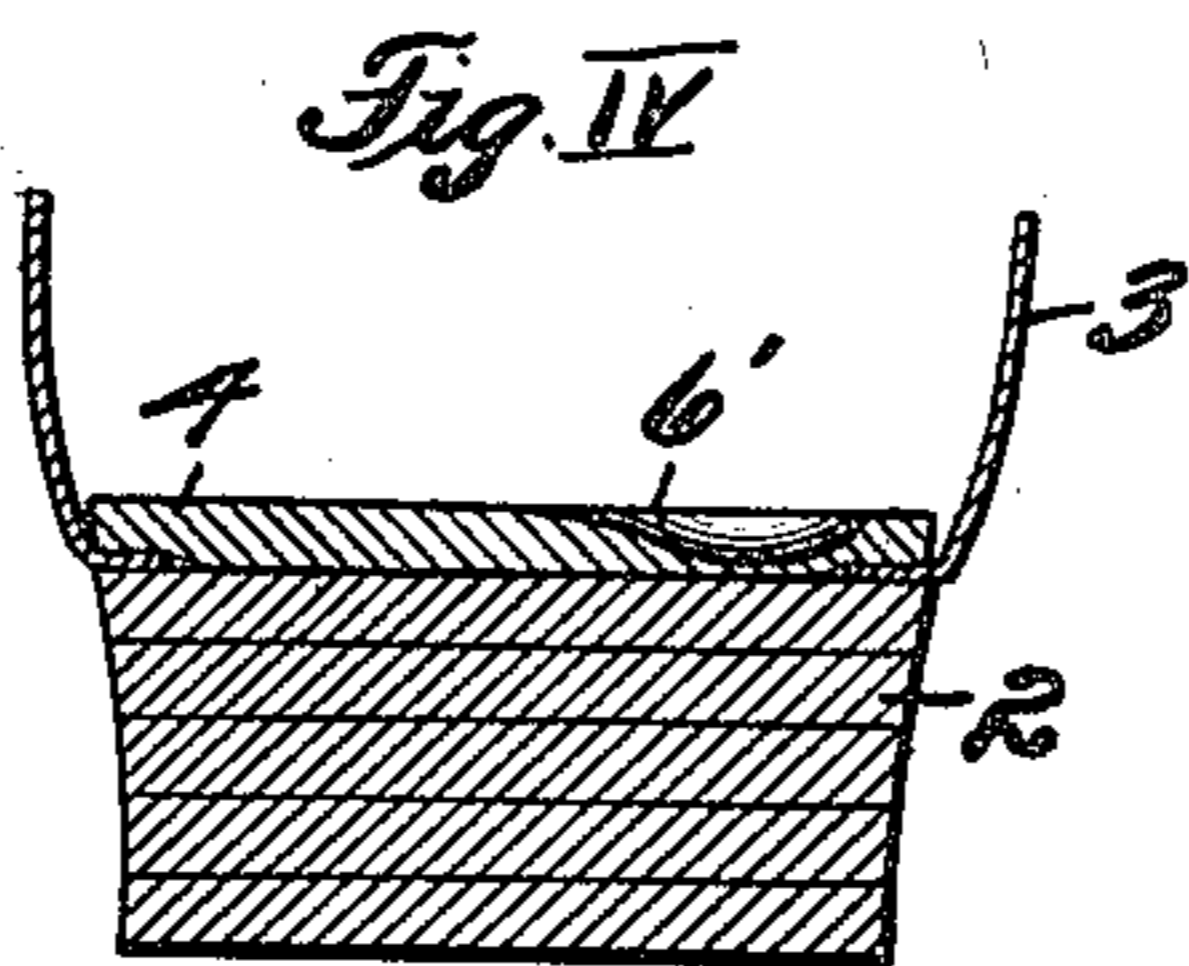
