No. 859,599. PATENTED JULY 9, 1907.

J. H. ELLERS & W. C. RICHARDSON.

SHOE FORM.

APPLICATION FILED APR. 16, 1906.

Fig. 1.

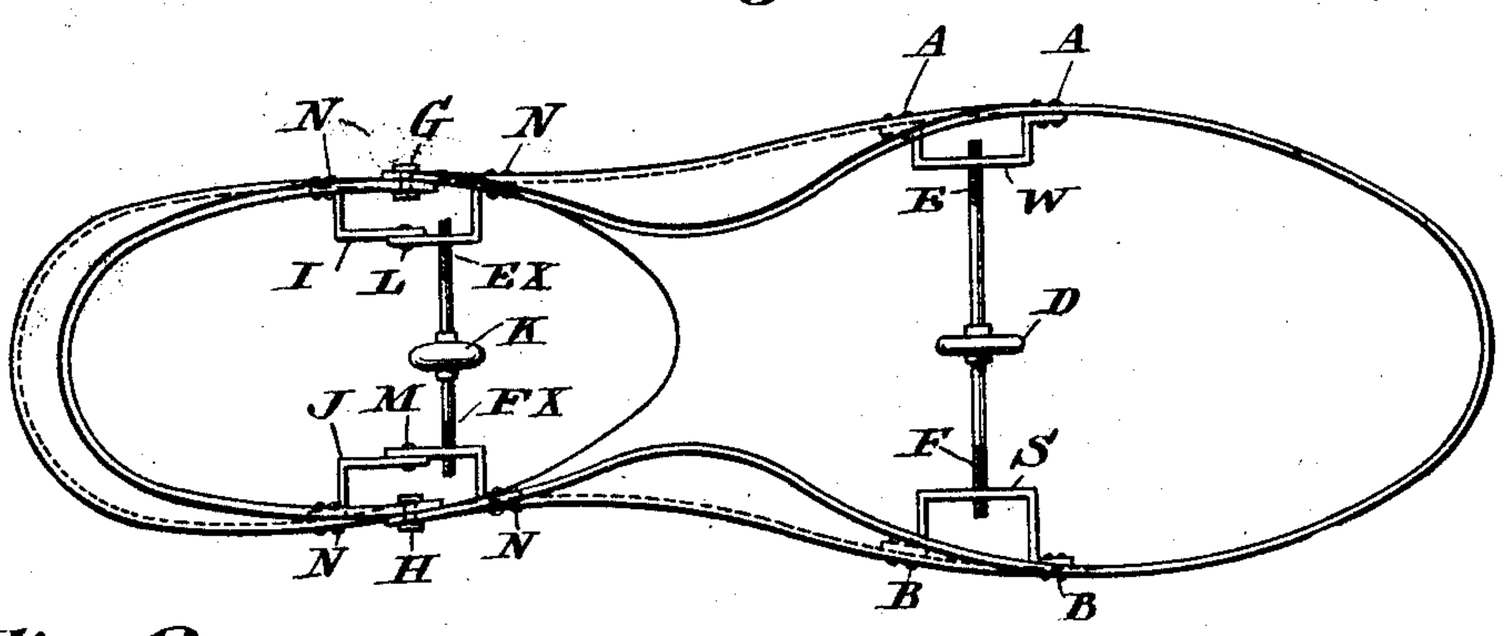
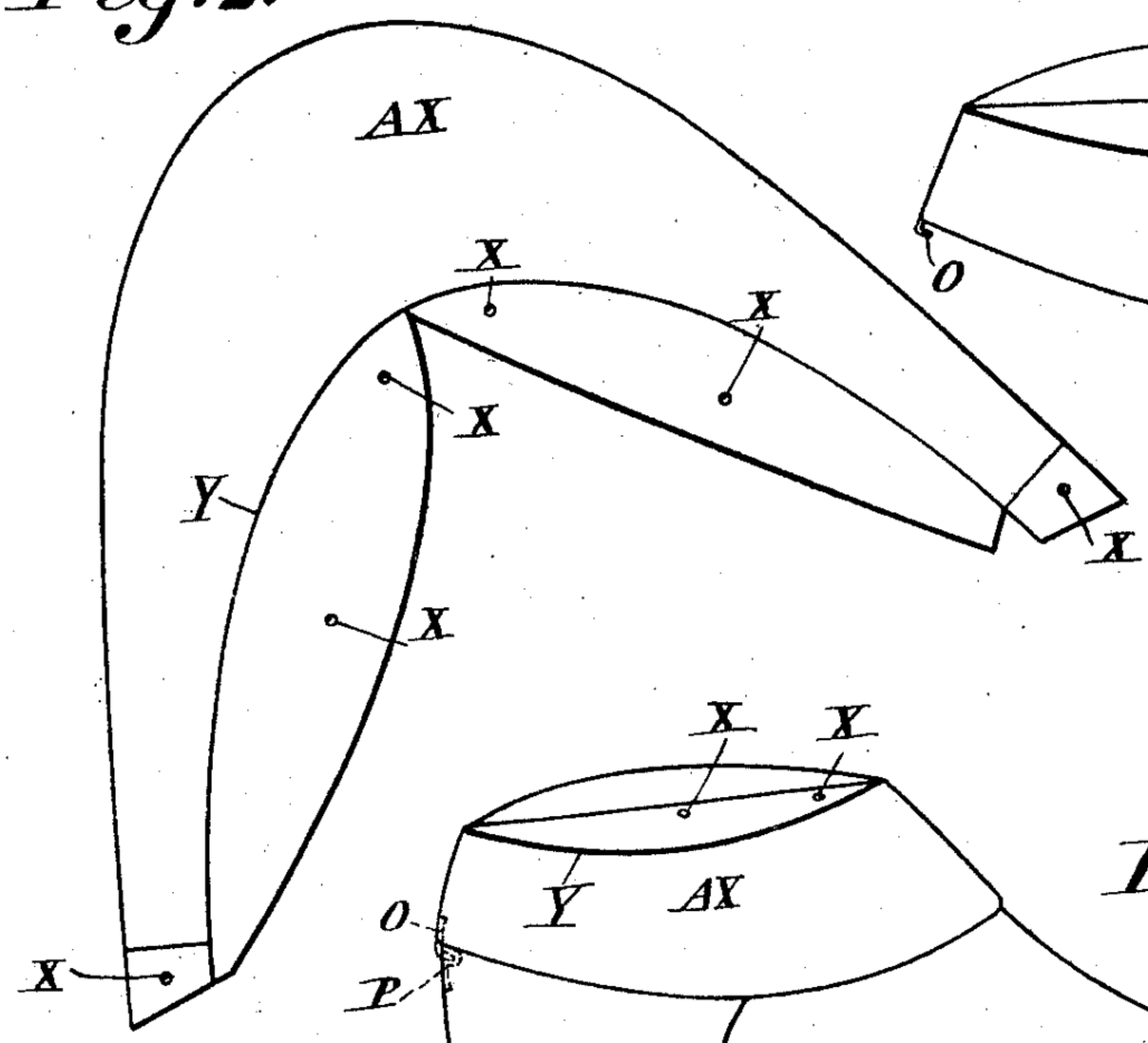


