

(No Model.)

S. C. DIZER.
BOOT OR SHOE.

No. 254,626.

Patented Mar. 7, 1882.

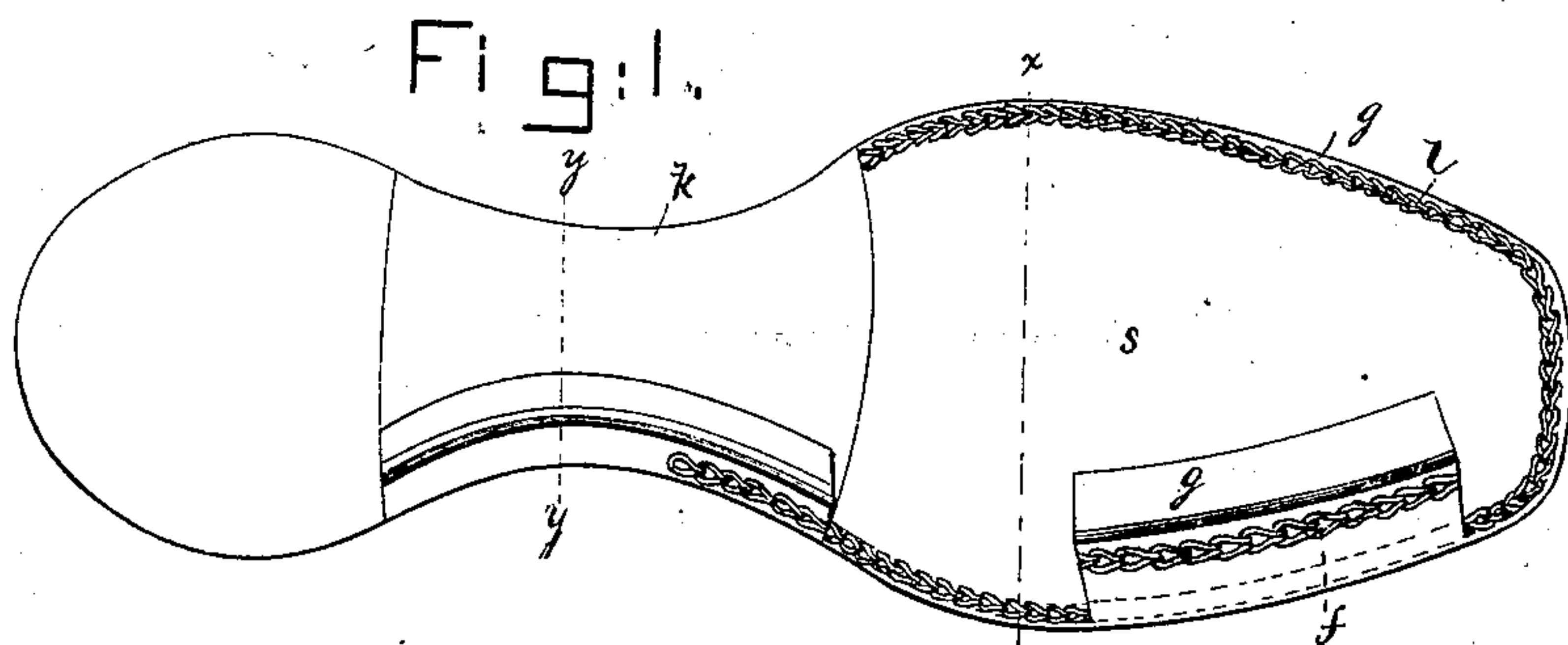


Fig: 2.

