No. 799,768. PATENTED SEPT. 19, 1905.

F. W. WHITCHER.

DEVICE FOR POSITIONING SOLE AND HEEL PROTECTORS.

APPLICATION FILED NOV. 16, 1900. RENEWED FEB. 15, 1905.

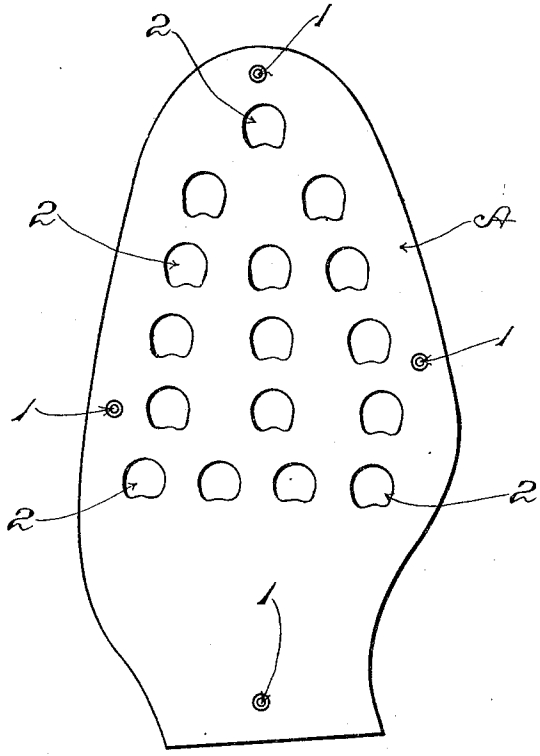


Fig. 1.



Fig. 2.

Witnesses:
Oscar F. Gill
Sadie M. Lonnehr.

Inventor:
Frank W. Whitcher
by Macleod Calver & Randall
Attorneys.

UNITED STATES PATENT OFFICE.

FRANK W. WHITCHER, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO UNITED SHOE MACHINERY COMPANY, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

DEVICE FOR POSITIONING SOLE AND HEEL PROTECTORS.

No. 799,768. Specification of Letters Patent. Patented Sept. 19, 1905.

Application filed November 16, 1900. Renewed February 15, 1905. Serial No. 245,676.

To all whom it may concern:

Be it known that I, FRANK W. WHITCHER, a citizen of the United States, residing at Boston, in the county of Suffolk, State of Massachusetts, have invented a certain new and useful Improvement in Devices for Positioning Sole and Heel Protectors, of which the following is a specification, reference being had therein to the accompanying drawings.

The soles and heels of boots and shoes are protected against wear by the insertion therein of metallic protectors which are forced into the sole or heel until their wear-surfaces are flush with the surface of the sole or heel. These protectors show in the sole or heel of the finished shoe, and it is therefore desirable that they should be located in the same position in each sole to which they are applied and where a series of protectors are applied that they should be located in the same position relatively to each other as also to the contour of the sole or heel. In this way one shoe of a pair is uniform in appearance with the other shoe of the pair, as also with other shoes of the same make. It is further desirable that the metallic protectors should not be inserted in the sole in certain parts thereof where they would interfere with the stitching or the like.

My invention has for its object to provide a simple and efficient guide or form for use in manually applying protectors to the soles and heels of boots and shoes, the said guide or form having for its especial purpose that of properly locating protectors on a boot or shoe sole or heel easily and quickly and guiding such protectors in being manually applied to the soles or heels in such manner that soles supplied with them may be when desired of uniform appearance, also that such protectors may be so located as to do no injury to the sole or connected parts, and also that the protectors when of non-circular form in cross-section may stand in the required relative position, respectively, in the sole or heel.

The nature of my invention is set forth in the following description, taken in connection with the accompanying drawings, and the novel features thereof are pointed out and clearly defined in the claims at the close of this specification.

