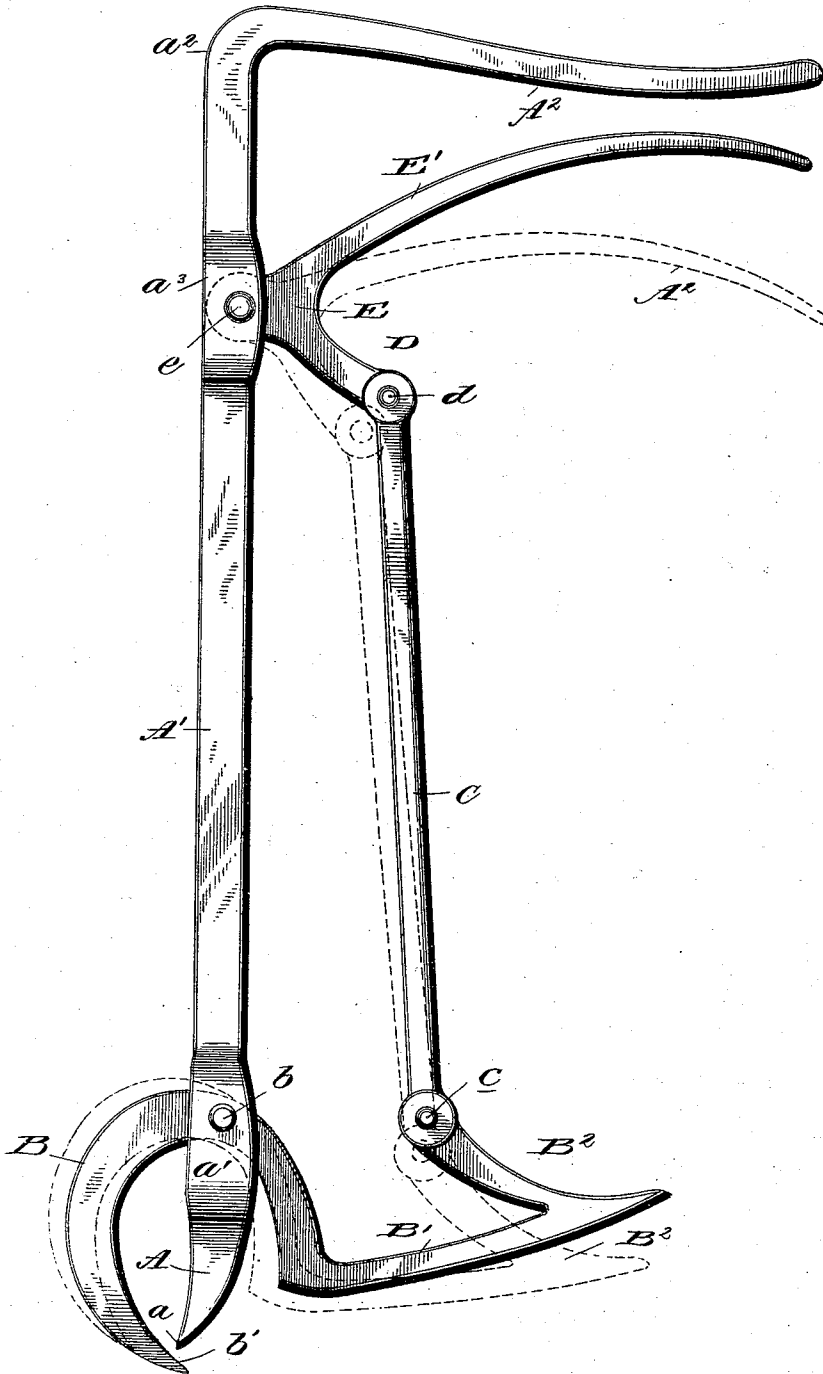


(No Model.)

F. X. ZAHRINGER.
NAIL EXTRACTOR.

No. 488,595.

Patented Dec. 27, 1892.



Witnesses

L. C. Hills

E. H. Bond.

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UNITED STATES PATENT OFFICE.

FRANK X. ZHRINGER, OF BELL AIR, MISSOURI.

NAIL-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 488,595, dated December 27, 1892.

Application filed April 25, 1892. Serial No. 430,549. (No model.)

To all whom it may concern:

Be it known that I, FRANK X. ZHRINGER, a citizen of the United States, residing at Bell Air, in the county of Cooper and State of Missouri, have invented certain new and useful Improvements in Nail-Extractors; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in nail extractors, and it has for its objects among others to provide an improved device of this character which shall be simple, cheap of manufacture and by the use of which no force is required to drive the ends of the jaws into the wood and by which the nail, whether with or without a head, is more firmly and securely grasped and more easily extracted than by prior constructions. I provide one of the jaws with a shank having a substantially right-angled end which serves as a grasp for the hand, and to this jaw or its shank is pivoted the movable jaw which has an extension which serves as a bearing or leverage and to this extension is pivotally connected a link which in turn is pivotally connected to a hand lever which is pivoted near the other end of the said shank.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claim.

The invention is clearly illustrated in the accompanying drawing, which, with the letters of reference marked thereon, forms a part of this specification and in which is shown a side elevation of my improved nail extractor.

Referring now to the details of the drawing by letter, A designates one of the jaws which is curved as shown slightly at its sharpened end *a* and near this end it is bifurcated as seen at *a'* for the passage of the other jaw as will soon be explained. This jaw A has a shank *A'* which, at its other end, is turned at right angles to its length to form a handle *A²* and near the bend *a²* the shank is bifurcated as seen at *a³* for the reception of the bend of the lever which is pivoted therein.

B is the movable jaw; it is curved forming nearly three quarters of a circle as shown and is pivoted between the bifurcations *a'* as

at *b* and the extreme end is sharpened as seen at *b'*, its other end terminating in a substantially horizontal extension *B'* which has a curved extension *B²* to the end of which is pivotally connected at *c* the link or arm C the other end of which is pivotally connected as at *d* with the short arm D of the lever E which is pivoted as at *e* between the bifurcations *a³* of the shank and the long arm *E'* of which is extended substantially parallel with the handle *A²* of the shank as shown.

The operation will be readily understood and briefly stated is as follows;—Place the extractor at right angles to the nail to be drawn and then slightly press the fixed jaw A into the wood behind the nail head which may be readily done by a slight twisting movement as will be readily comprehended; then grasp the parts *A²* and *E'* with the hand and press them together which movement will close the jaws firmly on the nail head when by drawing the extractor toward the operator the nail is easily extracted. The extension *B'* serves as a fulcrum when drawing the nail as will be readily understood.

Having thus described what I at present consider the preferable way of carrying out my invention, what I claim as new is;—

The nail extractor described consisting of the fixed jaw with shank with bifurcations near opposite ends and bent at one end at right angles to its length to form a handle; the curved jaw near the center of its curve pivoted to the fixed jaw in one of the bifurcations thereof and formed with horizontal extension the outer end of which is returned toward the shank of the fixed jaw and terminating in line with the pivot of the curved jaw, the link pivoted to the end of said end and arranged parallel with the shank of the fixed jaw, and the lever pivoted to the shank of the fixed jaw in the other bifurcation thereof and having a short arm pivoted to the link and a long arm at right angles to the said shank and parallel with the handle portion thereof, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

FRANK X. ZHRINGER.

Witnesses:

A. F. SANGER,
J. B. SPAEDY.