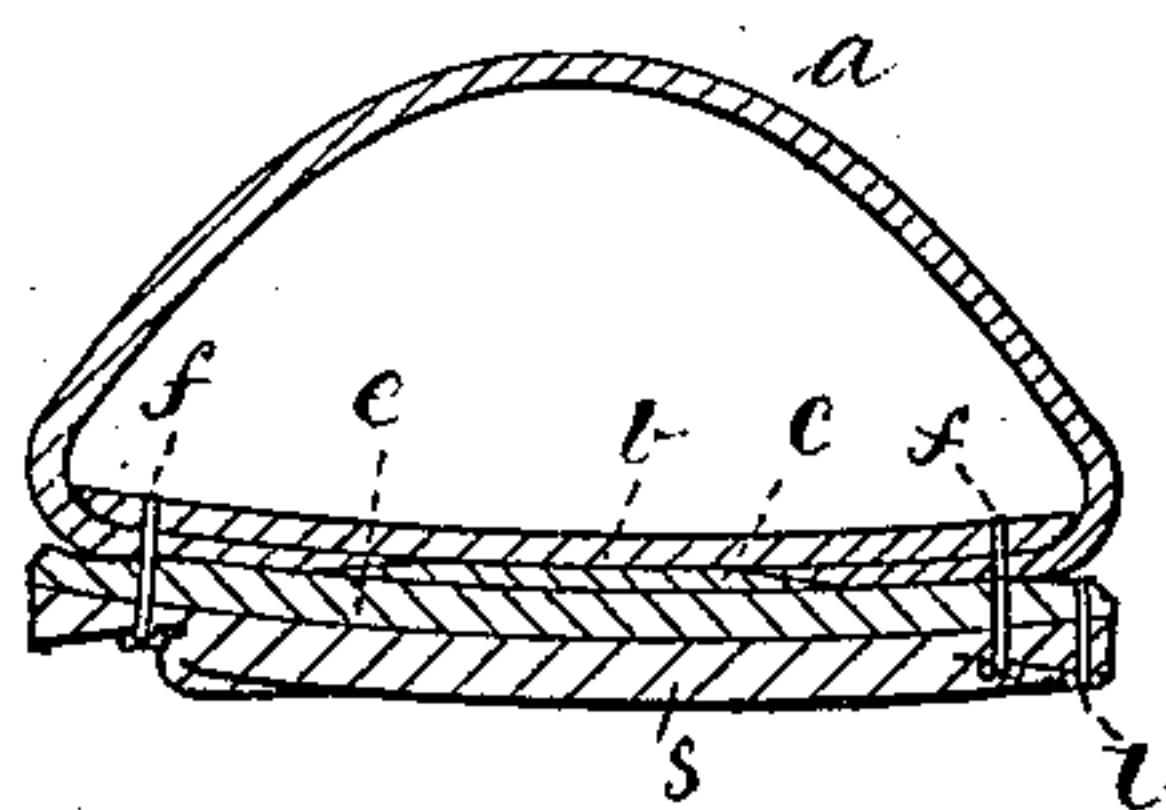


Fig: 3.

