No. 671,518. Patented Apr. 9, 1901.

J. E. JACKSON.

BOOT OR SHOE.

(Application filed June 12, 1900.)

(No Model.)

Fig. 1.

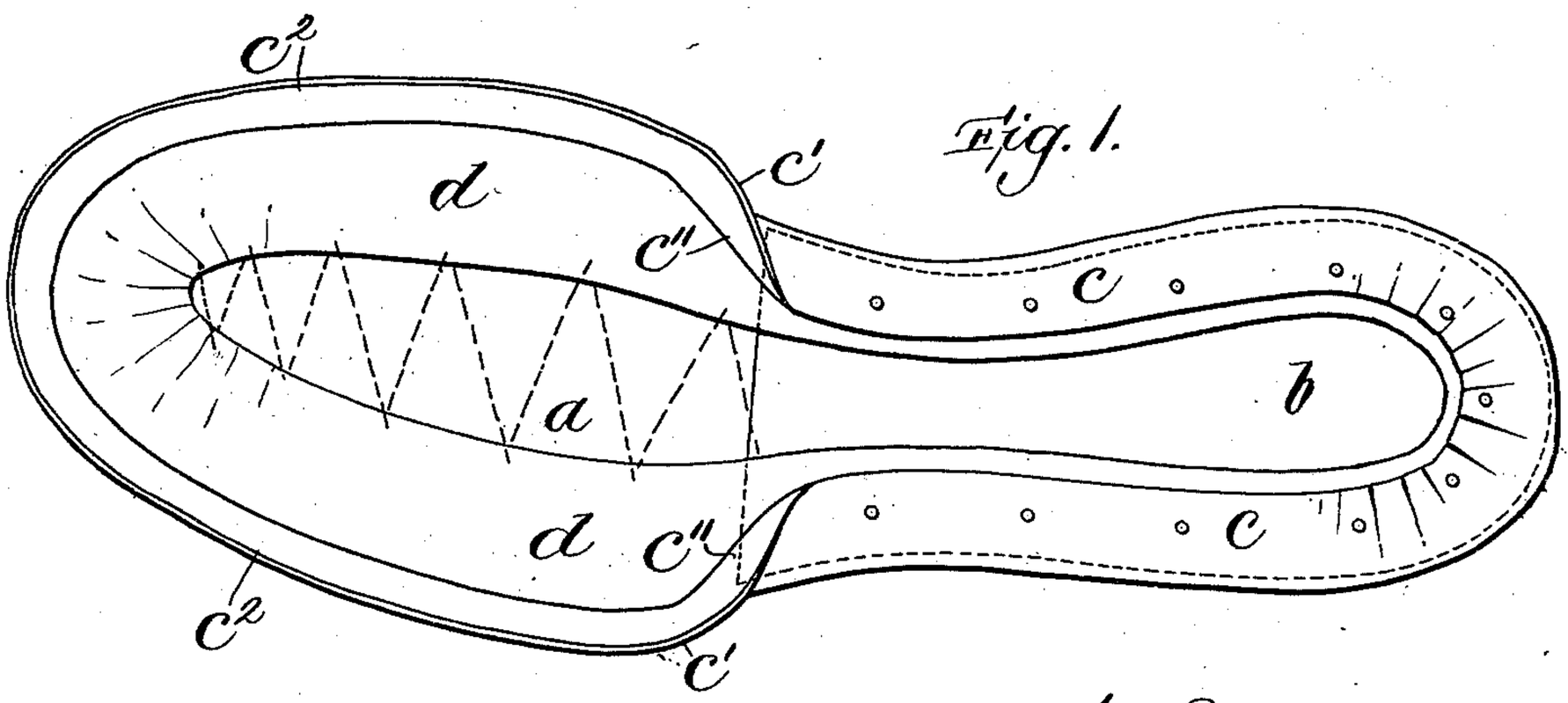


Fig. 2.

