

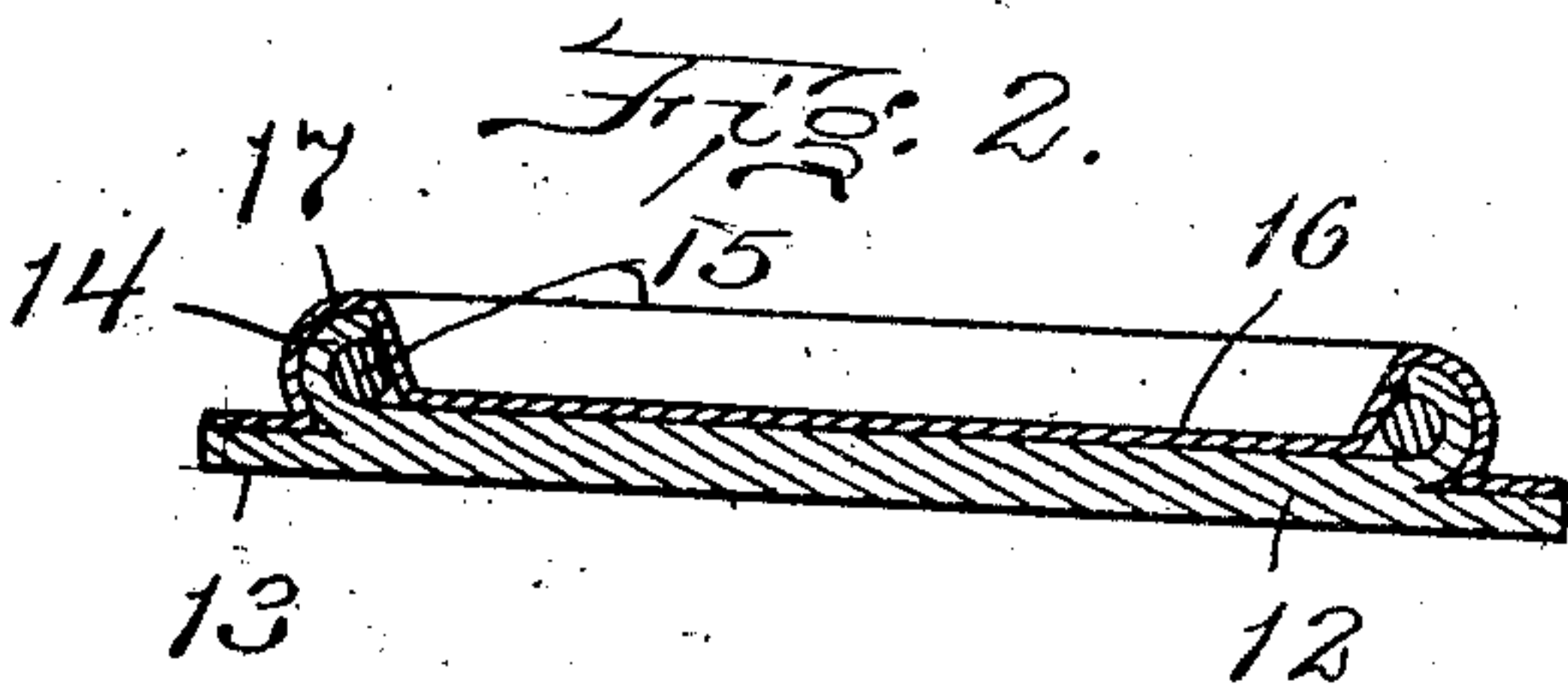
