

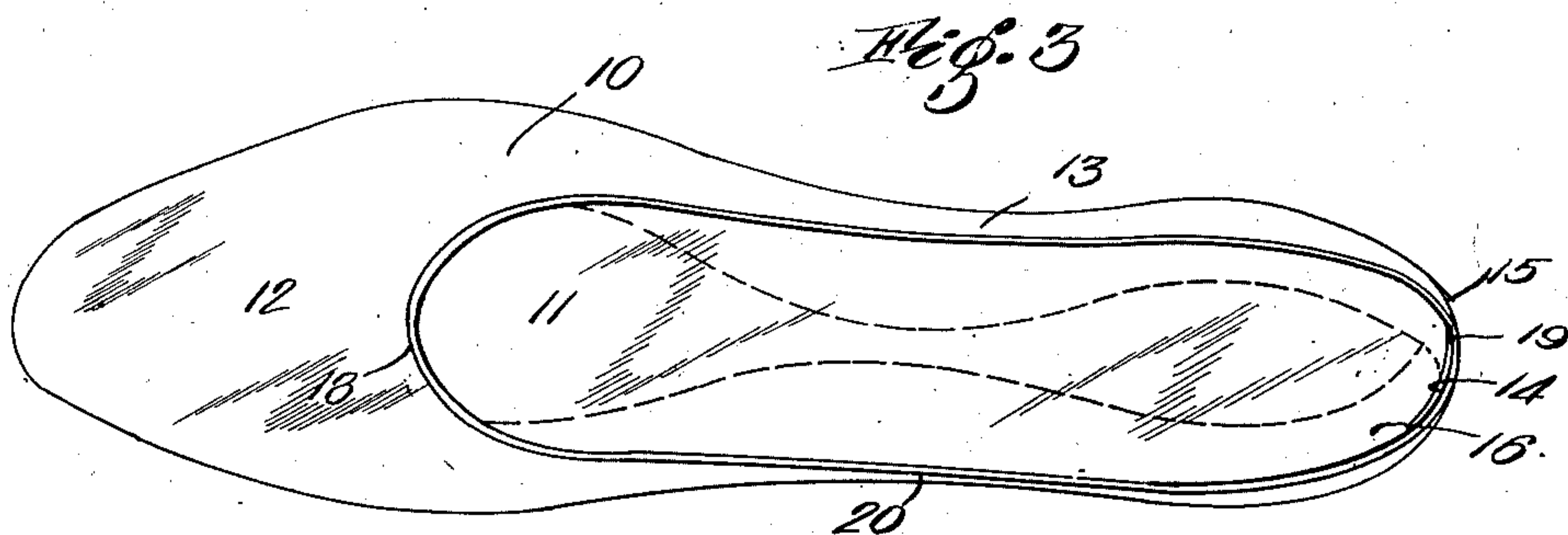
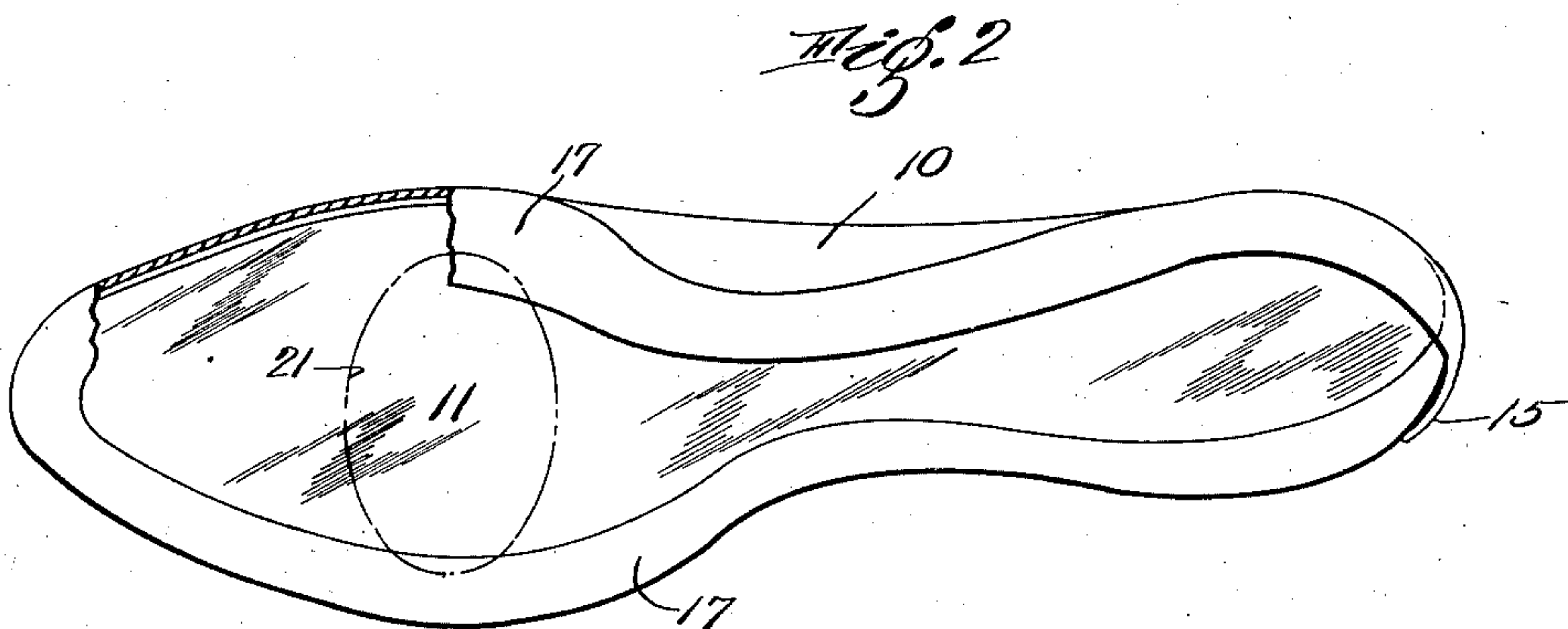
