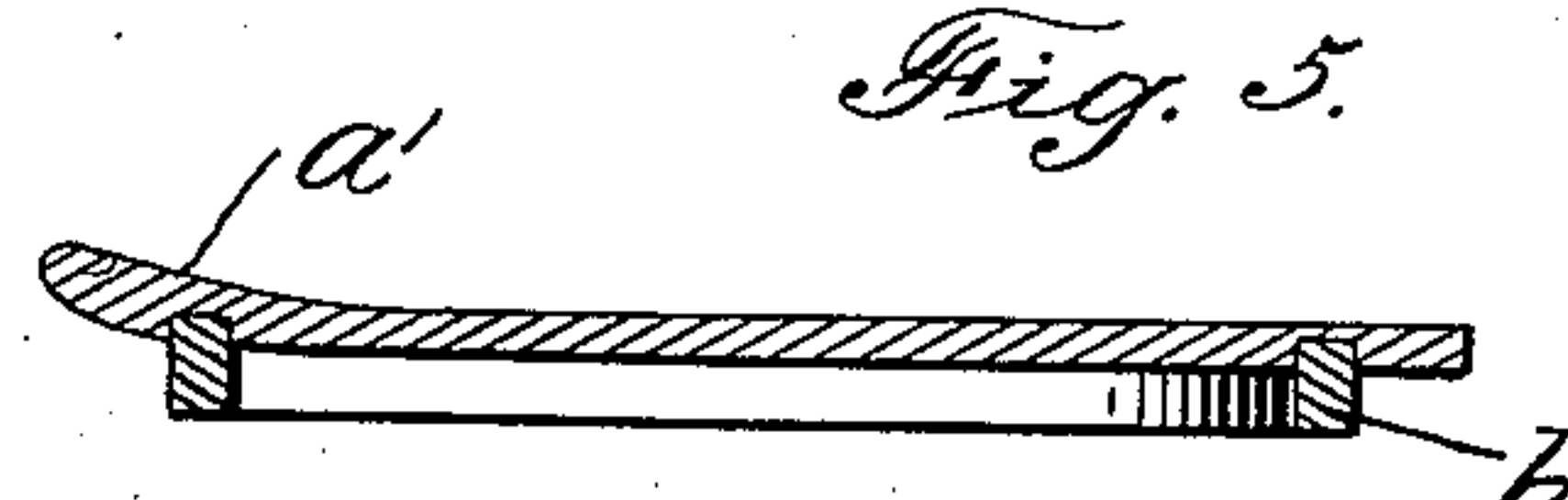
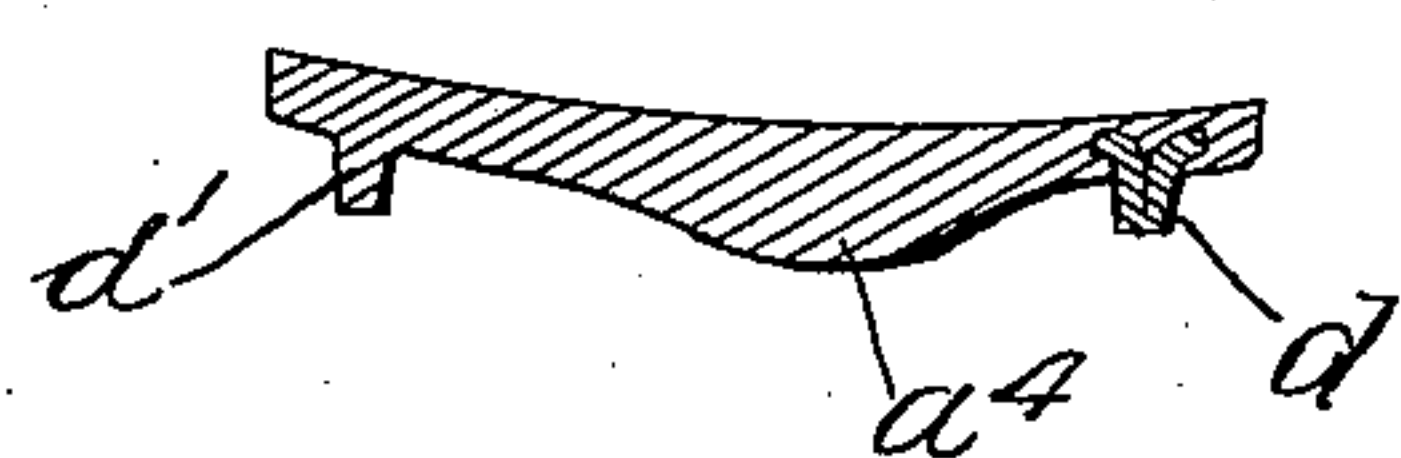
