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GALOSH, GUM BOOT, AND OTHER RUBBER FOOTWEAR.

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947,859.

Patented Feb. 1, 1910.

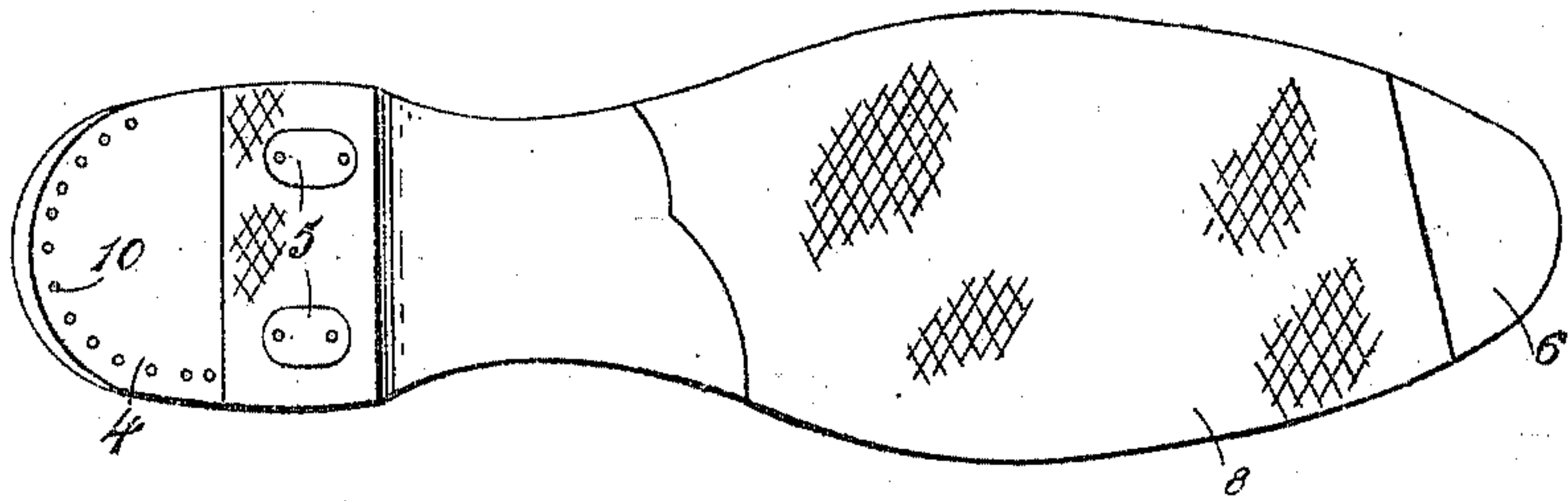


FIG. 1

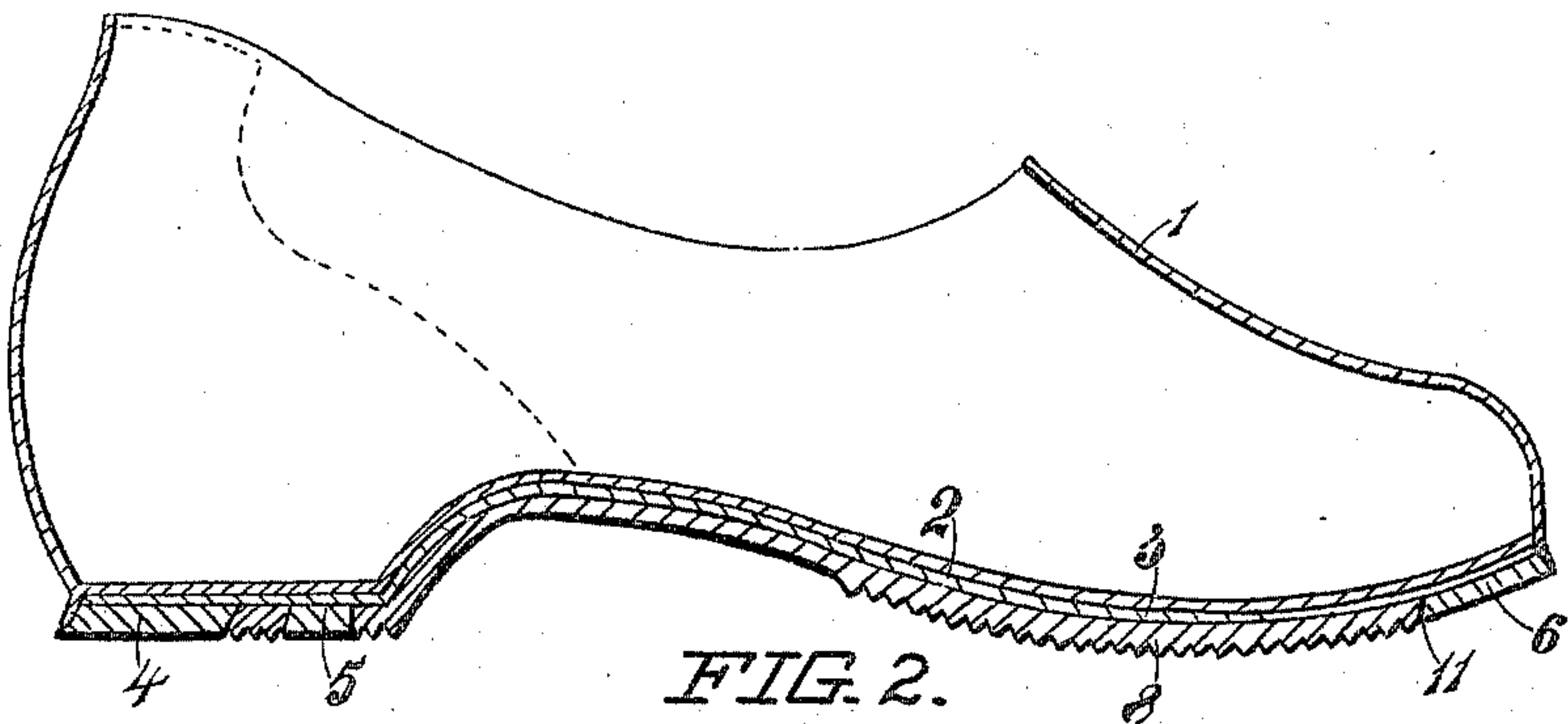


FIG. 2.