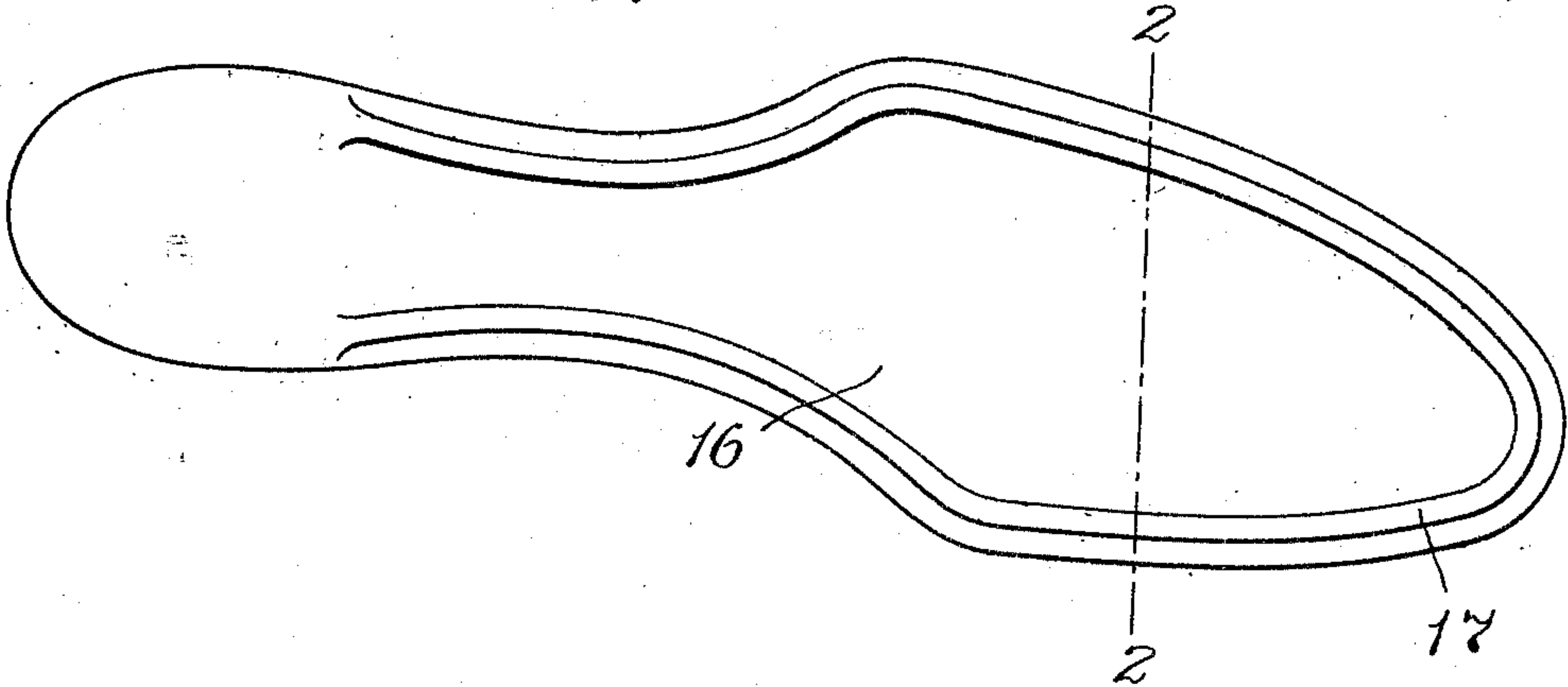
No. 826,975.

