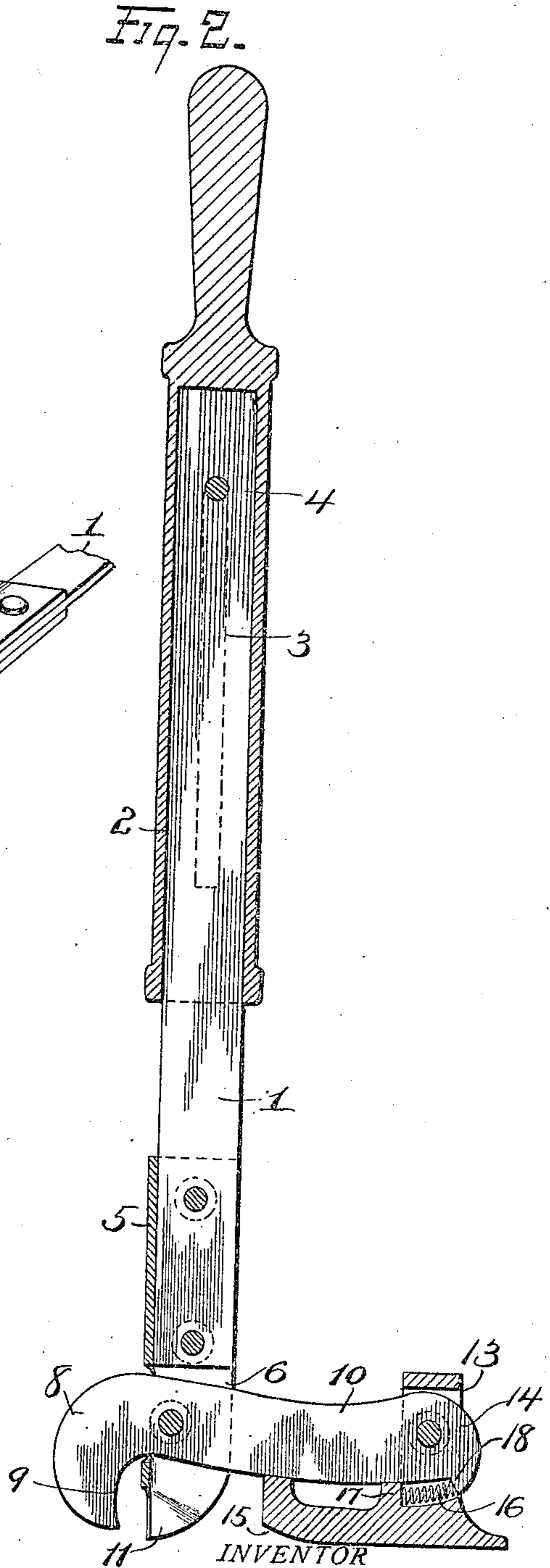
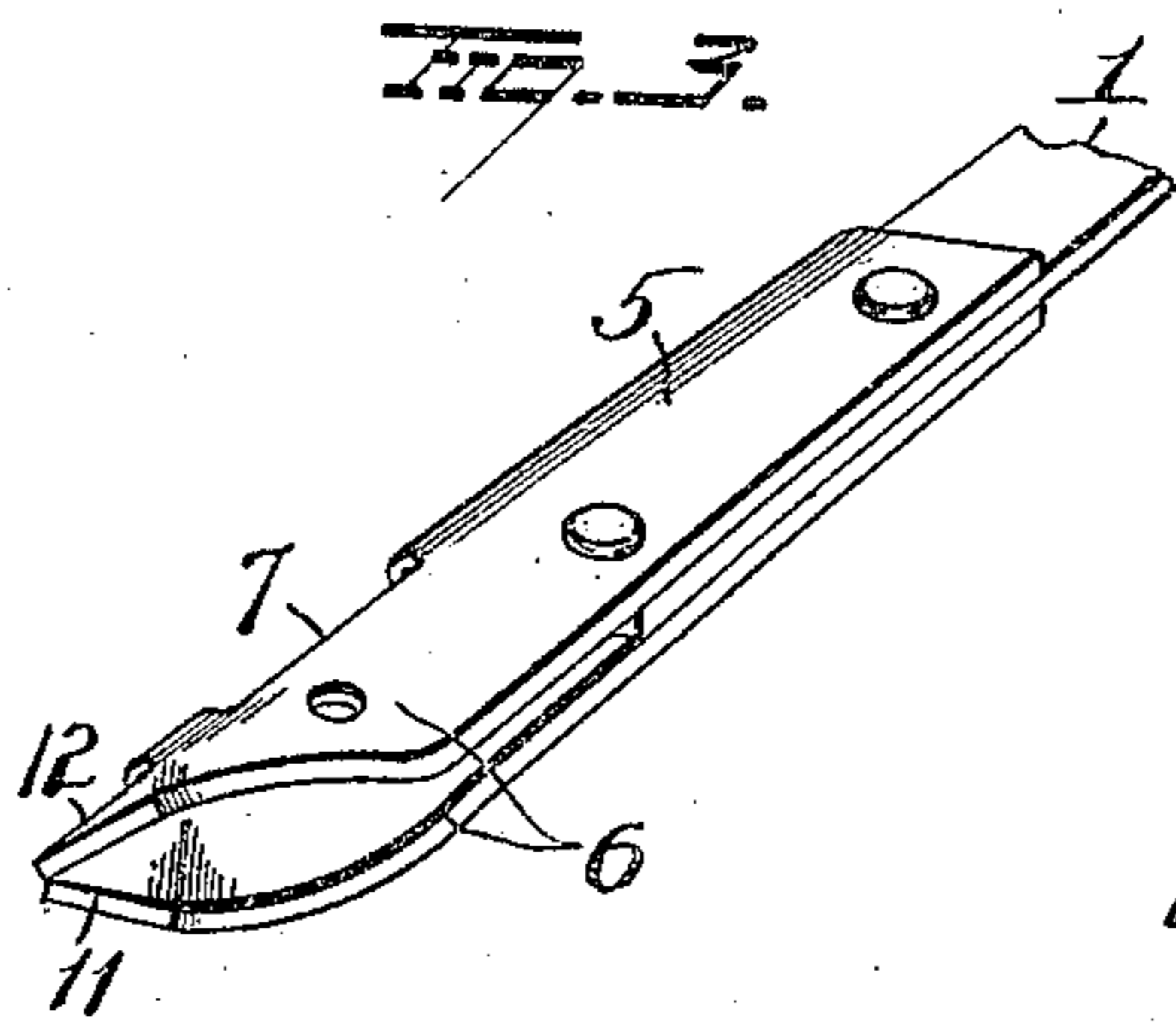