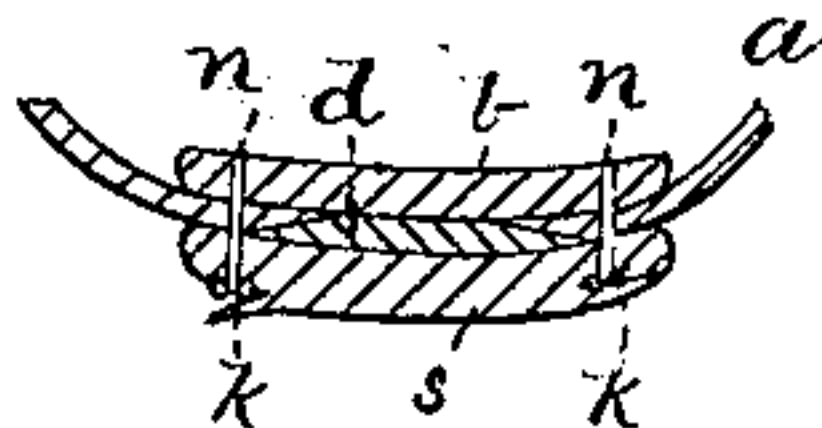
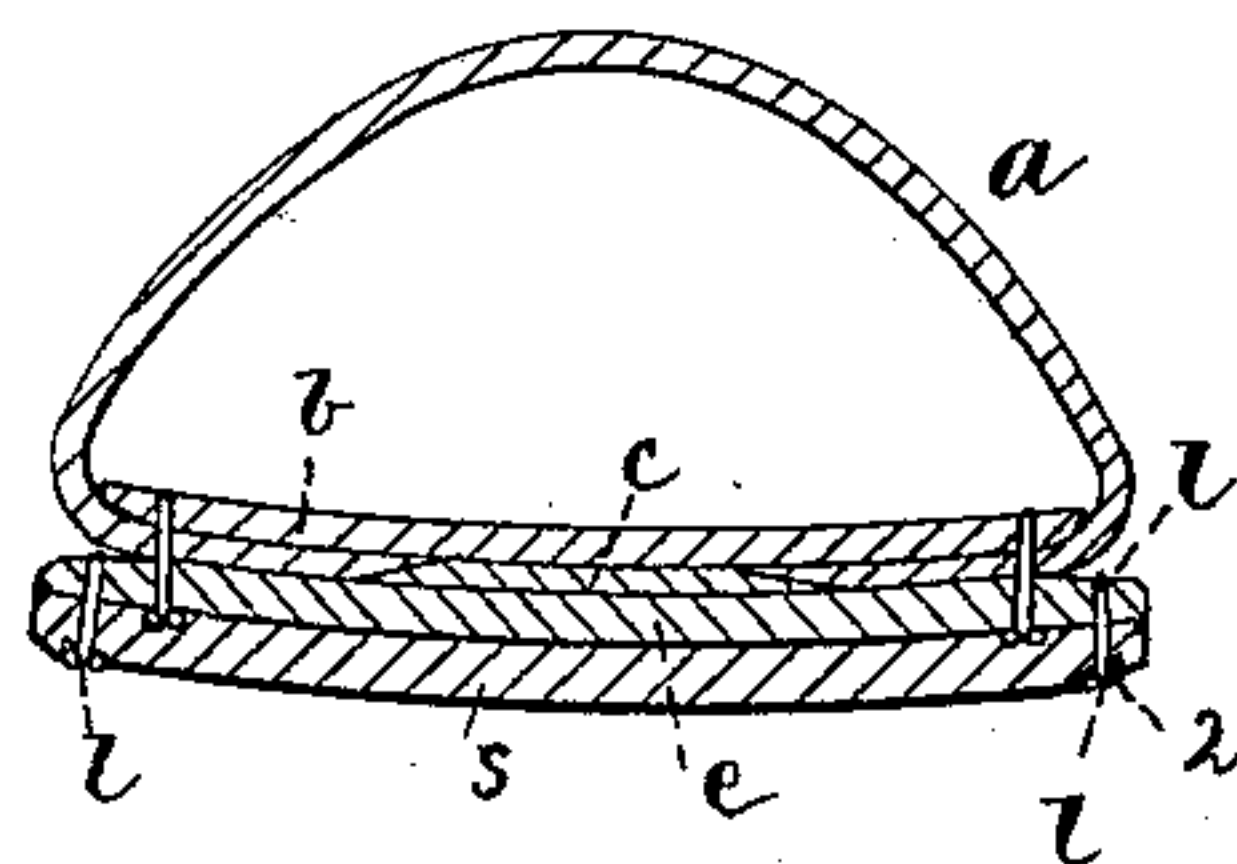


Fig: 4.



WITNESSES

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SILAS C. DIZER, OF BROOKLINE, MASSACHUSETTS.

BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 254,626, dated March 7, 1882.

Application filed February 5, 1881. (No model.)

To all whom it may concern:

Be it known that I, SILAS C. DIZER, of Brookline, Middlesex county, State of Massachusetts, have invented Improvements in Boots and Shoes, of which the following description, in connection with the accompanying drawings, is a specification.

