No. 845,672. PATENTED FEB. 26, 1907.

J. A. THOMPSON.

NAIL EXTRACTOR.

APPLICATION FILED MAR. 14, 1906.

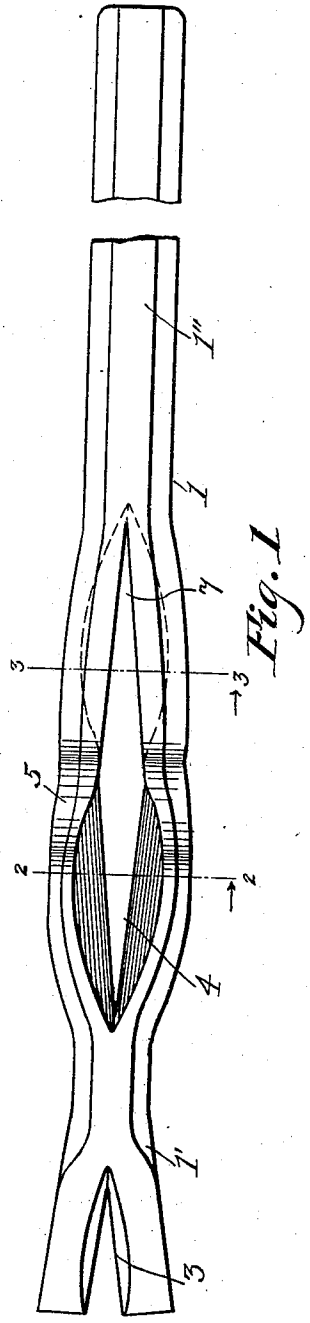

Fig. 1

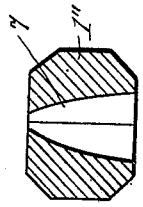

Fig. 3

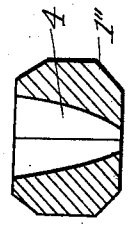

Fig. 2

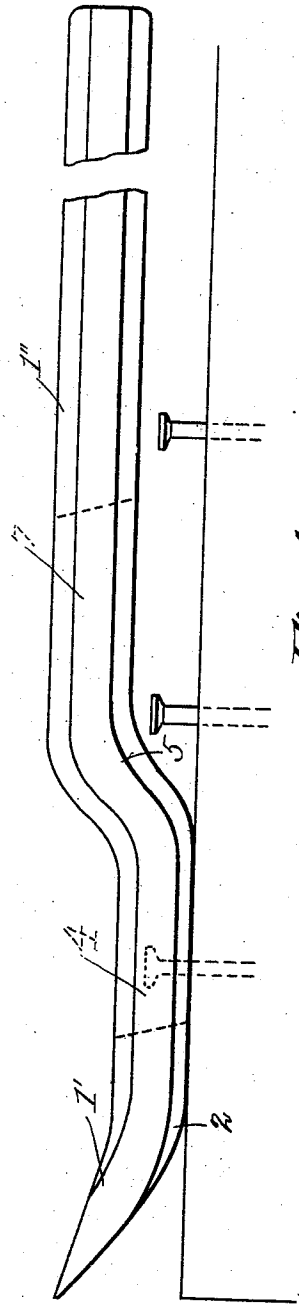

Fig. 4

Witnesses

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NAIL-EXTRACTOR.

No. 845,672. Specification of Letters Patent. Patented Feb. 26, 1907.

Application filed March 14, 1906. Serial No. 306,071.

To all whom it may concern:

Be it known that I, JOHN A. THOMPSON, a citizen of the United States of America, and a resident of the city of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Nail-Extractors, of which the following is a specification.

My invention relates to improvements in nail-extractors, and has for its primary object the production of an improved and simplified construction.

With the above and other objects in view the invention consists of the construction, arrangement, and combinations of parts hereinafter described, and succinctly pointed out in the appended claims.

In the accompanying drawing, in which like numerals of reference indicate like parts throughout the several views, Figure 1 is a view in top plan of my improved nail-extractor. Fig. 2 is a section taken on line 2 2 of Fig. 1. Fig. 3 is a section taken on line 3 3 of Fig. 1, and Fig. 4 shows the invention in use.