Fig. 2.



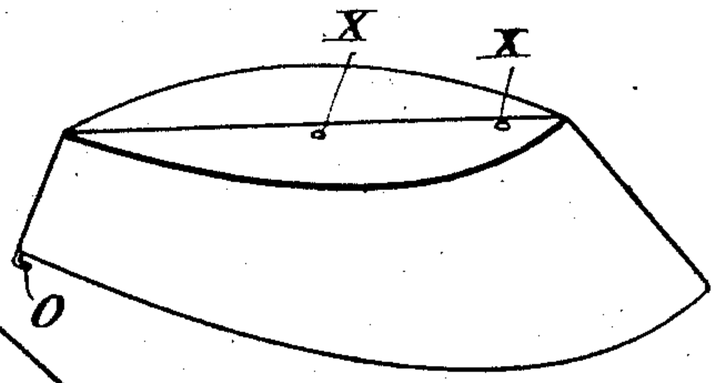
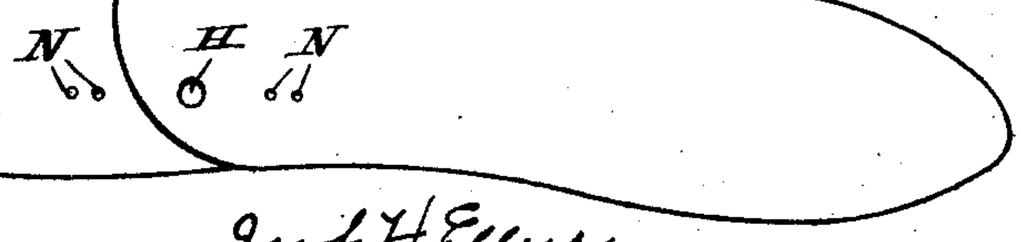


Fig. 3.

Fig. 4.



Witnesses:

E. M. Smerling

C. A. Norwood.

Jack H Ellers
Willard C Richardson Inventors:
By their attorney
Charles W. Hoyt

UNITED STATES PATENT OFFICE.

JACOB H. ELLERS AND WILLARD C. RICHARDSON, OF LYNN, MASSACHUSETTS; SAID ELLERS ASSIGNOR TO SAID RICHARDSON.