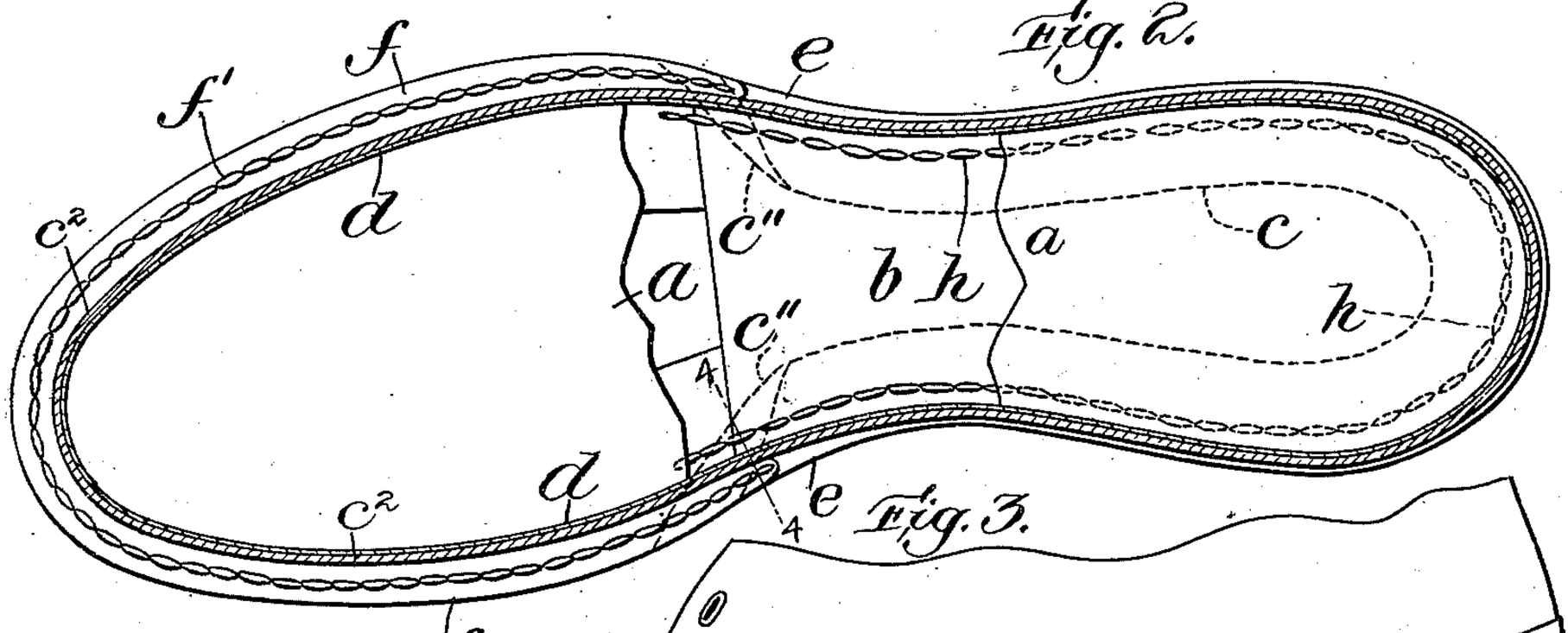


Fig. 3.

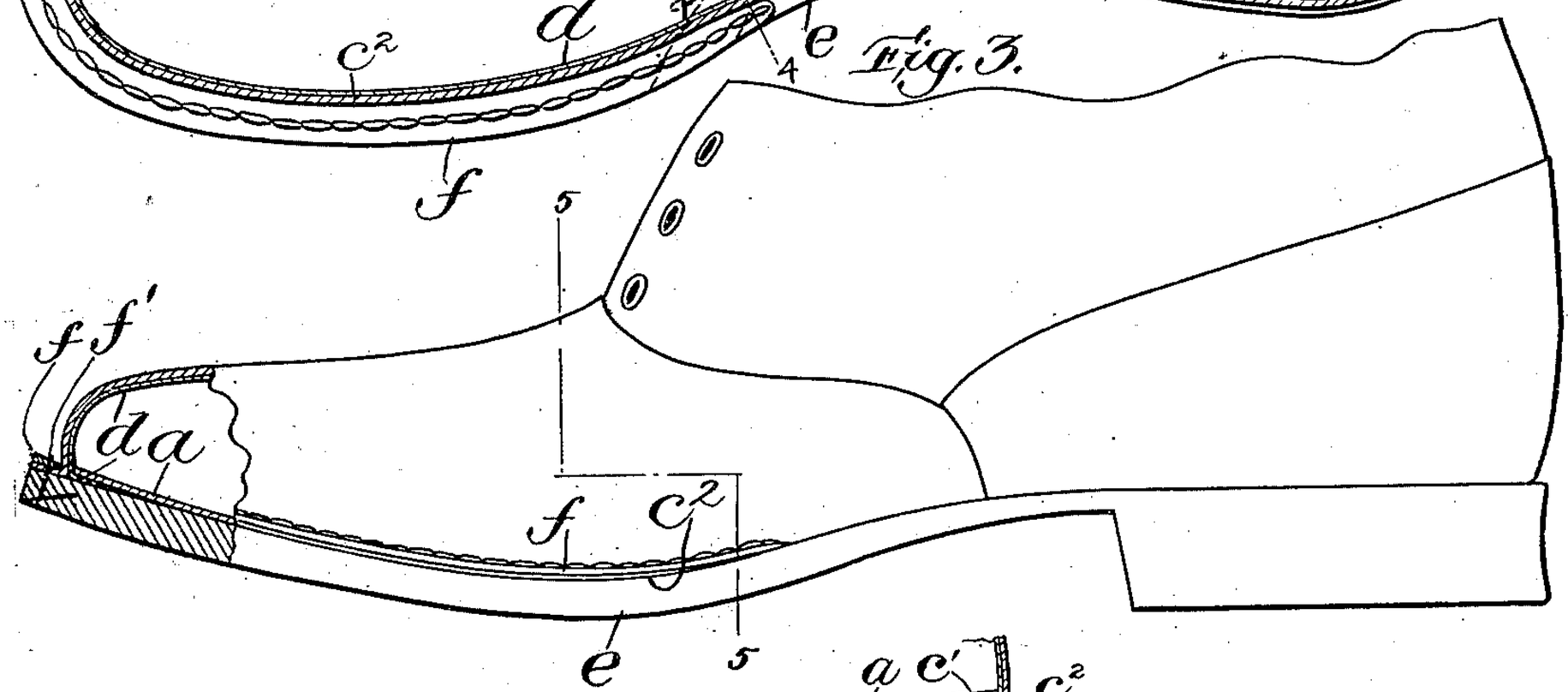
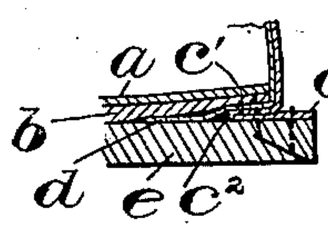
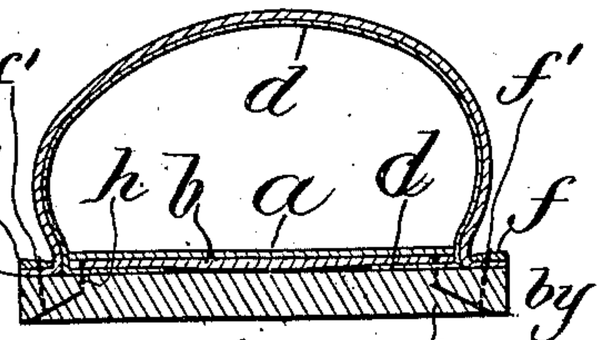