PATENTED JULY 24, 1906.

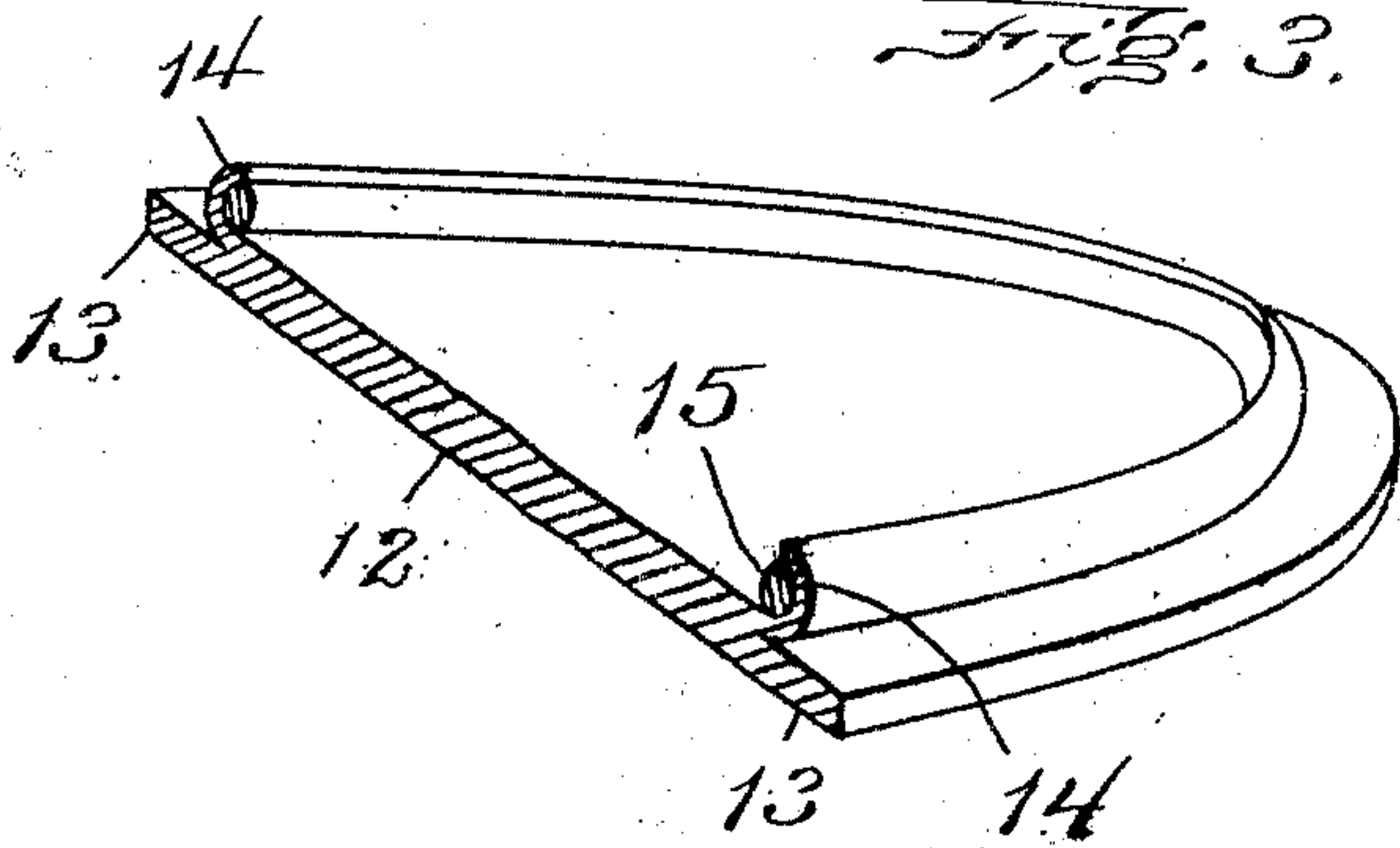
F. M. WADE.  
INNERSOLE.

APPLICATION FILED FEB. 16, 1906.

