

No. 657,095.

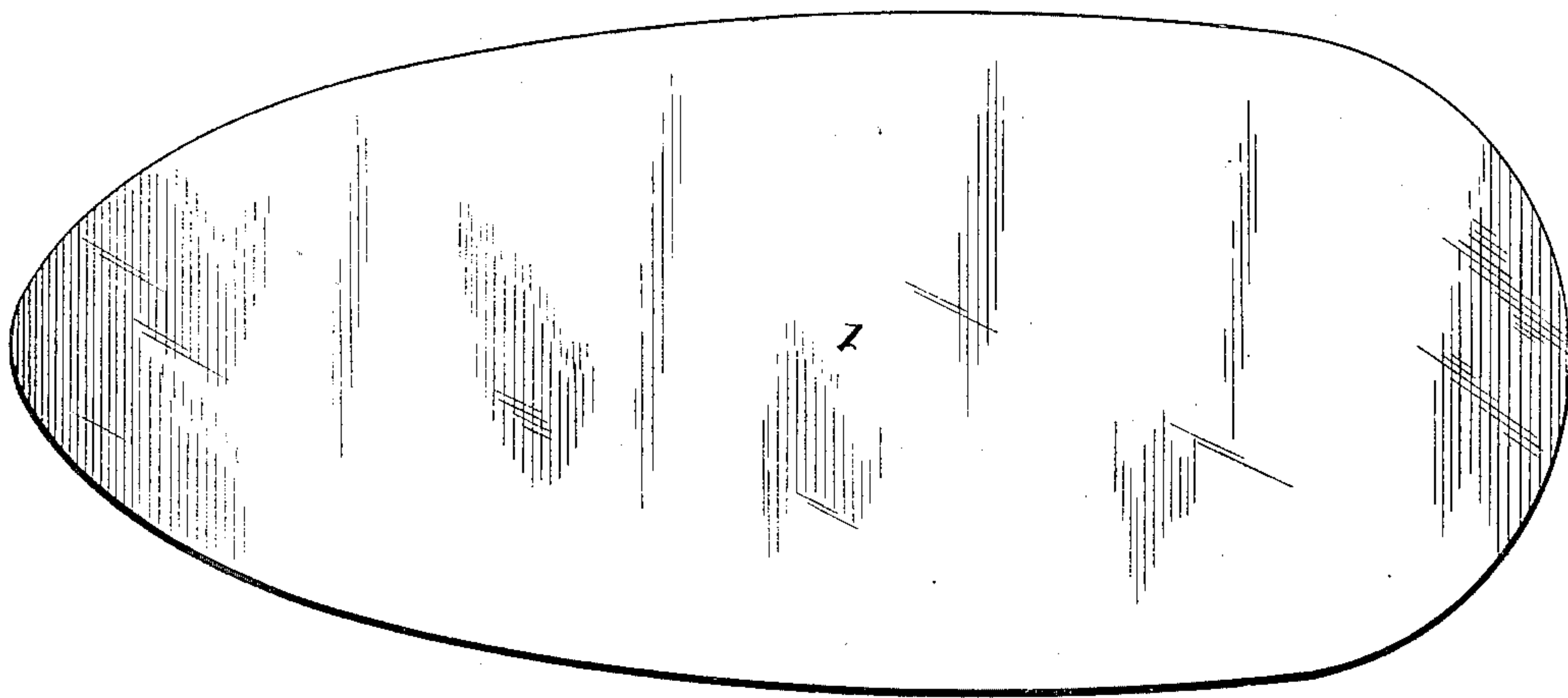
Patented Sept. 4, 1900.