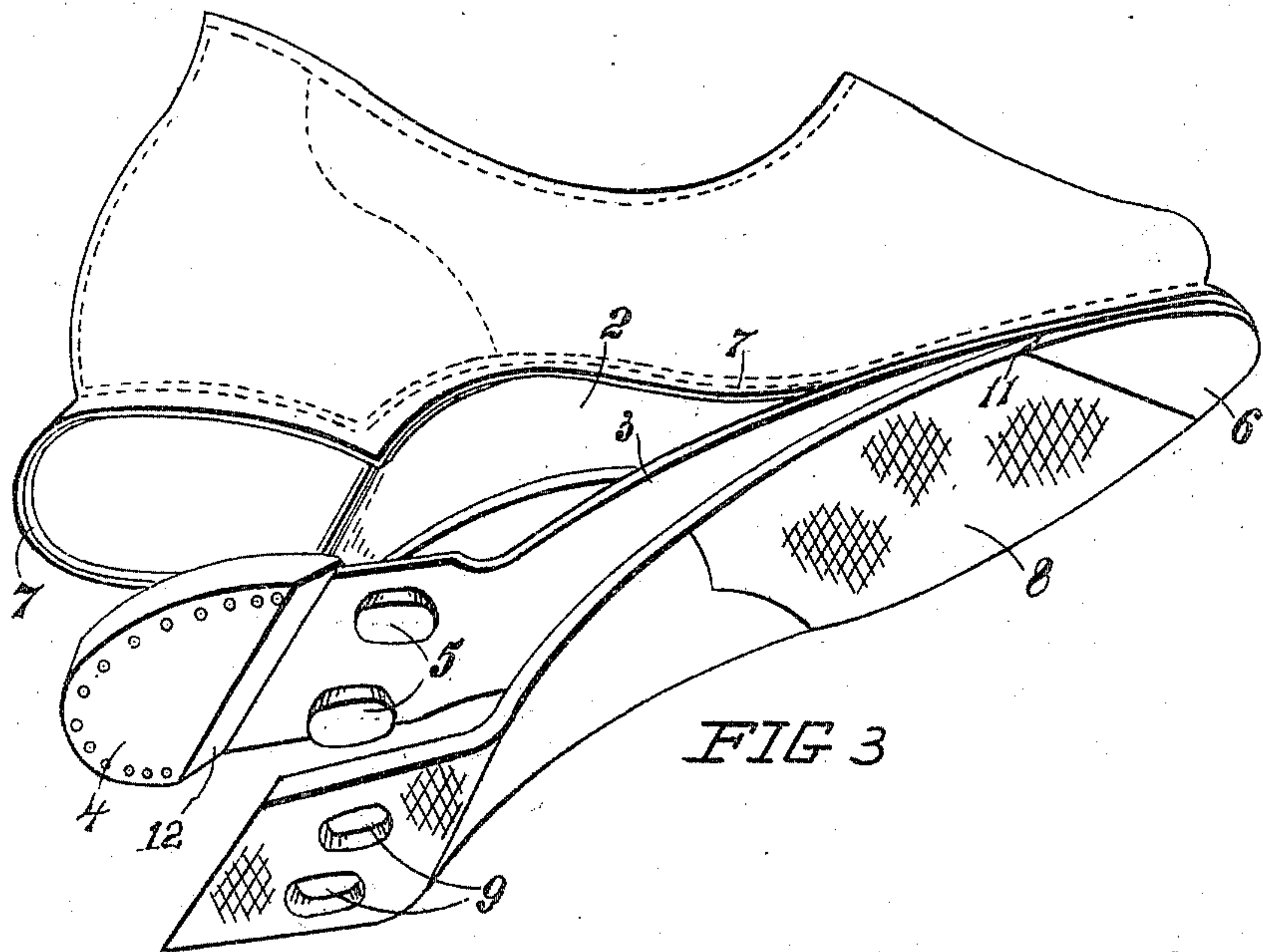


FIG. 3

Witnesses.
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UNITED STATES PATENT OFFICE.

DANIEL SMITH AND FREDERICK WILLIAM SMITH, OF CHRISTCHURCH, NEW ZEALAND.

GALOSH, GUM BOOT, AND OTHER RUBBER FOOTWEAR.

947,859.

Specification of Letters Patent.

Patented Feb. 1, 1910.

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To all whom it may concern:

Be it known that we, DANIEL SMITH and FREDERICK WILLIAM SMITH, subjects of His Majesty the King of Great Britain and Ireland, residing at Christchurch, in the Provincial District of Canterbury, in the Colony of New Zealand, have invented certain new and useful Improvements in Galoshes, Gum Boots, and other Rubber Footwear, of which the following is a specification.

Our invention relates to improvements in rubber foot-wear, such as water-proof boots and shoes, and it consists in the constructions, combinations and arrangements herein described and claimed.

An object of our invention is to provide an improved boot or shoe, in which a rubber outer sole is locked in position by leather wear pieces constructed to minimize danger of injury to said leather wear pieces and to securely lock said rubber sole in position under all conditions of wear.

A further object of our invention is to provide an improved water-proof rubber boot or shoe having a rubber outer sole protected by leather wear pieces capable of being readily repaired at slight cost, and in which the outer edges of said leather wear pieces are covered by a rubber flange constituting an integral part of said rubber shoe.

