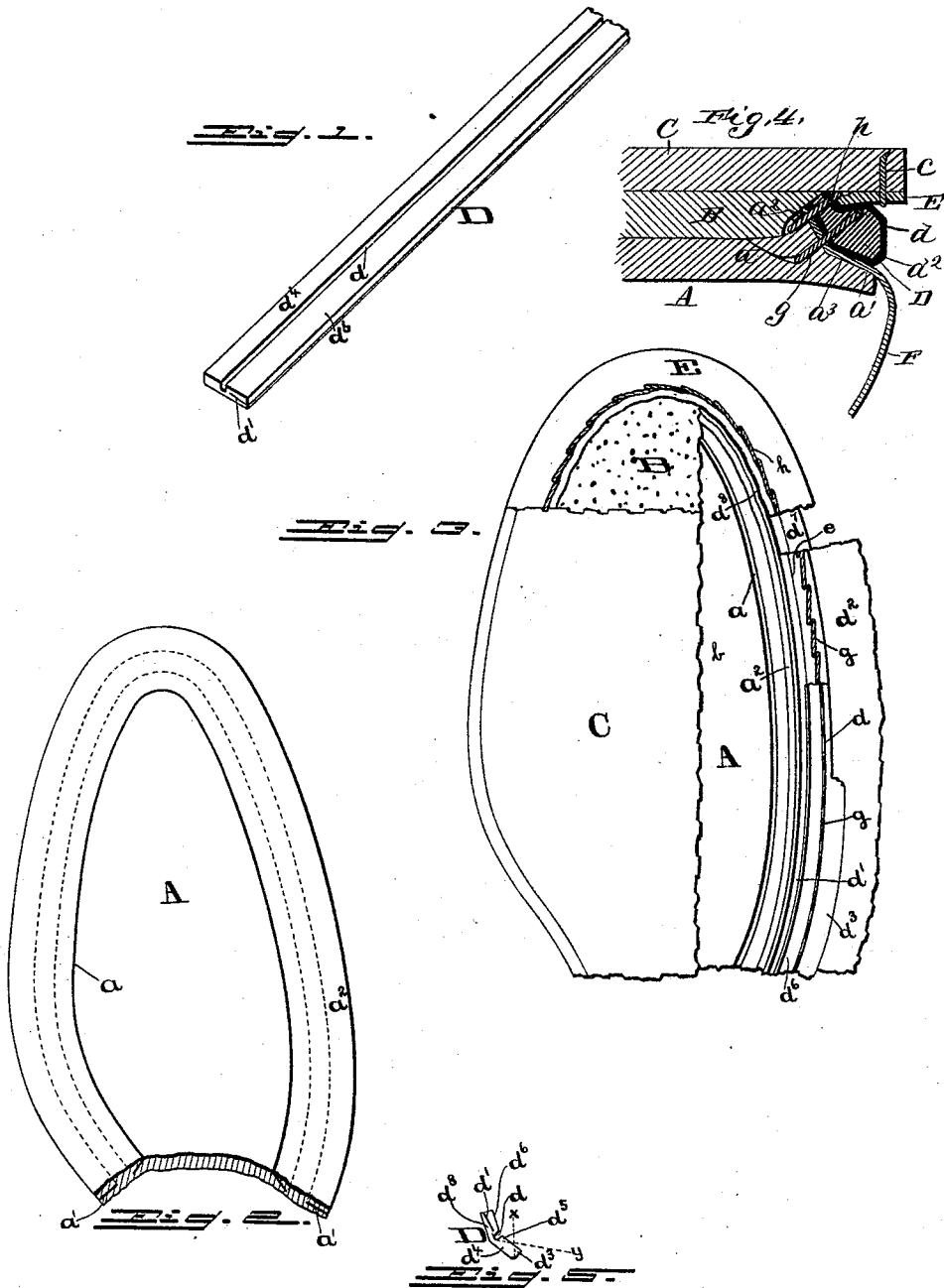


(No Model.)

W. J. DREY.
SHOE.

No. 496,822.

Patented May 2, 1893.



WITNESSES

E. H. Powell.
K. A. Powell.

INVENTOR

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By his Attorney,
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UNITED STATES PATENT OFFICE.

WILFRED J. DREY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO THOMAS BEATTY, OF SAME PLACE.

SHOE.

SPECIFICATION forming part of Letters Patent No. 496,822, dated May 2, 1893.

Application filed January 30, 1892. Serial No. 419,812. (No model.)

To all whom it may concern:

Be it known that I, WILFRED J. DREY, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Shoe-Making, of which the following is a specification.

