(No Model.)

R. BLAKE.

NAIL EXTRACTOR.

No. 526,678. Patented Oct. 2, 1894.

Fig. 1.

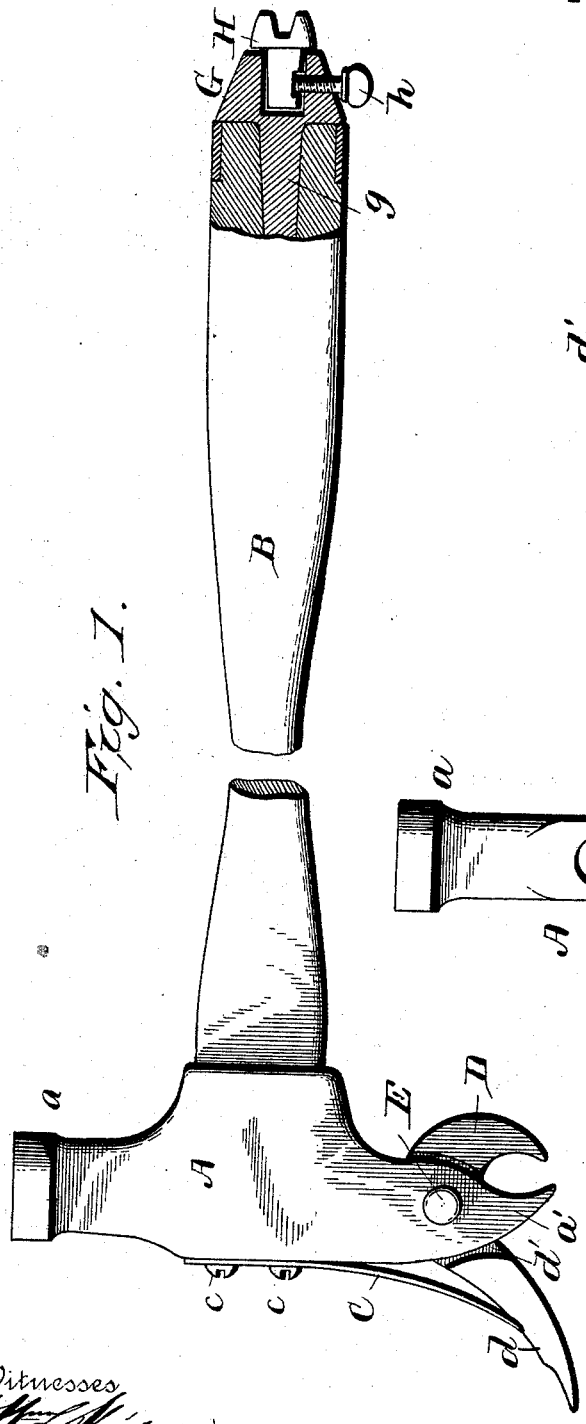


Fig. 3.

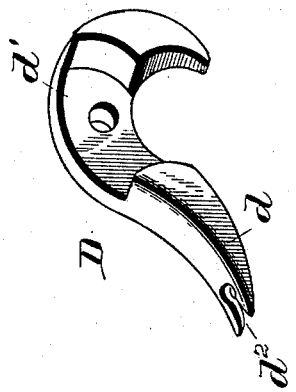
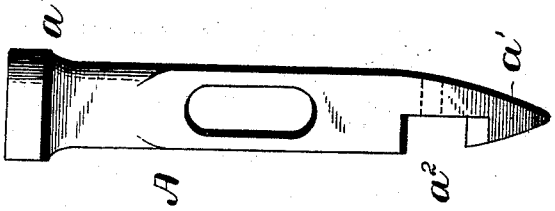


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

ROBIE BLAKE, OF CORNISH, MAINE.

NAIL-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 526,678, dated October 2, 1894.

Application filed May 16, 1894. Serial No. 511,440. (No model.)

To all whom it may concern:

Be it known that I, ROBIE BLAKE, a citizen of the United States, residing at Cornish, in the county of York and State of Maine, have invented certain new and useful Improvements in Nail-Extractors; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to hammers and like tools which embody in their organization nail gripping jaws to be used when it is required to extract nails, one of the jaws being extended to provide an arm to receive the thrust and present a fulcrum for the tool to rock upon when in active operation; and aims to dispose the parts to the best possible advantage both as regards simplicity of construction and efficiency of operation, to secure the head to the handle by the same means which actuates the movable jaw and holds it in a normal position when not operated upon by the external pressure, and to combine with the handle a holder to receive tools for various uses.

