

A. G. LEGG.

SHOE LAST.

APPLICATION FILED NOV. 25, 1907.

946,235.

Patented Jan. 11, 1910.

2 SHEETS—SHEET 1.

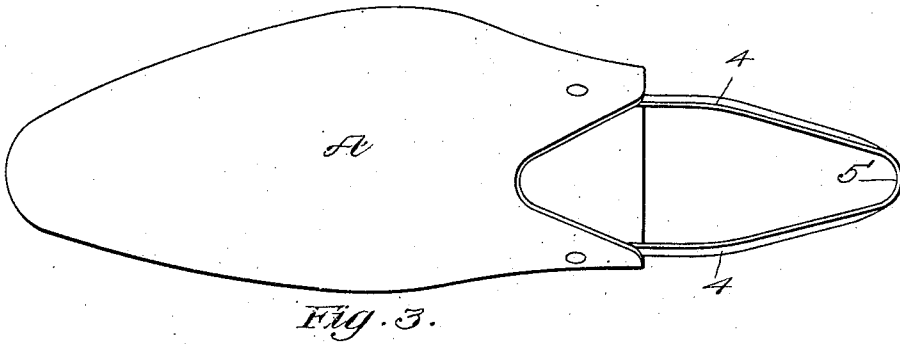


Fig. 3.

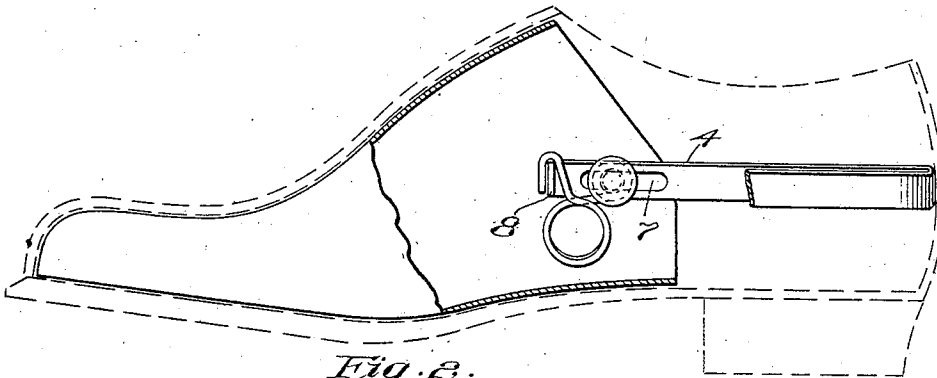


Fig. 2.

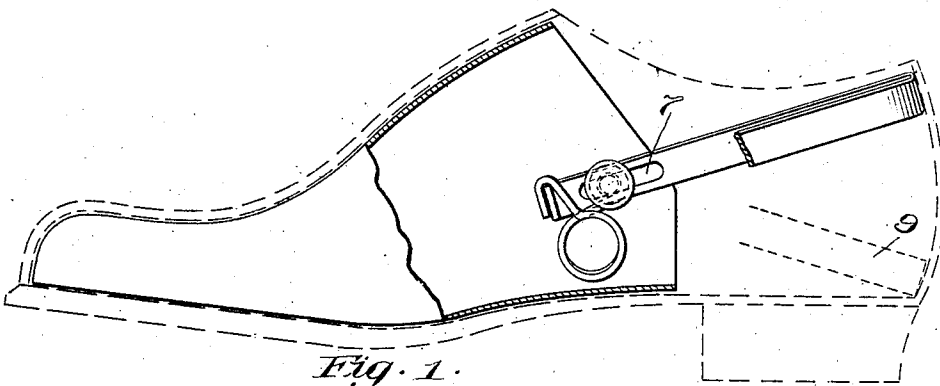


Fig. 1.

Witnesses:

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Alice H. Morrison

Inventor:

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2 SHEETS—SHEET 2.