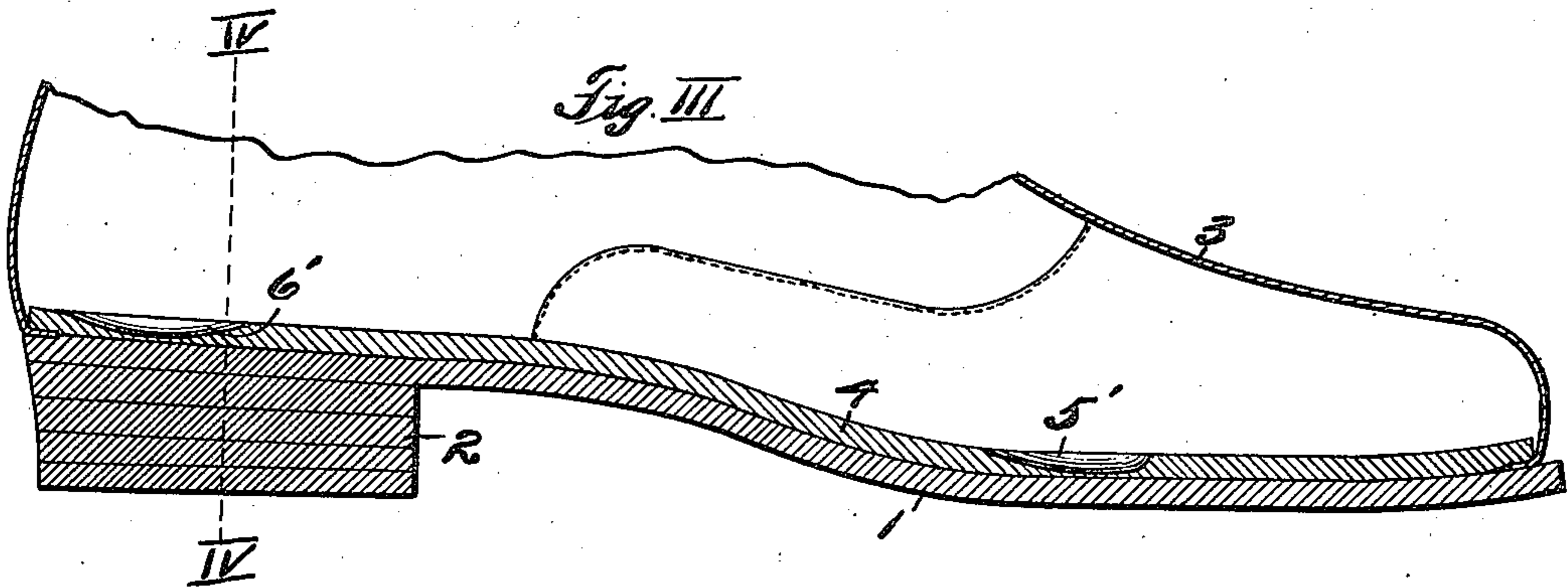
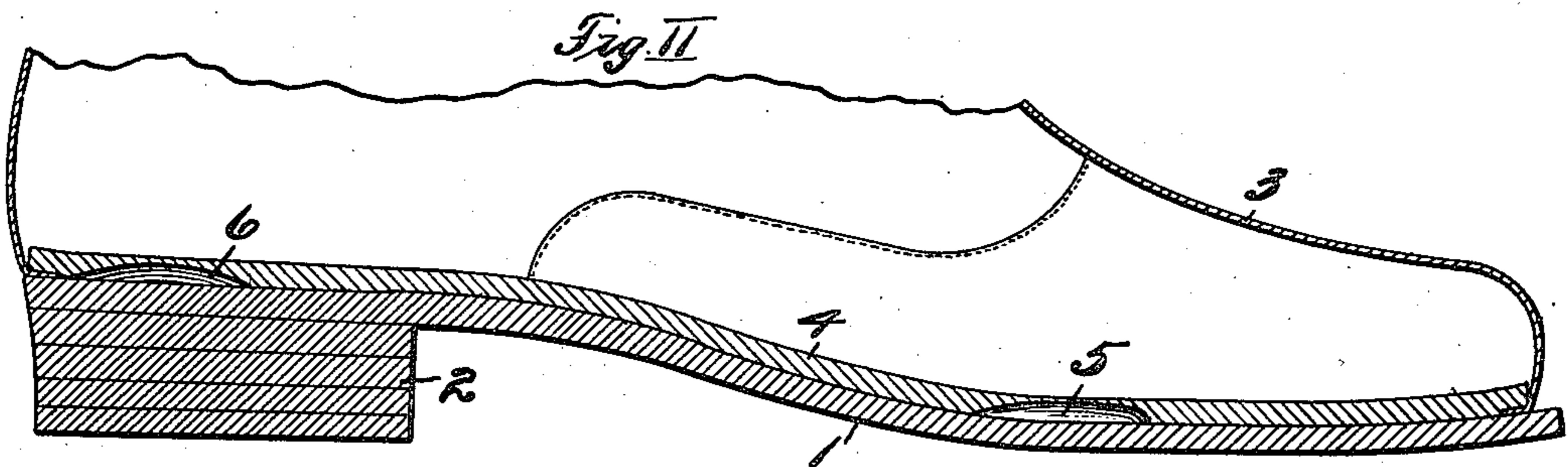
