(No Model.)

J. F. TESA.

RAILROAD SPIKE EXTRACTOR.

No. 458,005 Patented Aug. 18, 1891.

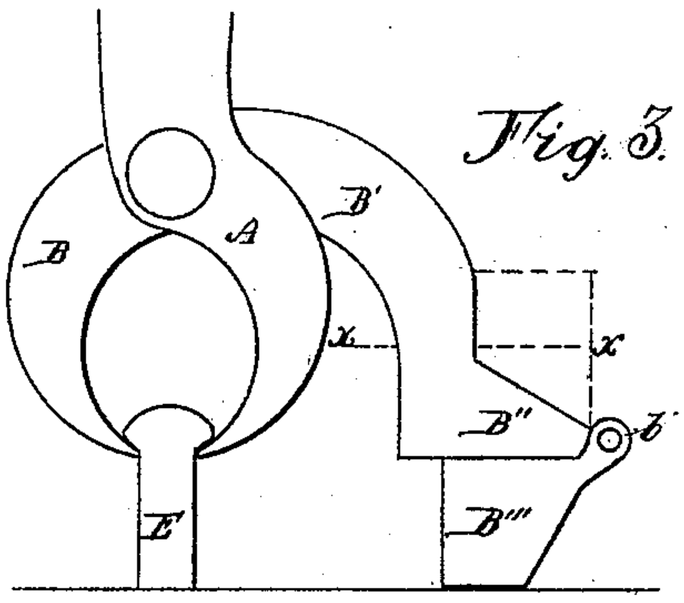

Fig. 3.

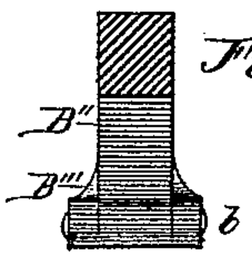

Fig. 4.

Fig. 1.

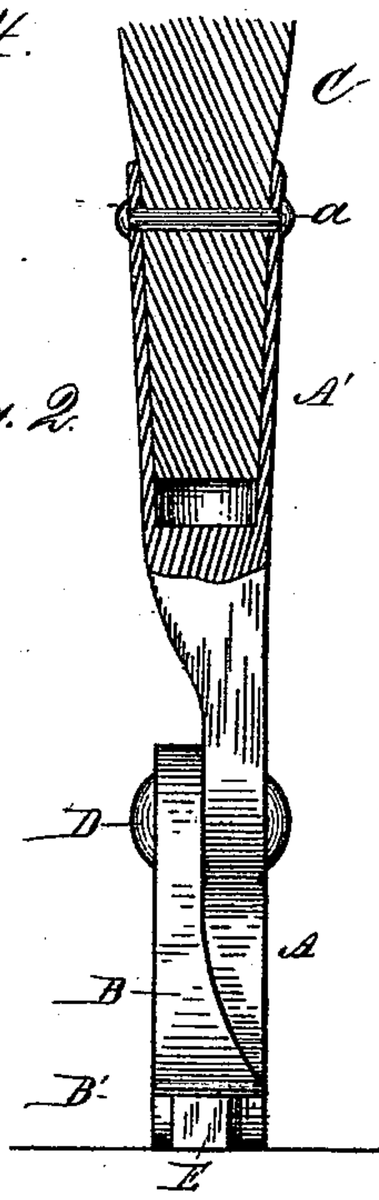

Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN F. TESA, OF CEDAR RAPIDS, IOWA, ASSIGNOR OF ONE-HALF TO ANTON TOMEC, OF SAME PLACE.

RAILROAD-SPIKE EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 458,005, dated August 18, 1891.

Application filed April 21, 1891. Serial No. 389,747. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. TESA, a citizen of Austria, Province of Bohemia, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Railroad-Spike Extractors; 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.

The object of my invention is to produce a tool capable of extracting railroad-spikes more rapidly, easily, and in better condition than the claw-bar or other devices in common use.

The invention consists in the construction, combination, and arrangement of parts, as hereinafter fully set forth and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation of the device as in use. Fig. 2 is a front elevation of the same, the shank and handle portion being in section. Fig. 3 is a side elevation showing the application of the pivoted foot-block, and Fig. 4 is a plan view of the foot below the section line *x x*.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A and B are two similar jaws connected by a suitable rivet D, and together forming a claw adapted to grip the spike just under the head. The other portion of the jaw A extends upwardly in the form of a hollow shank A′, in the socket of which is fitted a wooden handle C. The handle may be held in place by a suitable rivet *a*. This handle should be quite large, of course, since it is subjected to a powerful strain, and should be of such length as to be conveniently used by the operator in a standing position. Being made of wood it is much lighter, and therefore more convenient to carry and handle, than the heavy iron claw-bar in general use. The other portion of the jaw B extends backwardly and downwardly in a curved limb B′, terminating in a backwardly-extended foot B″. To the outer end of this foot is hinged at *b* a supplemental foot-block B‴, adapted to swing upwardly over the foot, as shown in Fig. 1, or under it, as shown in Fig. 3.

To extract a spike, the operator places the tool in position, the jaws of the claw each side of the head of the spike E and the foot B″ resting on the tie F. He then presses the handle downwardly and backwardly, whereby the claw grips the spike and draws it up, as shown in Fig. 1. The outer end of the foot B″ being the fulcrum, it is evident that the spike will be drawn up in the circle unless the foot slips on the tie. This it may do to a limited extent, so that for a distance the spike is drawn practically straight up and without bending it. Of course the same result might be attained by extending the foot backwardly; but this is hardly practical in view of the difficulty with which railroad-spikes are drawn. In order, therefore, to enable the operator to draw the spike clear out and without injuriously bending the spike, the supplemental foot B‴ is connected pivotally with the foot B″, and serves for a vertical extension of the same when the spike is partly drawn, as shown in Fig. 3. The operator therefore first draws the spike part way out, and then releasing his hold with his foot throws the foot-block B‴ down, takes a new hold, and extracts the spike. It is to be noticed that in the position shown in Fig. 3 the upper face of the foot-block B‴ abuts upon the bottom of the foot B″, and there is therefore no strain on the hinge *b*, which may be comparatively light. The gripping portion of the jaws A and B should be as wide as or wider than the head of the spike, so as to afford a firm hold on the same.

In Fig. 1 the tool is shown in a position to operate the handle in line with the rail, it being difficult or impossible to hold it in the other direction.

The construction, while extremely simple, is such as to enable the operator to extract railroad-spikes easily, in good condition for driving again, and much more rapidly than can be done by the claw-bar in common use.

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

1. In a spike-extractor, the combination of the jaw A, having an upwardly-extending shank and handle, the jaw B, having the leg or limb B′ and foot B″, and the foot-block B‴, hinged thereto.

2. The herein-described spike-extractor, composed of the jaw A, having the hollow shank A′, with the wooden handle C fixed therein, the jaw B, having limb B′ and foot B″, pivoted to the jaw A by a suitable rivet, and the foot-block B‴, hinged to the foot B″.

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

JOHN F. TESA.

Witnesses:
S. W. BRAINERD,
L. A. ST. JOHN.