

No. 672,651.

Patented Apr. 23, 1901.

H. RIES.
SHOE.

(Application filed Apr. 8, 1899.)

(No Model.)

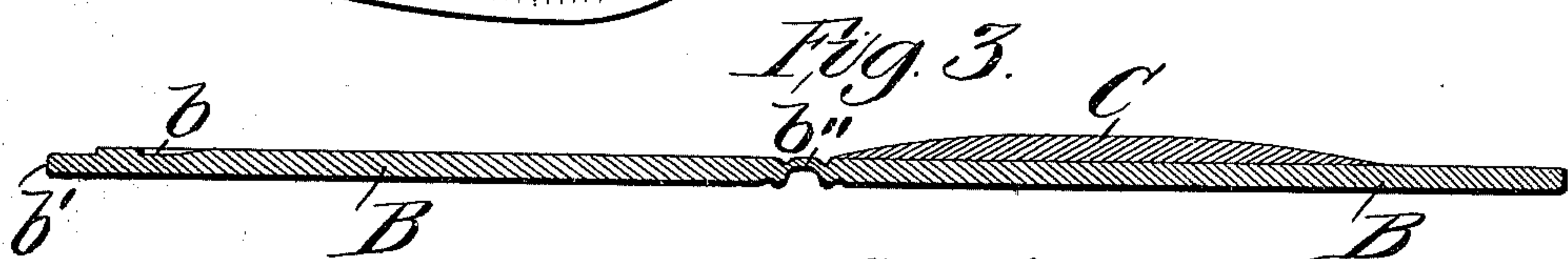
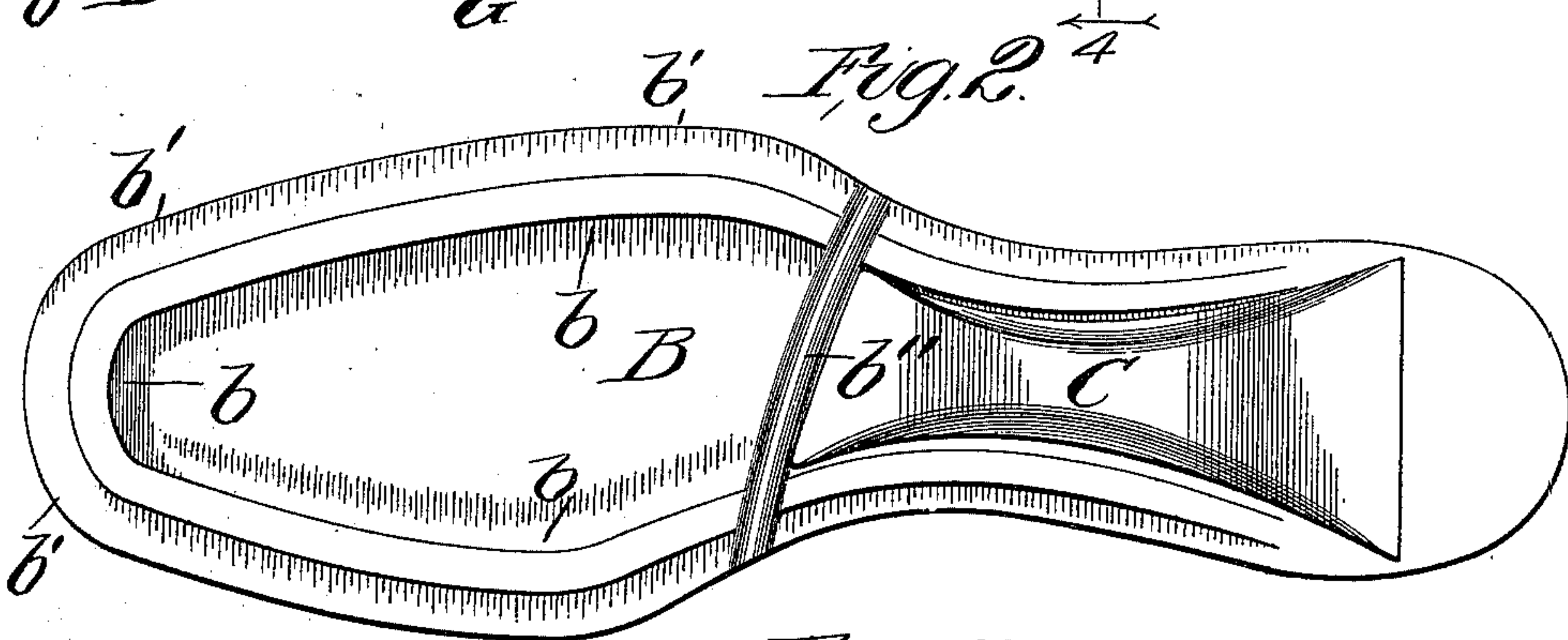