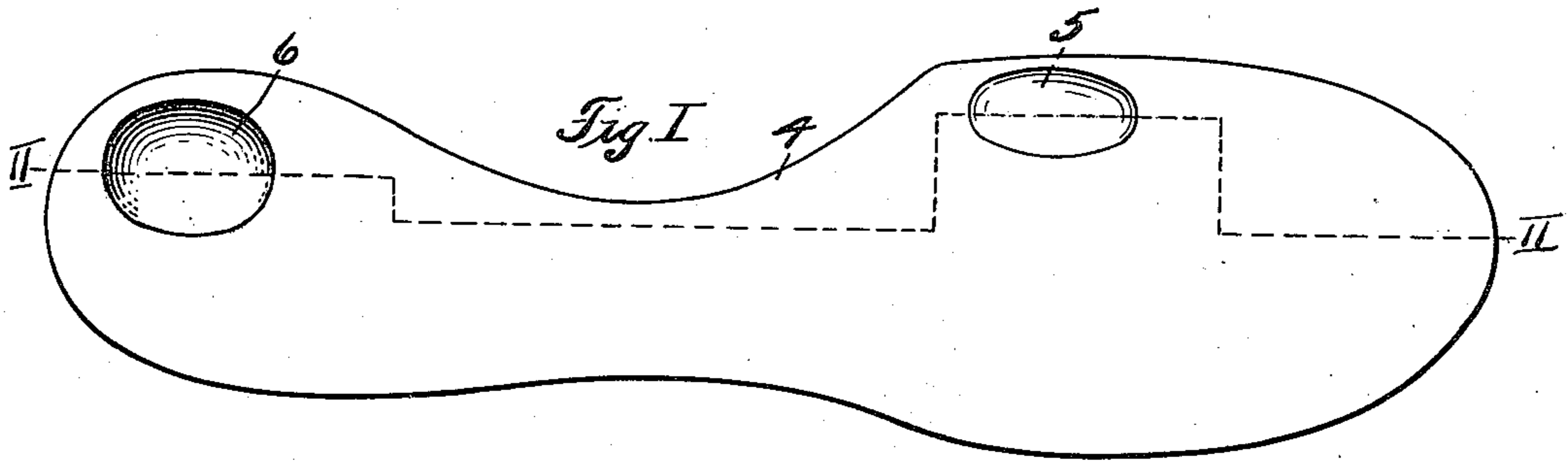


