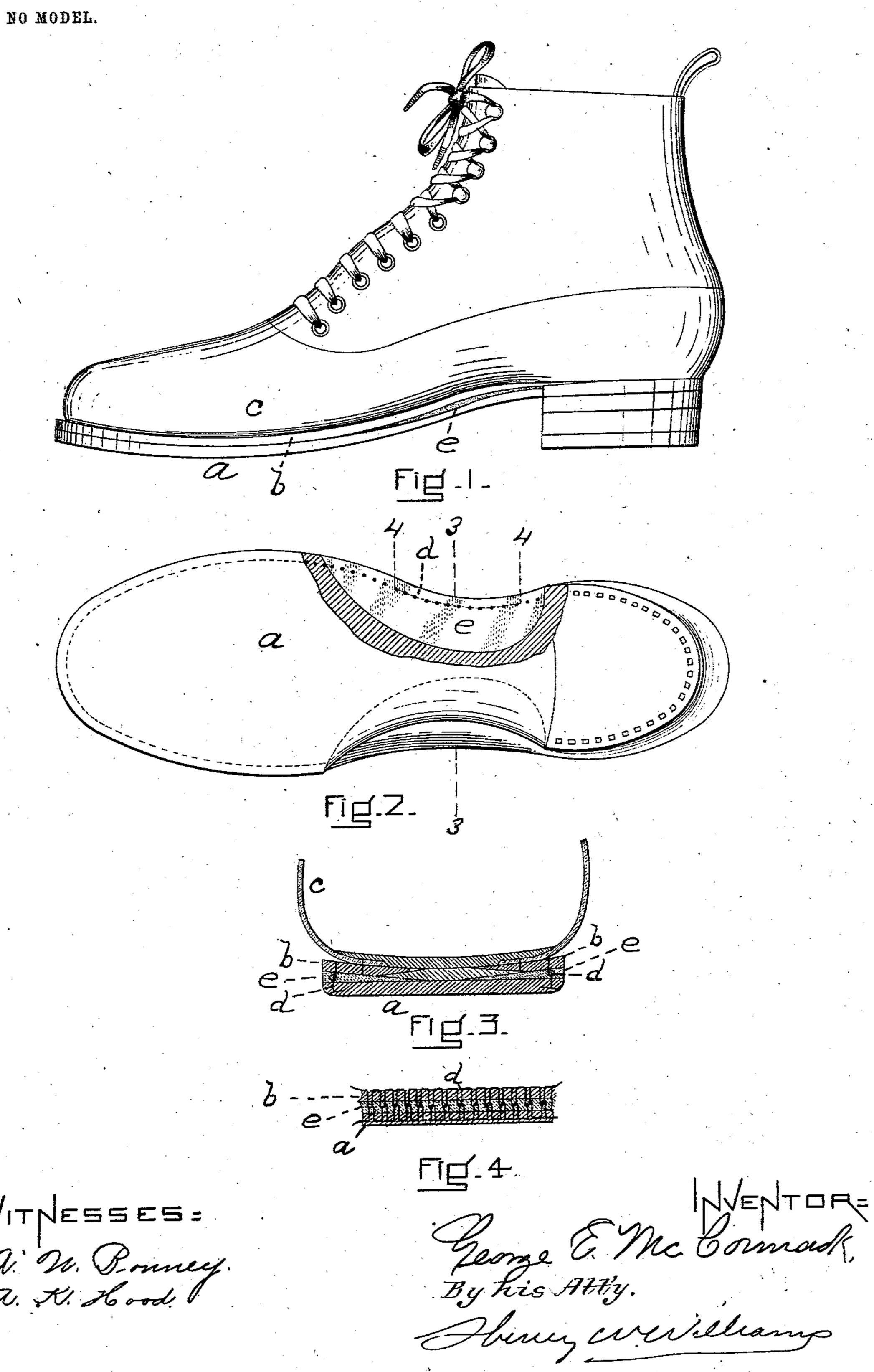
G. E. McCORMACK. LEATHER BOOT OR SHOE. APPLICATION FILED FEB. 28, 1903.



UNITED STATES PATENT OFFICE.