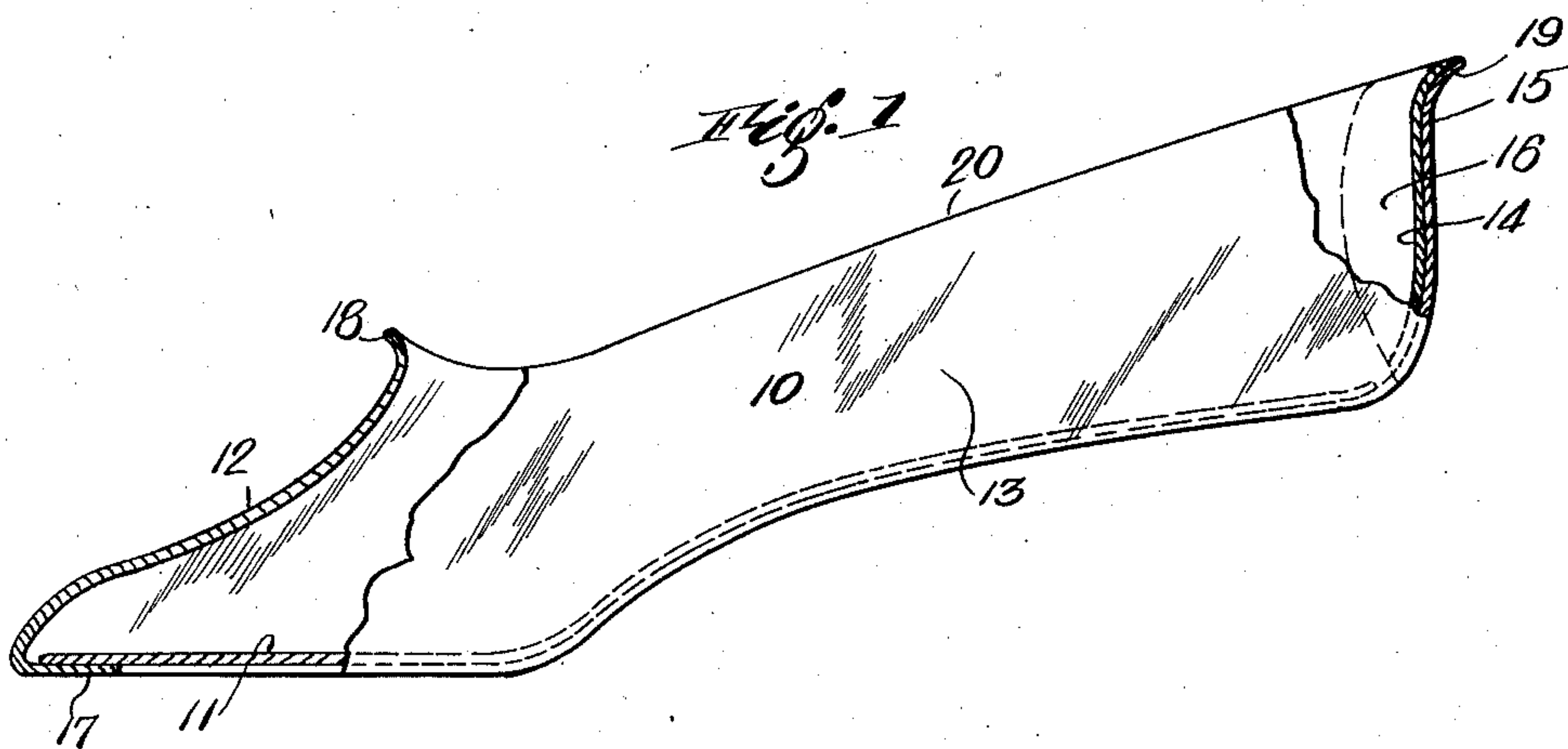
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W. J. DE WITT