R. DE LEO.  
SHOE.

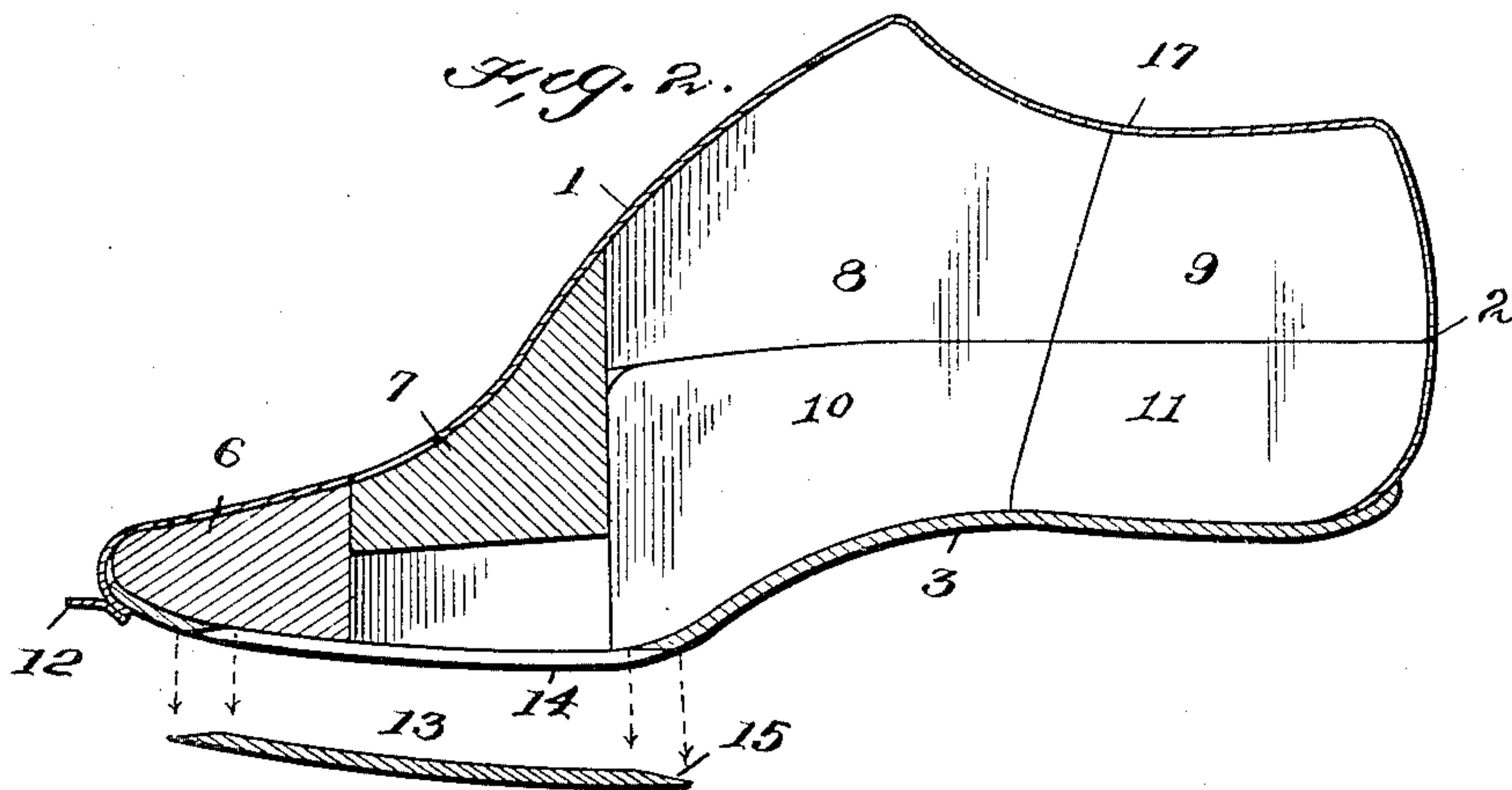
(Application filed Jan. 20, 1900.)

(No Model.)

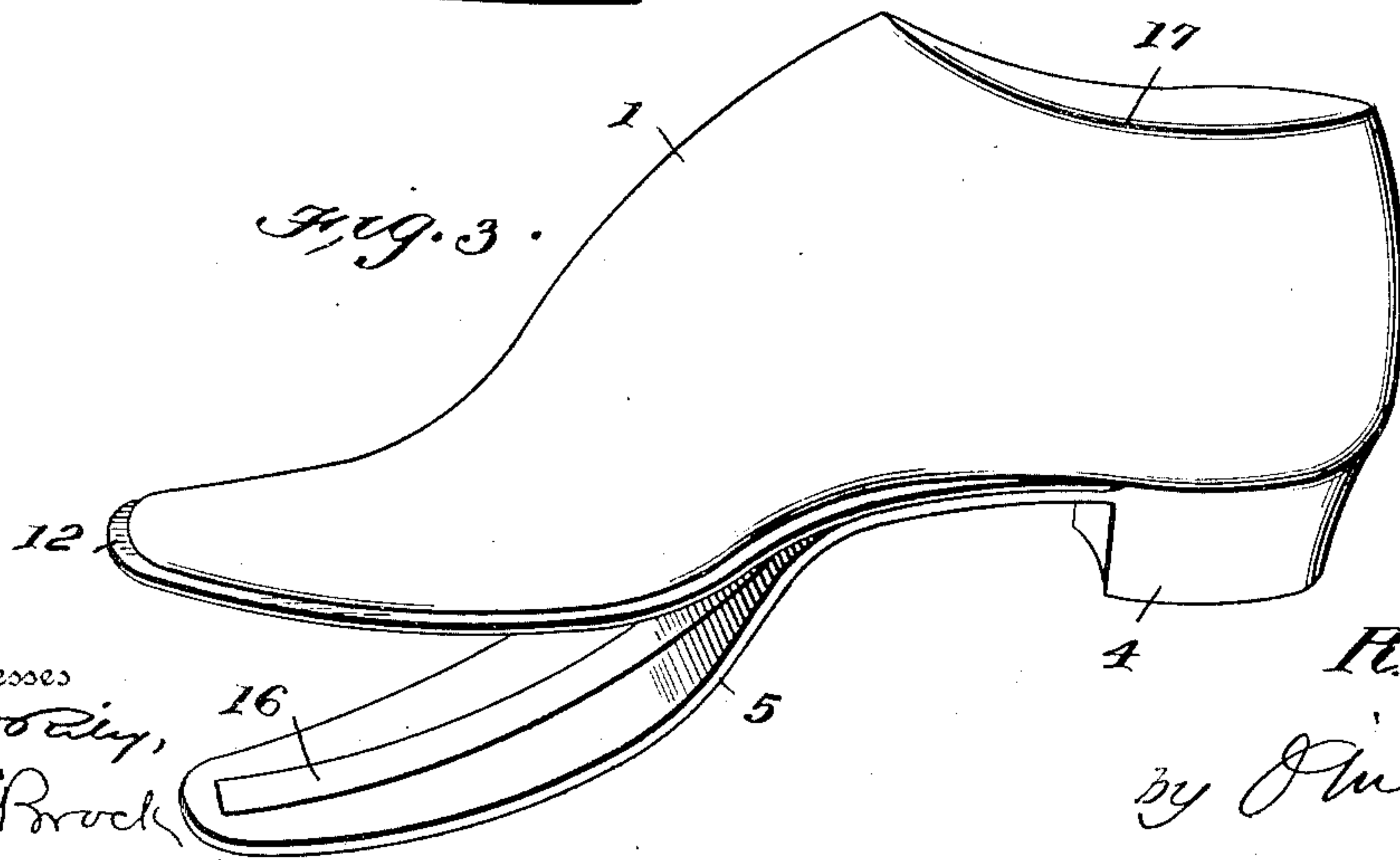
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

