

No. 882,449.

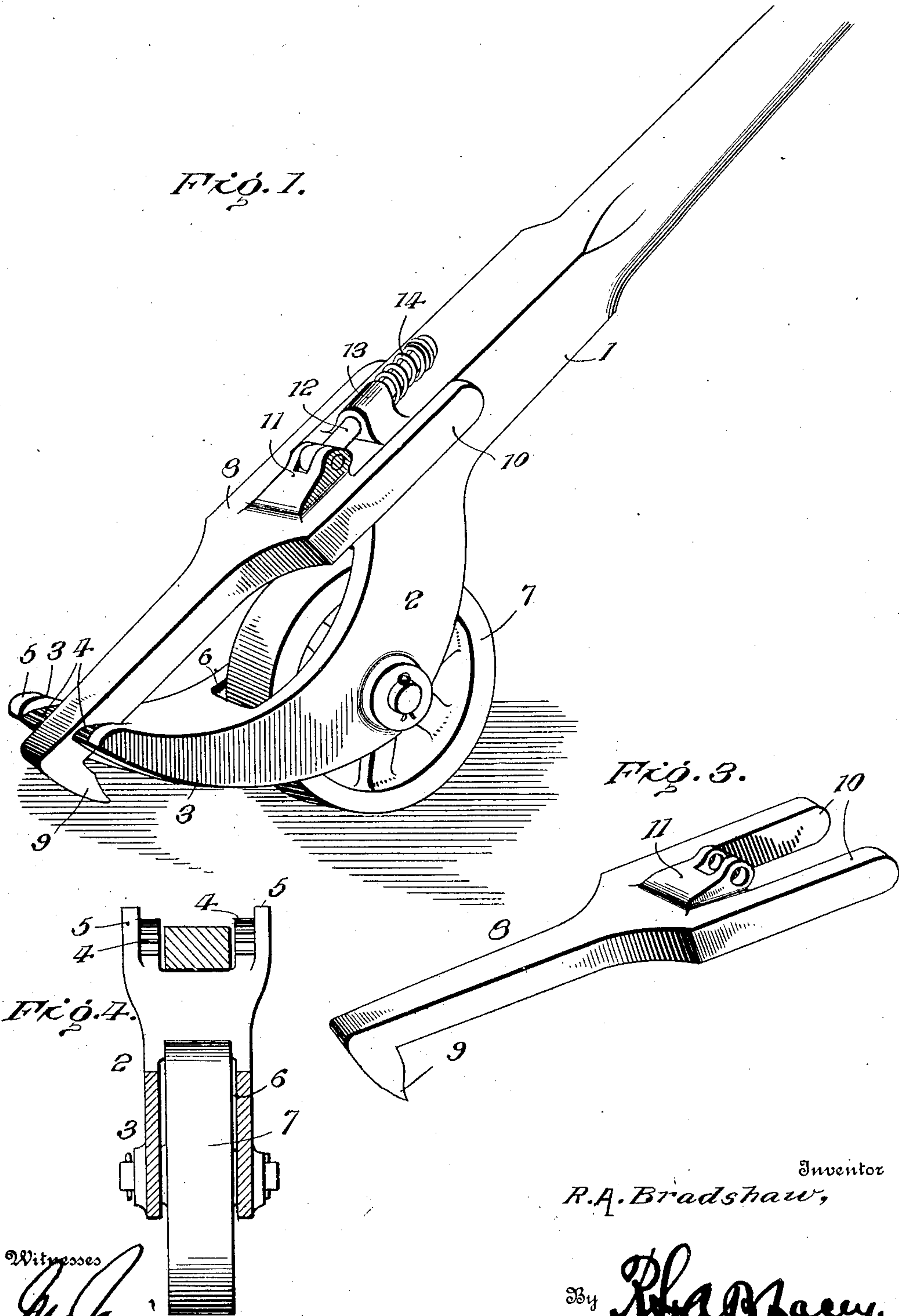
R. A. BRADSHAW.

PATENTED MAR. 17, 1908.

SPIKE PULLER.

APPLICATION FILED JUNE 4, 1907.