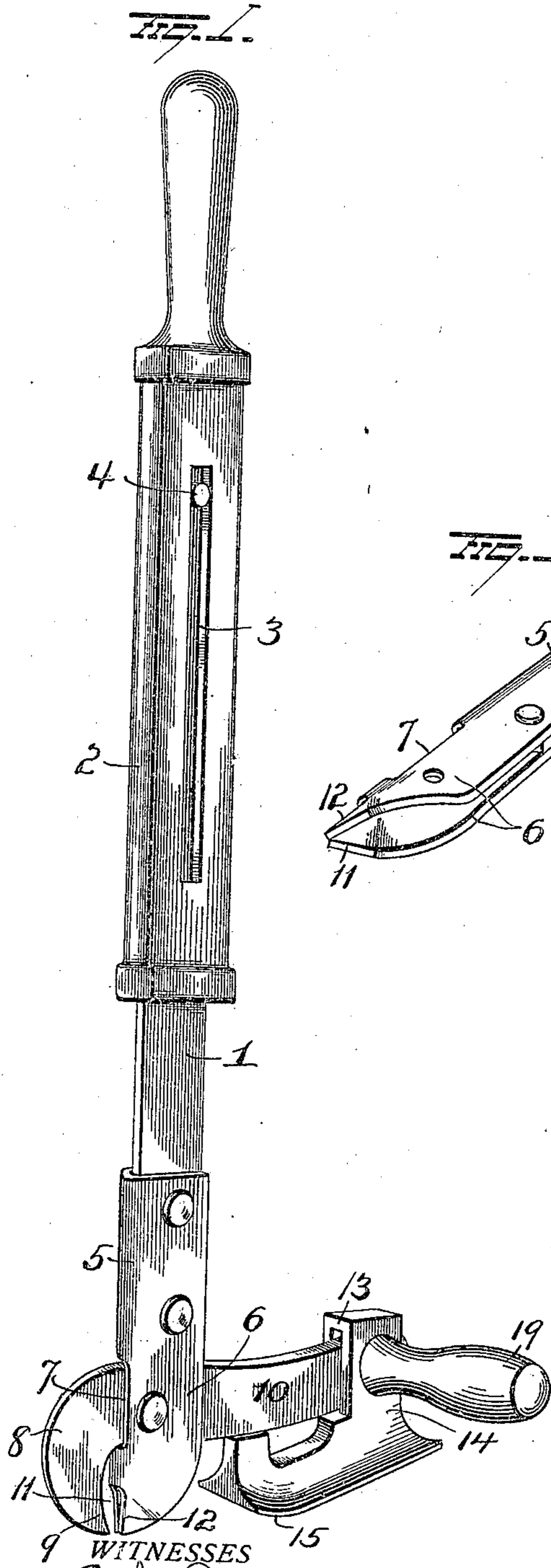