With these and such other objects as appertain to the nature of the invention, the improvement consists of the novel features which hereinafter will be more fully disclosed and which are shown in the annexed drawings, in which—

Figure 1, is a side elevation partly in section of a tool embodying the invention. Fig. 2, is a detail view of the head, the movable jaw and its actuating spring being detached, and Fig. 3, is a detail perspective view of the movable jaw.

The letter A represents the head of a tool to which the invention is applied and which is transversely apertured to receive a handle B of wood or other material usually employed for the purpose. The handle is driven into the head until its end is about flush with the outer edge thereof, and is held from withdrawal by means of a spring plate C which is attached to the end of the handle by screws *c*. The edges of the plate C overlap the sides of the opening in the head thereby preventing the latter from flying off the handle when using the tool. The pole *a* projects laterally from the head and the jaw *a'* extends in a diametrically opposite direction to the pole and has a transverse depression a^2 in one side extending in depth to about half the thickness of the jaw. The walls of the depression a^2 are curved to approximate the curved edges of the semi-circular portion of the movable jaw D to obtain a neat joint.

The jaw D approximates the form of the jaw *a'* at its operative end and has an arm *d*, which, when the parts are assembled, projects at about right angles from the outer edge of the jaw *a'* in an opposite direction to the handle B and forms a fulcrum for the tool to rock upon when extracting the nails. A depression *d'* is formed in one side of the jaw to correspond with the depression a^2 and is of proper depth, about half the thickness of the jaw, so that when the jaws are connected by the pivot E their sides will be flush or in the same plane. The projecting arm *d* is tapered to one edge which terminates in a claw d^2 to be used for extracting nails whose heads project sufficiently far to enable the claw to be readily engaged thereunder. When using the claw the ends of the jaws D and *a'* serve as a fulcrum, the arm *d* being held in a fixed relation by the mutual engagement of the walls of the depressions and the edges of the jaws.

The spring plate C is extended and exerts a pressure on the upper side of the arm *d* to normally hold the jaws D and *a'* open to facilitate the application of the said jaws to the nail to be extracted. The jaws being beak-shaped bite into the wood and grip the nail with sufficient force to enable it to be removed when rocking the tool on the end of the arm *d* as a fulcrum.

It will be observed that the jaws are in line with the pole. Hence, the pressure required to operate the tool successfully, especially when the heads of the nails are flush with or below the surface of the wood, can be advantageously and conveniently applied by one hand while the other is free to grasp and manipulate the handle B.

The tool holder G conforms to the end of the handle and has a tong *g* by means of which it is secured thereto. A socket is pro-

vided therein to receive the shank of the tool H which is removably held in the said socket by any suitable means as a binding screw *h*, the latter passing through the side of the holder. This tool H is a gage to be fitted over the head of a nail to remove the wood from around the same when driven in far so that the jaws can readily grasp the said head when it is required to extract the nail.

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

1. The combination of a tool head provided with an operating handle, and with an integral jaw having a transverse depression in one side whose walls are curved, and a jaw having a semi-circular portion which is seated and fulcrumed in the depression in the integral jaw, and having an arm projecting at approximately right angles from the tool head in an opposite direction to the operating handle, substantially as described.

2. The combination with a tool apertured to receive a handle and having nail gripping jaws, and a handle inserted in the aperture in the tool head, and a spring plate attached to the handle and overlapping the sides of the aperture to retain the tool head on the handle and constructed to actuate the movable nail gripping jaw and maintain the same in a normal position, substantially as described.

3. The combination of a tool head provided with an operating handle and an integral jaw, and a movable jaw fulcrumed on the integral jaw, to co-operate therewith to extract nails, and having an arm projected substantially at right angles from the head in an opposite direction to the operating handle and terminating in a claw, the parts being so disposed that the said jaws form a fulcrum for the claw, and the claw a fulcrum for the jaws, substantially as set forth.

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

ROBIE BLAKE.

Witnesses:

PHILIP F. TURNER,

ALFRED WOODMAN.