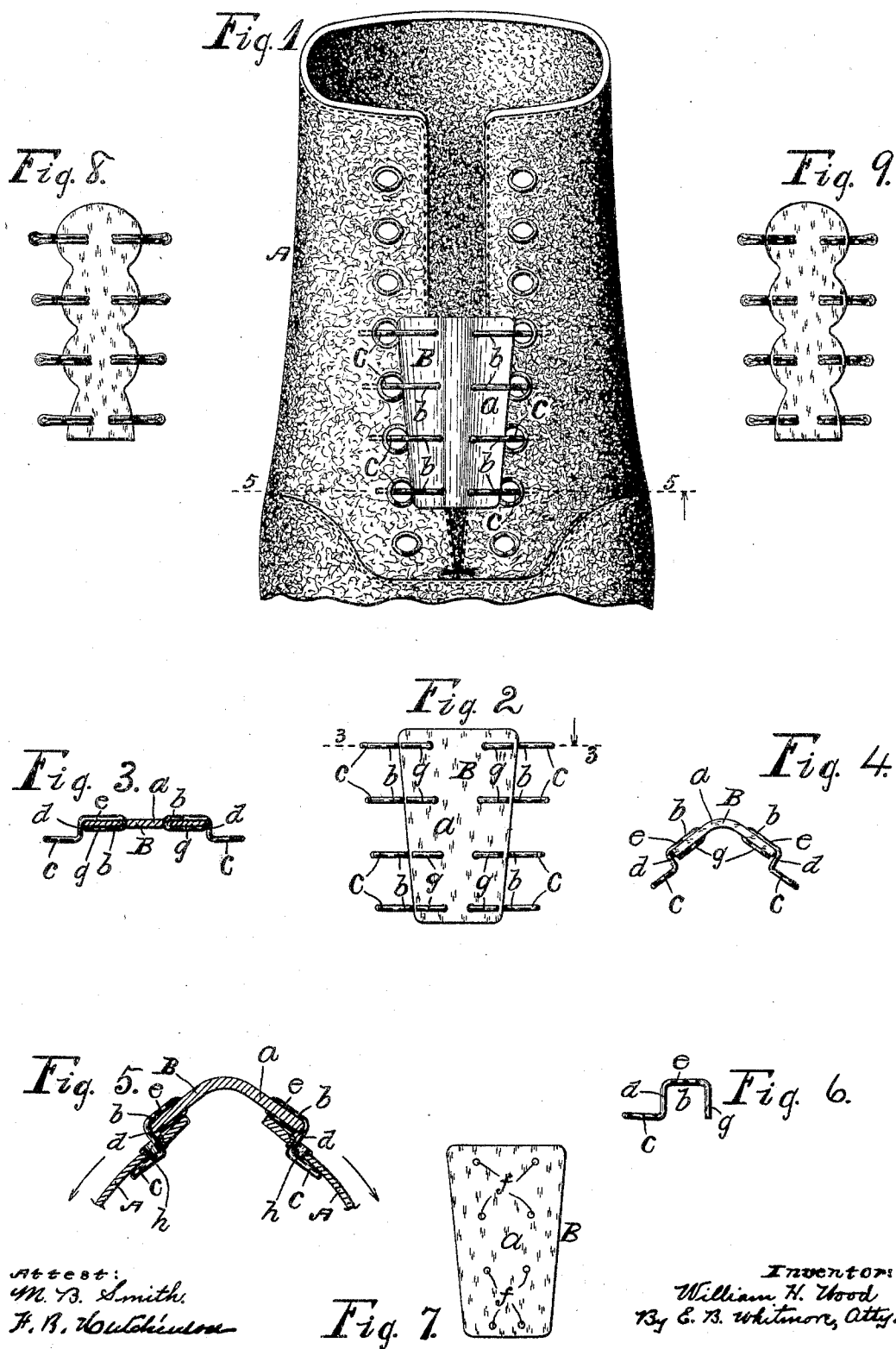


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W. H. WOOD.
 HOLDER FOR SHOE UPPERS.
 APPLICATION FILED MAY 18, 1904.



