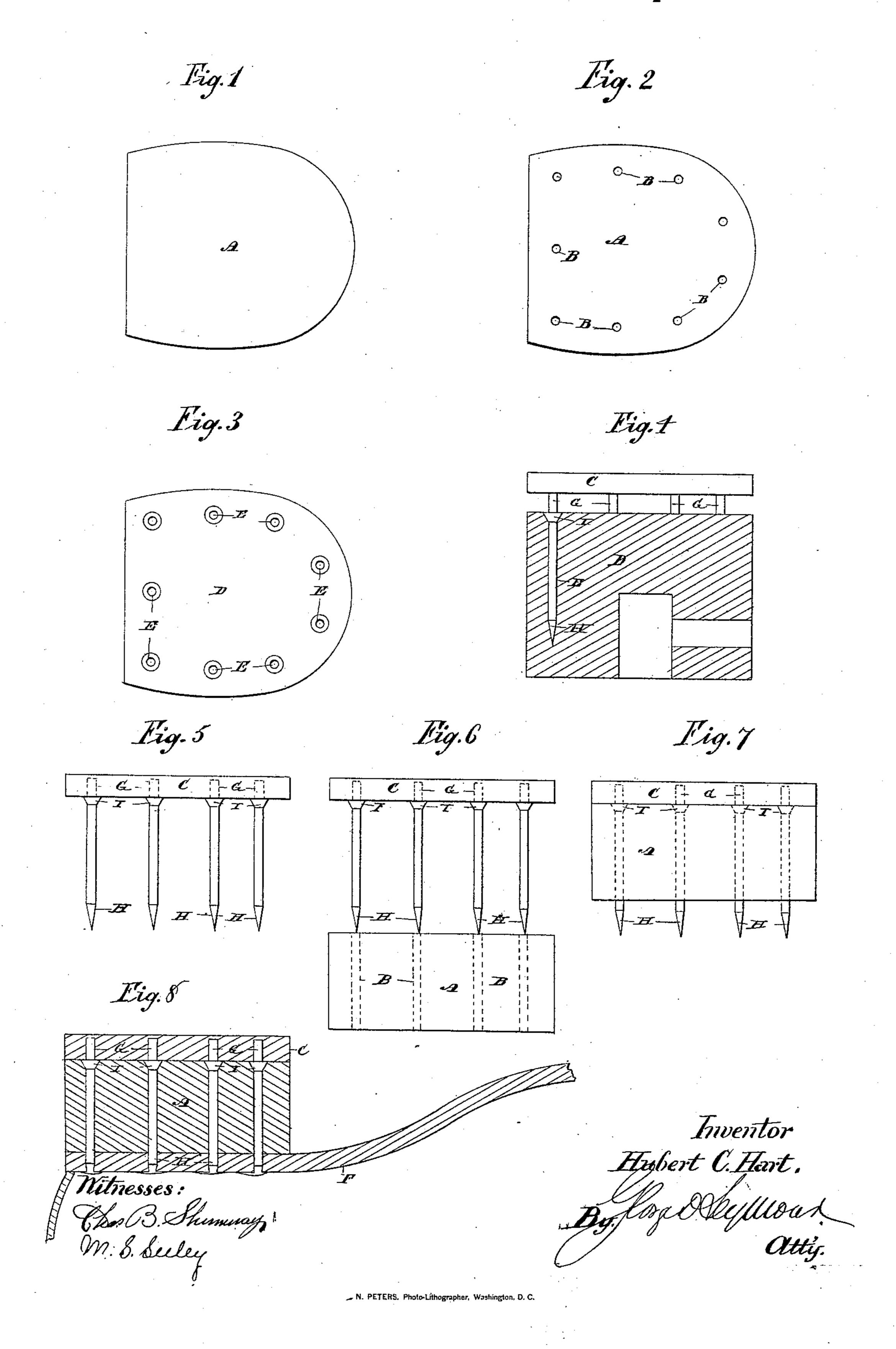
(No Model.)

