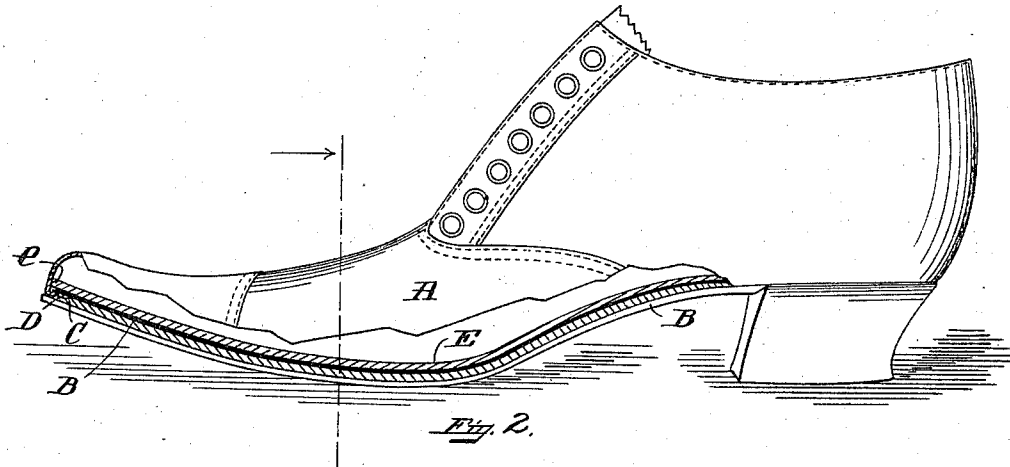
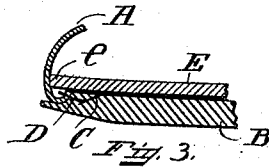
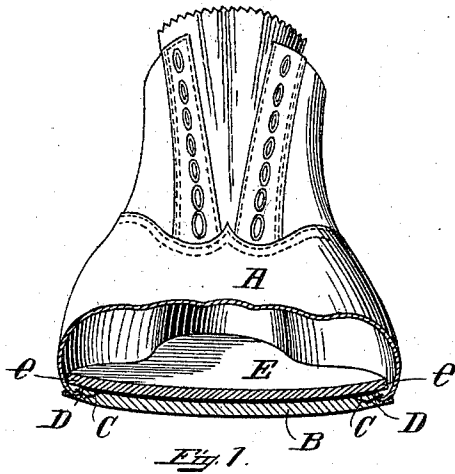


(No Model.)

G. E. MILNER.
TURN SHOE.

No. 579,159.

Patented Mar. 23, 1897.



Witnesses:
H. E. Newick,
A. E. P. H. to

Inventor:
George E. Milner
By his Attorney
Benjamin Phillips

UNITED STATES PATENT OFFICE.

GEORGE E. MILNER, OF CHICAGO, ILLINOIS.

TURN-SHOE.

SPECIFICATION forming part of Letters Patent No. 579,159, dated March 23, 1897.

Application filed June 30, 1896. Serial No. 597,594. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. MILNER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Turn-Shoes, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to shoes and to that class of shoes commonly known as "turns" or "turned shoes," wherein the upper and sole are united by stitching while the parts are inside out and are afterward turned and finished. As heretofore made these shoes comprise an upper and a single-channeled sole which are united together by a seam, the stitches of which pass through the upper and "between substances" along the edge of the sole, being seated in the channel and covered by the channel-flap and the shoe finished by the insertion of a sock-lining of some thin material.

When constructed as above stated, the strain of the upper during the usual wear of the shoe is at a right angle, or nearly so, with the sole and is brought on the seam in such manner as to be most liable to tear the stitch out of the between substances, which while well fitted to hold the seam against a horizontal strain or a strain exerted along the surface of the sole is poorly fitted to hold the seam against a vertical strain or a strain substantially at right angles to the sole, and for the reason above stated turn-shoes as heretofore constructed, whether by machine or hand methods, have been found to be weak and apt to rip, particularly at the shank and toe portions.

The object of the present invention is to remove the objection above noted and to increase the durability of shoes of this class; and to this end the present invention consists in providing in a turn-shoe a relatively stiff insole provided with extending edges overlapping the seam and bearing against the upper, whereby the strain of the upper is brought upon the seam substantially horizontally or along the inner surface of the sole.

My invention is shown in the accompanying drawings, in which—

Figure 1 shows a transverse section of a

turned shoe containing my invention. Fig. 2 is a longitudinal section of the shoe, and Fig. 3 is a partial transverse section enlarged.

Similar letters of reference designate similar parts throughout the following specification.

A denotes the upper, which may be of any suitable material and of the usual construction common in turned shoes.

B denotes the usual sole, of any suitable material, sole-leather being commonly used therefor. The sole B has any suitable channel C, in which the stitches D are placed, which unite the upper and sole, the stitch passing through the turned-up edge of the upper and the between substances, as is usual in turned shoes.

The shoe so far described is the same as those common to the art, except that it has heretofore been the practice to cover the inner surface of the sole with a thin sock-lining.

In the shoe of the drawings, E denotes an insole, of leather or other suitable material and of sufficient thickness and stiffness for the purposes hereinafter described. The insole E is of such a size relative to the outsole that when adjusted in the shoe its projecting edge *e* overlaps the seam which unites the outsole B to the upper A and thus forms a bearing or abutment for the upper, around which the upper is drawn, and which so directs the strain of the upper on the seam that it is exerted substantially horizontally along the inner surface of the outsole B, and the strain brought on the between substances thereby is exerted in a direction in which, as before stated, the between substances is best fitted to withstand the same.

It will be noted that when the pull or strain is around the edge or abutment *e* it is impossible to impart a direct vertical strain to the seam and between substances.

The insole E may be made of leather or any other suitable material, and is united to the outsole B in any suitable manner, preferably by some suitable cement. The insole E should, however, be held firmly in position and be of sufficient thickness and stiffness to prevent it from curling up and allowing the strain of the upper to be exerted vertically upon the seam and between substances.

Having thus described my invention, I claim as novel and desire to secure by Letters Patent of the United States—

A turned shoe comprising an upper and
5 outsole united by a seam in the usual manner, and a relatively stiff insole having an extended edge, overlapping the seam and bearing against the upper, of sufficient thickness to deflect the strain upon the seam in a line

substantially along the inner surface of the outsole, substantially as described.

In testimony whereof I have hereunto set my hand, in the presence of two attesting witnesses, this 13th day of June, 1896.

GEORGE E. MILNER.

Witnesses:

BENJAMIN PHILLIPS,
WILLIAM C. MEYER.