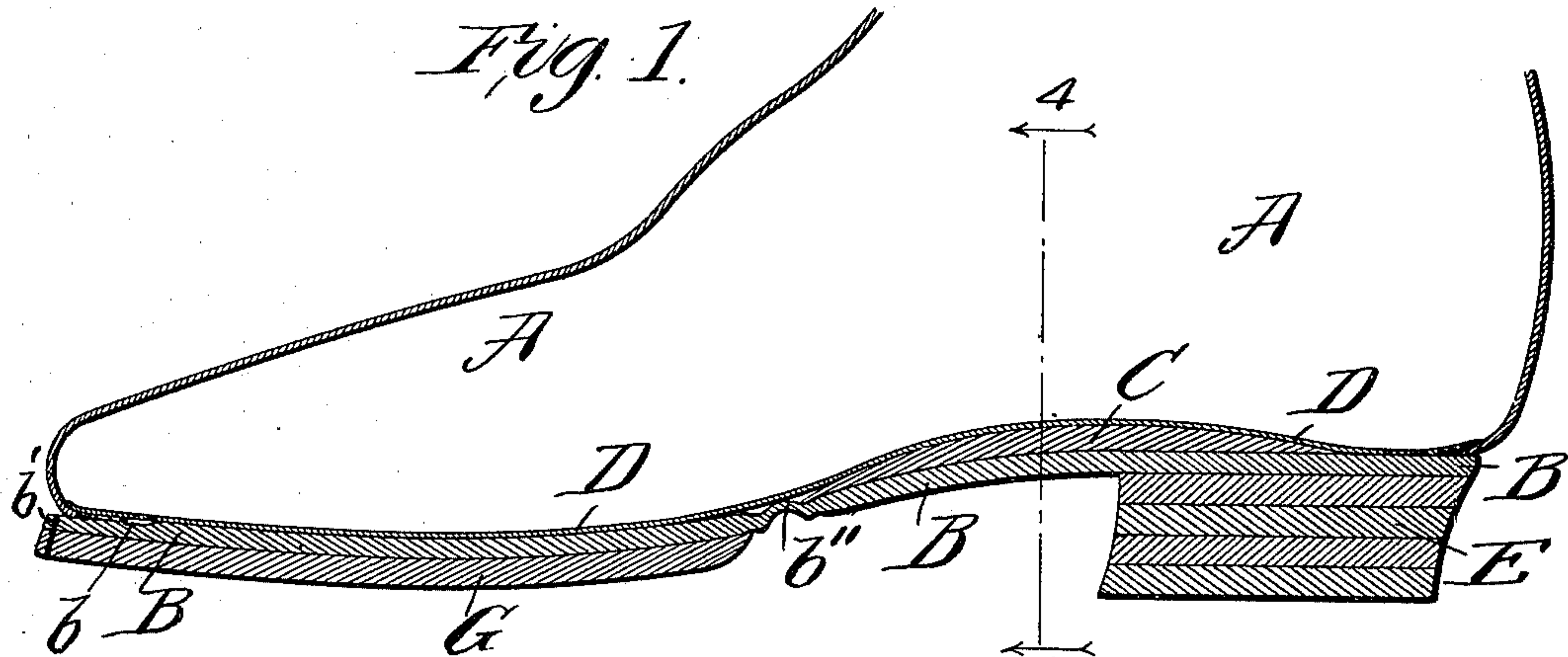
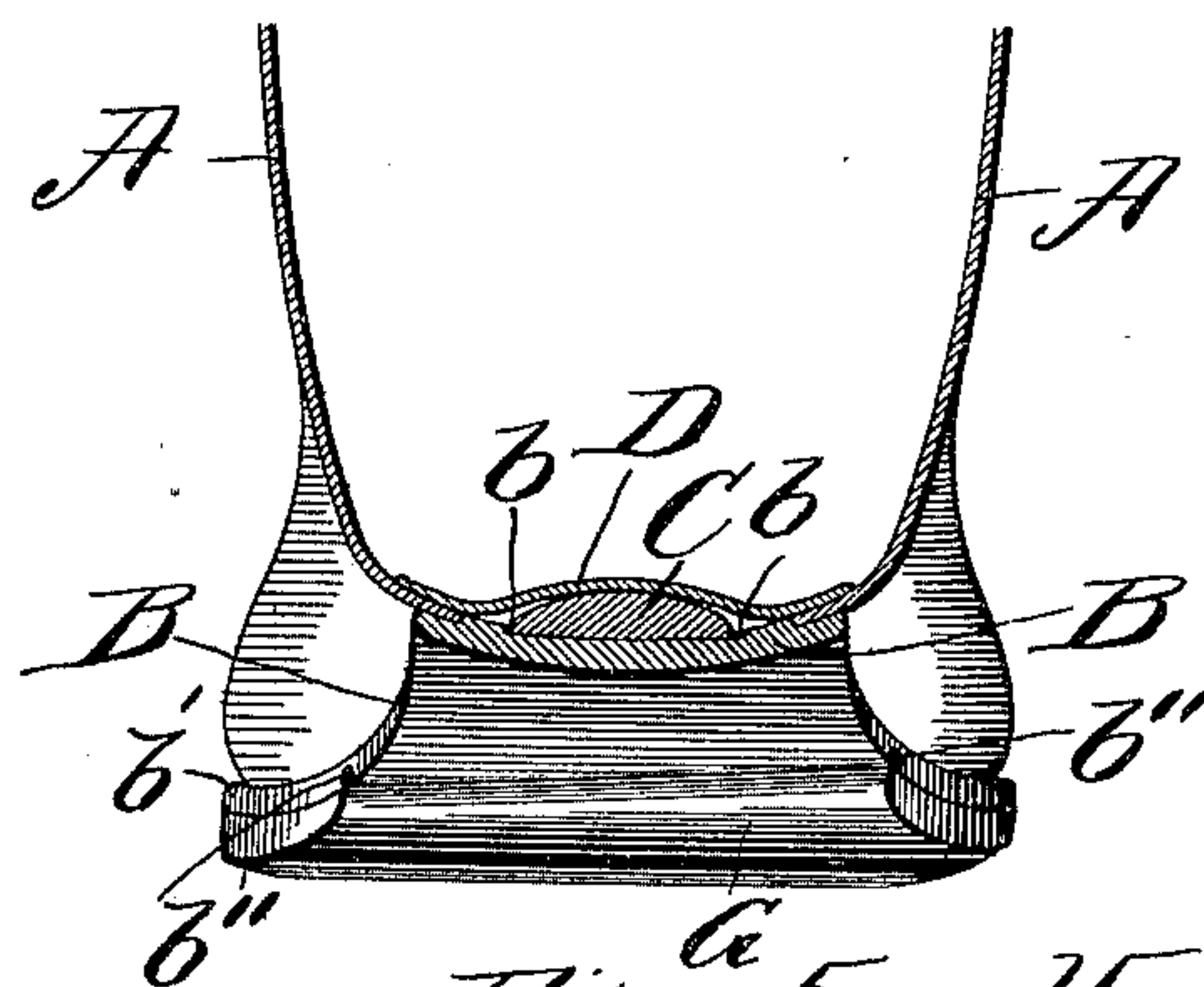


