M. S. PRENTICE.

SPIKE-PULLER.

No. 186,874. Patented Jan. 30, 1877.

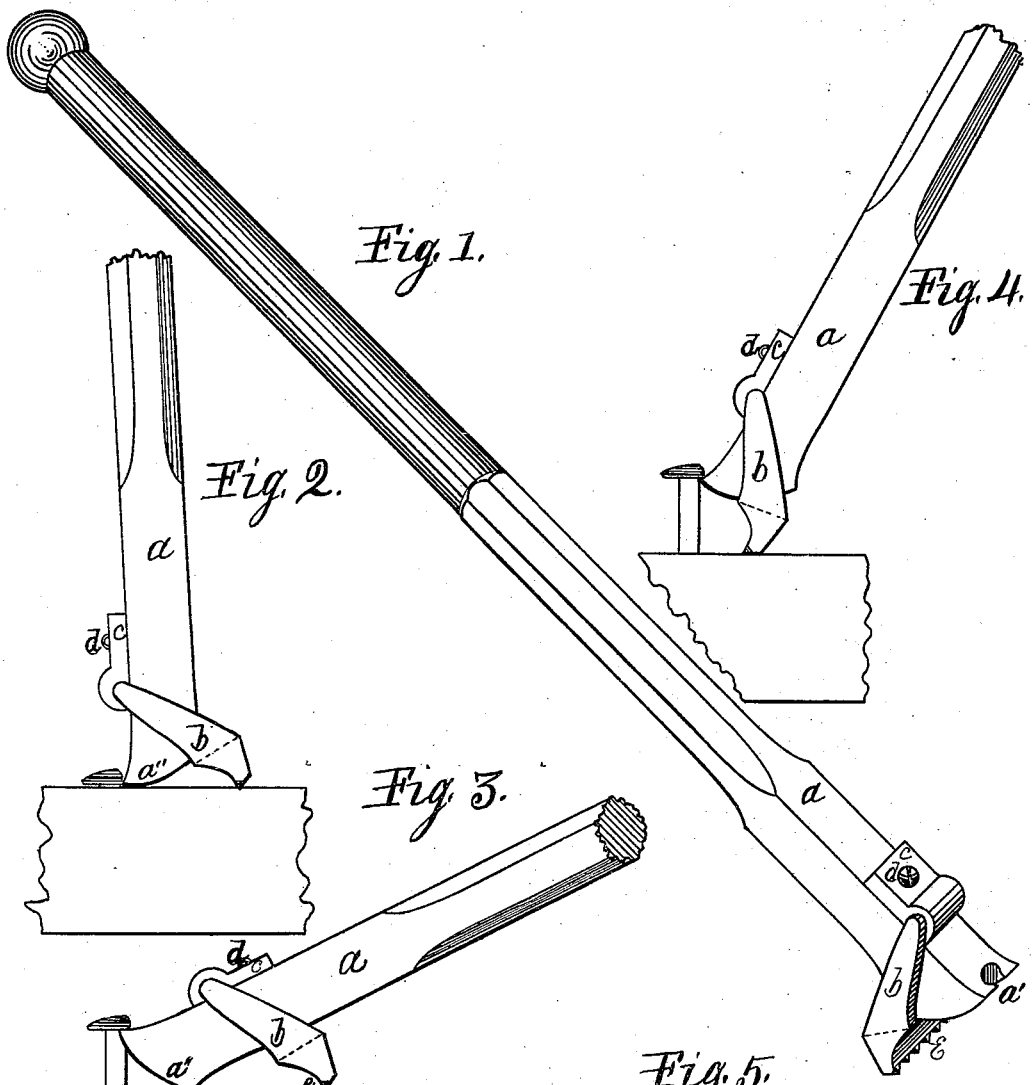

Fig. 1.

Fig. 2.

Fig. 4.

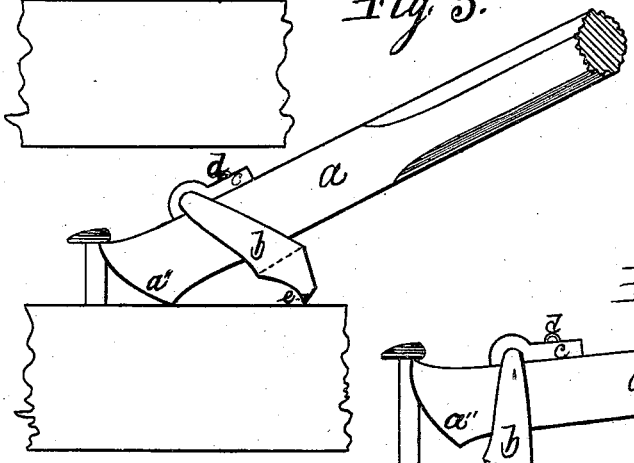

Fig. 3.