RALPHAEL DE LEO, OF LYNN, MASSACHUSETTS.

## SHOE.

SPECIFICATION forming part of Letters Patent No. 657,095, dated September 4, 1900.

Application filed January 20, 1900. Serial No. 2,159. (No model.)

*To all whom it may concern:*

Be it known that I, RALPHAEL DE LEO, a citizen of the United States, residing at Lynn, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Shoes, of which the following is a specification.

My invention relates to shoes, and has for its object to produce a shoe in which the entire upper portion is made from one piece of leather; and it consists in the novel construction of the same, as will be more particularly set forth.

In the accompanying drawings, in which the same reference-numerals indicate corresponding parts in each of the views in which they occur, Figure 1 is a view of the blank from which the upper portion of the shoe is formed. Fig. 2 is a longitudinal sectional view of the shoe partially completed with the last in position and a portion of the insole detached and at a distance below its normal position, and Fig. 3 is a perspective view of my shoe in condition to have the outer sole secured in position.

In manufacturing shoes, and especially the finer grades—as, for instance, ladies' shoes—it is desired that the upper portion of the shoe be made without seams to give the shoe as neat an appearance as possible. To accomplish this object, I have found that by cutting the upper in the form of an oblong oval, as shown at 1 in Fig. 1, and properly crimping the same the different parts can be drawn perfectly smooth and even when applied to the last 2. After the last has been inserted the insole 3 is secured in position in the usual manner, and the heel 4 and the rear end of the outersole 5 are secured thereto, as shown in Fig. 3. As the upper is imperforate, it becomes necessary to remove the last through the sole instead of taking it out through the upper, as is usually done. For this purpose I find it necessary to form the last in separable sections 6, 7, 8, 9, 10, and 11, each of which is small enough to be removed through an opening in the sole. After the upper, which has been provided with an ordinary welt 12, has been secured in position over the last and the insole 3 and the heel 4 and the rear portion of the outer sole 5 have been secured in place it is necessary to remove the last before the outer sole is sewed to the welt. To accomplish this, a portion 13

of the insole is removed, forming a hole 14 directly under the section 7 of the last, the edges of the removed portion of the insole being beveled, as shown at 15, to prevent the piece 13 from passing through the opening 14 after the last has been removed and the piece is replaced to complete the insole of the shoe. By pressing down upon the top of the section 7 it can be slipped down through the opening in the insole and removed. Each of the other sections are then removed through the opening in the sole. After the last has been removed the piece 13 is replaced in the opening 14 and the outer sole 5 is brought into position and secured by means of stitches through its edge and through the welt 12 in the ordinary manner. If desired, a suitable spring 16 may be secured between the two soles to prevent the possible breaking of the outer sole in removing the last. A portion 17 of the upper is then cut out for the ankle and the usual slit made therefrom toward the toe for the entrance of the foot of the wearer and the parts trimmed in any desired fashion.

As above described, it will be seen that a shoe constructed in accordance with my method will effect quite a saving in the amount of leather required for the upper and in the time necessary for preparing it for use and that the shoe will have a much neater appearance when completed than with the usual seams and ridges.

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

1. As a new article of manufacture, a shoe, the upper of which is formed from a single piece of material, and the insole is provided with a removable portion, and the outer sole is secured to the welt of the upper in position to hold the removable portion of the insole in place, substantially as described.

2. As a new article of manufacture, a shoe, the upper of which is formed from a single piece of material and the insole is provided with a removable portion, the edges of which are beveled, and the outer sole is secured to the welt of the upper in position to hold said removable portion in place, substantially as described.

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