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 INNERSOLE.  
 APPLICATION FILED SEPT. 14, 1908.

975,576.

Patented Nov. 15, 1910.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

DANIEL SEXTON, OF KANSAS CITY, MISSOURI.

## INNERSOLE.

975,576.

Specification of Letters Patent.

Patented Nov. 15, 1910.

Application filed September 14, 1908. Serial No. 452,973.

*To all whom it may concern:*

Be it known that I, DANIEL SEXTON, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Innersoles; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to inner soles for boots and shoes, the term inner sole being used in a broad sense and meaning the sole located upon the interior of a boot or shoe as distinguished from the wearing outer sole, and which may be formed either integral with the shoe or in a separate piece and adapted for insertion into or removal from the shoe at will.

It frequently occurs, particularly with persons who walk much on hard pavements, that callouses are formed on the heel and the ball of the foot, this condition resulting from a pressure of the flesh between the inner sole of the shoe and the heel and great toe joint bones, which bones, as is well known, project below any of the other bones of the body.

I have discovered that by providing sockets in the inner sole of a boot or shoe, into which such bones may project, that it is possible for the foot to rest flatly on the sole and thereby divide the weight of the body and relieve the extra pressure on the points noted.

It is the object of my invention therefore, to provide an inner sole by means of which the result above mentioned may be accomplished, and in so doing I have provided the improved details of structure which I will presently describe and have illustrated in the accompanying drawings, in which:—

Figure I is an inverted plan view of an inner sole constructed according to my invention. Fig. II is a sectional view of a shoe provided with an inner sole constructed according to my invention, illustrating the condition of the inner sole, prior to use. Fig. III is a similar view illustrating the condition of the inner sole after the shoe

has been worn sufficiently to shape the sole. Fig. IV is a cross sectional view on the line IV—IV, Fig. III.

Referring more in detail to the parts:—1 designates the permanent under sole, 2 the heel and 3 the upper of the shoe of any ordinary structure, the parts occupying their usual position and being combined in the ordinary manner.

4 designates the inner sole which may be formed permanently in the shoe body or may be in a separate piece and adapted for removal therefrom. In the inner sole 4 at a position adapted to correspond with the position of the great toe joint, when the inner sole is in place and the shoe in use, is a socket 5, formed by cutting out the material of the inner sole to produce a permanent and positive recess, the socket being preferably formed in the under side of the sole for the reason presently set forth, and made to correspond as nearly as may be with the form of the joint bones, this latter result being preferably accomplished by providing a more gradual incline of the socket from the back of the recess toward its deepest point, than from the front of the recess toward such point.

6 designates a socket in the inner sole 4, in a position adapted to correspond with the position of the heel bone, as described with reference to the socket 5, the socket 6 being also preferably formed in the under side of the sole and having its greatest depth adjacent to the inner edge of the sole to accommodate the projection of the heel bone at that side, as indicated in the drawings, the views shown representing a shoe adapted for use on a wearer's left foot, as particularly indicated by the instep arch shown in Fig. I.

When in use, the inner sole is placed within the shoe either during the manufacture or by separate insertion so that it may assume the usual position, as indicated in Figs. II, III, and IV. Before the shoe is used, the upper surface of the inner sole is unbroken as in a sole of the ordinary construction, the sockets 5 and 6 being projected upwardly from the under surface and not affecting the contour of the upper surface of the inner sole. When the shoe is worn, the heel and great toe joint bones press downwardly against the inner sole on the portions covering the sockets 6 and 5,

until, after the shoe has been worn a sufficient length of time, the material is pressed downwardly into such sockets filling the same and forming the sockets 6' and 5' in the upper surface of the inner sole, into which the heel and joint bones fit naturally when the shoe is placed on the foot.

It is readily apparent that by forming the socket in the under surface of the inner sole and allowing the bones of the foot to later form the upper sockets, that such upper sockets will conform more nearly to the correct shape and requirements of individual cases.

Having thus described my invention, what I claim as new therein and desire to secure by Letters-Patent is:—

1. An insole for shoes having a flat even upper side and a recess in its under side, the insole being of a substantially non-resilient material such that in use the pressure of a salient part of the foot upon the upper side of the recessed portion will form therein a permanent depression conforming to said salient part.

2. An insole adapted to extend the full length of the interior of a shoe and having a flat even upper side and a recess in its under side, the greatest depth of the recess being adjacent to the inner edge of the insole, the insole consisting in a single piece having, excepting at the recessed portion, a substantially uniform thickness, and the material of the insole being substantially non-resilient, whereby when in use the pressure of a salient part of the foot upon the upper side of the recessed portion will form therein

a permanent depression conforming to the salient part.

3. An insole for shoes having a flat even upper side and a recess in the under side of the portion adapted to support the heel of the foot, the insole being of a substantially non-resilient material, whereby when in use the pressure of a salient part of the heel upon the upper side of the recessed portion will form therein a permanent depression conforming to said salient part.

4. An insole for shoes having a flat even upper side and a recess in the under side of the portion adapted to support the ball of the foot, the insole being of a substantially non-resilient material, whereby when in use the pressure of a salient part of the ball of the foot upon the upper side of the recessed portion will form therein a permanent depression conforming to said salient part.

5. An insole for shoes having a flat even upper side and two recesses in the under sides respectively of the portions adapted to respectively support the heel and ball of the foot, the insole being of a substantially non-resilient material, whereby when in use the pressure of the salient parts of the heel and ball of the foot upon the upper sides of the recessed portions respectively will form therein permanent depressions conforming respectively to said salient parts.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL SEXTON.

Witnesses:

MYRTLE M. JACKSON,  
ARTHUR C. BROWN.