In the accompanying drawings, forming a part of this application and in which similar reference numerals indicate corresponding parts in the several views:—Figure 1 is a bottom plan view, illustrating one embodiment of our invention; Fig. 2 is a longitudinal sectional view of the construction shown in Fig. 1, on a plane extending through one of the undercut leather locking lugs; and Fig. 3 is a perspective view, showing a partial separation of the parts for clearly illustrating their construction.

Referring to the drawings, 1 indicates the upper portion of a rubber shoe, provided with an inner sole 2 and a filling member 3. The filling member 3 is preferably formed of canvas, which may be rubber faced and cemented upon the inner sole 2. A series of leather wear pieces 4, 5 and 6 are secured to the filling member in any suitable manner, as by cement and nails 10, or stitching. The member 4 comprises a leather heel piece formed with a downwardly and rearwardly inclined front edge 12. The

members 5 comprise undercut leather lugs adjacent the inclined edge 11 of the heel piece, and preferably arranged with their long axes extending in the length of the shoe. The member 6 comprises a leather toe piece provided with an undercut rear edge 11. A rubber outer sole 8 is cemented to the filling member 3 and provided with an inclined front edge for engaging beneath the undercut edge 11 of the leather toe piece, and with an inclined rear edge for overlapping the inclined front edge 12 of the leather heel piece; said rubber sole being provided with tapered apertures 9 for receiving the undercut leather lugs.

From the above description, it will be understood that the rubber outer sole 8 is positively locked at its front edge by an undercut toe piece 6, and adjacent its rear edge by the undercut elongated lugs 5; the rear edge of said rubber sole overlapping the inclined front edge 12 of the leather heel piece. By this construction, the elongated undercut lugs 5 will accommodate any flattening or spreading of the rubber sole through wear, and insure said sole being maintained positively locked by said undercut lugs and the undercut toe piece, under all conditions of wear.

The downwardly and rearwardly inclined front face 12 of the leather heel piece provides a seat against which the inclined overlapping rear edge of the rubber sole 8 will be maintained in close engagement during wear of said leather heel piece and rubber sole. Further, the downwardly and rearwardly inclined front face 12 of the leather heel piece provides a strong and durable construction, which will prevent injury or distortion to said heel piece by the heavy shocks and wear which are localized on the heel piece in use; thereby eliminating the defects found in previous constructions in which the heel piece is formed with relatively thin undercut locking edges.

As shown especially in Figs. 2 and 3, a rubber flange 7, constituting an integral part of the rubber shoe, is cemented to the outer edges of the rubber sole and the heel and toe pieces. This construction shields the edges of said leather toe and heel pieces from the access of water, and protects the shoe from the deleterious action which would be caused by water percolating through the edges of

the leather pieces to be subsequently absorbed and retained against the filling member covering the top of said leather pieces.

5 We have illustrated and described, preferred and satisfactory constructions, but, obviously, changes could be made within the spirit and scope of our invention.

10 Having thus described our invention, what we claim as new therein and desire to secure by Letters Patent is:—

15 In a rubber boot or shoe, the combination of a leather toe piece provided with an undercut rear edge, a leather heel piece formed with a downwardly and rearwardly inclined front edge, undercut leather lugs adjacent the inclined front edge of said heel piece, a rubber outer sole provided with an inclined front edge for engaging beneath the under-

cut edge of said leather toe piece and an inclined rear edge for overlapping the inclined front edge of said leather heel piece, said rubber sole being provided with tapered apertures for lockingly engaging said undercut lugs, and a rubber flange on the shoe secured to the outer edges of said rubber sole and said heel and toe pieces, substantially as described. 25

In testimony whereof, we have signed this specification in the presence of two subscribing witnesses.

DANIEL SMITH.

FREDERICK WILLIAM SMITH.

Witnesses:

PERCY R. CLIMIE,
A. D. COOK.