(No Model.)

# G. H. GIFFORD.

## CORK SOLE SHOE.

No. 541,999. Patented July 2, 1895.

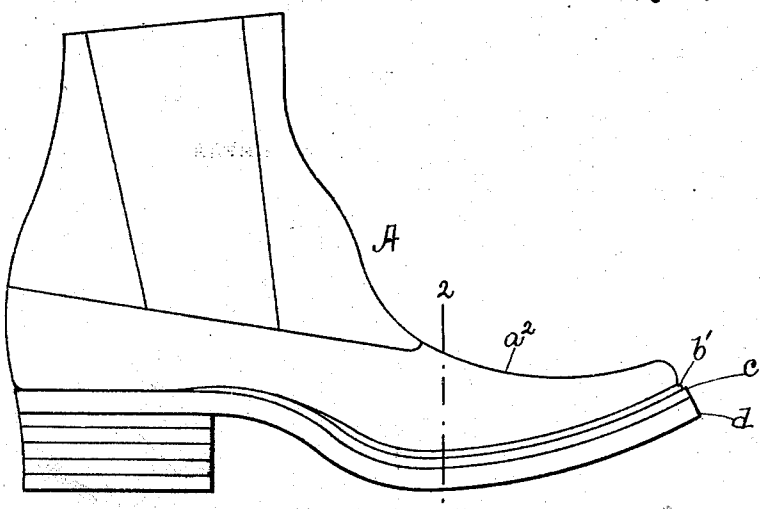


Fig. 1.

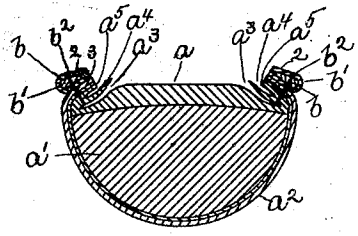


Fig. 2.

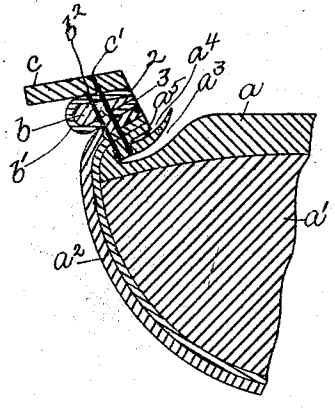


Fig. 3.

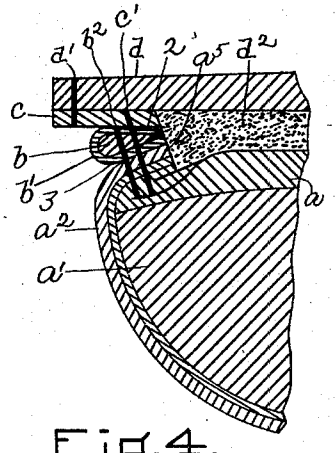


Fig. 4.

WITNESSES.
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# UNITED STATES PATENT OFFICE.

GEORGE H. GIFFORD, OF BROCKTON, MASSACHUSETTS.

## CORK-SOLE SHOE.

SPECIFICATION forming part of Letters Patent No. 541,999, dated July 2, 1895.

Application filed November 9, 1893. Serial No. 490,410. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE H. GIFFORD, residing in Brockton, in the county of Plymouth and State of Massachusetts, have invented an Improvement in Cork-Sole Shoes, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

This invention relates to shoes of that class commonly called "cork-sole shoes," in which a cork sole or other filling-sole is interposed between the outer and inner soles of the shoe.

In cork-sole shoes as now commonly constructed and known to me the cork-sole welt, consisting of a filling-strip and a casing of leather inclosing the same, is secured to the inner sole by two seams or rows of stitching sewed in two separate channels of the inner sole of the shoe, the filling of the cork-sole welt and one-half of its casing being attached to the upper and inner sole by one seam made in one channel, and the other half of the cork-welt casing and the main welt being secured by a second seam made in the second channel of the inner sole. In the above construction, after the first seam above referred to has been sewed, the cork-welt casing does not envelop the filling, but one edge projects from the edge of the insole, or that portion thereof to which the cork is applied, forming a "flap," so called, which must be lasted over the filling.