2 SHEETS—SHEET 1.



Witnesses

*[Signature]*  
W. H. Woodson

Inventor  
R. A. Bradshaw,

By *[Signature]*  
Attorneys

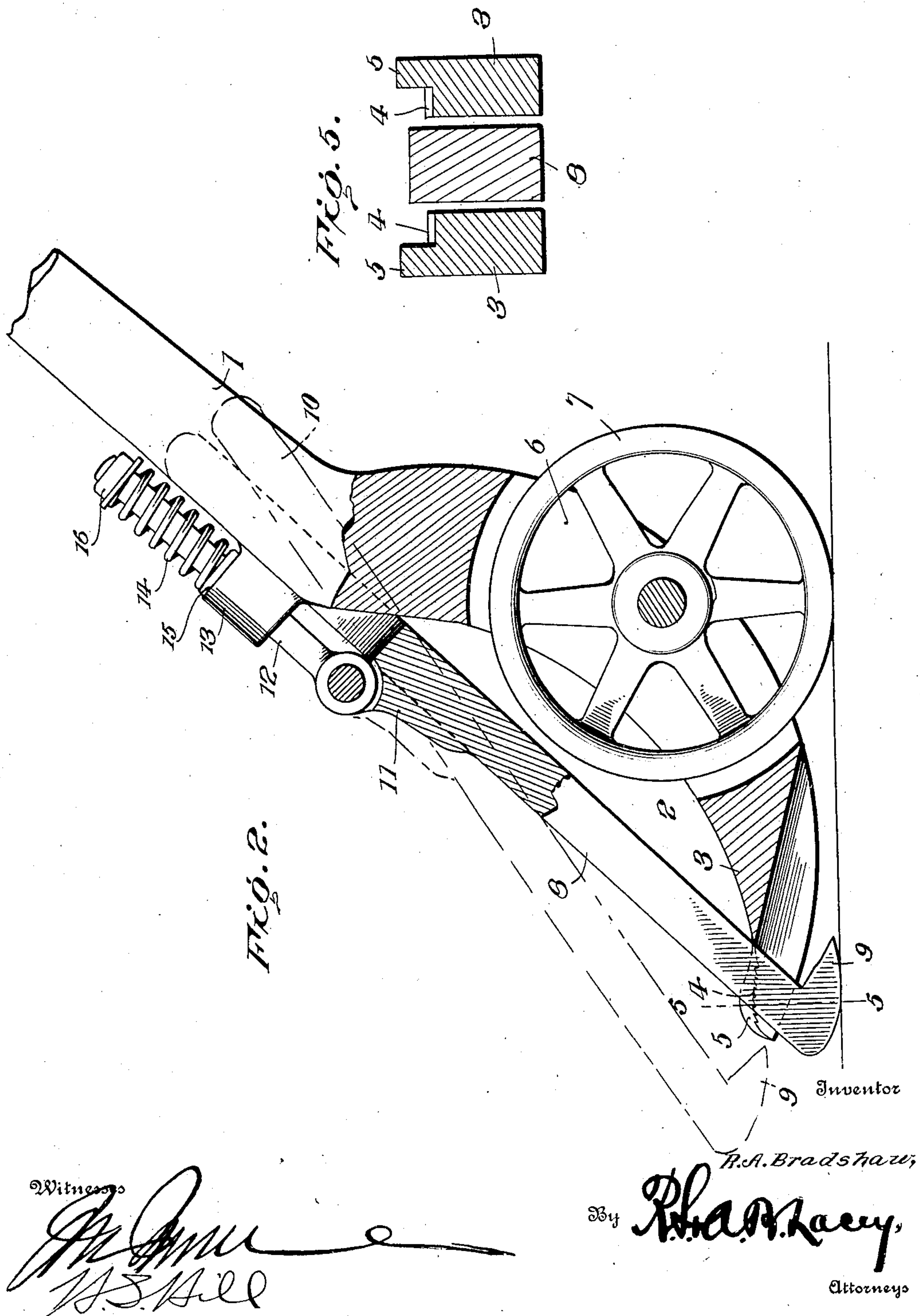
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# UNITED STATES PATENT OFFICE.

RICHARD A. BRADSHAW, OF WINTERS, TEXAS.

## SPIKE-PULLER.

No. 882,449.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed June 4, 1907. Serial No. 377,219.

*To all whom it may concern:*

Be it known that I, RICHARD A. BRADSHAW, citizen of the United States, residing at Winters, in the county of Runnels and State of Texas, have invented certain new and useful Improvements in Spike-Pullers, of which the following is a specification.