This invention in boots and shoes relates to improvements in construction thereof.

As boots and shoes are now commonly made on sole-sewing machines, the stitches about the fore part of the outer sole are buried in a channel and concealed by the channel-flap, which is pasted down over the stitches; but in practice this channel-flap soon gets loose, curls up, uncovers the stitches, looks bad, and is considered a great objection and disadvantage to machine-sewed work. In this my invention the inner sole laid upon the last has the upper drawn over it in the usual manner, filling is placed on the inner sole between the edges of the upper, the slip-sole is laid upon the filling and that part of the upper drawn over the inner sole, and the outer sole, prepared as hereinafter described, is laid on the slip-sole and extended back beyond it, after which the parts are stitched, and after this the outer sole, channeled at its shank, and grooved and prepared as hereinafter described, about the fore part in front of the shank, is by a suitable sole-sewing machine stitched to the outer edge of the slip-sole by stitches which are made to extend through them, and the channel-flap turned down over the line of stitches previously made, while the stitches in the shank are made in the channel under the usual channel-flap, so as to be subsequently covered by the said channel-flap. In this my improved boot or shoe the stitches about the fore part of the outer sole and edge of the slip-sole in front of the shank are so made and left as to be always exposed to view for purposes hereinafter stated; or the shoe is stitched "aloft," as it is termed among shoe-manufacturers.

I may accomplish the object herein aimed to be accomplished by first stitching the slip-sole, upper, and inner sole together through and through, and then subsequently stitching the fore part of the outer sole and slip-sole through and through, the outer sole being

preferably slightly grooved about the fore part in front of the shank to receive the stitches, leaving them, however, always fully exposed about the fore part, as when the said stitches extend through the channel-flap, as before described, whereby in both cases the fineness of the stitch and size and quality of thread will enable the purchaser to immediately tell the quality of the work, whereas when the stitches are all covered in a channel, where the purchaser cannot see the same, a manufacturer may deceive the purchaser by taking long stitches and doing poor work, and not be liable to be detected by the purchaser until after the boots or shoes have been worn sufficiently long to loosen the channel-flap.

The stitches made through the slip-sole, outer sole, and the edge of the channel-flap of the outer sole about the fore part rest directly on the channel-flap and effectually prevent it from curling up and uncovering the stitches concealed in the channel of the outer sole.

Figure 1 represents in bottom view a boot or shoe made in accordance with my invention, the channel-flap at one side of the sole being elevated, and at the other side turned over or down and stitched through, in connection with the slip-sole. Fig. 2 is a cross-section of Fig. 1 on the dotted line *xx*; Fig. 3, a cross-section on the line *yy*; and Fig. 4 is a view, similar to Fig. 2, of a modification.

The upper *a*, inner sole, *b*, filling *c*, and shank *d* are all as usual. The slip or half sole *e* laid upon the upper, drawn in any usual manner over the inner sole on the last and on the filling *c*, and the outer sole, *s*, laid on the slip-sole, will be stitched through and through, as at *f*, in the channel made therein by raising the channel-flap *g*, as shown at the left of Fig. 2, the said series of stitches *f*, holding the outer sole about its fore part to the slip-sole, upper, and inner sole, being subsequently covered about the said fore part by the said channel-flap *g*.

In a welted boot or shoe—the class of boots and shoes most nearly resembling my improved boot or shoe—the welt composed of upper-leather secured to the upper and inner sole has to be bent and stitched to the upper about the edge of the latter after it has been drawn over the inner sole, and a boot or shoe with

such a welt has not the strength, nor is it as durable as this my improved boot or shoe, wherein the edge of the slip-sole serves the purpose of the welt.

5 By the slip-sole I avoid all bends in the leather entering into the sole, such bends as are made in the welt where it turns about the toe of the upper.

