W. T. WILMER.

SPIKE PULLER.

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955,570.

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Fig. 1.

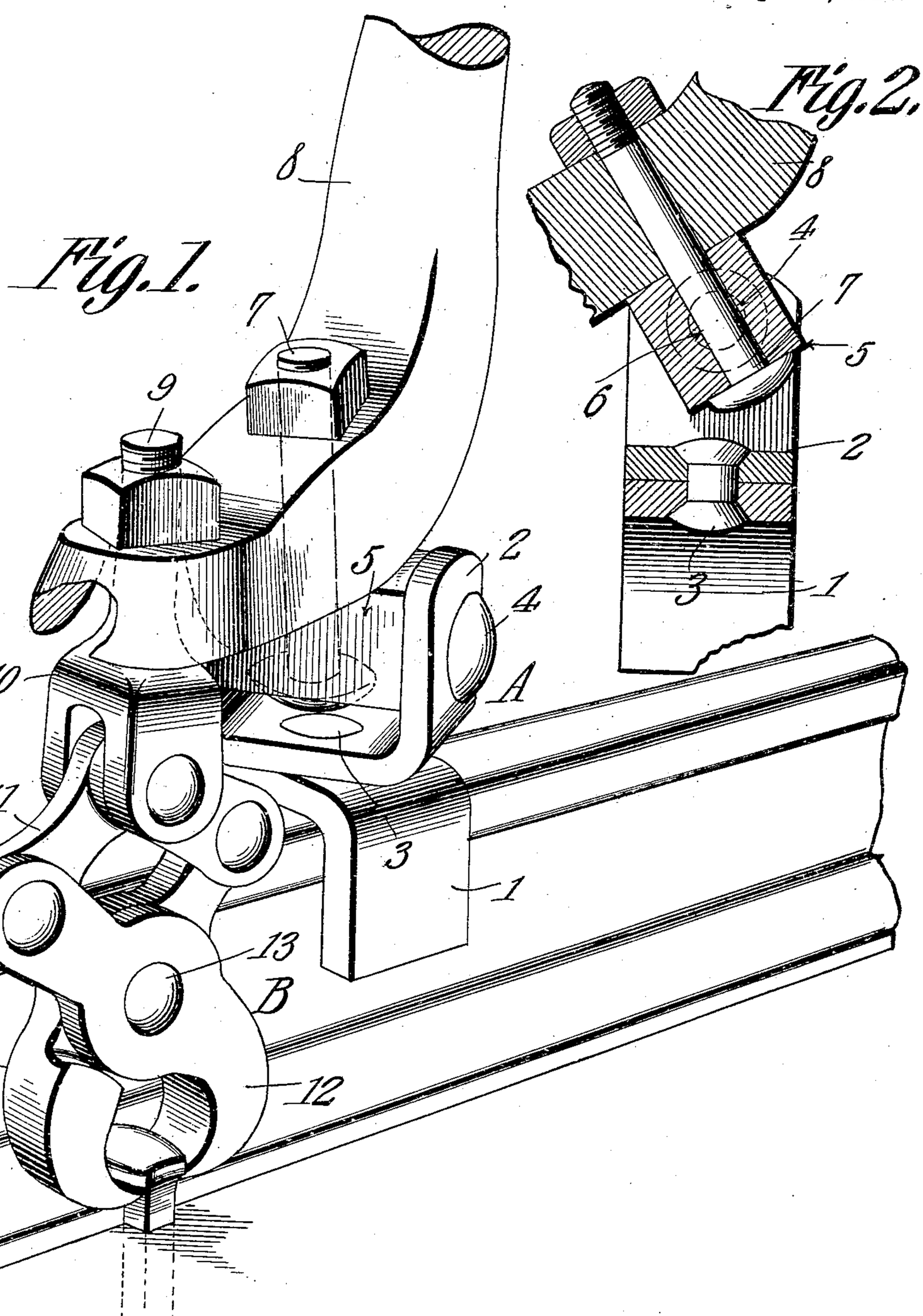

Fig. 2.

Witnesses

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WILLIAM T. WILMER, OF MONTGOMERY, WEST VIRGINIA, ASSIGNOR OF ONE-HALF TO CHARLES L. WILMER, OF MONTGOMERY, WEST VIRGINIA.

SPIKE-PULLER.

955,570. Specification of Letters Patent. Patented Apr. 19, 1910.

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To all whom it may concern:

Be it known that I, WILLIAM T. WILMER, a citizen of the United States, residing at Montgomery, in the county of Fayette and State of West Virginia, have invented a new and useful Spike-Puller, of which the following is a specification.