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TRANSPARENT SHELL

Filed May 24, 1929



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Attys.



# UNITED STATES PATENT OFFICE

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## TRANSPARENT SHELL

Application filed May 24, 1929. Serial No. 365,694.

This invention is an improvement in a transparent shell adapted to be used in practicing the method disclosed in my copending application Serial No. 185,615, filed April 21, 1927, and is a continuation in part of my application Serial No. 232,962, filed November 14, 1927.

As pointed out in those earlier applications there is a demand for a transparent form or shell which is molded over a selected last and which when slipped upon a normal foot discloses how a shoe made upon that last will fit. This transparent shell provides means for testing a new last and for determining how a shoe made upon it will fit the foot of the wearer at every point.

The manufacture of shoes has been greatly improved, but unless a shoe is properly fitted it can not give satisfaction to the wearer. Attempts have heretofore been made to insure proper fitting by taking measurements of the foot at various places but they have not proven entirely satisfactory. However if a transparent shell embodying this invention be placed upon the foot it will readily disclose to the salesman and to the customer that a shoe made upon the same last will or will not be suited to the foot. Thus by trying on several such transparent shells the proper last can be discovered and the customer be properly fitted. Moreover, in the case of "health" or "form fitting shoes" which are at the present time on the market in considerable quantities, a transparent shell made on such a last will demonstrate to the wearer the points of superiority claimed for such shoes and the action of the shoes in supporting certain portions of the foot.

In the application of which this is a continuation in part, is disclosed several types of transparent shells or forms which are adapted to be used in carrying out the procedure outlined above, among them being a shell in which the heel and side portion is rigidly secured to the toe portion to complete the foot form. The use of such a shell has proven to be of considerable advantage and one object of the present invention is to provide a shell embodying this rigid feature in which the foot form is molded from a single

integral sheet of material rather than from two sheets rigidly joined together.

A further object of the invention is to provide a transparent shell which has been so treated that it can be slipped on and off the foot of the customer without difficulty despite the fact that the foot form is integral.

Another object of this invention is to provide a transparent shell comprising a foot form made from a unitary sheet material and having bottom flanges to which an insole is rigidly secured.