The cork-sole shoe made as above described is objectionable in that the main welt is secured to the inner sole by a single seam made in the second channel of the inner sole, which second channel is much smaller than the first channel, and as a result the main welt is insecurely attached to the inner sole of the shoe. The construction above referred to is further objectionable in that it involves, in the process of making, a second lasting operation, which is necessarily slow and expensive.

This invention has for its object to remove the objections above cited and to provide a cork-sole shoe of increased strength and durability which can be made on shoe-sewing machines as now constructed without change to the machine or without the use of auxiliary tools or implements.

In accordance with this invention the cork-sole welt, consisting of a filling and an inclosing-case of leather for the same, may be prepared before being applied to the shoe, and the cork-sole welt is then attached to the inner sole and to the upper by a seam or row of stitching made in a channel of the inner sole, the said seam or row of stitching attaching not only the filling of the cork-sole welt but also both folds of its casing. The main welt is then attached to the cork-sole welt and to the upper and inner sole by a second seam or row of stitching made in the same channel of the inner sole, the second seam or row of stitching extending through the welt, both folds of the cork-welt casing, the cork-welt filling, the upper, and the channel of the inner sole. By reason of the cork-sole welt being attached to the inner sole by two seams or rows of stitching made in the same channel of the inner sole the main welt and the cork-sole welt are more firmly attached to the upper and inner sole, which results in the making of a stronger and more durable shoe of the class described. The channel in which both seams or rows of stitching are made will preferably be made of such depth as to afford increased holding-surface for the main welt and the cork-sole welt. By the position of the seams which secure the cork-sole welt to the lasted upper and insole I am enabled to apply the finished cork-sole welt to the shoe and to avoid the lasting operation hereinbefore referred to and essential in the construction of cork-sole shoes as heretofore made. By applying the finished cork-sole welt to the shoe I secure a neater and more finished appearance of the cork-sole welt than can be secured where said welt is manufactured upon the shoe, as in the prior art. By securing the cork-sole welt and the main welt to the inner sole by two seams or rows of stitching made in the same channel of the inner sole a half-cork-sole welt can be made on shoe-sewing machines as now commonly constructed.

My invention therefore consists in a boot or shoe having a main welt and a cork-sole welt secured to the inner sole by two seams or rows of stitching made in the same channel of the inner sole, and the process of making the same, as hereinafter more specifically set forth and claimed.

Figure 1 represents in elevation a cork-sole shoe provided with what is known as a "half-cork welt" and embodying this invention. Fig. 2 is a transverse section taken on the line 2 2 of Fig. 1, showing the cork-sole welt se-

cured to the inner sole before the main welt is attached to the said inner sole, the outer sole, the main welt, and the cork filling being omitted in this figure; Fig. 3, a sectional detail on an enlarged scale, showing the main welt secured to the inner sole by a second seam made in the same channel as the seam which secures the cork-sole welt to the inner sole; and Fig. 4, a sectional detail, on an enlarged scale, of one-half of the completed shoe with the outer sole attached to the main welt and the cork filling interposed between the inner and outer soles.

Similar letters and figures of reference refer to similar parts throughout the several views.

The shoe A, represented in Fig. 1 as a Congress shoe provided with a half-cork sole, is made in accordance with this invention in the following manner: The inner sole $a$ is attached to the last $a'$, and the upper $a^2$ is stretched over and secured to the inner sole $a$ in any suitable manner, such as now commonly practiced. The inner sole $a$ is provided with a channel $a^3$, which may be and conveniently is the usual channel found in the insole of welt shoes.