The present invention relates to certain new and useful improvements in spike pullers and resides principally in the provision of novel means for holding the spike in engagement with the claws of the head.

The invention also contemplates a spike puller which is mounted upon a roller so that the fulcrum can be moved inwardly as the spike is extracted, thereby preventing mutilation of the spike and decreasing the amount of power required for pulling the same.

The primary object of the invention is to provide a simple and inexpensive spike puller embodying the above mentioned features, and one which will operate efficiently under various conditions of service.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction and 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 showing the application of the improved spike puller. Fig. 2 is a longitudinal sectional view through the same. Fig. 3 is a detail view of the guard arm. Fig. 4 is a transverse sectional view through the head. Fig. 5 is a transverse sectional view through the claws on the line 5—5 of Fig. 2.

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.

Specifically describing the invention the numeral 1 designates the handle or lever which is of the usual construction, and 2 the head at the lower end of the lever. This head 2 has a curved formation and has the extremity thereof enlarged laterally to a slight extent and provided with the claws 3 for engaging the head of the spike or like member being extracted. It will be observed that the upper face of each of the claws 3 has the inner portion thereof serrated or roughened as indicated at 4 to prevent slipping of the spike, while the outer side is formed with an upwardly extending guard flange 5. The intermediate portion of the

head 2 has a slot or recess 6 formed therein within which the roller 7 is journaled. This roller 7 is designed to constitute the fulcrum of the implement and permits the spike puller to be moved inwardly as the spike is extracted for the purpose of shifting the fulcrum point and preventing the spike from being deflected to one side which not only bends and mutilates the spike but also greatly increases the amount of power required in pulling the same.

A guard arm 8 is utilized to retain the spike in engagement with the claws 3, one end of the guard arm having a yielding connection with the lower extremity of the lever 1 while the opposite end is formed with a hook 9 which engages the head of the spike being operated upon. The inner end of the guard arm 8 is bifurcated and the two members of the bifurcation are loosely mounted upon opposite sides of the lever 1 and operate to prevent the lateral displacement of the guard arm. A bracket 11 is provided upon the inner end of the guard arm 8 and has a pivotal connection with a stem 12 passing loosely through a keeper 13 upon the lower end of the lever 1. Encircling the end portion of the stem 12 is a spiral spring 14 one end of which bears against a washer 15 placed against the bracket 11 while the opposite end bears against a nut 16 at the extremity of the stem 12. This spring 14 operates to draw the guard arm 8 inwardly and hold the hook 9 in engagement with the head of the spike, but at the same time permits yielding of the members which would prevent injury to the implement should at any time an excessive force be applied thereto.

In the operation of the tool the hook 9 upon the guard arm 8 is placed in engagement with one side of the spike head and the claws 3 moved against the opposite side of the spike head. A downward pressure upon the lever 1 then operates in the usual manner to withdraw the spike and as the spike is extracted the head is gradually moved inwardly upon the roller 7 in order to shift the fulcrum point and always have a direct upward pull upon the spike.

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

1. In a device of the character described, the combination of a lever, a head at one end of the lever provided with a claw, a guard arm cooperating with the claw, and a stem connecting the guard arm and head, the



said stem being pivotally connected to one of the members and having a yielding connection with the opposite member.

2. In a device of the character described,  
5 the combination of a lever, a head at one end of the lever provided with a claw, a guard arm cooperating with the claw, a stem connecting the guard arm and head and pivotally connected to one of the members, a  
10 keeper upon the opposite member loosely receiving the stem, and a spring surrounding the stem and cooperating with the keeper to hold the guard arm in an operative position.

3. In a device of the character described,  
15 the combination of a lever, a head at one end of the lever provided with a claw, and a guard arm cooperating with the claw and having a yielding connection with the head,

one end of the guard arm being bifurcated and the arms of the bifurcation fitting upon  
20 opposite sides of the head.

4. In a device of the character described, the combination of a lever, a head at one end of the lever provided with a claw, a guard arm cooperating with the claw and having an  
25 end thereof bifurcated to receive the head, and a stem connecting the head and claw, the said stem having a pivotal connection with one of the members and a yielding connection with the opposite member. 30

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

RICHARD A. BRADSHAW. [L. s.]

Witnesses:

JOSIAH HOOD,  
J. V. DAVIS.