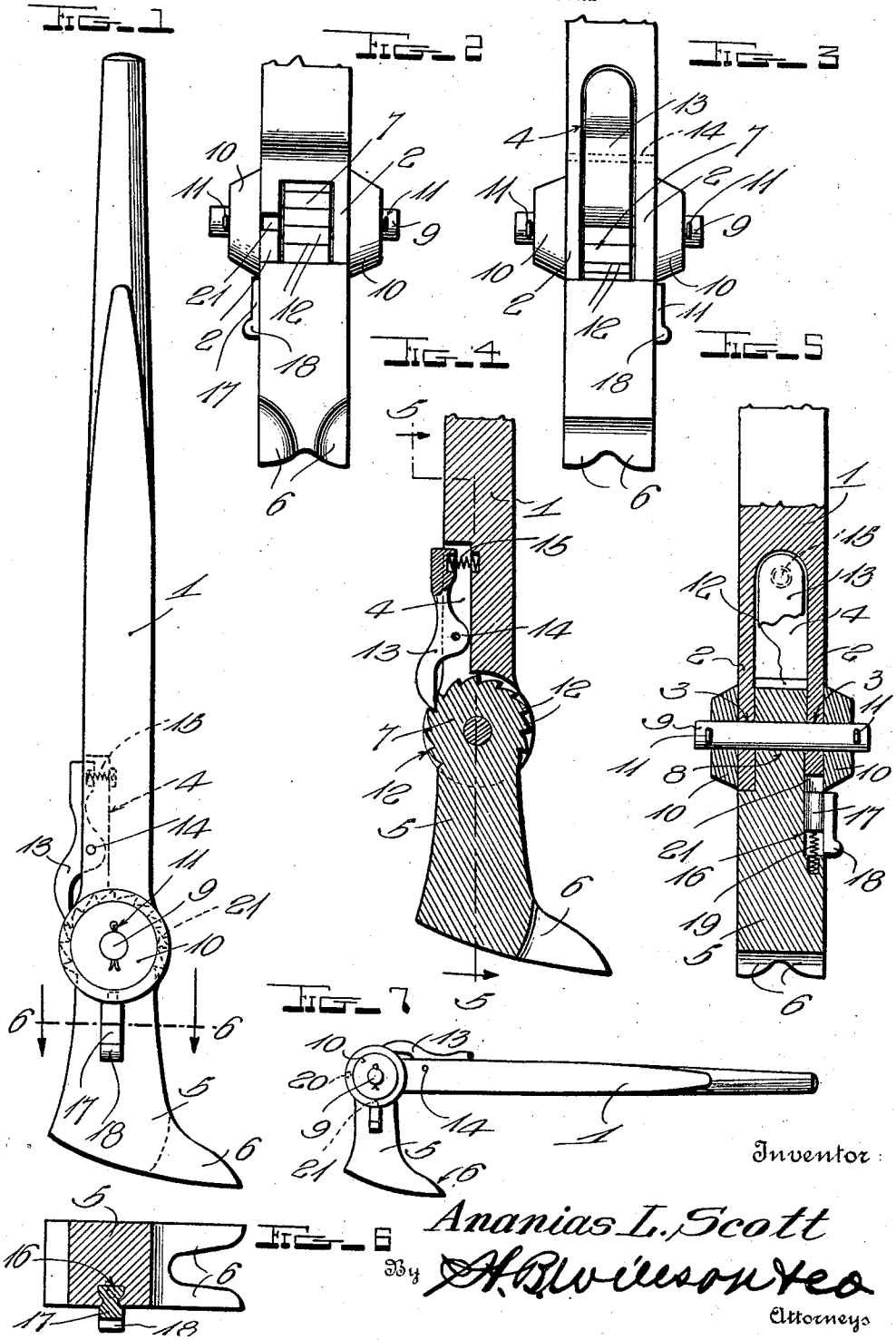
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A. L. SCOTT

SPIKE PULLER

Filed July 13, 1922



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UNITED STATES PATENT OFFICE.

ANANIAS L. SCOTT, OF MORRIS, ALABAMA, ASSIGNOR OF ONE-HALF TO JOSEPH W. ELLIS, OF MORRIS, ALABAMA.

SPIKE PULLER.

Application filed July 13, 1922. Serial No. 574,657.

To all whom it may concern:

Be it known that I, ANANIAS L. SCOTT, a citizen of the United States, residing at Morris, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Spike Pullers; and I do 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.

This invention relates generally to spike pullers, and particularly to spike pullers which are especially adapted for extracting or removing spikes from railway tracks.

The invention has been designed in order to provide a spike puller by which spikes located on both the inner and outer sides of the rails of a railway track may be removed while the operator is positioned between the rails. The invention is therefore particularly useful for removing spikes from railway tracks located upon bridges and trestles, since in using it, the operator would not have to get on the outside of the track close to the edge of the bridge or trestle in order to remove the outer spikes from the track.

The improved spike puller comprises a handle bar, to one end of which a spike-engaging head is pivoted so as to swing to various positions with respect thereto, and novel means for locking the spike-engaging head in its various positions upon the handle bar. This broad combination and arrangement of parts can be embodied in devices which will have the highly desirable features of being not only strong and durable but also of being of simple construction, and therefore can be very cheaply and economically made.

The novelty in the invention resides in the combination and arrangement of parts, and the various features of construction which are hereinafter fully described and claimed, and illustrated in the accompanying drawing.