Fig. 4.



Attest:
Wm. H. Scott.
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Fig. 5. Henry Ries.

by Baker & Cornwall

Attys

UNITED STATES PATENT OFFICE.

HENRY RIES, OF ST. LOUIS, MISSOURI.

SHOE.

SPECIFICATION forming part of Letters Patent No. 672,651, dated April 23, 1901.

Application filed April 8, 1899. Serial No. 712,313. (No model.)

To all whom it may concern:

Be it known that I, HENRY RIES, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Shoes, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal sectional view through my improved shoe. Fig. 2 is a plan view of the insole. Fig. 3 is a sectional view through the insole and shank. Fig. 4 is a cross-sectional view on line 4 4, Fig. 1; and Fig. 5 is a detail view illustrating the manner in which the insole is creased on the last.

This invention relates to a new and useful improvement in shoes, boots, or slippers, the object being to render the soles of the same flexible, so as to accommodate the movement of the wearer's foot.

With this object in view the invention consists in the construction, arrangement, and combination of the several parts, all as will hereinafter be described, and afterward pointed out in the claims.

In the drawings, A indicates the upper of my improved shoe, which may be of any usual and well-known form.

B indicates what is commonly termed the "insole," and, as shown in Fig. 1, is attached to the upper by suitable stitching on the inside, passing through a channel *b*, after which the shoe is "turned," as is well understood, leaving a portion *b'* of the inside projecting outwardly to serve as a welt for the attachment of the outer sole.

C indicates the shank, which may be of any desired construction.

D indicates the lining of the sole inside of the shoe, and E the heel of said shoe.

In forming the insole the last F, a portion of which is shown in Fig. 5, is formed with a projection *f*, and the insole is reduced by crimping, cutting, oiling, or otherwise, so as to conform to this projection, leaving a crease *b''* transversely said insole, as shown in Fig.

2. This crease acts practically as a hinge, making the sole of the shoe flexible at this point, back of which the shank sufficiently stiffens the sole so as to prevent the wearing of the shoe so constructed being uncomfortable on account of the elevation of the heel.

The turned shoe (shown in Fig. 1) may, if desired, be provided with an outer sole G, which, however, terminates at the crease *b''*.

In applying my invention where the Good-year welt is used the outer sole is correspondingly weakened or creased as the insole, so as to make the shoe flexible at this point.

From the above it will be seen that a shoe constructed on the lines indicated in the drawings is easily made, simple in construction, strong, economical in the use of leather, and comfortable to the wearer's foot, said shoe being practically "broken in" when first worn.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a shoe or the like, the combination with an upper, of an insole formed with a marginal rib a short distance from the edge of the sole to which rib the upper is attached, and a transverse crease or fold at the forward end of the shank portion which crease or fold extends entirely across the sole and obliterates said marginal rib at its intersection therewith, a shank arranged on the upper side of said insole and terminating at its forward end in rear of said transverse crease or fold, and an outsole attached to the edge of the insole, substantially as described.

2. In a shoe or the like, the combination with an upper, of an insole, marginal ribs passing around that portion of the insole under the ball of the foot and terminating on each side short of the rear extremity or heel portion, the transverse crease or fold intersecting the marginal rib and extending entirely across the insole, a shank the forward edge of which terminates at the transverse crease, and the rear edge of the shank being coincident with the termini of the marginal rib, substantially as described.

3. In a shoe or the like, the combination with

an upper, of an insole having a transverse
crease or fold, a shank arranged on the upper
side of the insole and terminating at its for-
ward end in rear of said crease, and an out-
5 sole terminating at its rear end in front of
said crease or fold, substantially as and for
the purpose set forth.

In testimony whereof I hereunto affix my
signature, in the presence of two witnesses,
this 4th day of April, 1899.

HENRY RIES.

Witnesses:

F. R. CORNWALL,
WM. H. SCOTT.