GEORGE E. McCORMACK, OF EAST BRIDGEWATER, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO GEORGE E. ROLLINS, OF EAST BRIDGE-WATER, MASSACHUSETTS.

LEATHER BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 730,555, dated June 9, 1903.

Application filed February 28, 1903. Serial No. 145,473. (No model.)

To all whom it may concern:

Beitknown that I, GEORGE E. MCCORMACK, a citizen of the United States, residing in East Bridgewater, in the county of Plymouth and 5 State of Massachusetts, have invented a new and useful Improvement in Leather Boots or Shoes, of which the following is a specification.

This invention relates particularly to welt-10 shoes; and it has for its principal object to provide means for preventing the adjacent surfaces of the outer sole and welt at the instep or shank of the shoe from rubbing together or chafing as the instep bends, and 15 thus wearing off or breaking the stitches.

In order to accomplish this result, I provide at the instep, between the welt and the outer sole next and substantially flush with the outer edges on each side, spacers or layers of 20 rubber or equivalent elastic soft material, through which the stitching extends and within which the knots or locking portions of the stitches are located. By this means the outer sole and welt are prevented from rub-25 bing or chafing, there is no shearing edge to cut the stitches, and inasmuch as there is a considerable space between the outer sole and welt, which is occupied by the spacer, the stitches in the course of relative movement 30 of said sole and welt do not bend suddenly at or nearly at right angles, but at very obtuse angles, as they extend from the welt through the spacer to the sole.

The nature of the invention is fully de-35 scribed below and illustrated in the accom-

panying drawings, in which—

Figure 1 is a side view of a shoe embodying my invention. Fig. 2 is a bottom view of the same, a portion of the outer sole and heel 45 being broken out. Fig. 3 is a cross vertical section taken on line 3, Fig. 2. Fig. 4 is a vertical section along the line of stitching, taken on line 4, Fig. 2.

Similar letters of reference indicate corre-

45 sponding parts.

a represents the outer sole, b the welt, and c the upper, all constructed as usual.

d represents the line of stitching.

At the instep, between the welt and the

outer sole and flush with their outer edges on 50 each side of the shoe, I provide an intermediate layer or spacer e of rubber or equivalent elastic soft material, such as felt, each of said spacers extending from the outer edge inward through and beyond the line of stitch- 55 ing, substantially as indicated in Figs. 2 and 3. The spacers extend for a sufficient distance toward the heel and toe to practically include and protect those portions of the lines of stitching in which there is relative move- 60 ment of the outer sole and welt as the instep or shank bends. The spacers may extend inward as far as desired, and their inner edges and ends grow gradually thinner in section, being beveled or skived for that purpose. 65 When the shoe is sewed, the stitches d extend from the welt b through the spacers e into the outer sole α , and the knot or lock of each stitch is embedded in this soft-rubber

When the shoe is used and the instep bends, there is no chafing or rubbing of the stitch between the adjacent surfaces of the welt and outer sole, as said surfaces are kept a sufficient distance apart by the spacers. Hence 75 there is practically no shearing edge to cut the stitch. Moreover, by reason of the thickness of the spacers the effect on the stitch of any relative movement of the outer sole and welt is to merely bend the portion of the 80 stitch which is within the spacer at a slight angle, it being evident that there can be no sharp right-angular bend, as is the case when the adjacent surfaces of the welt and outer sole are in contact. The effect of the cush- 85 ioning-spacer on the stitch is to prevent friction and to prevent its being worn down or severed by a rubbing or chafing process, and the general effect on the shoe is to impart flexibility and keep out moisture.

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

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In a boot or shoe of the character described, the combination with the outer sole and welt, 95 of a spacer consisting of a layer of rubber or equivalent elastic soft material, said spacer being located at the instep between the outer

sole and welt and extending substantially | name to this specification in the presence of from the outer edges thereof across and beyond the line of stitching, the stitches extending through said spacer and with their 5 knots or locks embedded therein, for the purpose set forth.

In testimony whereof I have signed my

two subscribing witnesses.

GEORGE E. McCORMACK.

Witnesses:

HENRY W. WILLIAMS, A. N. Bonney.