The boot or shoe sole channeled as in Figs. 1, 2, 3, after being stitched, as at *f*, is again stitched; but at this second operation it is stitched about the fore part of the outer sole, as at *l*, the said stitches so made extending through the channel-flap *g*, outer sole, and edge of the slip-sole; but on arriving at the shank the stitches are made in the channel of the outer sole, through and through the outer sole from the bottom of the channel, and through and through the upper and inner sole, as at *n*, Fig. 3, the said stitches at the shank being subsequently covered or concealed by turning over and down on them the channel-flap *k*.

If it be desired to make the boot or shoe as represented in Fig. 4, as soon as the slip-sole has been united to the upper and inner sole the outer sole, grooved slightly about its fore part, as at 2, and channeled at its shank in the regular way, will be laid upon the slip-sole, the shank and heel of the outer sole extending back beyond the rear end of the slip-sole, over the shank of the lasted shoe, to the heel end of the inner sole, covering preferably the edges of the quarter turned over upon the heel of the inner sole. In this condition the outer sole, *s*, is secured to the projecting edge of the slip-sole by stitching aloft, as I have stated, as at *l*, the thread forming the stitch showing plainly at the top of the edge of the slip-sole, near the upper, and at the outer face of the outer sole; but as the line of stitching reaches the shank of the boot or shoe the stitches are, as already described, taken into the channel of the outer sole, and extended from the bottom thereof through the outer sole, upper, and inner sole, as in Fig. 3, after which the channel-flap *k*, Figs. 1 and 3, at the said shank, is turned down and pasted, as shown at the right of Fig. 3, so as to completely cover the stitches in the said shank.

The stitches *l* are always plainly exposed to view about the fore part of the outer sole, near its edge, and in both the methods herein shown enable the purchaser to at once see the quality of the sewing, the number or closeness of the stitches, and the quality of the thread, thus enabling him to select good work, whereas when the stitches at the fore part are covered by a channel-flap purchasers of boots and shoes are liable to be wronged by unprincipled manufacturers who fail to use proper wax or to employ thread of proper size, as compared with

the holes made in the sole by the needle, or who take stitches of too great length, or carelessly space them, thus leaving gaps or spaces between the slip-sole and outer sole, through which water may work.

A channel-flap above the fore part of the outer sole in boots and shoes wherein the said flap is pasted down over the line of stitches, besides being objectionable, because of the unsightly appearance of the bottom of the sole, as the channel-flap, wet or partly worn, gets loose and curls up, is also objectionable, for the reason that water entering the said channel has an opportunity to pass through the outer sole, inner sole, and its intermediate parts in the holes made therein by the needle for the thread, provided such holes have not been properly filled with wax or with a thoroughly-waxed thread. I am enabled, however, to completely overcome this difficulty and gain all the advantages herein stated as due to stitching the fore part of the sole in a manner to expose all the said stitches, for when the outer sole has been stitched to the slip-sole, upper, and inner sole by stitches *f*, in a channel, as in Fig. 1, I subsequently lay the channel-flap over on the outer sole to cover the said stitches, and then stitch the same, as at *l*, the thread forming the said stitches passing through and through the edge of the slip-sole, outer sole, and channel-flap, as described.

I claim—

1. As an improved article of manufacture, a boot or shoe composed of an upper, inner sole, and slip-sole, all connected by stitches extended completely through and through them from side to side, as shown, and of an outer sole attached to the slip-sole, upper, and inner sole by stitches which at the shank of the boot or shoe extend through the outer sole, upper, and inner sole, and are covered by a channel-flap, while the stitches made about the fore part of the outer sole are left fully exposed at the top of the slip-sole and upon the bottom of the outer sole, as shown and described, instead of being covered by a channel-flap, as heretofore common, substantially as described.

2. In a boot or shoe having an upper, inner sole, slip-sole, and outer sole united together, as described, a row or series of stitches made therein through the flap of the channel, the outer sole, and the edge of the slip sole, substantially as described.

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

SILAS C. DIZER.

Witnesses:

G. W. GREGORY,
ARTHUR REYNOLDS.