Referring to the drawing by reference-numerals, 1 indicates the body of my improved nail-extractor, shown as consisting of a metal bar bent intermediate its ends to form short and long arms 1′ and 1″, respectively, and provide a fulcrum on what I term for convenience the "under side" of the bar at 2. Arm 1 is formed with claw 3 and cleft 4, whose side walls diverge from the under side, or that side of body 1 which is provided with fulcrum 2, and cleft 4, it will be observed, is arranged further from fulcrum 2 than claw 3. Therefore if it is desired to extract a nail of considerable length claw 3 is first used, this claw being intended principally for reaching and starting nails whose heads are in deep-seated depressions, and after the nail is partly extracted cleft 4 is engaged with the head thereof to finish the extracting operation, which is then accomplished by swinging the outer portion of arm 1″ upwardly on fulcrum 2. If, however, the arm 1″ be swung too high, the fulcrum will obviously change from said fulcrum 2 to the free end or working edge of the short arm 1′. To the rear of cleft 4 the arm 1″ is bent, forming an offset portion 5, whereby the rear portion of said arm 1″, or that part grasped by the operator, will be arranged to one side of the lower face of that portion of the arm in which the cleft 4 is provided. By this construction, as is clearly illustrated in Fig. 4, when it is desired to extract a series of nails whose heads are clear of the wood that portion of arm 1′ which has the cleft 4 therein can be slid along on the wood toward the operator and the nails successively engaged in the cleft 4 and extracted from the wood, and when the device is used in this manner the rear portion of arm 1″ will be out of the way of the nails to be engaged by the cleft 4, the same being disposed above the nails by reason of the offset portion 5, and obviously injury to the operator's hands by snagging on the nails will be avoided.

The upper face of that portion of arm 1″, lying to the rear of the offset portion 5 is approximately in line with the free edge portion of arm 1′, and in said last-named portion of arm 1″ I form another cleft, as 7, this cleft, however, being reversely arranged and inverted with respect to claw 3 and cleft 4, so that to engage it with a nail for extracting the body 1 must be turned over, as will be hereinafter more fully set forth.

To provide the clefts 4 and 7, I form the arm 1″ with an elongated opening which extends through the offset portion 5 to suitable distances on opposite sides thereof, and each end portion of said opening is approximately **V** shape in cross-section, one having its side walls diverging from the lower side of the arm and forming cleft 4 and the other having its side walls diverging from the upper side of said arm and forming cleft 7, whereby, as heretofore stated, it bears an inverted position relatively to cleft 4. By this construction aside from providing extracting e'ements which are arranged at varying distances from a fulcrum it will be perceived that the flared upper end portion of one cleft communicates directly with the contracted lower end portion of the other cleft, and thereby will receive and serve to guide a nail into the same.

When it is desired to remove a nail through the intermediacy of cleft 7, body 1 is inverted and positioned so that the nail-head is received in the flared upper end portion of cleft 4. Body 1 is then moved from the operator until the nail-head is securely engaged in the cleft 7, after which the outer end portion of arm 1″ is swung upwardly. The free edge of arm 1′ serves as a fulcrum in this operation.

It will be further noted that if after engaging a cleft 4 with a nail and swinging the long arm 1″ upwardly it is found that the arc

through which said cleft travels is too small to entirely effect withdrawal of the nail, said arm can be again lowered and slid toward the nail to engage cleft 7 therewith, the nail when thus engaged by cleft 7 having its shank passing through the V-shaped nail-notch thereof and having its head resting on the outer face of said cleft, which, as is apparent, is a portion of the upper side of the arm 1″.

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

1. A nail-extractor comprising a body bent intermediate its ends forming two arms one of which is offset and parallel to the other, and a cleft in each arm, said clefts being in communication with each other.

2. A nail-extractor comprising a body bent intermediate its ends forming two arms one of which is offset and parallel to the other, a cleft in each arm the entrance to each cleft for the nail being at the point of bend.

3. A nail-extractor comprising two arms one of which is offset and parallel to the other, an intermediate bent portion integrally connecting said arms, a cleft formed in each arm, the entrance to one cleft for the nail being on the opposite side of the bent portion from the entrance to the other cleft.

4. A nail-extractor comprising a pair of integral arms each formed with a cleft, the cleft of one arm opening into that of the other arm, said arms being bent at the point of juncture of said clefts disposing said arms in different parallel planes whereby one of said arms may be drawn over a partly-extracted nail without engaging the same and the other arm slid so as to engage its cleft with the nail for extracting the same.

5. A nail-extractor comprising a body bent intermediate its ends forming two arms one of which is offset and parallel to the other, whereby clearance is provided for the fingers of the operator between one of the arms and the article operated on, the lower arm being provided with a cleft having its entrance for the nail at the under side of the bent portion of the body and the upper arm being provided with a cleft having its entrance for the nail at the upper side of the bent portion and both clefts being in communication.

Signed at Seattle, Washington, this 7th day of March, 1906.

JOHN A. THOMPSON.

Witnesses:
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