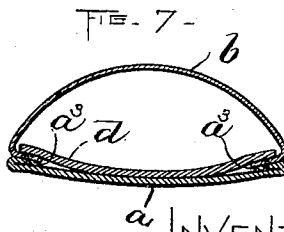
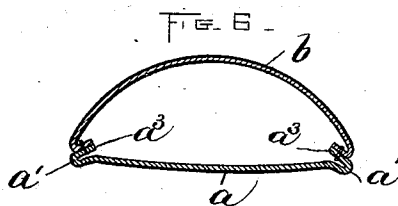
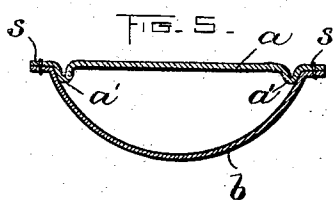
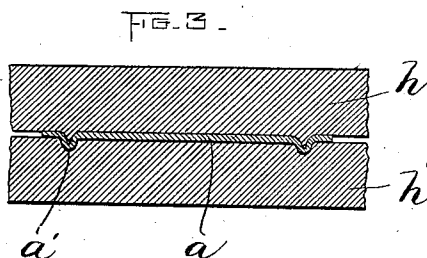
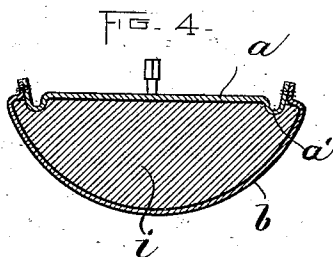
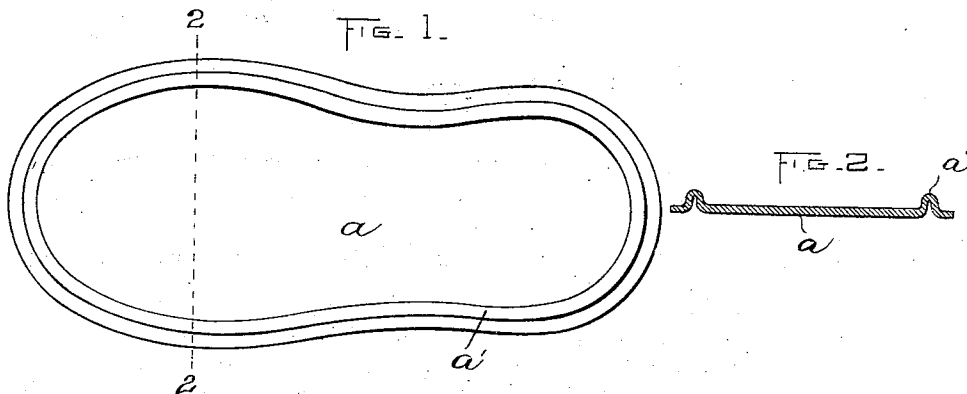


(No Model.)

G. A. RICHARDSON.  
TURNED SHOE.

No. 508,242.

Patented Nov. 7, 1893.



WITNESSES.

*W. W. Jackson*  
*A. S. Harrison*

INVENTOR.  
*G. A. Richardson*  
*Wm. B. Brown*  
Atty.

# UNITED STATES PATENT OFFICE.

GEORGE A. RICHARDSON, OF READING, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO JASON W. RICHARDSON, OF SAME PLACE.

## TURNED SHOE.

SPECIFICATION forming part of Letters Patent No. 508,242, dated November 7, 1893.

Application filed July 15, 1893. Serial No. 480,574. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE A. RICHARDSON, of Reading, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in the Manufacture of Turned Shoes, of which the following is a specification.

This invention has for its object to provide a simple and economical method of making a turned shoe in such manner as to reduce to the minimum the cost of manufacture, and to produce a neat and attractive shoe.

The invention consists in the improved method hereinafter described of making turned shoes, said method comprising the following steps, namely: first, raising a bead near the margin of the sole to form a shoulder, the contour of which determines the outline of the sole in the completed boot or shoe; then stitching the upper and sole together, inside out, along a line outside of said shoulder; and then turning the shoe, the said shoulder defining the outline of said sole, and enabling the turning operation to be expeditiously performed, and in such manner as to give the sole a neat and finished appearance, as I will now proceed to describe.

Of the accompanying drawings, forming part of this specification: Figure 1 represents a plan view of a sole prepared for attachment to the upper, in accordance with my invention. Fig. 2 represents a section on line 2—2 of Fig. 1. Fig. 3 represents a sectional view, showing the manner of forming the shoulder shown in Figs. 1 and 2. Fig. 4 represents a transverse section, showing a different manner of forming the said shoulder. Fig. 5 represents a transverse section, showing the sole and upper stitched together before the turning operation. Fig. 6 represents a similar view, showing the said parts after the turning operation. Fig. 7 represents a transverse section of a completed shoe, having an inner-sole.

The same letters of reference indicate the same parts in all the figures.

In the drawings: *a* represents the sole, and *b* the upper of a turned shoe.

In carrying out my invention, I form upon the sole, inside of the edge thereof, a shoulder *a'*. Said shoulder is formed by raising a bead on the sole, as shown in Figs. 1, 2, 3, 4 and 5, said bead having two sides; the shoulder being arranged so that it forms, upon the right or outer side of the sole, a continuous surface which defines the outline or contour of the sole when the parts are turned. The sole and upper are connected by stitches *s* outside of the shoulder *a'*, said parts being wrong side out when thus stitched together, so that the shoulder is within the space enclosed by the sole and upper, as shown in Fig. 5. I then turn the shoe, as indicated in Figs. 6, and 7, thus bringing the shoulder *a'* upon the outside, the portion of the sole surrounding the shoulder becoming an inwardly-turned lip *a<sup>3</sup>*, this operation causing the shoulder to become the edge of the sole, that part of the sole outside of the shoulder and the corresponding part of the upper being turned inwardly. The shoe may be completed by inserting an inner-sole *d*, as shown in Fig. 7.

The inwardly-turned lip *a<sup>3</sup>* is not secured to the body of the sole, but is left loose, as indicated in Fig. 6, thus giving the shoe more flexibility and ease to the foot than it would have if this inwardly-turned lip were cemented or otherwise secured to the main body of the sole.

The shoulder *a'* may be formed by pressing the sole between two dies *h h'*, as shown in Fig. 3; or by pressing down portions of the sole into a groove in a last *i*, as shown in Fig. 4.

I claim—

1. The improved method hereinbefore described of making turned shoes, the same consisting in raising a bead on the sole near the margin thereof, whereby a shoulder *a'* is formed then stitching the sole and upper together inside out, the said shoulder being within the shoe, and finally turning the shoe, the shoulder defining the edge of the sole, as set forth.

2. A turned shoe, composed of a sole hav-

ing a bead forming a shoulder near its edge,  
and a lip turned inwardly from said shoulder  
and resting loosely upon the body of the sole  
without attachment thereto; and an upper,  
5 the edge of which is turned inwardly and  
stitched to said lip; as set forth.

In testimony whereof I have signed my

name to this specification, in the presence of  
two subscribing witnesses, this 11th day of  
July A. D. 1893.

GEORGE A. RICHARDSON.

Witnesses:

C. F. BROWN,

A. D. HARRISON.