In the drawing which forms a part of this specification:—

Fig. 1 is a side elevation of a spike puller constructed in accordance with the invention;

Fig. 2 is an elevation of the lower portion of one edge of the puller;

Fig. 3 is an elevation of the lower portion of the other edge of the puller;

Fig. 4 is a central vertical longitudinal sectional view taken through the lower end of the puller;

Fig. 5 is a longitudinal sectional view through the lower end of the puller taken substantially on the line 5—5 of Fig. 4;

Fig. 6 is a transverse sectional view of the spike-engaging head of the puller, taken substantially on the line 6—6 of Fig. 1; and

Fig. 7 is a side elevation of the puller, showing the spike-engaging head thereof in a different position with respect to the handle bar then it is shown in, in Fig. 1.

The device illustrated in the drawing has a handle bar 1, the lower end of which is bifurcated so as to form a pair of spaced disk-like ears or extensions 2. These ears or extensions 2 are provided with alined apertures 3. In addition to being bifurcated, the lower end of the handle bar 1 is provided in one side with a recess 4, which communicates at one end with the space disposed between the heads or extensions 2.

Associated with the handle bar 1 is a spike engaging head 5. The head 5 is provided at one end with a spike-engaging claw or toe 6 of suitable construction and configuration and at its other end with a longitudinally extending shank or lug 7. Preferably the shank 7 is of less thickness than the body portion of the head 5 which is of the same thickness as the lower end of the handle bar 1. The lug 7 is disposed in the space between the extensions 2, and is provided with an aperture 8 alined with the apertures 3 in the latter. A pin 9 extending through the apertures 3 and 8, pivotally connects the head 5 to the lower end of the handle bar 1. The ends of the pin 9 may extend through apertures disposed in disks 10 arranged upon the outer sides of the heads or extensions 2 to serve in the capacity of washers, and cotter pins 11 may be extended through the extreme end portions of the pin 9 to maintain this in place.

The inner end of the shank or lug 7, which is curved concentrically with the aperture 8 formed therein, is notched so as to provide a series of ratchet teeth 12. These teeth 12 are normally engaged by a pawl 13 which is pivotally mounted between its ends upon a pin 14, which extends transversely across the recess 4 formed in the handle bar 1. The upper end of the pawl 13 is forced outwardly by a coil spring 15,

which is located in the recess 4 and confined between the upper end of the pawl 13 and the bottom of the recess 4. By this means, the lower end of the pawl 13 is yieldably maintained in engagement with the ratchet teeth 12.

One side of the head 5 is provided with an undercut recess 16 running from one end thereof. Slidably mounted in this recess is a latch 17 having a finger-piece 18 projecting beyond the side of the head 5 so as to be easily engaged and operated. Mounted in the bottom of the recess 16 is a coiled spring 19. This coiled spring 19 presses against the latch 17 and maintains it projected.

One of the heads or extensions 2 is provided at its edge with a pair of notches 20 and 21. The notch 20 is disposed at the extreme end edge of the head 2, while the notch 21 is disposed at one side edge of the head 2, approximately at right angles to the notch 20. The projecting end of the latch 17 fits into either of the notches 20 and 21, depending upon in which position the head 5 with respect to the handle bar 1 is disposed. When in either of the notches 20 and 21, the latch 17 will lock the head 5 to the handle bar 1, and the pawl 13 engaging the ratchet teeth 12 will assist in doing this.

When the head 5 is extended longitudinally with respect to the handle bar 1 and locked in this position, the device may be effectively used for removing spikes from the inner sides of the rails of a railway track while the operator is positioned between the rails. When, however, spikes located along the outer sides of the rails are to be removed, this can be done without requiring the operator to change his position from between the rails, by retracting the latch 17 and swinging the head 5 upon its pivot from the position shown in Fig. 1 to the position shown in Fig. 7 and then releasing the latch 17 when it is opposite the notch 21. In swinging the head 5 upon its pivot from the position shown in Fig. 1 to the position shown in Fig. 7, the pawl 13 will ride loosely over the ratchet teeth 12. When, however, it is desired to swing the head 5 from the position shown in Fig. 7 back to the position shown in Fig. 1, the upper end of the pawl 13 should be depressed and at the same time, the latch 17 should be retracted.

From the foregoing description, taken in connection with the accompanying drawing, the construction, use and advantages of the invention will be readily understood.

It is obvious that numerous changes in form, proportion and in the various details of construction may be made without departing from the principle or sacrificing any of the advantages of the invention, and hence, it is to be understood that such changes may be made within the meaning and scope of the appended claim.

What is claimed is:

A spike puller comprising a handle, a spike-engaging head having a laterally disposed spike-engaging claw at one end and having ratchet teeth at its other end, means pivotally connecting the last named end of said head to the lower end of said handle, said handle being provided at the last named end with a pair of spaced notches, one of which is disposed in longitudinal alinement with the axis of the handle and the other one of which is disposed at right angles to said axis, a spring-pressed latch slidably mounted on said head and adapted to be selectively projected into one or the other of said notches to hold said head against movement relative to the handle when disposed at right angles thereto or in longitudinal alinement therewith, and a spring-pressed exteriorly disposed pawl carried by said handle and co-operable with said ratchet teeth.

In testimony whereof I have hereunto affixed my signature.

ANANIAS L. SCOTT.