Fig. 4.



Witnesses:
Arthur D. Randall.
N. F. Dailey.

Fig. 5.



Inventor:
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UNITED STATES PATENT OFFICE.

JAMES E. JACKSON, OF LYNN, MASSACHUSETTS, ASSIGNOR OF TWO-THIRDS TO GEORGE E. BARTLETT, OF SAME PLACE, AND GEORGE C. DAVIS, OF WESTON, MASSACHUSETTS.

BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 671,518, dated April 9, 1901.

Application filed June 12, 1900. Serial No. 19,988. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. JACKSON, of Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Boots or Shoes, of which the following is a description sufficiently full, clear, and exact to enable those skilled in the art to which it appertains or with which it is most nearly connected to make and use the same.

This invention relates to boots and shoes of the "stitched-down" type; and one object is to provide for obviating any cutting of the upper where it turns outwardly for stitching down to the outer sole by so arranging the fastenings which unite the component parts of the shoe as to close the crease where the marginal portion of the upper folds on itself, a half inner sole, to which the heel and shank portions of the upper are lasted, being utilized in this connection.

With the above-stated and other incidental objects in view, as will hereinafter appear, the present invention consists in a number of novel features of construction and combinations of parts, the essential elements of which are set forth in the appended claims and a preferred form of embodiment of which is illustrated in the accompanying drawings and specifically described hereinafter.

Of said drawings, Figure 1 represents a bottom plan view of the shoe in an incomplete state, as when on the last after the heel and shank portions of the upper have been lasted over and secured to the half inner sole and the vamp-lining has been lasted over and secured to the sock-lining. Fig. 2 represents a sectional top plan view of the completely-assembled shoe, the upper appearing as cut off close to the sole and the sock-lining being represented as partially broken away. Fig. 3 represents the completed shoe in side elevation with the toe partly broken out and in section. Figs. 4 and 5 are cross-sectional views taken substantially on lines 4 4 and 5 5 of Figs. 2 and 3, respectively.