This invention relates to spike pullers.

In the removal of ties or rails in repairing railway lines it is usual to employ claw-bars for the removal of the spikes and these tools are extremely heavy and it requires considerable exertion on the part of the operator to handle them in withdrawing the spikes and in carrying the tools to and from the car and along the track. It is further necessary for the operator to shift from side to side of each rail in order to extract the spikes of which there are usually two at each end of the tie.

The principal object of the present invention is to provide an improved spike-extracting tool which while of sufficient weight and strength to accomplish the desired result may be handled with ease and without the necessity of carrying the tool from one side of the rail to the other in order to pull the spikes on both sides of the rails.

A still further object of the invention is to provide a spike puller having a loose fulcrum member which may be slid along the rail and which will permit free turning movement for the purpose of properly gripping the spike at either side of a rail and then extracting the same.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claim.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a perspective view of the spike puller, the same being shown in position upon a rail and gripping a spike. Fig. 2 is a detail sectional view.

Referring to the figures by characters of reference A designates a slidable bracket which, in the present instance, is provided with a yoke-like base 1 designed to straddle the head of a rail so that the tool when in use may be readily shifted along the rail from tie to tie. A yoke-like body 2 is pivotally mounted at its center upon the central portion of the base 1 as indicated at 3, this body being thus capable of swinging horizontally. The upwardly extending arms of the body constitute journals for trunnions 4 extending from the ends of a rock-bar 5 which bar has an opening 6 extending therethrough at the center thereof for the reception of a pivot bolt 7. This bolt extends through a suitable opening formed near the lower end of an operating lever 8 of any preferred length. It will be seen therefore that the construction of the device is such that the lever may be turned with bolt 7 as an axis in order to bring the lower or shorter arm of said lever into position beyond either edge of the rail. Swiveled within the shorter arm of lever 8 is a stem 9 extending from a forked head 10, to which is connected the gripping member B of the tool. This gripping member consists of links 11 pivotally mounted within the head 10 and also pivotally connected to the upper ends of spike-gripping claws 12 which cross at intermediate points and are held together by means of a pivot pin 13. The lower ends of the claws 12 are preferably somewhat sharp and may if desired be serrated in order to secure a good grip under the opposite sides of the head of the spike.

In using the tool herein described the base 1 of the bracket is fitted on top of a rail and the lever 8 swung laterally so as to bring the claws 12 and the parts connected thereto over either edge of the rail. This lateral swinging movement of the lever can be very quickly and conveniently effected in view of the fact that said lever is pivotally mounted on the bolt 7 and the body 2 is capable of corresponding swinging movement about its pivot 3. After the claws have been brought into proper position at one side of the rail the longer arm of the lever is raised and the claws will thus be caused to move downwardly until they can be engaged with opposite sides of the spike to be drawn. When the handle end of the lever is forced downwardly the links 11 will operate to close the claws against the spike and the latter will be firmly gripped, the gripping effect being in proportion to the degree of force exerted in forcing the end of the lever downwardly. After the spike has been removed in this manner the tool is slid along the rail and is then turned so that the claws may engage a spike at the opposite side of the rail, it of course being necessary to rock the lever 8

vertically in order to elevate the claws a sufficient distance to permit them to pass over the rail. This operation may be continued as long as desired, and it will be seen therefore that the labor necessary to remove the spikes will be considerably lessened, because it does not become necessary for the operator to carry the tool. Moreover, the work may be more rapidly performed owing to the further fact that it is not necessary for the operator to cross and recross the rails in extracting the spikes at the two sides thereof.

Importance is attached to the particular means for mounting the lever upon the rail, because this results in a tool which can be very quickly adjusted to any position desired and which permits the claws to hang in proper position at the sides of the rail without requiring handling of the claws.

Obviously various changes may be made in the construction and arrangement of the parts without departing from the spirit or sacrificing the advantages of the invention.

What is claimed is:—

A spike extracting tool including a base arranged for sliding movement on the tread of a rail, a lever, a universal joint connection between the lever and the base, said connection consisting of a yoke-like body pivotally mounted on the base and having upstanding terminal arms, a rock bar journaled at its ends within said arms and extending parallel with the base and body and a pivot bolt extending perpendicularly from the upper face of the rock bar and on which the lever is fulcrumed, crossed pivotally connected claws, links pivotally connected to the upper ends of the claws, a stem mounted for rotation within one end portion of the lever, said stem being parallel with the pivot bolt of the lever, and a pivotal connection between the stem and the links.

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

WILLIAM T. WILMER.

Witnesses:

E. HUME TALBERT,

C. E. DOYLE.