(No Model.)

J. W. PITTS.

SPIKE EXTRACTOR.

No. 558,102. Patented Apr. 14, 1896.

Fig. 1.

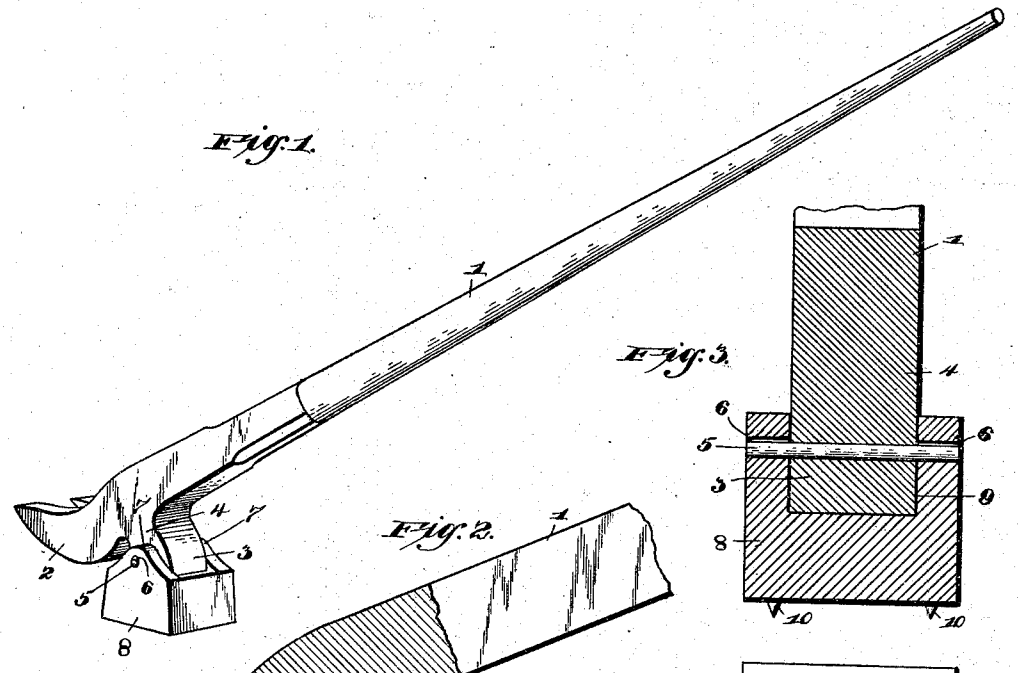


Fig. 2.

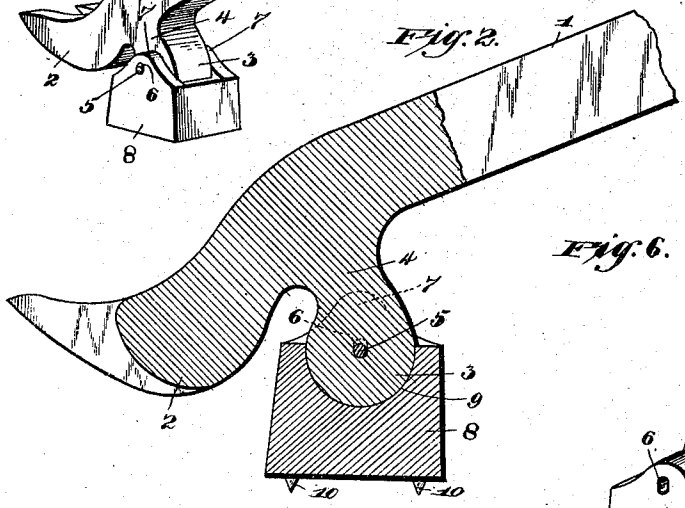


Fig. 3.

Fig. 4.

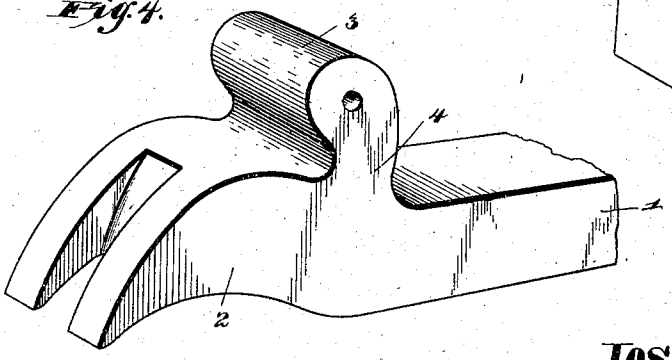


Fig. 6.