In the drawings, Figure 1 is a plan view of a form or plate embodying my invention. Fig. 2 is a perspective of one form of protector which may be set by the aid of my invention.

Having reference to the drawings, A is a form, preferably of metal and preferably less in thickness than the depth or width of a protector. Said form A is preferably shaped to correspond in contour with the contour of a boot or shoe sole or heel or that portion thereof in which it is desired to set the protectors. Two or more holes 1 are made through the form A, near the edges thereof, for the reception of nails or tacks by means of which the form may be secured in proper position on the sole. As will be clear, any means for temporarily securing the form in place may be employed instead of the holes and tacks or nails. At each of the points on the sole or heel where a protector is to be located the form A is provided with a hole or opening 2, formed therethrough of a size and shape which will permit a protector to be placed therein. The series of holes or openings 2 2 is located in the form A in the same relative position to each other as it is desired the protectors shall have relatively to each other in the finished sole or heel.

In using my device it is placed upon a sole or heel in proper position and temporarily secured in place thereon by tacks or nails, which are passed through the holes 1, or by other well known securing means. The protectors are then inserted in the holes or openings 2 with their entering edges resting on the surface of the sole or heel and their wear-resisting edges projecting above the surface of the form A in case the form is of less thickness than the depth or width of the protector, as is preferable. By the employment of a hammer or other driving means the protectors are then partially driven into the sole or heel. After the desired number of protectors are thus located and partially driven the form A is removed and the protectors are driven home, or the protectors may be driven home without removing the form if a suitable driving device is employed for the purpose.

The protector for which the form having the openings 2, shaped as shown in Fig. 1, is designed is shown at Fig. 2 and is in general of a horshoe shape in plan view. It will be

noted that protectors, even when of the irregular shape shown, may not only be located quickly and accurately in that portion of the sole or heel where each is designed to be placed, but may be given the right position, so that the open end of the horseshoe-shaped protector will be accurately placed in each instance, greatly improving the symmetry, uniformity, and general appearance of the finished sole. It will further be obvious that only a portion of the openings 2 may be employed with one series of soles, it being only necessary to use the same holes each time to insure uniformity of result.

My device has the additional advantage of guiding the protector while it is being set, which is a feature of importance.

What I claim is—

1. A positioning device for use in manually applying sole and heel protectors to the soles and heels of boots and shoes, comprising a separate plate-like form adapted to be manually applied to a sole or heel, said form having one or more openings therein each adapted to receive a protector and to properly position the same on the sole or heel, substantially as described.

2. A positioning device for use in manually applying sole and heel protectors to the soles and heels of boots and shoes, comprising a separate plate-like form adapted to be manually applied to a sole or heel, having one or more openings therein each adapted to receive a protector, properly locate the same on the sole or heel, and guide the protector in being entered into the material of the sole or heel, and means for temporarily attaching the said form to said sole or heel, substantially as described.

3. A positioning device for use in manually applying non-circular sole and heel protectors to the soles and heels of boots and shoes, comprising a separate plate-like form adapted to be temporarily applied to a sole or heel, and having one or more openings therein corresponding in shape with the shape of the body of the protector, to receive the latter, locate its place on the sole or heel, and guide the protector in being entered into the material of the sole or heel, substantially as described.

4. A positioning device for use in applying sole and heel protectors comprising a plate-like form less in thickness than the height of the protectors, and having openings therein to receive the bodies of the protectors and adapted to locate said protectors on the sole or heel where desired, substantially as described.

5. A positioning device for use in applying sole and heel protectors of non-circular form to soles and heels, comprising a plate less in thickness than the height of the protectors, and having openings therein to receive the bodies of the protectors, said openings fitting the protectors, and operating to locate the protectors as well as guide the latter in being entered into the material of the sole or heel, substantially as described.

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

FRANK W. WHITCHER.

Witnesses:

HERBERT L. TURNER,

LEPINE HALL RICE.