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NAIL EXTRACTOR.  
APPLICATION FILED DEC. 23, 1908.

952,289.

Patented Mar. 15, 1910.



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# UNITED STATES PATENT OFFICE.

MILTON WENGER, OF NEW HOLLAND, PENNSYLVANIA.

## NAIL-EXTRACTOR.

952,289.

Specification of Letters Patent. Patented Mar. 15, 1910.

Application filed December 23, 1908. Serial No. 468,932.

*To all whom it may concern:*

Be it known that I, MILTON WENGER, of New Holland, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Nail-Extractors; and I do hereby 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 to improvements in nail extractors, the object of the invention being to provide a device of this character which shall be simple in construction; cheap to manufacture, and which shall provide jaw engaging faces disposed at various angles to each other and adapted to contact with a nail at more than two points.

With this object in view the invention consists in certain novel features of construction and combinations of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings, Figure 1 is an elevation of a nail extractor embodying my improvements. Fig. 2 is a sectional view, and Fig. 3 is an enlarged detail view.

1 represents the shank of the tool, over which shank a stock 2 telescopes and constitutes an anvil and handle for the tool. The stock 2 is provided with a slot 3 to receive a pin 4 projecting from the shank 1 for the purpose of limiting the upward movement of the stock relatively to the shank.

A plate 5 is folded upon itself to receive between its parallel members, the lower end of the shank 1. Portions 6—6 of the plate 5 depend from the lower end of the shank 1 and this portion of the plate is provided with a slot 7 for the accommodation of a jaw 8 having a single nail engaging face or edge 9. This jaw is pivotally supported between the parallel members of the plate 5 and is provided with an arm 10. The lower ends of the depending portions 6 terminate in two jaws 11—12 and the metal is so formed that the nail engaging faces of these jaws will be disposed at an angle to each other and at an angle to the nail engaging face of the jaw 8. It will thus be seen that the portions 6 of the plate 5 constitute a support for the jaw 8 and that the jaws 11—12 are made integral with the said plate by cutting away the lower portion of the metal at the union of the two members of said plate.

The outer end of the arm 10 of jaw 8 enters the slotted portion 13 of a post 14 to

which it is pivotally attached. From its connection with the arm 10 the post 14 projects in a direction toward the jaws and is disposed under said arm 10. In order to keep the post in proper position, with the extension thereof, in contact with the bottom edge of the arm 10, a spring 16 may be employed, said spring bearing at one end against a shoulder 17 on the post and at the other end against a shoulder 18 on the arm 10. The inner end of the post 14 is beveled as shown at 15, and a handle 19 is attached to the post by means of the same bolt which serves as the pivotal connection of said post with the arm 10.

The jaws 11—12 will be driven into the wood by the use of the stock 2 operating as an anvil on the shank 1 and as said jaws penetrate the wood, the device will be somewhat tilted on the beveled portion of the post 14 as a fulcrum. When in this position the arm 10 will be resting upon the portion of the post 14 under it. A movement now, of the device in the direction of the post will first cause the several jaws to grasp the nail and as the movement is continued, the withdrawal of the nail will be started while the tool is turning on the inner end of the post as a fulcrum. Great leverage is thus afforded for starting the nail. A continued lateral movement of the device will cause the arm 10 to turn on its pivotal support in the post 14 and the nail to be fully extracted. During these operations the operator may hold the device in proper position by means of the handle 19 connected with the post.

Having fully described my invention what I claim as new and desire to secure by Letters-Patent, is,—

1. In a nail extractor, the combination of two members pivotally connected together, two jaws separated from each other and having their nail engaging faces disposed at an angle to each other at the free end of one of said members and constituting integral portions of said member, and a jaw at the free end of the other member coöperating with said first mentioned separated jaws.

2. In a nail extractor, the combination of two members pivotally connected together, the lower end of one of said members shaped to form two jaws having nail engaging faces disposed at an obtuse angle to each other and separated from each other, and the other member having a single jaw.

3. In a nail extractor, the combination with a shank and an anvil to cooperate therewith, of a plate embracing said shank and secured thereto, said plate having portions depending below the shank and provided at their lower ends with integral jaws separated from each other and disposed at an angle to each other, and a pivoted jaw passing between the depending portions of said plate and adapted to cooperate with said first mentioned jaws.

4. In a nail extractor, the combination of two members pivotally connected together, one of said members comprising a single piece of metal bent upon itself and provided at the lower end with two nail engaging faces disposed at an angle to each other, and the other member having a nail engaging face disposed at an angle to the first-mentioned nail engaging faces.

5. In a nail extractor, the combination of two members pivotally connected together, one of said members comprising a single piece of metal bent upon itself and having the metal connecting its two portions cut

away at the lower end, forming two integral nail-engaging faces disposed at an angle to each other, and the other member having a nail engaging face disposed at an angle to the first mentioned nail engaging faces.

6. In a nail extractor, the combination with two members pivotally connected together and provided with nail engaging surfaces, of a post pivotally connected with one of said members, said post having an inwardly projecting member to engage the under edge of said arm, a shoulder on the arm, a shoulder on the base portion of the post under said arm, and a spring between said shoulders for retaining the inwardly projecting members of the post in proper position relatively to the arm with which it is pivotally connected.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

MILTON WENGER.

Witnesses:

P. B. HESS,  
C. S. FRITZ.