In building the shoe the component parts of the upper are assembled much as usual and placed over the last, and a full sock-lining *a* is laid on the bottom of the last and coated with cement, and a half inner sole *b*, comprising shank and heel portions, is placed on the said sock-lining as it appears in Fig. 1. The portions of the upper at the heel and shank of the shoe are then lasted over, lining and all, and fastened by lasting-tacks to the half inner sole, as represented in Fig. 1, where the reference-letter *c* designates the marginal portion of the upper, which is thus lasted over. Beyond the shank of the half inner sole the leather of the upper is not so lasted over; but the lining *d* is lasted over throughout and in the forward portion of the shoe is connected to the sock-lining *a* by the cement with which the latter is coated. Where the lasted portion of the leather of the upper leaves off in rear of the forward edge of the half inner sole the marginal part of this leather is turned outwardly, as shown at *c'*, so that it folds upon itself along the lines *c''*, and throughout the ball portion and toe of the shoe the marginal portion c^2 of the leather of the upper stands out from the last at this stage of the operation. The outer sole *e* is placed upon the last over the lasted portion *c* of the upper, the folded portions *c'* thereof, and the lining *d*, leaving the marginal portion c^2 of the leather outside and free to be manipulated. This outer sole is secured in place by temporary fastenings, as usual, and then the marginal portion of leather c^2 is drawn up and tacked temporarily to the edge of the outer sole, and the shoe goes to the sewing-machine to have this marginal portion of leather stitched down to the outer sole. A loose welt-strip *f* is carried by said machine and laid over the upper as a line of stitches *f'* is run through this welt-strip, the marginal portion of the upper, and the outer sole. The welt-strip is extended at each side of the shoe beyond the inwardly-extending edges of the folded-over parts of the leather, as shown in Figs. 2 and 3. The stitching-down operation having been completed, the shoe is ready to be run through a machine which unites the inner and outer soles and the lasted portion *c* of the upper by through-and-through fastenings, and the shoe is here shown as McKay-sewed in the shank and heel, the line of stitches *h* being carried forward somewhat

beyond the half inner sole, as shown in Fig. 2, which takes the stitches through the folded-over portions c' of the upper. The component parts of the shoe having now all been united, the shoe is ready for the beating-out process.

In assembling the parts of the upper the leather and the cloth lining of the vamp are so stitched together that when the lining is lasted over and secured to the sock-lining the whole vamp is drawn to the shape of the last, except, of course, the marginal portion, which is to be stitched down to the outer sole. In the stitching-down process this marginal portion is drawn to the last, and the crowding in of the welt-strip assists in the shaping of the shoe, so that altogether the completed shoe will be perfectly conformed to the last.

It will be observed that by carrying the two sets of stitches f' and h past each other where the folded or doubled portions of the upper occur these portions are securely held together, and the half inner sole assists in this as well as the outer sole, for these folded-over parts are clamped between the two soles, as shown in Fig. 4.

The shoe presents a neat exterior, the ends of the welt-strip tapering down to the shank-surface of the outer sole after passing over the edges of the upper and said welt-strip being preferably beveled transversely, as shown in Fig. 3, so that it is thickest at the outer edge and tapers toward the crease of the upper.

A shoe constructed as above described possesses the highest degree of flexibility in the ball portion, adding greatly to the comfort of the wearer. At the same time the shank possesses the desired stiffness.

The shoe can be very cheaply made, for there is no great strain imposed upon the upper, as in the construction of a turned shoe, and at the same time the shoe will have as great flexibility as a turned shoe and, moreover, can be readily made water-tight.

Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, it is declared that what is claimed is—

1. In a boot or shoe the combination of a half inner sole comprising heel and shank portions; a full sock-lining; an upper lasted in over the said half inner sole and having a lining lasted in over the forward portion of the sock-lining and secured thereto, the marginal portion of the vamp of the upper being turned outwardly away from its said lasted lining and folded on itself between the shank and heel portions and in rear of the front edge of the half inner sole; an outer sole; through-and-through fastenings uniting the latter, the half inner sole, and that portion of the upper which is lasted over said inner sole, said fastenings extending through the folded portions of the vamp; and fastenings securing the outwardly-turned marginal portion of the vamp to the saidouter sole, substantially as described.

2. In a boot or shoe the combination of a half inner sole comprising heel and shank portions; a full sock-lining; an upper lasted in over the said half inner sole and having a lining lasted in over the forward portion of the sock-lining and secured thereto, the marginal portion of the vamp of the upper being turned outwardly away from its said lasted lining and folded on itself between the shank and heel portions and in rear of the front edge of the half inner sole; an outer sole; through-and-through fastenings uniting the latter, the half inner sole, and that portion of the upper which is lasted over said inner sole, said fastenings extending through the folded portions of the vamp; a welt-strip lying over the outturned portion of the vamp and extending at each end beyond the edges of said vamp; and fastenings securing the said welt and outwardly-turned marginal portion of the vamp together and to the said outer sole, said fastenings overlapping or breaking joint with the through-and-through fastenings, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 5th day of June, A. D. 1900.

JAMES E. JACKSON.

Witnesses:
C. P. DAVIS,
ARTHUR W. CROSSLEY.