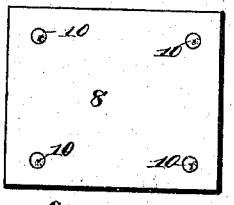
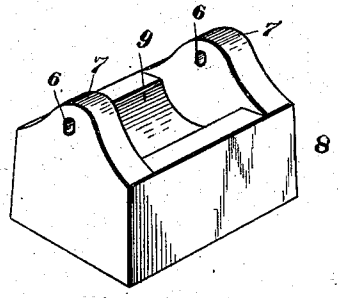


Fig. 5.



Inventor

Joseph W. Pitts.

Witnesses

Wm. C. Doyle

J. H. Riley

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JOSEPH W. PITTS, OF AUGUSTA, GEORGIA.

SPIKE-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 558,102, dated April 14, 1896.

Application filed October 8, 1894. Serial No. 525,288. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. PITTS, a citizen of the United States, residing at Augusta, in the county of Richmond and State of Georgia, have invented a new and useful Spike-Extractor, of which the following is a specification.

The invention relates to an improvement in spike-extractors.

The object of the present invention is to improve the construction of spike-extractors, to provide a simple and inexpensive one which will enable railway-spikes to be withdrawn from cross-ties without bending or otherwise injuring them, and to afford a firm bearing for the heel of the lever, and to prevent the same from crushing or otherwise injuring the pivot by relieving the latter of the heavy strain incident to extracting a spike.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a spike-extractor constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the lower portion or claw end of the spike-extractor. Fig. 3 is a transverse sectional view of the same. Fig. 4 is a detail perspective view of the claw end of the lever, illustrating the construction of the heel. Fig. 5 is a detail perspective view of the bearing-block. Fig. 6 is a detail view illustrating the arrangement of the spurs of the bearing-block.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates a lever provided at one end with a slightly-curved spike-engaging claw 2 and having a depending rounded heel 3, connected by a neck portion 4 with the lever and extending transversely of the lever the entire width of the latter. The depending heel is provided with a central transverse perforation, through which passes a pivot 5, which is also arranged in perforations 6 of upward-extending ears 7 of a bearing-block 8, substantially rectangular.

The bearing-block 8 is provided with a concave upper face 9, which conforms to the rounded portion of the heel and provides a bearing for the same, and the ears 7 extend upward at the ends of the heel. The recess of the bearing-block is struck on the same curve as the periphery of the substantially cylindrical or rounded heel. The bearing-block extends upward in front and in rear of the heel and forms a socket for the same to prevent any longitudinal movement of the lever, and this, together with the flat lower face of the bearing-block, produces a steady upward movement in a spike. The perforations 6 of the ears are sufficiently greater in diameter than the pivot 5 to permit the heel in withdrawing a spike to rest upon and be supported by the concave upper face of the bearing-block, whereby all strain is removed from the pivot, and the latter is prevented from being broken.

Owing to the particular form of the semi-cylindrical socket of the bearing-block 8 and the rounded heel the spike-extractor is capable of operation without employing the pivot, the latter serving, merely, as a connection to prevent the separation of the parts when the spike-extractor is not in actual use.

The neck 4 sufficiently offsets the lever from the bearing-block and causes the claw to have a curved movement sufficient to extract a spike without bending or otherwise injuring the same.

In order to prevent any liability of the bearing-block slipping while extracting a spike, the said bearing-block is provided on its lower face with spurs 10, which are formed integral with the block and which embed themselves in the cross-tie.

The bearing-block or fulcrum 8 when the spike-extractor is first placed in position rests on the two rear spurs to draw a spike, thus throwing the strain forward until the spike is drawn.

It will be seen that the spike-extractor is simple and comparatively inexpensive in construction, that it possesses great strength and durability, and that it is capable of withdrawing spikes from cross-ties without bending or otherwise injuring them.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

A spike-extractor, comprising a lever provided at one end with a claw, a rounded heel formed integrally with said lever and extending transversely the entire width thereof and having a perforation concentric with the arc of the bearing-face of the heel and also having a reduced neck for the purpose of extending the bearing-face of the heel, a bearing-block formed with a semicylindrical socket or bearing-seat in its upper side providing opposing shoulders for preventing the tendency of the heel to ride out of its socket, upwardly-projecting ears embracing the ends of the heel, and a stay-pin passing through said ears and also through the heel, said pin being arranged in concentric relation to the socket or bearing-seat in the base-block, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOS. W. PITTS.

Witnesses:
GEO. P. WILTCH,
J. M. STOY.