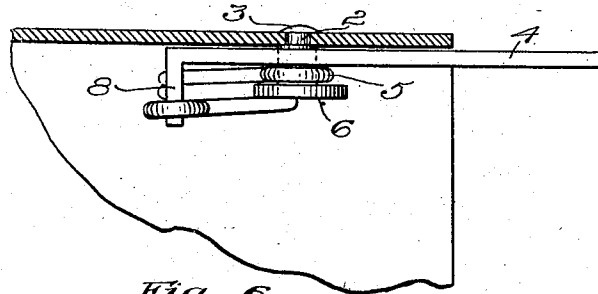


Fig. 6.

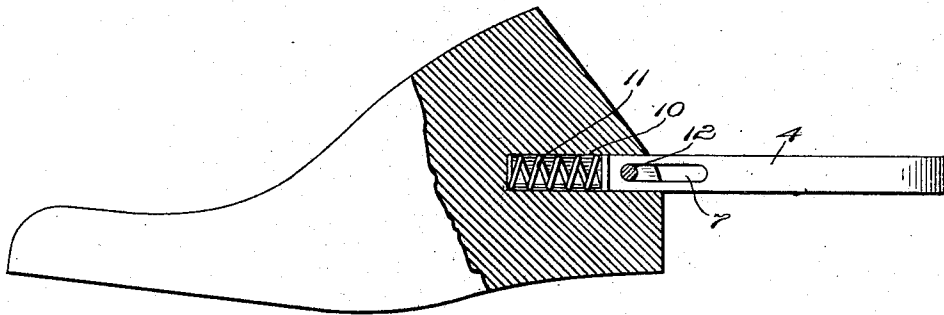


Fig. 4.

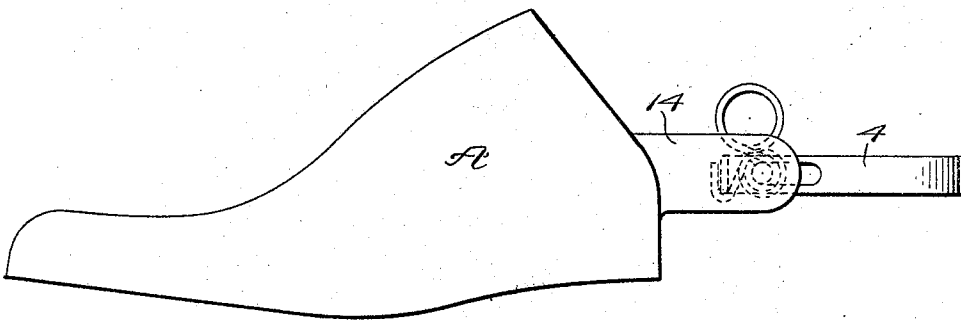


Fig. 5.

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UNITED STATES PATENT OFFICE.

ALFRED G. LEGG, OF BROCKTON, MASSACHUSETTS, ASSIGNOR TO CHARLES S. PIERCE,
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SHOE-LAST.

946,235.

Specification of Letters Patent.

Patented Jan. 11, 1910.

Application filed November 25, 1907. Serial No. 403,615.

To all whom it may concern:

Be it known that I, ALFRED G. LEGG, a citizen of the United States, residing at Brockton, county of Plymouth, State of Massachusetts, have invented a certain new and useful Improvement in Shoe-Lasts, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has for its object to provide an improved shoe form.

Shoe forms as now made, which are adapted to fill the shoe and thus keep the fore part, sides and heel distended in substantially the same position which they occupy when the shoe is on the foot of the wearer are so far as known to me so constructed that they may be slipped into the shoe and then mechanically adjusted so as to fill the shoe and press the fore part, sides and heel outwardly and maintain them in a distended position. This adjustment is effected by the operator mechanically and it is not only more or less complicated and expensive in construction but is liable to be so used as to apply too great a pressure to the interior of the shoe to the injury thereof.

By the employment of my invention I provide an automatically adjustable shoe form which may be readily inserted in the shoe and which will expand sufficiently to fill the shoe and maintain it in proper form.