SHOE-FORM.

No. 859,599. Specification of Letters Patent. Patented July 9, 1907.

Application filed April 16, 1906. Serial No. 311,810.

To all whom it may concern:

Be it known that we, JACOB H. ELLERS and WILLARD C. RICHARDSON, citizens of the United States, residing at Lynn, in the county of Essex and Commonwealth of Massachusetts, have invented new and useful Improvements in Adjustable Shoe-Forms, of which the following is a specification, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, in explaining its nature.

Our invention relates to improvements in shoe forms made or molded from any suitable substance but preferably bristol or leather board, and the objects of our invention are, first: to provide a shoe form adjustable in its nature so that it may be lengthened or shortened from one size to another and widened or narrowed from one width to another according to the dimensions of the shoe in which it is to be used, second: to provide a hinge to act in conjunction with and as a reinforcement for the hinge of the form where the heel or counter portion is joined to the fore portion, third: to provide a cover in combination with the form, for the purpose of giving a finished effect to the shoe containing our form, when used for display, and to secure other advantages and results, some of which may be referred to hereinafter in connection with the description of the working parts. We attain these objects by the mechanism illustrated in the accompanying drawings, in which:—

Figure 1 is a bottom view looking up into the body of the form; Fig. 2 represents the cover as it is cut from the material of which it is made; Fig. 3 is a side view of the cover after it is bent into shape; Fig. 4 is a side view of our completed shoe form.

In Fig. 1 the ball portion of the form is spanned by a connecting screw "D", on the ends of which are right and left threads "E" and "F" respectively, terminating in the spring steel bridges "W" and "S", which bridges provide a suitable terminal for the screw "D" so that the right and left threads do not conflict or come in contact with the outer surface of the form. The said spring steel bridges are fastened to both sides of the ball portion of the form by the eyelets "A" and "B". By turning the screw "D" either to the right or to the left the form is adjusted at the ball portion to varying widths of shoes.

The pivotal points on both sides of our form are spanned by spring steel bridges, "I" and "J" respectively, of suitable width and thickness. Said bridges being made in two pieces, and overlapping at "L" and "M", where they are riveted together so as to form a hinge in each instance, which hinges act in conjunction with the hinges "G" and "H" on the outer surface. Said bridges are then connected with the screw "K", on the ends of which are right and left threads, "EX" and "FX" respectively, by means of which the form is adjustable at the instep portion to varying widths of shoes simply by turning the screw "K" either to the right or left as needed.

It will be noted that the bridges "I" and "J" accomplish two results, first: they reinforce and prevent liability of the form pulling apart at the hinges "G" and "H", and second: they provide a suitable terminal for the screw "K" so that the right and left threads do not conflict or come in contact with the outer surface of the form.

It will of course be recognized that the narrowing of the form at the ball and shank portions will have a tendency to increase the length of the form, and likewise the widening of the form at the ball and shank portions will have a tendency to shorten the length of the form.

The cover portion of our form, "AX", is cut in one piece from the material of which it is made, as shown by Fig. 2. "Y" represents a grooving or cutting of the material so as to insure a perfect folding of the cover portion along the lines shown. "X" represents the position of the rivets which hold the cover portion in shape after it is properly folded.

Fig. 3 represents the cover portion after it is properly folded and shaped. "O" represents a hook which holds the cover down in position at the heel.

Fig. 4 shows our complete shoe form. The hook "O" fitting in the socket or receptacle "P" which in turn is riveted to the counter portion of the form. The use of the cover "AX" is intended for low shoes; the said cover being properly covered with velvet, silk or other suitable material, so as to insure attractiveness in display. The forward portion of the cover is held in position by the lacing or buttoning of the shoe.

Our said form is made in various sizes and in rights and lefts according to the size of the shoe in which it is intended to be used. It may then be adjusted to the corresponding larger or smaller size and width according to the needs of the user.

Having thus described our invention what we claim as new and desire to secure by Letters Patent, is:—

1. In a shoe form an adjusting screw with right and left threads in combination with and terminating in two

spring steel bridges, one on each side of the ball portion of the said form, substantially as described and for the reasons specified.

2. In a hinged shoe form an adjusting screw with right and left threads in combination with and terminating in two spring steel bridges which span the pivotal points of the said form on their respective sides of the shank portion, all substantially as described and for the reasons specified.

3. The combination of a shoe form and a cover for the top of said form, one of such parts being provided with a socket and the other with a hook to engage in said socket, substantially as described and for the reasons specified.

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

JACOB H. ELLERS.
WILLARD C. RICHARDSON.

Witnesses:
E. M. SMERLING,
CHARLES W. LOVETT.