H. C. HART.
METHOD OF MAKING HEELS FOR BOOTS OR SHOES.

No. 410,833.

Patented Sept. 10, 1889.



United States Patent Office.

HUBERT C. HART, OF UNIONVILLE, CONNECTICUT.

METHOD OF MAKING HEELS FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 410,833, dated September 10, 1889.

Application filed March 13, 1889. Serial No. 303, 108. (No model.)

To all whom it may concern:

Be it known that I, Hubert C. Hart, residing at Unionville, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in the Method of Making Heels for Boots or Shoes; and I do declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improved method of making heels for boots or shoes, the object being to simplify the operation and enable it to be conducted with an economy of time and labor over the mode now in use.

With these ends in view my invention consists in a method having certain steps, as will be hereinafter described, and pointed out in the claim.

20 In the accompanying drawings, Figure 1 is a reverse plan view of a heel-body. Fig. 2 is a similar view showing the body after it has been pierced. Fig. 3 is a plan view of a nailholder. Fig. 4 is a view thereof, in side ele-25 vation, showing it charged with nails and a top lift resting upon their projecting outer ends. Fig. 5 is a view in side elevation, showing a top lift assembled with as many nails as are required for the finished heel. 30 Fig. 6 is a view in side elevation, showing the pierced heel-body and the top lift and nails in position for being combined. Fig. 7 is a similar view of the finished heel, and Fig. 8 is a sectional view showing the heel applied 35 to a shoe.

The heel-body A, composed of the desired number of pieces or lifts, is pierced in any suitable manner to form transverse nail-holes B, as shown by Fig. 2 of the drawings, such 40 holes being arranged in the order required and conforming in number to the number of nails to be contained in the finished heel.

The top lift C of the heel is combined with the nails by pressing it down upon their outer ends while they are assembled in right position, whereby the top lift and nails are rigidly secured together in their right relations, independent of the heel-body.

For the purpose of combining the top lift on and nails, as described, they may be supported in a nail-holder such as herein shown, and consisting of a metallic block D,

having a series of deep nail-pockets E, arranged to correspond to the positions which the nails are to occupy in the finished heel. 55 I do not limit myself, however, to using such a nail-holder in carrying out my invention. After the top lift has been forced down upon the outer ends of the nails it is drawn away from the nail-holder, bringing the nails with it. 60

The top lift and nails having been combined, as described, the ends of the nails are introduced into the outer ends of the holes in the heel-body, after which the body and top lift are drawn together by pressure, where- 65 by the nails are driven through the heel-body, their points projecting beyond the inner face thereof.

Fig. 8 of the drawings shows the application, under my improved method, of a heel 70 to a shoe F, which will in practice be placed upon a last, although that is not shown. A pierced heel-body is placed upon the shoe and the combined nails and top lift applied to the heel-body, after which pressure upon 75 the lift drives the nails through the heel-body and shoe and turns their points down upon the last, whereby the heel is formed and clinched to the shoe.

By assembling the nails with the top lift, 80 as described, the separate insertion of the nails into the heel-body is avoided, whereby economy of time and labor is secured.

As herein shown, the nails consist each of a wearing end G, a binding end H, and a collar I interposed between such ends. This is the form of nail I prefer to use. I do not, however, limit myself to such form, because my invention may be practiced with the ordinary form of nail.

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

The method of making heels for boots or shoes, consisting in grouping and supporting 95 the nails in the relative positions which they will occupy in the completed heel, then placing a top lift upon their outer ends and applying pressure to force the said ends into the inner face of the lift, whereby all of the nails are simultaneously assembled with the top lift and held in place by their outer ends, with their shanks projecting from the inner face thereof, taking a heel-blank

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and piercing holes therein, and, by grasping the lift, simultaneously inserting the points of all the nails into the holes thereof and drawing the blank and lift together under pressure and simultaneously forcing the shanks of all of the nails through the heelblank.

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

HUBERT C. HART.

Witnesses:
T. W. OWENS,
CHS. H. FIELD.

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