Other objects of the invention will appear to one skilled in the art from an examination of the following specification taken in connection with the drawings which form a part thereof and in which

Fig. 1 is a side elevation with parts broken away of a transparent shell embodying this invention;

Fig. 2 is a bottom plan view of such a shell a portion of the flange being broken away in order to show more clearly the relation of the insole to the foot form; and

Fig. 3 is a top plan view of such a shell.

The transparent shell consists of a foot form 10 and an insole 11 both of which are preferably made of celluloid or similar material which provides the necessary lightness, resiliency, strength and capability of conformation. The foot form 10 comprises a toe portion 12 and side walls 13 the ends 14, 15 of which overlap to form a heel portion 16 and is, as here shown, provided with a continuous integral bottom flange 17. This form 10 is made by shaping the material upon a last so that it reproduces the contour of the last in the same way as does a shoe which is molded thereon. following for example the disclosure in my Patent No. 1,632,954 dated June 21, 1927. The overlapping ends 14, 15 are preferably united by the use of acetone or other adhesive to close the heel portion so that the form 10 is rigid except for the flexibility due to the qualities of the celluloid or other material from which it is made. Inserted into the form 10 and resting upon the flange 17 thereof is the insole 11 which preferably completely fills the open space defined by the flange 17 and which is permanently



secured to such flange by the use of acetone or other adhesive.

Since the transparent shell so formed is not capable of expanding to any appreciable extent, particularly around the foot receiving opening, it would be difficult to slip this shell upon a foot which would otherwise be of the size to receive it. In order to avoid this difficulty and at the same time to avoid the difficulty that the edges of the shell around the opening might scratch the foot or tear the hose of the wearer, these edges are rolled back, particularly the upper edge 18 of the toe portion 12 and the upper edge 19 of the heel portion 14. The edges 20 of the side walls 13 may also be rolled over in order to protect the foot of the wearer against any contact with the edge of the material while slipping the shell on or off the foot, but this is not absolutely essential and may be omitted should it be desired to do so.

Upon the sole of the shell may be placed a print or label 21 bearing a trade mark or other insignia, which can be seen through the transparent sole. This is practically desirable in case a transfer or decalcomania process is used in affixing the label.

While one embodiment only of this invention has been shown and described I am not thereby limited thereto since other embodiments might be made without departing from the spirit and scope of the invention as set forth in the following claims.

I claim:

1. A transparent shell into which the foot may be inserted comprising a foot form made from a single sheet of material, the ends thereof overlapping and being securely joined, and an insole made from another sheet of material secured to the foot form.

2. A transparent shell into which the foot may be inserted comprising a foot form made from a single sheet of material, the ends thereof overlapping and being securely joined, said form including an inwardly projecting bottom flange, and an insole resting upon the upper surface of and secured to the flange of the form, said insole being made from a separate sheet of material.

3. A transparent shell into which the foot may be inserted comprising a foot form made from a single sheet of material, the ends thereof overlapping and being securely joined, the upper edges of the form being rolled over to facilitate entrance of the foot into the shell, said form including an inwardly projecting continuous bottom flange, and an insole resting upon the upper surface of and secured to the flange of the form, said insole being made from a separate sheet of material.

4. A transparent shell comprising a foot form having a toe portion and side walls the ends of the walls overlapping and being securely joined to form a heel portion, and an

insole secured to the form, the upper edges of the toe and heel portions being rolled outwardly to facilitate entrance of the foot into the shell.

5. A transparent shell into which the foot may be inserted comprising a foot form having a toe portion and side walls the ends of the walls overlapping and being securely joined to form a heel portion and having an inwardly projecting flange at the bottom thereof, and an insole resting upon the upper surface of and secured to such flange, said insole being made from another sheet of material.

6. A transparent shell comprising a foot form having a toe portion and side walls the ends of the walls overlapping and being securely joined to form a heel portion and having an inwardly projecting flange at the bottom thereof, and an insole secured to such flange, the upper edges of the toe and heel portions of the form being rolled outwardly to facilitate entrance of the foot into the shell.

Signed by me at Auburn, New York, this 20th day of May, 1929.

WILLIAM J. DE WITT.