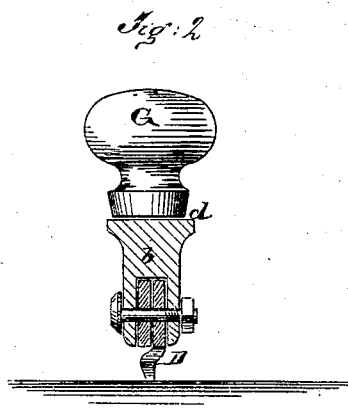
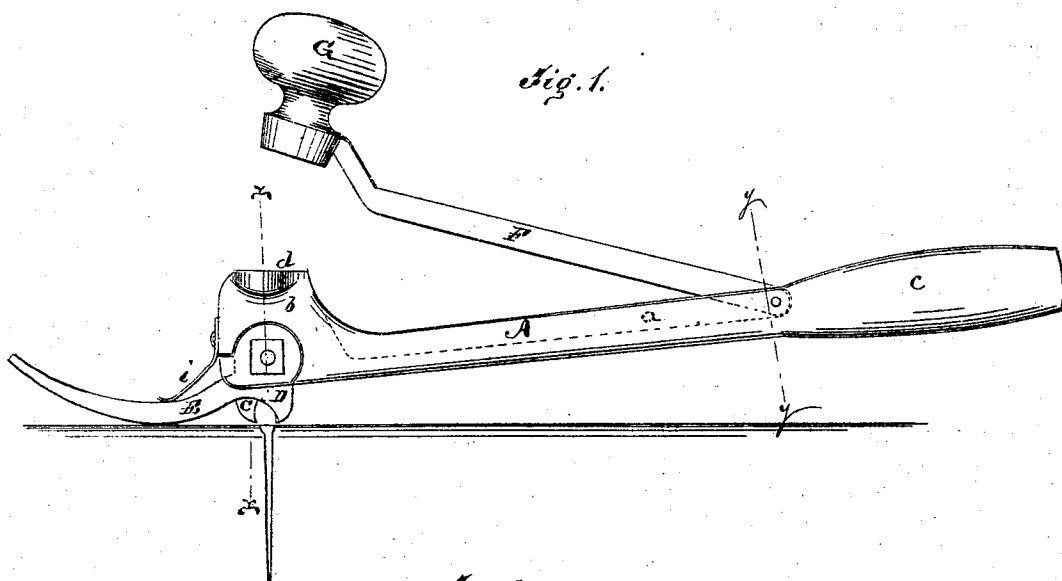


H. A. NETTLETON.  
Nail-Extractors.

No. 146,938.

Patented Jan. 27, 1874.



*Fig. 3.*



Witnesses.  
*H. L. Maltzberg.*  
*M. Lovell.*

Inventor.  
*Horace A. Nettleton.*  
*per [Signature]*  
*Atty.*

# UNITED STATES PATENT OFFICE.

HORACE A. NETTLETON, OF NEW HAVEN, CONNECTICUT.

## IMPROVEMENT IN NAIL-EXTRACTORS.

Specification forming part of Letters Patent No. **146,938**, dated January 27, 1874; application filed February 4, 1873.

*To all whom it may concern:*

Be it known that I, HORACE A. NETTLETON, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and Improved Nail-Extractor; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to an improvement in an implement for extracting nails, &c.; and the invention consists in a nail-puller consisting of a lever hammer, fixed and adjustable jaws, and fulcrum, all constructed and operated in the manner hereinafter fully described.

In the accompanying sheet of drawings, Figure 1 represents a side view of my invention; Fig. 2, a cross-section in the line *x x*; Fig. 3, a cross-section in the line *y y*.

Similar letters of reference indicate like parts in the several figures.

A represents a lever, which may be constructed of iron or other desirable material, and of any desired length. Into the upper edge of this lever a groove, *a*, is formed, extending from the grasp *c* nearly to the opposite end of the same. On one end of the lever A is cast or otherwise formed a projection, *b*, with a flat surface, *d*, on its upper side, and to the end of the lever, and immediately below the projection *b*, is firmly secured a fixed claw, C. This claw is made of steel, and projects below the end of the lever, as shown in Fig. 1, and, secured to the said end, is affixed a second claw, D, in such manner as to enable the points of the respective claws to be brought nearly in the same line. The claw D is secured to the lever, so that it may freely turn or move to or from the fixed claw C, and its outer side is prolonged into a curved fulcrum, E. Pivoted to the lever A, at or near one end of the groove or slot *a*, is a stem or guide, F, which may be made from wrought-iron or other suitable metal. This stem is of such dimensions as will allow it to fit snugly within the slot *a*,

and it extends nearly up to the projection *b*, where it terminates in a solid head, G, immediately over and resting upon the flat surface *d* of the projection *b*.

The construction of my implement being substantially as above described, its operation is as follows: The lever A is held in such position as will bring the points of the claws C and D immediately over the head of a nail it is desired to draw; and then the head G is raised (the pivoted end of the stem F acting as a hinge) and brought, with one or more blows, in contact with the flat surface *d* of the projection *b*, when the concussive force will drive the points of the claws into the wood surrounding the nail-head. The end of the lever A is raised, bringing the fulcrum E in contact with the surface of the box within which the nail is driven, and forcing the point of the claw D tightly against the nail-head, which is thus jammed between said movable claw and the fixed claw C, and as the lever A is raised the nail is withdrawn. The fulcrum E yielding as the nail is withdrawn permits the nail to be drawn without bending it, ready to be driven again, if necessary. The fulcrum E is kept in its normal position by the spring *i*.

From the foregoing description of the construction and operation of my implement, it will readily be seen that with it a nail may be withdrawn from the wood within which it is embedded, in an expeditious manner, (even though its head may be countersunk below the surface,) without injury to the wood within which it is driven or to the nail.

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

A nail-puller constructed of the lever A, stem F, fixed and adjustable claws C and D, fulcrum E, and hammer G, as and for the purpose described.

HORACE A. NETTLETON.

Witnesses:

SYLVANUS BUTLER,  
ANTON COE.