The invention will be readily understood from the following description, taken in connection with the accompanying drawings forming a part hereof, 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 side view partly in section of a shoe form embodying my invention; the rearwardly projecting portion which extends into the heel of the shoe, being shown in an inclined position and in contact at its rear end with the back of the shoe near the top of the counter, the shoe being indicated in dotted lines. Fig. 2 is a similar view with the portion which extends into the heel of the shoe bearing about midway of the back of the heel portion. Fig. 3 is a top view of a shoe form embodying my invention. Figs. 4 and 5 show modifications hereinafter referred to. Fig. 6 is a detail hereinafter referred to.

The fore part of my shoe form indicated

at A and which is intended to fill the forward portion of the shoe as also the shank portion as is shown clearly in Figs. 1 and 2 is preferably a shell formed from material which may be molded to shape, such for example as leatherboard or the like material and which will after being molded to shape set and harden so as to present sufficient rigidity and strength to firmly hold the shoe in place when inserted therein. At the rear portion thereof and on each side thereof I secure, preferably by riveting, a stud 2, see Fig. 6, having a riveted head 3 on the outside of the form. The stud 2 projects inwardly a sufficient distance to accommodate one side or leg 4 of the yoke shaped piece which extends rearwardly into the heel of the shoe when the form is in position and also a spiral spring 5 hereinafter described, and the inner end of the stud is provided with a relatively large head 6 which serves to keep the said leg 4 and spring 5 in position thereon. The yoke shaped piece which extends into the heel and serves to keep the latter distended is preferably made from a strip of metal of yoke shape and comprises the curved rearward portion 5' and the two legs 4. The legs 4 are slotted lengthwise near their free ends at 7, the studs 2 passing through the said slots. The inner end of each of the legs 4 is turned at right angles as shown at 8, Fig. 6 the offset portion serving as a convenient point of engagement for the end of the spring 5. The slot 7 permits movement of the yoke shaped heel piece on the stud 2 lengthwise of the shoe. The spring 5 which is preferably a spiral spring is bent around the stud 2 so as to be held in engagement therewith, is then bent downwardly in preferably two convolutions and the other end is passed upwardly and bent over the offset portion 8 at the inner end of the leg 4 as shown Figs. 1 and 2. The tendency of the spring 5 is to press the yoke shaped part outwardly forcing the curved part 5' against the inside of the heel portion of the shoe when the form is in position therein. By placing the yoke shaped part and the spring on the stud in the manner described the yoke shaped part may be swung on the said stud 2 as a pivot and may be set in the shoe so as to bear at the back of the shoe near the top of the counter as shown Fig. 1, or it may be swung downwardly into

the position indicated by dotted lines at 9, Fig. 1, to engage the rear portion of the shoe at or near the sole thereof.

My invention as will be clear, is not limited to a hollow form or one of a precise shape, or which is made from any special material. The fore part instead of being hollow, as shown Figs. 1, 2, and 3, may be solid, as shown Fig. 5, and made from any suitable material as wood or metal. The fore part of the form, shown at A, may be lengthened or shortened so as to fill a greater or less proportion of the whole length of the shoe as may be desired. The precise method of securing and mounting the automatically adjustable heel portion (what I have herein termed the yoke shaped part) may be varied without departing from my invention.

As will be obvious the range of expansion of the form may be increased or diminished by increasing or diminishing the length of the slot 7 and providing a spring of corresponding size and power and the pressure exerted by the form within the shoe may be adjusted as desired by using a spring of greater or less power.

In Fig. 4 I have indicated a modified form in which the ends 4 of the yoke shaped heel portion are placed in a slot or recess 10 a spiral spring 11 being placed in the bottom of said recess and operating to force the part 4 outwardly away from the fore part of the form. The leg 4 is slotted as shown at 7, and a pin 12 is set in the fore part so as to project across the recess 10 and through the slot 7. By this arrangement the yoke-shaped heel part may be forced forward toward the toe of the form against the pressure of spring 11 and when released the spring 11 will operate to force the said heel part in the opposite direction to engage with the inside of the heel part of the shoe. It will be noted that in this modification the yoke shaped heel part cannot be swung vertically upon the pin 12 as a pivot, capacity for vertical swing is not however an essential of my invention, although I prefer to embody the invention in such form that the rear or heel part may be swung vertically if desired.