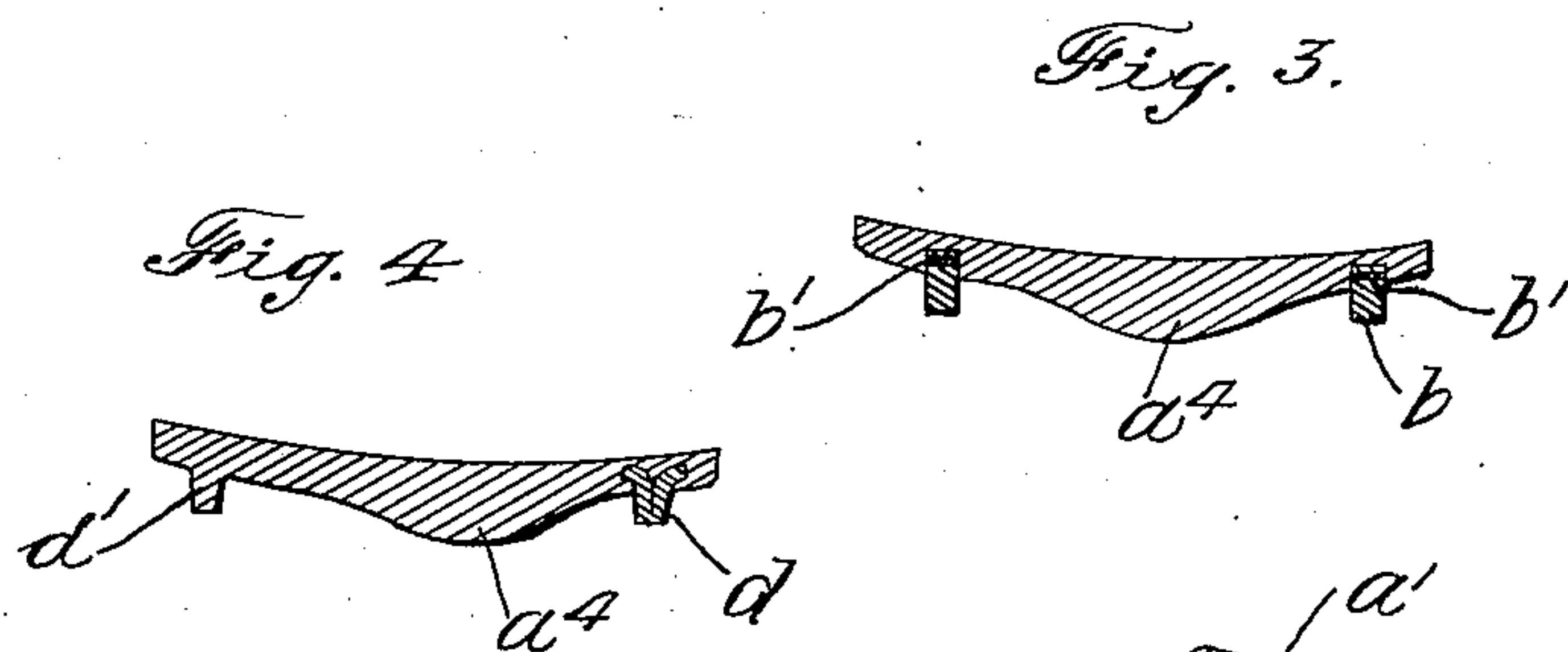