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UNITED STATES PATENT OFFICE.

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HOLDER FOR SHOE-UPPERS.

SPECIFICATION forming part of Letters Patent No. 789,474, dated May 9, 1905.

Application filed May 18, 1904. Serial No. 208,578.

To all whom it may concern:

Be it known that I, WILLIAM H. WOOD, of Rochester, in the county of Monroe and State of New York, have invented a new and useful

Improvement in Holders for Shoe-Uppers, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

In lasting shoes the uppers are drawn firmly down toward the sole on both sides of the last, which drawing downward of the parts tends to cause the sides of the upper to spread apart at the front lace-opening. This spreading at the lace-opening needs to be prevented, as a shoe thus made would be distorted and out of shape. To avoid this difficulty various devices have been produced; but these heretofore used have been found in some manner incomplete and objectionable and more or less troublesome in use. To produce a more perfect device of this kind and for the purpose stated is the object of my present invention.

One objection to the holding devices heretofore employed for preventing the spreading of the upper at the lace-opening while lasting the shoe is that they frequently have been in too many separate pieces or if in a single piece, as in some cases, the holder has been made of material too rigid and unyielding and not adapted to readily and properly break over the comb of the last while the sides of the upper are being drawn downward, and besides as usually constructed the parts of these temporary stays or holders that come within the shoe-upper when applied are in the way of and crowd the last. Noting and realizing these defects and objections in the construction of the various holders in use I have aimed to devise and produce a holder that will avoid these difficulties, one in which the various parts are combined in a single piece or body and forming the main part or body of the holder of pliable and yielding material and with the parts within the shoe small and out of the way of the last.

The invention is hereinafter fully described, and more particularly pointed out in the appended claims, reference being had to the accompanying drawings, which, with the refer-

ence-letters marked thereon, constitute a part of this specification.

Figure 1 is a front elevation of a part of the upper of a shoe, showing my improved holder in place thereon. Fig. 2 is a plan of the under side of the holder. Fig. 3 is a transverse section of the holder, taken on the dotted line 3 3 in Fig. 2. Fig. 4 is an end view of the device, showing its bent form. Fig. 5 is a transverse section of the parts on the dotted line 5 5 in Fig. 1, further showing the adaptation of the holder to the shoe, parts being broken away. Fig. 6 is a side elevation of a metal catch-wire or catch detached, showing its form before being secured to the body portion of the holder. Fig. 7 is a plan of the body of the holder detached. Figs. 8 and 9 are views showing the upper and the lower side, respectively, of another form of the holder sometimes employed, the body portion being more ornamental in form and the catch-wires made double.

In the drawings, A is a part of the upper of a shoe, and B my improved holder for the parts attached in place thereon. This holder consists of a body portion or body *a* of some flexible or yielding material, as medium-thick leather, provided at its opposite edges with two series of catches *b*, preferably of hard wire. The body *a* is longer than wide and slightly tapered, the catch-wires *b* being equally spaced on the two long or convergent sides, each catch *b* on either side of the body being in a transverse line with and opposite one on the other side. The catch-wires or catches *b* are all alike, having portions extending outward beyond the edges of the body *a* in planes at right angles with the middle line of the body, the extreme ends of the catches projecting at equal distances from the edges of the body, and each two opposing catches being in a plane at right angles with the plane of said body *a*. Each catch is formed with an extreme tine or portion *c*, to overhang the edge of the body *a*, said tine or portion *c* being straight and forming an angle slightly acute with the adjacent portion *d* of the catch, said portion *d* being in a line at right angles with the body portion *e* of the catch, as shown. The ends

of the tines *c* are in straight lines on the two sides of the holder, these lines being parallel with the sides of the body *a*, respectively, the tines on either side being in a plane, which two planes normally intersect.