Still another modification of the invention is shown Fig. 5 in which the fore part A may be either solid or hollow or partly solid. In this construction the automatically expandible or adjustable heel part 4 is mounted upon two legs or projections, one of which is shown at 14. These projections are secured in the fore part one at or near each side thereof in any suitable way and the stud and spiral spring arrangement heretofore described and which is more clearly shown in Fig. 6 is employed with the exception that the position of the spring is preferably reversed so that the spiral portion

thereof is uppermost when the form is in position in the shoe. With this exception the construction is the same as heretofore described in connection with Figs. 1 and 2 and the mode of operation is the same.

In using my improved shoe form it is only necessary to insert the fore part A into the fore part of the shoe compress the form, that is force the skeleton or yoke shaped heel part inwardly toward the fore part against the pressure of the expanding spring, swing the heel part inwardly into the position desired if a pivoted heel part is employed as in the preferred form, and then release the heel part which will be forced outwardly by the action of the spring into contact with the inside of the heel portion of the shoe, this expansion of the form serving to expand the shoe, as when filled by the foot of the wearer and to maintain it in this expanded form under the tension desired. To remove the form it is only necessary to force the heel part forward or toward the toe part, swing the heel part upwardly and pull the fore part out of the shoe, or in case the heel part is not constructed to swing on its pin or pivot force the heel part inwardly toward the fore part and hold it in that position while the form is being removed from the shoe.

My improved form may be speedily inserted or withdrawn from the shoe, will automatically adjust itself to the shoe and will exert the necessary pressure to expand or distend the shoe to its proper shape without distorting or injuring it.

What I claim is,—

1. A shoe form comprising a fore part and a heel part, the heel part being transversely curved at its rear to engage the counter of the shoe and having two forwardly projecting legs which are respectively engaged with the fore part at opposite sides thereof substantially in contact with the lining of the shoe, and having elongated slot and guide connection therewith whereby the form may be expanded and contracted in length, and a spring which normally tends to hold the parts in the expanded position.

2. A shoe form comprising a fore part and a heel part, said heel part having forwardly extending legs the forward ends of which are pivotally secured to said fore part on opposite sides thereof and which have elongated slot and pin connection with said fore part at opposite sides thereof, and springs which tend to force said heel part away from said fore part to keep the shoe form distended within the shoe.

3. A shoe form comprising a fore part and a skeleton heel part of substantially yoke shape the legs of which have lengthwise slots engaged by pins on the fore part

and springs secured between said pins and said legs which tend to force said heel part away from said fore part.

4. A shoe form comprising a fore part and a heel part, said heel part being transversely curved at its rear to engage the lining of the counter of the shoe and having two forwardly projecting legs which are respectively connected with the said fore part at opposite sides thereof substantially in contact with the lining of the shoe, the connection of each of said legs with the respective sides of the fore part being expansible and a spring which normally tends to hold the parts in the expanded position.

5. A shoe form comprising a fore part and a heel part, said heel part being transversely curved at its rear to engage the lining of the counter of the shoe and having two forwardly projecting legs which are respectively connected with the said fore part at opposite sides thereof substantially in contact with the lining of the shoe, the connection of each of said legs with the respective sides of the fore part being expansible, means for guiding the expansive and contracting movement and a spring which normally tends to hold the parts in the expanded position.

6. A shoe form comprising a fore part and a heel part, said heel part being transversely curved at its rear to engage the lining of the counter of the shoe, and having two forwardly projecting legs which are respectively connected with the said fore part at opposite sides thereof, the connection of each of said legs with the respective sides of the fore part being expansible and a spring connected with each of said legs whereby the parts are normally held in the expanded position.

7. A shoe form comprising a fore part and a heel part, said heel part being transversely curved at its rear to engage the lining of the counter of the shoe and having two forwardly projecting legs which are pivotally and expansibly connected with the said fore part at opposite sides thereof substantially in contact with the lining of the shoe and a spring which normally tends to hold the parts in the expanded position.

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

ALFRED G. LEGG.

Witnesses:

WILLIAM A. MACLEOD,
ALICE H. MORRISON.