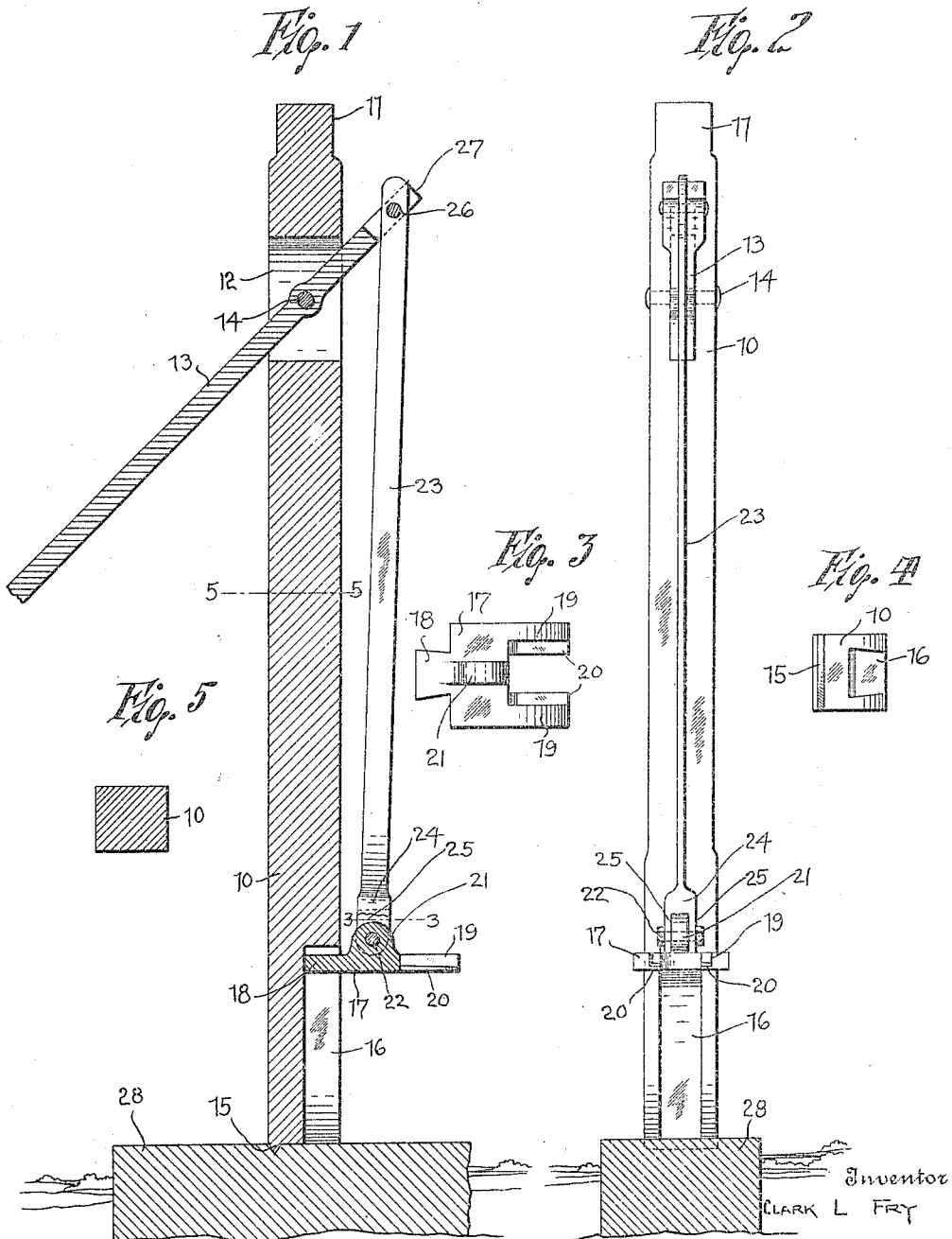


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SPIKE PULLER.

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1,051,211.

Patented Jan. 21, 1913.



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# UNITED STATES PATENT OFFICE.

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## SPIKE-PULLER.

1,051,211.

Specification of Letters Patent.

Patented Jan. 21, 1913.

Application filed February 26, 1912. Serial No. 679,955.

*To all whom it may concern:*

Be it known that I, CLARK L. FRY, a citizen of the United States, residing at Oxford, in the county of Marquette and State of Wisconsin, have invented certain new and useful Improvements in Spike-Pullers, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to spike pullers which are intended to be used by men working along railroad tracks.

The object of the invention is to so construct the puller that when the spike is drawn out it will not be bent as now frequently happens when spikes are drawn by means of devices which are now in use.

