 1

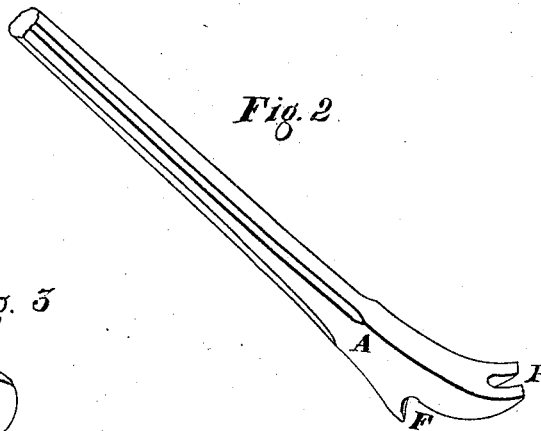


Fig. 2

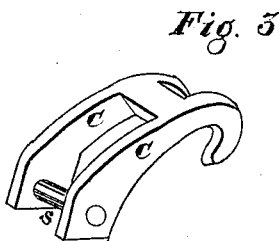


Fig. 3

Witnesses.
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JOSIAH ELLS, OF PITTSBURG, PENNSYLVANIA.

INSTRUMENT FOR DRAWING RAILROAD-SPIKES.

Specification forming part of Letters Patent No. **51,818**, dated January 2, 1866; antedated December 26, 1865.

To all whom it may concern:

Be it known that I, JOSIAH ELLS, of the city of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Apparatus for Drawing Spikes; and I hereby declare that the following is a full, clear, and exact description of my invention, reference being had to the accompanying drawings, forming part of this specification, and to the letters of reference marked thereon.

The nature of my invention consists in drawing railroad-spikes by the employment and use of a lever or draw-bar having a bifurcated claw of curved form, in connection with a hook or pair of hooks for supporting a fulcrum, and so constructed as that the hooks will catch over the top of the rail and keep the fulcrum of the bar or lever from slipping away during the operation of drawing the spike.

To enable others to understand and make my invention, I will proceed to describe its construction and operation by reference to the accompanying drawings, in which—

Figure 1 represents a perspective view of my apparatus. Fig. 2 represents a lever with a curved and forked claw. Fig. 3 is a perspective view of the hooked frame for supporting the fulcrum.

All the drawings are lettered, and similar letters denote corresponding parts in the several views.

To construct my spike-drawing apparatus, I take two short wrought-iron bars, C C, and on one end of each I form a hook, shaped to fit over and catch upon the rail B, while the other ends are curved down so as to rest upon the cross-tie D. These hooks are fastened together by a strong steel bolt, S, passing through both, near that part resting on the wood, the upper end being secured by rivets or otherwise, thus forming a frame having sufficient space between the bars C C for the

insertion and operation of the long-lever A. This lever has a curved claw, in which is cut a parallel-sided notch, P, being of an equal width its entire depth, to allow the claws to pass under the head of the spike H without danger of wedging fast, which would be the case if the notch was tapering.

In addition to the forked claw, the lever A is also furnished with a hook-shaped stop, F, at the bottom of the curve, which, when the lever is in use, catches against the steel bolt S, and prevents the spike from being forced toward the rail B, and thereby twist or otherwise bend it.

When in operation, the hooks are so placed as to clasp the top of the rail B directly above the spike H, the other end resting on the cross-tie D. The claw of the lever A being inserted between the bars C C of the frame, the curved portion will rest upon and bear against the round steel bolt S, which acts as a rolling fulcrum, and causes the claw to advance until the body of the spike is fairly in the notch P, and bring the claws under the head, when, on downward pressure being applied to the handle of the lever, the spike is readily drawn out, the hooked frame preventing the fulcrum from slipping away during the operation.

Having thus briefly described my invention, what I claim is—

The employment and use of a lever or draw-bar having a bifurcated claw of curved form in connection with a hook or pair of hooks for supporting a fulcrum, and so constructed as that the hooks will catch over the rail and prevent the fulcrum of the lever or bar from slipping away during the operation of drawing the spike.

JOSIAH ELLS.

Witnesses:

JOSIAH W. ELLS,
JOHN McKENNA.