My invention has relation to shoes, particularly those the soles of which contain an inner layer of cork and which are known to the trade as "cork sole" shoes, and has for its object the provision of certain improvements in the manufacture of such shoes, to the end that their cost may be lessened and the soles thereof rendered more durable, flexible and waterproof. In shoes of the character mentioned, it is necessary to sew a strip of leather, called the "casing," to the inner sole, the same following the contour of such sole enlarged and forming a recess between it and the outer sole, in which recess is placed a thin layer of cork. Heretofore, this casing has been composed of a simple, narrow strip of leather of such width as to prevent more than one line of stitching passing therethrough without being run into by another such line. Consequently, it has been found necessary to place a second leather inner sole, in the recess aforementioned, for securing thereto the welt. Thus the sole of the shoe is rendered very stiff and heavy and its cost increased and the thin layer of cork therein does not perfectly exclude moisture, while, owing to the practical independence between the first inner sole and casing, and the second inner and the outer soles, the durability of the shoe is impaired.

My invention consists in the provision of a casing, for the purpose specified, of a character more particularly described hereinafter, the same being adapted for reception of two separate lines of stitching, one line passing through said casing, the casing-cover, the upper and the inner sole, and the other line through the welt, said casing, casing-cover, upper and inner sole. Thus there is secured a perfect unity between the inner and outer soles and a corresponding degree of durability, dispensing entirely with the second leather inner sole aforementioned and rendering the

sole of the shoe considerably lighter and cheaper and increasing its flexibility.

Referring to the accompanying drawings: Figure 1 is a perspective view of a portion of the strip of which the improved casing is composed. Fig. 2 is a plan view, partly broken away, of the insole. Fig. 3 is a similar view, showing the relative positions and the means of securing in place the various parts of the improved sole. Fig. 4 is a vertical section of a portion of the complete sole; and Fig. 5 is an end view of the casing in position to receive the first line of stitching.

In said drawings, A represents the leather inner sole, the same being channeled at a and having its edge split, as shown at a' . B is the layer of cork, C the outer sole, and D the casing, said casing being formed of a strip of leather provided with a longitudinal groove d and having one of its edges split, as at d' . E represents the welt and F the upper.

As illustrated in Figs. 3 and 4, the side a^2 of the split portion a' , of inner sole A, when the latter is in its normal position, is bent upwardly, leaving a recess a^3 in the edge of said sole. In this recess are first laid the lower edges of the upper F, then the casing-cover d^2 is laid upon the latter, upon which cover is placed, in the condition shown most clearly in Fig. 5, the casing D, whereupon the stitching g is run in the groove d , through the casing-cover, the upper, inner sole A and into the channel a therein. Thus said casing, cover and upper are secured firmly to the inner sole of the shoe. This having been accomplished, the portion d^3 , of the edge d^4 of the casing, is trimmed off on dotted line x of Fig. 5. Then the portion d^5 of said edge, on dotted line y of said figure, and the side d^6 of the split in said casing, are removed, resulting in the formation of a recess or seat e for the welt E. The casing-cover d^2 is now turned up over the casing D, as shown at d' in Fig. 3, and the welt E placed thereon, and then the stitching h is run through said welt, cover, casing, upper and the upturned portion a^2 of the inner sole A, as shown in the drawings, securing each of these parts to said inner sole. In this position of the various parts there is left a recess b , the edges of the welt, casing, cover,

upper and part A² being trimmed off, as shown in said Fig. 3, and forming the walls of the recess *b*, said inner sole forming the bottom of this latter recess. In this recess is secured, 5 by cementing to the inner sole A, the cork sole B, to which latter is cemented the outer sole *c* and the same sewed, by the stitching *c*, to the welt E, when the operation is complete.

By the improved method of manufacture 10 hereinbefore described the dispensing with the second inner sole of leather effects a saving of material and, consequently, of expense, a lessening of the weight of the completed sole and permits of the use of a layer of cork 15 equal in thickness to that of such second inner sole and the layer of cork heretofore used, combined, or double the thickness of that usually employed, enabling the sole to more perfectly prevent moisture from reaching the foot 20 of the wearer of the shoe. At the same time, the absence of the second inner sole of leather, just mentioned, renders the improved sole that much more flexible.

The preferred medium through which the 25 sewing of the different parts of the improved sole together is accomplished is a machine of the "Goodyear welt" pattern, although any other suitable machine may be employed.

Furthermore, as is quite obvious, such sewing may be done by hand. 30

What I claim as my invention is as follows:

In a cork-sole shoe, the combination of the inner sole, the upper, the welt, the outer sole, the cork-sole casing, a layer of cork between 35 said soles, said inner sole having its edges split, being channeled and having one side of the split edge upturned, and said casing having one of its edges split and provided with a longitudinal groove, a line of stitching in the latter 40 and passing through the casing, upper, inner sole and into said channel and one side of the split edge of the casing being removed, forming a seat for the welt and affording room for another line of stitching which 45 passes through said welt, casing, upper and upturned portion of the inner sole, said stitching serving to unite the aforementioned parts in the completed shoe, substantially as shown and described. 50

In testimony whereof I have hereunto set my hand this 23d day of January, A. D. 1892.
WILFRED J. DREY.

Witnesses:

THEO. C. WARNER,
WM. H. POWELL.