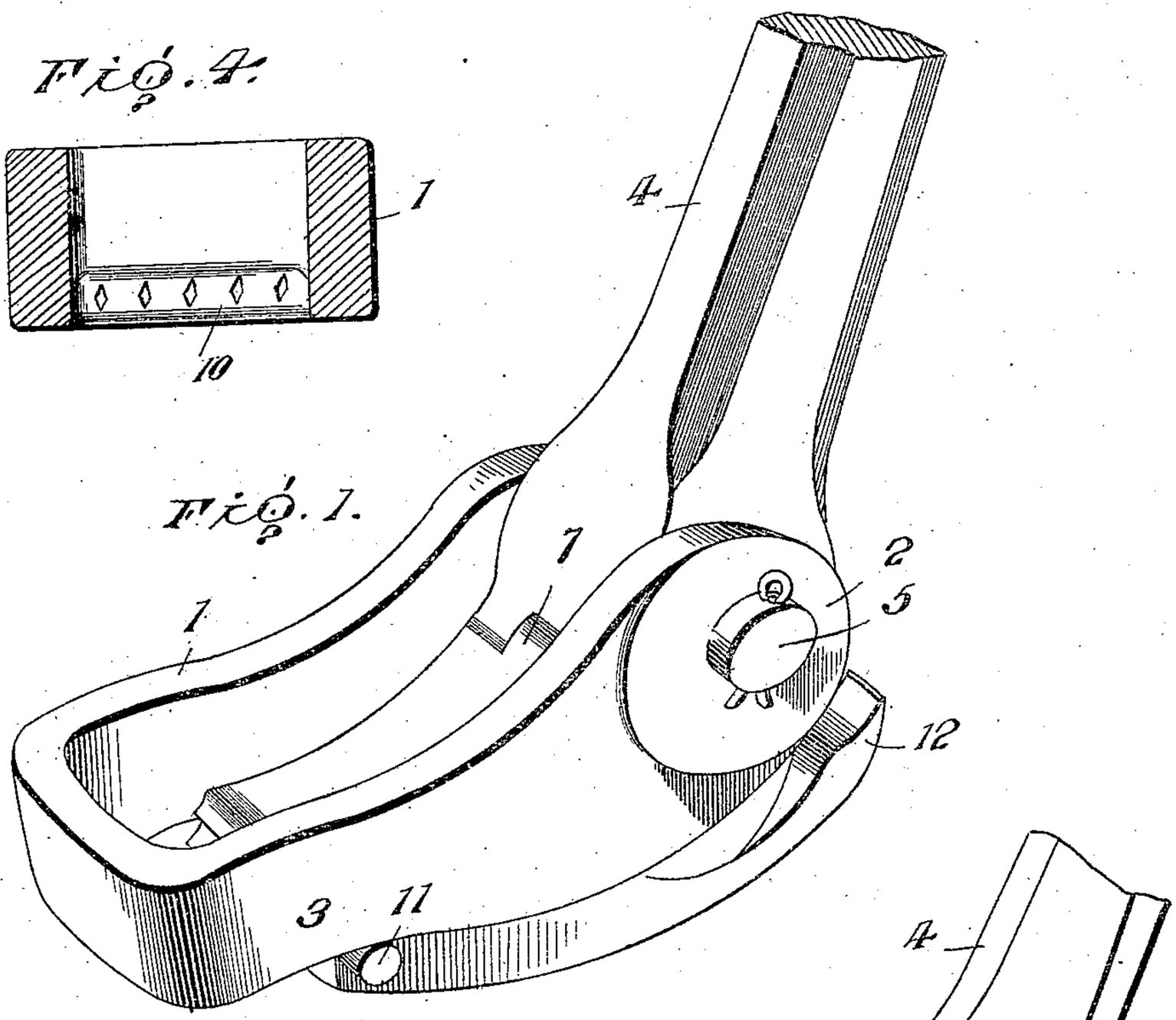
No. 855,564. PATENTED JUNE 4, 1907.

T. C. GATTI.

SPIKE PULLER.

APPLICATION FILED FEB. 25, 1907.

Fig. 4.