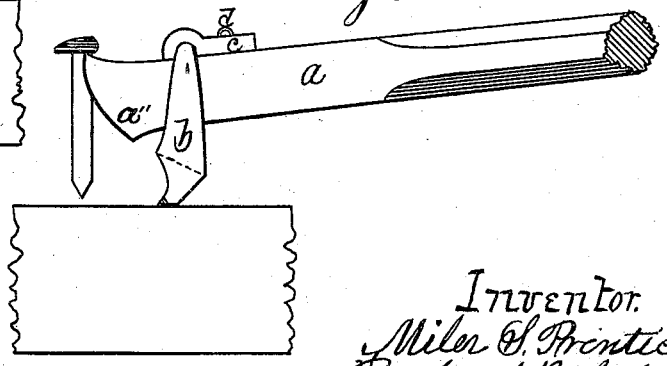

Fig. 5.

Witnesses.
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MILES S. PRENTICE, OF ROCKFORD, ILLINOIS, ASSIGNOR TO HIMSELF AND TIMOTHY HENNESSEY, OF SAME PLACE.

IMPROVEMENT IN SPIKE-PULLERS.

Specification forming part of Letters Patent No. **186,874**, dated January 30, 1877; application filed August 17, 1876.

To all whom it may concern:

Be it known that I, MILES S. PRENTICE, of the city of Rockford, in the county of Winnebago and State of Illinois, have invented a new and useful Improvement in Spike-Pullers, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to provide a spike-pulling implement embodying in itself all the requirements necessary to enable an operator to draw spikes without bending them, and more rapidly than with the implements now in use.

To this end I have devised and constructed the device represented in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved spike-puller. The figures from 2 to 5, inclusive, in the order in which they are numbered, represent the application of the puller in the different steps, from first application until the spike is drawn complete.

In the figures, *a* represents a claw-bar, which is substantially the same as similar bars now in use for the purpose of drawing spikes, having a split toe, *a'*, and a rounded heel, *a''*, to serve as a fulcrum. To this bar I have applied the hinged fulcrum, represented at *b*, which is of rectangular link form, and of proper size to receive the claw-bar in the opening of the link.

The cross-bar connecting the side bars of the link at their upper ends is of round form, and is fitted to a circular groove in the under side of the cap *c*, which is firmly secured in place on the face of the claw-bar by means of a screw-bolt, *d*, passing through the cap, and entering a screw-threaded hole in the bar, fitted for its reception, and by means of which the hinged fulcrum is securely held in place on the bar, in such a manner as to permit it to freely swing back and forth into all the positions represented in the drawings, the opening in the link being of the proper form to permit it to swing into the positions represented. In this instance, the lower forward edge of the swinging fulcrum is provided with teeth, which are clearly shown at *e*, and are employed, mainly, for the purpose of furnishing an effective fulcrum to force the claw-bar under the heads of spikes driven nearly even with the surface.

The first application of my improved spike-puller in the operation of drawing a spike is represented at Fig. 2, in which the operator applies the toe of the bar under the head of the spike, with the bar in a perpendicular position, with the teeth of the swinging fulcrum resting on the sill. He then places his foot on the heel of the swinging fulcrum, to press the teeth thereof against the sill; then, by pulling the free end of the bar rearward, the toe thereof will be forced under the spike-head. The fulcrum is then permitted to slide back, and the continued movement of the bar will cause the spike to rise, and the parts will be in the position represented at Fig. 3. Then, by raising the bar to the position represented at Fig. 4, the fulcrum will swing over the heel of the bar into a perpendicular position, as represented in the figures, and the backward movement of the bar will bring the spike out without bending, the link *b* furnishing the fulcrum for the complete extraction of the spike, and the parts will be in the position represented at Fig. 5.

I have represented my improvement applied to the claw-bar, held in place thereon by means of the grooved cap *c* and bolt *d*, which is a ready method of applying my improvement to bars already manufactured. This method may also be employed in the manufacture of my improved spike-puller; or, instead of the grooved cap *c*, a suitable piece may be welded to the face of the bar, or otherwise formed with a hole through it, instead of the groove in the cap, fitted to receive a bolt or rivet, which will pass through the upper ends of the side bars of the swinging fulcrum *b*, in holes prepared therein for its reception.

I am aware that in some instances claw-bars have been constructed with a claw-shackle hinged thereto, limited in its swinging movements by shoulders, as seen in Patent No. 52,017, and prominences on the bar, and that might in some instances be used as a fulcrum; and in some instances swinging

fulcrums have been employed in connection with claw-bars made adjustable thereon, for the purpose of increasing or lessening the lever-purchase in the operation of drawing spikes. These I, therefore, do not claim, nor do I claim the swinging fulcrum, broadly; but

I do claim as my invention—

A spike-puller composed of the claw-bar lever *a*, with the claw *a'* at the toe, a rounded heel-fulcrum, *a''*, and the swinging-link fulcrum *b*, having its bearing-edge *e* toothed or serrated, as and for the purposes described.

MILES S. PRENTICE.

Witnesses:

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