In accordance with this invention the inner sole $a$ has secured to it a cork-sole welt comprising a filling $b$ and a casing $b'$, folded over the same, so as to envelop the said filling.

In accordance with this invention the cork-sole welt may be prepared before being applied to the inner sole, which is effected by folding the casing $b'$ over the filling $b$, and when thus made the cork-sole welt is secured to the upper $a^2$ and to the inner sole $a$ by a seam or row of stitching $b^2$, which passes through the lower fold 2 of the casing $b'$, the filling $b$, the upper fold 3 of the casing, the upper $a^2$, and through the inner sole into the channel $a^3$. The cork-sole welt may be secured by the seam or row of stitching $b^2$ on shoe-sewing machines as now commonly constructed without change or addition to the machine.

After the cork-sole welt has been secured to the upper and inner sole, as above described, the main welt $c$ (shown in Figs. 3 and 4) is then secured to the inner sole by a second seam or row of stitching $c'$, which extends through the main welt $c$, the lower fold 2 of the casing $b'$, the filling $b$, the upper fold 3 of the casing $b'$, the upper $a^2$, and inner sole $a$ into the channel $a^3$, as clearly shown in Figs. 3 and 4. It will thus be seen that the cork-sole welt and the main welt are secured by two seams or rows of stitching made in the same channel $a^3$ of the inner sole, and as a result the cork-sole welt and the main welt are firmly attached to the upper and inner sole, thereby greatly strengthening this class of shoes. The shoe may be completed by attaching the outer sole $d$ to the main welt $c$ by the seam $d'$ in the usual manner, the cork filling $d^2$ being interposed between the outer sole and the inner sole, as represented in Fig. 4.

Cork-sole shoes made in accordance with this invention can be produced much cheaper than those now commonly made, owing to the fact that the cork-sole welt can be prepared before being applied to a shoe and by reason of the fact that the cork-welt shoe may be made on shoe-sewing machines as now commonly constructed. The channel $a^3$ made in the inner sole $a$ may and preferably will be the usual channel commonly formed in inner soles, and it will be noticed that both seams $b^2$ $c'$ pass through a considerable portion of the inner sole, which affords the greater holding-surface for the seams, and consequently increases the strength of the shoe.

I have shown in the drawings the second channel $a^4$, hereinbefore referred to as essential in prior art, but which I dispense with. The position of said channel $a^4$ with reference to the inseams $c'$ and $b^2$ as it appears upon the drawings is sufficient to show that it performs no function in my construction and is unnecessary therein. I wish, however, to call attention to the fact that, since I make no use of the channel $a^4$, I am enabled to dispense with the lip $a^5$ by which said second channel is commonly formed, and therefore to apply my cork-sole welt to an inner sole formed with a "shoulder," so called, instead of a "lip," a construction of insole very desirable and commonly found in fine grades, especially of women's work.

I am aware of the state of the art as shown in Letters Patent to Des Lauries, No. 425,598, dated April 15, 1890; Drey, No. 496,822, dated May 2, 1893, and Brooks, No. 152,067, dated June 16, 1874, and I claim nothing as shown or described therein.

I claim—

1. As an improved article of manufacture, a boot or shoe having an insole, a welt, an interposed cork sole welt, and two inseams stitched in the same channel in the insole whereby the welt and cork sole welt are secured thereto, substantially as described.

2. The process of making cork sole boots or shoes consisting of stitching the finished cork sole welt to the lasted insole and upper, then stitching the welt through the cork sole welt to the lasted insole and upper, then stitching the outsole to the welt in the usual manner, substantially as described.

3. The process of making cork sole boots and shoes consisting of stitching the cork sole welt to a channel in the insole after the upper has been lasted thereto, then stitching the welt through the cork sole welt to the same channel in the insole, then stitching the outsole to the welt in the usual manner, substantially as described.

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

GEORGE H. GIFFORD.

Witnesses:
JAS. H. CHURCHILL,
J. MURPHY.