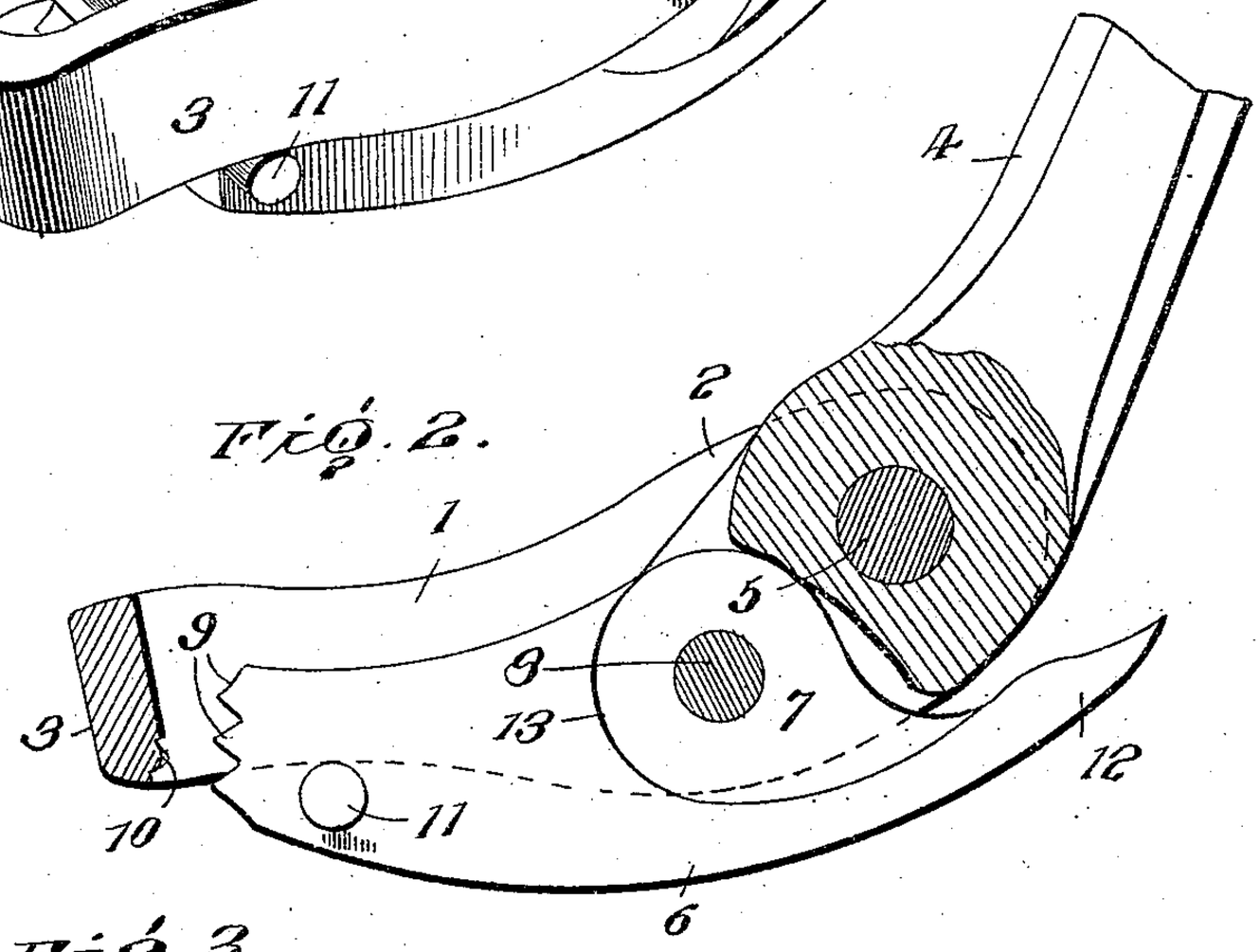
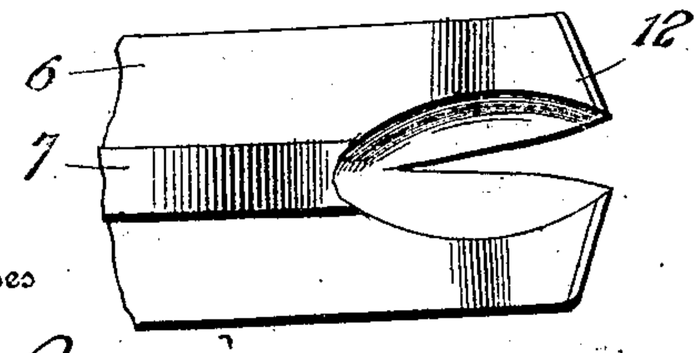


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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SPIKE-PULLER.

No. 855,564. Specification of Letters Patent. Patented June 4, 1907.

Application filed February 25, 1907. Serial No. 359,145.

To all whom it may concern:

Be it known that I, TONNY C. GATTI, a citizen of the United States, residing at Scranton, in the county of Jackson and State of Mississippi, have invented certain new and useful Improvements in Spike-Pullers, of which the following is a specification.