In manufacturing these holders the leather body *a* is primarily pierced with rows of holes *f* in two converging lines parallel with the adjacent sides of the body, as shown in Fig. 7, the shank portions *g*, Fig. 6, of the catches being passed through these holes and subsequently bent up against the under face of the body *a*, as shown in Figs. 3 and 4. When thus bent to place, the parts *e* and *g* of a catch are substantially parallel, both being slightly embedded or pressed into the substance of the leather body, as shown. The construction of the holder is such that the portions *d* of the catches are adjacent to or in contact with the edges of the leather body *a*, as shown, said portions *d* being of such length as to hold the tines *c* at some distance below the under surface of the body *a*.

The catches *b* of the holder are spaced equally with the eyelets *h* of the shoe, and in using this holder the line of catches on one side are first passed simultaneously through the eyelets of the shoe on one side of the lace-opening and the other line of catches then passed through the eyelets on the other side, the tines or portions *c* on both sides lying flat against the inner surface of the shoe-upper, as shown in Figs. 1 and 5. In this position of the holder the eyelets are directly engaged by the portions *d* of the respective catches *b*, as clearly shown in Fig. 5, the tines *c* serving to effectually prevent the escape of the eyelets from the catches, and thus the holder *B* when applied to the shoe effectually prevents the sides of the upper from being pulled abnormally apart and out of shape during the process of lasting the shoe.

The body *a* of the holder when in use is wholly outside of the shoe, resting on the outer surface of the upper, as shown, and being flexible it readily bends along its middle longitudinal line, as appears in Figs. 4 and 5, to adapt itself to the form of the comb of the last, no part of the device materially interfering with or pressing the last. In this position of the holder upon the shoe the tines or portions *c* of the catches bear against the inner surface of the upper at one side of each series of eyelets and the body *a* rests upon the outer surface of the upper at the other side of each series of eyelets, the length of the portions or shoulders *d* of the catches being such that the distance between the upper surface of a tine and the under surface of the adjacent part of the body *a*, measured along said part *d*, being substantially equal to the length of an eyelet, as appears in Fig. 5.

This holder being a single body or utensil without movable parts is quickly and conveniently applied to a shoe or removed therefrom, and by its use in manufacturing shoes those of any given size or make are all lasted alike and of uniform and exact measurement and with the same opening at the top.

The holder shown in Figs. 8 and 9 is sometimes employed, in which construction the catches are made of lighter wire and double, as shown. The catches in this form of holder are the same in shape as those made of single wire, (see Fig. 6;) but they have the advantage of having rounded ends for the extreme portions.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A holder for shoe-uppers while lasting, having a body in a single piece and a series of catches secured to said body and overhanging opposite sides thereof, the overhanging portion of each catch consisting of an extreme member and an adjacent member forming an angle with each other, said adjacent member being in contact with the edge of the body and the extreme member projecting away therefrom.

2. A holder for shoe-uppers while lasting, having a body in a single piece and a series of catches secured to said body and overhanging opposite sides thereof, the overhanging portion of each catch consisting of an extreme member and an adjacent member forming an angle with each other, said adjacent member being in contact with the edge of the body and the extreme member projecting away therefrom, the extreme members of the catches being below the body of the holder.

3. A holder for shoe-uppers while lasting, having a body in a single piece and a series of wire catches secured thereto and overhanging opposite edges of the body each catch comprising a portion *e* resting upon the upper surface of the body, an extreme portion below the under surface of the body and extending away therefrom, and a portion intermediate of and connecting the portion *e* and said extreme portion, said intermediate portion being adapted to engage with the eyelet of the shoe, with said extreme portion adjacent to the inner surface of the shoe-upper on one side of the eyelet and said body in contact with the outer surface of the shoe, on the other side of the eyelet.

In witness whereof I have hereunto set my hand, this 13th day of May, 1904, in the presence of two subscribing witnesses.

WILLIAM H. WOOD.

Witnesses:

ENOS B. WHITMORE,
MINNIE SMITH.