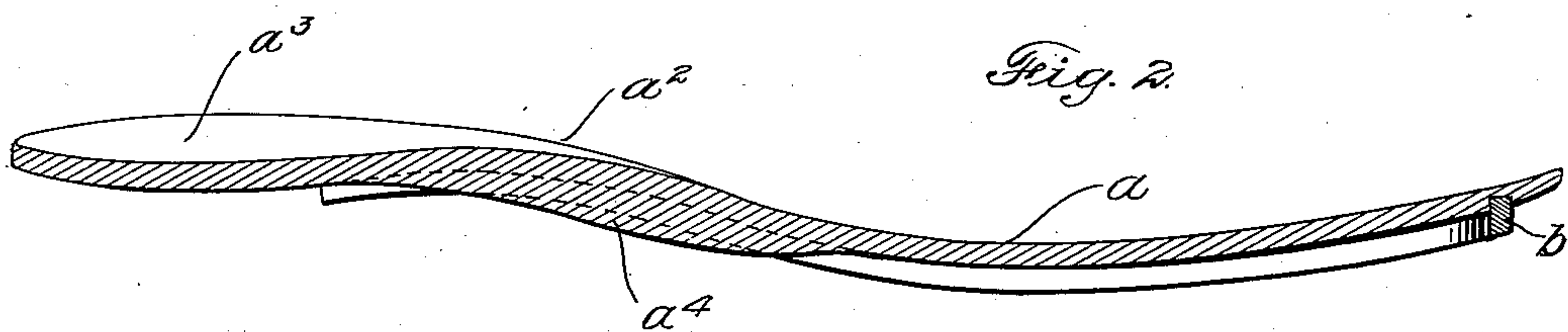
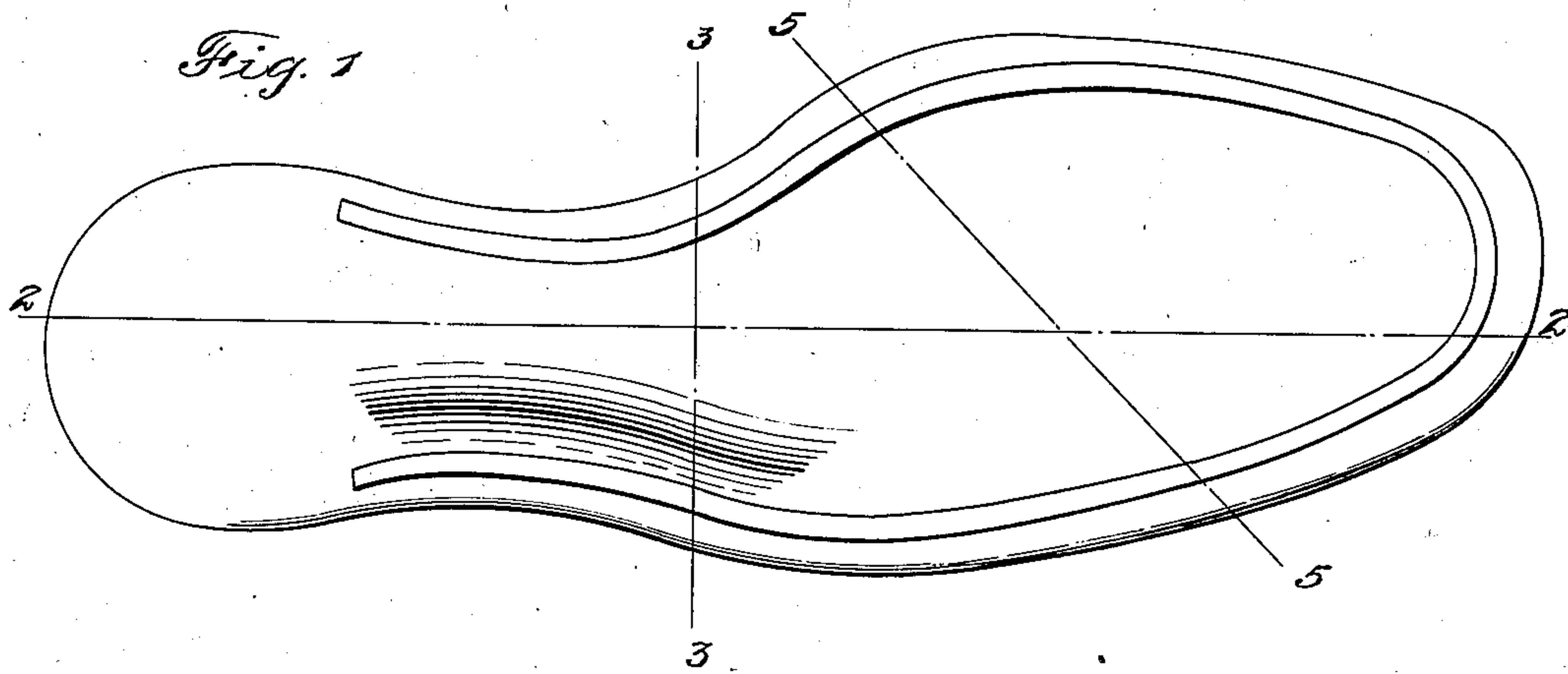