The present invention relates to an improved implement which is especially designed for the withdrawal of the spikes or similar fastening means employed in all kinds of wooden construction, the primary object of the invention being to provide a device of this character in which the gripping jaws have a sliding movement with relation to each other, which enables them to automatically adjust themselves for the various sizes of fastening members upon which it may be desired to operate.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of the improved spike puller; Fig. 2 is a longitudinal sectional view through the same; Fig. 3 is a detail view of the claw at the rear end of the shoe; and, Fig. 4 is a transverse sectional view through the forward portion of the shackle.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The shackle 1 is approximately U-shaped, the free ends of the side bars thereof being curved upwardly as indicated at 2, while the lower edge of the forward portion of the shackle is cut away at 3. The operating handle 4 is pivotally mounted toward its lower end upon a pin 5 connecting the upturned ends of the two arms of the shackle. Slidably mounted between the two side bars of the shackle 1 is a shoe 6 provided at an intermediate portion with an upwardly extending web 7 received between the bifurcated lower extremity of the handle or lever 4 and pivotally connected thereto by means of the pin 8. The lower face of the shoe 6 has a curved formation and forms a base upon which the implement rocks when the upper portion of the lever 4 is pulled rearwardly to withdraw the spike. The forward end of the shoe 6 is formed with a series of transversely disposed ribs 9 designed to coöperate with a toothed inwardly extending rib 10 upon the cross bar of the shackle 1 to grip the spike or fastening member desired to be withdrawn.

With this construction, it will be readily apparent that when the lever 4 is pulled rearwardly, the shoe 6 is given a sliding movement between the side bars of the shackle 1 and the forward end thereof is moved toward the cross bar of the shackle in such a manner as to cause the coöperating ribs 9 and 10 to bite into and firmly grip the fastening member being operated upon. In order to prevent the shoe 6 from swinging upwardly between the side bars of the shackle, a bearing pin 11 is passed transversely through the forward end thereof, the extremities of the bearing pin projecting beyond the sides of the shoe to form stops which have a sliding engagement with the cut away portion 3 at the forward portion of the shackle. In the present instance the rear end of the shoe is shown as extended to form a claw 12 which is designed to be employed for the pulling of headed fastening members in the usual and well known manner, and when this construction is employed, the forward portion of the web 7 terminates in shoulders 13 which limit the forward swinging movement of the operating lever 4 and enable the same to impart a rocking movement to the shoe 6 which lifts the claw 12 and causes the same to withdraw the fastening member with which it is engaged.

Attention is also directed to the fact that the guide pin at the forward end of the shoe not only prevents the shackle from dropping down, but it also guides the shackle at its proper height as it is made to extend to admit larger fastenings.

Having thus described the invention, what is claimed as new is:

1. In a spike puller, the combination of a U-shaped shackle, an operating lever pivoted at an intermediate point between the arms of the shackle, and a shoe slidable longitudinally of the arms of the shackle and having a pivotal connection with one end of the operating lever, the said operating lever performing the double function of tilting the tool to withdraw the spike and of causing the shoe to coöperate with the cross bar of the shackle to grip the spike.

2. In a spike puller, the combination of a U-shaped shackle, an operating lever pivoted at an intermediate point between the arms of

the shackle, and a shoe slidable longitudinally of the arms of the shackle and having a pivotal connection with one end of the operating lever, the lower face of the shoe being curved to form a rocking surface for the tool and the operating lever performing the double function of causing the tool to rock to withdraw the spike and of causing the shoe to coöperate with the cross bar of the shackle to grip the spike.

3. In a spike puller, the combination of a U-shaped shackle, an operating lever pivoted between the arms of the shackle, a shoe pivoted to an end of the operating lever and slidable between the arms of the shackle, the said shoe coöperating with the cross bar of the shackle to grip the spike, and stops projecting from the shoe and having a sliding engagement with the arms of the shackle.

4. In a spike puller, the combination of a U-shaped shackle, the arms of which have their free ends curved upwardly, an operating lever pivoted between the up-turned arms of the shackle, a shoe pivoted to the extremity of the operating lever and slidable between the arms of the shackle, the said shoe coöperating with the cross bar of the shackle to grip the spike, and the lower face of the shoe having a curved formation, and stops projecting laterally from the shoe and having a sliding engagement with the arms of the shackle.

5. In a spike puller, the combination of a U-shaped shackle, an operating lever pivoted at an intermediate point between the arms of the shackle, a shoe slidable longitudinally of the arms of the shackle and having a pivotal connection at an intermediate point with an end of the operating lever, one end of the shoe being designed to coöperate with the cross bar of the shackle to grip the spike while the opposite end of the shoe is extended to form a claw.

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

TONNY C. GATTI. [L. S.]

Witnesses:
GARRY A. BOYLE,
JOHN T. BYRAM.