This invention comprises in brief, a standard which has a spike engaging plate slidably mounted in the lower portion, the plate being raised by means of a lever pivotally mounted in the upper portion of the standard, and connected with the plate by means of a vertical rod.

In the drawings: Figure 1 is a view of the spike puller, the standard and portions of the lever and spike engaging plate being shown in section. Fig. 2 is a front elevation of the spike puller. Fig. 3 is a top plan view of the spike engaging plates taken along the line 3-3 in Fig. 1. Fig. 4 is a bottom plan view of the standards. Fig. 5 is a section along the line 5-5 of Fig. 1.

Referring to the accompanying drawings, it will be seen that this invention comprises a standard 10 having a reduced upper end 11 forming a hand-hold and provided near its upper end with a slot 12 forming a pivot housing for the lever 13, the lever 40 being mounted upon the pivot pin 14. The lower portion of the standard carries a bracing cleat 15 and is provided with a vertically extending slot 16, the slot being provided with undercut side walls so that the slot has a substantially dovetail shaped end in cross section. A plate 17 is provided with a dovetail 18 at its inner end which is positioned in the slot 16, so that the plate will be slidably connected with the standard 10. The plate is provided at its outer end portion with a slot 19, and ledges 20 having inclined upper faces are at the lower portion of the slot so that the nail may be gripped.

It should be noted that the head of the nail will fit in the space above the ledges 20, and is held in place by the ledges. It will, also, be noted that by having the upper faces of the ledges sloping that the ledges may be slipped partially beneath the head of the spike and the spike partially withdrawn so that a better grip may be obtained.

A pivot lug 21 extends upwardly from the central portion of the plate 17, and is provided with an opening through which a pivot pin 22 passes so that the vertical shaft 23 may be connected with the lug 21. The lower end of the shaft 23 is provided with a head 24 having arms 25, which are positioned to each side of the lug 21, so that the arms may be mounted upon the outer ends of the pivot pin 22. The upper end of the shaft 23 is mounted upon a pivot pin 26 between the arms 27 at the end of the lever 13.

It will be seen that when the lever is locked upon its pivot pin 14 that the plate 17 will be drawn up and down in the slot 16, and that the dovetail 18 prevents the plate from moving away from the standard. It will also be noted that the cleat 15 prevents the standard from slipping when drawing out a spike.

When using this invention the standard is placed upon the tie 28, and the lever is raised so that the plate will be lowered to permit the ledges 20 to be inserted beneath the head of the spike. If the spike has been driven into the tie very hard, the ledges are simply placed a short distance beneath the head of the spike, and the lever is then moved so that the plate will be raised thus withdrawing the spike a small amount. The plate is then lowered again, and the ledges inserted beneath the spike so that the head is entirely seated in the cut out portion 19 above the ledges 20. The hand-hold 11 is grasped and the cleat pressed into the tie so that the standard will be braced and the lever is then pushed down so that the plate will be drawn up thus withdrawing the spike by a vertical movement so that the spike is not bent when removing it.

It should also be noted that when desired the pivot pin 22 may be withdrawn and a new plate secured in its place so that if the plate becomes broken, a new plate may be easily supplied and it not being necessary

to send the extractor to a shop to have it repaired.

What is claimed is:—

- 5 1. A spike puller of the character described comprising a standard provided with a slot adjacent its upper end and with a longitudinally extending groove in its lower portion, the groove being dovetail in cross section, a claw, a dovetail heel extending from said claw and sliding in said  
10 groove, a lever pivotally mounted in said slot, and a rod pivotally connected with said claw and one end of said lever, whereby said claw may be moved in said groove.
- 15 2. A spike puller comprising a standard provided with a longitudinally extending under-cut groove leading from its lower end, a sharpening cleat at the bottom of said standard extending the full width of  
20 the standard, a claw provided with a slot in its outer end portion, a dovetail heel carried by said claw and slidably mounted in said groove, a lever pivotally connected

with the upper portion of said standard, and a rod connecting said lever with said claw. 25

3. A spike puller comprising a standard provided with a longitudinally extending under-cut groove leading from its lower end, a claw provided with a longitudinally extending slot in its outer portion having  
30 an enlarged upper end portion to form a seat for a spike head, a pivot lug extending above said claw, a dovetail heel carried by said claw and slidably mounted in said groove, a lever pivotally connected with said  
35 standard, and a rod having its upper end pivotally connected with said lever and its lower end pivotally connected with said pivot lug.

In testimony whereof I hereunto affix my  
signature in presence of two witnesses. 40

CLARK L. FRY.

Witnesses:

SCOTT KEACH,  
PERCY HUNT.