G. E. ROLLINS.
INNERSOLE.
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955,104.

Patented Apr. 12, 1910.



Witnesses;
John C. Porter.
L. A. Canthard.

Inventor,
George E. Rollins,
by
Geo. St. Maxwell
Attorney.

UNITED STATES PATENT OFFICE.

GEORGE E. ROLLINS, OF EAST BRIDGEWATER, MASSACHUSETTS.

INNERSOLE.

955,104.

Specification of Letters Patent.

Patented Apr. 12, 1910.

Application filed June 20, 1904. Serial No. 213,231.

To all whom it may concern:

Be it known that I, GEORGE E. ROLLINS, a citizen of the United States, and resident of East Bridgewater, Massachusetts, have invented an Improvement in Innersoles, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention is an improved inner-sole, the objects thereof being to provide an inner-sole of increased strength, and affording greater durability to the shoe and increased comfort and ease to the wearer, besides other advantages in connection with the manufacture of the inner-sole, and of the shoe in connection therewith.

In the accompanying drawings I have shown a preferred embodiment of my invention.

Figure 1 is a bottom plan view of an inner-sole, constructed according to my invention. Fig. 2 is a vertical longitudinal section thereof, taken on line 2—2, Fig. 1. Figs. 3 and 5 are cross sectional views, taken respectively on the lines 3—3 and 5—5, Fig. 1. Fig. 4 is a sectional view, similar to Fig. 3, showing a modification.

In manufacturing my improved inner-sole, I first prepare the composition or other material, such as leather board, or the like, and subject it to pressure so as to mold it permanently into the shape of the finished shoe, as shown in the drawing, said inner-sole being permanently curved downward at a , and substantially flat beneath the ball of the foot, being slightly curved upwardly on its upper surface adjacent the front edge portion of the inside of the shank as indicated at a' and arched upwardly at the shank a^2 , and hollowed or depressed centrally at the heel a^3 , the shank portion being thickened centrally as indicated at a^4 .

In preparing the inner-sole as above described, I lay in the mold a strip b of light, tough material such as leather, felt or any soft strong material, and mold this directly into the rest of the inner-sole to constitute the stitch receiving lip, and secure the same by some additional means, such as having the inner edge of the strip b provided with perforations b' , as shown in Fig. 3, so that the material of the inner-sole (when the latter is made of composition capable of being compressed therefor) will pass there-through and inter-lock therewith; and in

some instances I apply cement to the inner edge of the strip so that it is thereby given increased holding power; or I may make the same flaring at its inner edge, as is shown at d in Fig. 4.

In Fig. 4 at d' a rib or lip is molded as an integral part of the inner-sole.

In use, an inner-sole, as above described, presents many advantages over the ordinary inner-sole of commerce. The strong solid peripheral edge outside of the lip b gives a firm support to the upper, preventing the tendency of cutting the upper with the scarfing edger as is the case where the inner-sole has a yielding feather edge. The latter, or old construction, is very apt to roll up, thereby causing the wearer great discomfort and also thereby removing the bracing support of the inner-sole from the stitches and causing the shoe to give way and wear out more rapidly, whereas by my invention the inner-sole cannot roll up and it is always in proper position to protect the stitches and strengthen the upper. Moreover, the inserted stitch receiving lip is much stronger than when formed by turning up the latter from a feather edge and channel, and also it has no tendency to lie down against the body of the inner-sole as its natural position is upright, as required for receiving the stitches. Also as the inner-sole is permanently molded originally to its proper shape, there is no subsequent leveling strain brought upon the stitch receiving lip and the stitching, which joins the same to the upper and hence I avoid this frequent cause of the breaking of the thread along the edges of the shoe. This has been a common source of weakness in shoes and as the broken threads are entirely concealed in the finished shoe, the fact that they are broken cannot be detected by the most skilful expert. My invention avoids all the liability of breaking the threads. I prefer also to incorporate in the composition before molding the inner-sole, health giving ingredients, such as powdered alum, mixed with pulverized cork, leather and paper. Also, by having the inner-sole molded as stated, I am enabled to make certain that the shank stiffening a^4 and the slight shaping in other places, as for instance at a' , will always be of the proper shape and in the proper location; whereas, as commonly made, the separate shank stiffener is frequently placed too high in the shoe or at one side and the other

curvatures remain to be molded as it were by the foot of the wearer. This is one of the common causes of discomfort when a shoe is new; whereas by my invention the
5 foot is provided with comfort from the first.

Having described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is—

1. A molded inner-sole having its stitch-
10 receiving lip formed as an independent strip molded into and retained by the material of the inner-sole.

2. An inner-sole having a molded body portion and a stitch receiving lip of inde-
15 pendent fibrous material molded into the under side of the inner-sole and projecting perpendicularly therefrom.

3. An inner-sole having a molded body portion and a stitch receiving lip of inde-
20 pendent fibrous material molded into the

under side of the inner-sole and projecting perpendicularly therefrom, said lip having its inner edge interlocked with the material of said molded inner-sole.

4. A molded inner-sole containing a stitch- 25
receiving lip molded in place, and having its shank portion centrally thickened lengthwise on its under side between the opposite portions of said lip, and its heel portion hol-
lowed to fit the heel of the wearer on its 30
upper side, and upwardly curved on its upper surface adjacent the front edge portion of the inside of the shank.

In testimony whereof, I have signed my name to this specification, in the presence of 35
two subscribing witnesses.

GEORGE E. ROLLINS.

Witnesses:

GEO. H. MAXWELL,
JOHN E. PORTER.