P. F. PETERS.
Lasting-Hammer.

No. 199,568. Patented Jan. 22, 1878.

Fig. 1.

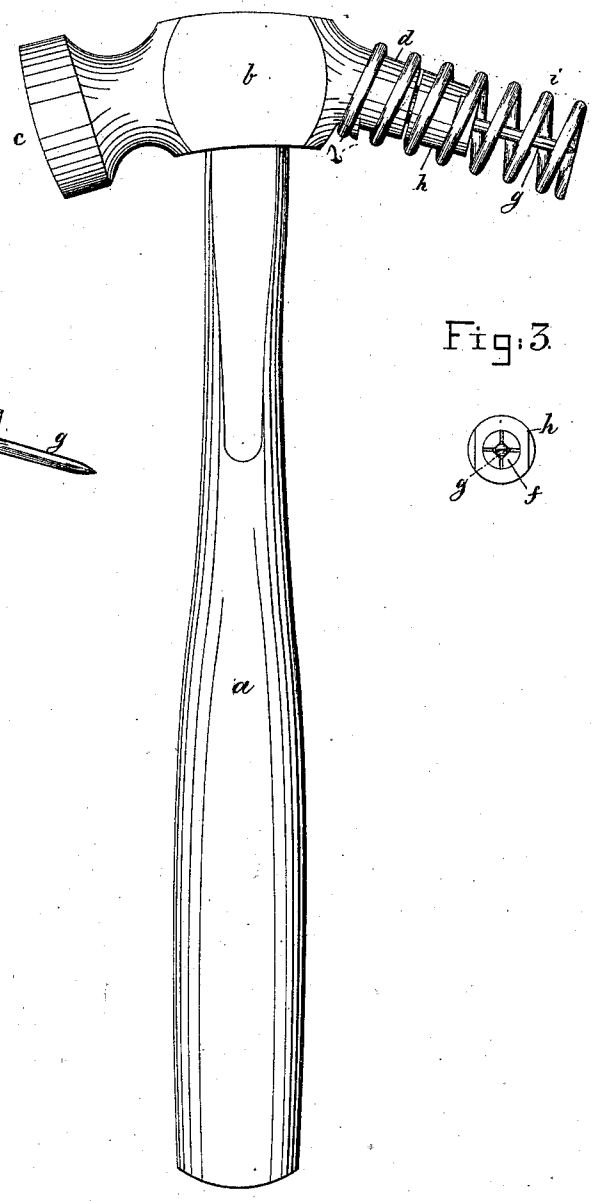

Fig. 2.

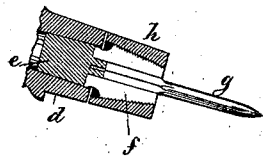

Fig. 3.

Witnesses.
E. C. Perkins.
W. J. Pratt.

Inventor.
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by Crosby & Gregory Attys

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UNITED STATES PATENT OFFICE.

PATRICK F. PETERS, OF NATICK, MASSACHUSETTS.

IMPROVEMENT IN LASTING-HAMMERS.

Specification forming part of Letters Patent No. **199,568**, dated January 22, 1878; application filed October 18, 1877.

To all whom it may concern:

Be it known that I, PATRICK F. PETERS, of Natick, in the county of Middlesex and State of Massachusetts, have invented an Improved Lasting-Hammer, of which the following is a specification:

This invention relates to a hammer for lasting boots and shoes; and consists in the combination, with an awl adapted to be driven by a blow, of a spring to yield when the awl is driven into the stock, and then, by its reaction, to assist in withdrawing the awl from the stock.

Figure 1 represents, in side elevation, my improved lasting-tool or hammer; Fig. 2, a longitudinal section thereof at one end, showing the manner of holding the awl; and Fig. 3, an end view of the awl-holding portion.

The handle *a* is provided with a metallic head, *b*, made as a hammer, having the face *c*. At its opposite side the head *b* is provided with an extension, *d*, made hollow to receive an awl-holding device, *e*, provided with prongs *f*, between which the end of the awl *g* is placed, it being held firmly by the action of a nut, *h*. The awl-holding devices are, and may be, of any usual construction.

About the extension *d* and the awl-holder is placed a strong, stiff spiral or coiled spring, *i*, extending about to the end of the awl.

Several coils of the spring *i* surround the extension *d* and the awl-holding nut *h*, thereby so supporting the spring as to prevent it tipping or moving at its free end laterally with reference to the awl. The spring, when being crowded over the extension, is turned in a direction opposite to that of the coil of the spring, and being so moved is expanded, so that when in position the spring hugs the extension very closely. In use the spring is made so stiff as never to touch the awl.

When the holes are to be made in the outer sole for the reception of nails or pegs to confine it to the inner sole, or for other purposes in shoe work, the operator, having the hammer or lasting-tool in his hand, will strike the awl into the stock. As the awl meets and enters the stock the force of the blow will cause the spring *i* to shorten until the awl has completed its penetrating movement, after which the spring, in its effort to elongate itself to its natural position, will act to assist or completely draw the awl from the leather or stock.

The spring will act with more or less power, according to its strength or stiffness. The hammer-head may be of any usual shape.

The holding projection *l* (shown at the under side of the portion *d*, Fig. 1) forms between itself and the hammer portion *b* a groove for the reception and retention of the end of the spring, holding it so that it cannot be drawn off longitudinally, set-screws for holding the spring being thereby dispensed with.

I claim—

1. The hammer *a b c d*, in combination with the awl and awl-holding devices *e f h*, the spiral spring *i*, and its holder *l*, the spiral spring surrounding the portion *d* of the hammer, and the awl and awl-holder, all substantially as set forth.

2. The hammer *c b*, its extension *d*, and awl-holding devices, in combination with a strong spiral spring, *i*, forced upon and made to hug closely the extension and envelop the awl-holding devices, to prevent the spring moving laterally with relation to the awl, and from coming in contact with the awl, substantially as shown and described.

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

PATRICK F. PETERS.

Witnesses:

G. W. GREGORY,

W. J. PRATT.