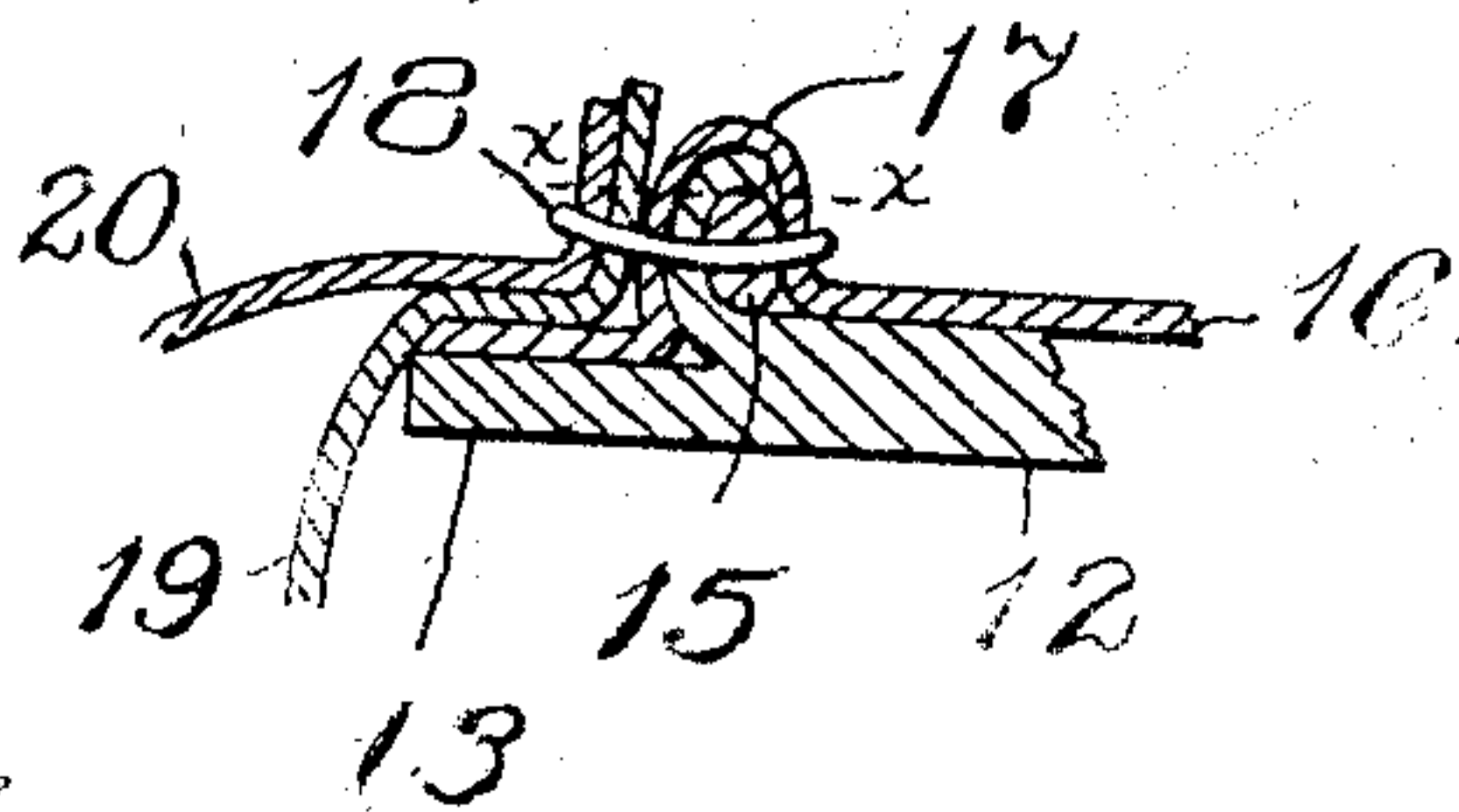
*Fig. 1.*



*Fig. 3.*



*Fig. 4.*



Witnesses:  
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# UNITED STATES PATENT OFFICE.

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## INNERSOLE.

No. 826,975.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed February 16, 1906. Serial No. 301,383.

*To all whom it may concern:*

Be it known that I, FRED M. WADE, of Brockton, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Innersoles, of which the following is a specification.

This invention relates to innersoles for welt-shoes, and particularly to that class of innersoles which comprises a body portion split or channeled at its edge to form a feather and a lip, the latter being turned outwardly from the outer face of the body portion, and a reinforcing layer of canvas or other suitable material secured to the outer face of the sole and covering said outer face, the outer surface of the feather, and the outwardly-turned lip, a portion of the reinforcing layer being offset to form a casing or cover which incloses the lip. In a sole of this character as heretofore constructed the lip and the portion of the reinforcing layer covering the same constitute the entire body of the rib which engages and supports the inseam-stitches; the said rib being therefore composed of three thicknesses at the portion through which the stitches pass—viz., the lip of the body portion and the two sides of the offset portion of the reinforcing layer covering said lip. As this rib has to support the pressure due to the heavy tension exerted on the thread in taking up the inseam-stitches, the ordinary construction above outlined requires that the body portion be made of maximum thickness and of a relatively expensive grade of material in order that the rib composed only of the lip of the body portion and the parts of the reinforcing layer that cover the rib may have suitable thickness and resistance to the pressure exerted upon the rib by the inseam-stitches.

My invention has for its object to enable a sole of the character stated to be manufactured at less expense than heretofore by the use of a body portion, which may be thinner and of less expensive material than is required in the ordinary construction; and to this end the invention consists in an inner-sole comprising a body portion having the usual feather and lip, a reinforcing member, which is preferably a cord of linen or other fibrous material, bearing on the outer side of the body and on the inner side of the lip, the said member reinforcing the lip and adding

materially to the strength and thickness thereof, and a reinforcing layer covering the outer side of the body portion and feather and having an offset portion covering the lip and its reinforcing member and confining the latter in place.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a view of the outer side of an innersole embodying my invention. Fig. 2 represents a section on line 2 2 of Fig. 1. Fig. 3 represents a perspective sectional view showing the toe part of the body portion and the corresponding part of the reinforcing member, the reinforcing layer being removed. Fig. 4 represents an enlargement of a portion of Fig. 2, showing portions of the upper and welt united to the rib of the innersole by the inseam-stitches.

The same numerals of reference indicate the same parts in all the figures.

In the drawings, 12 represents the body portion of a ribbed innersole for a welted shoe, the same being split at its margin to form the usual feather 13 and lip 14. 15 represents a reinforcing member which is placed upon the outer surface of the body portion and against the inner side of the lip. The said reinforcing member is preferably a stout cord composed of twisted fibers of linen or other suitable material, although I do not limit myself to this material and may employ a reinforcing member adapted for the uses herein set forth composed of any suitable material. The lip 14 is bent inwardly over the reinforcing member, so that its outer edge overhangs the reinforcing member, as shown in the drawings.

16 represents the reinforcing layer, which is preferably composed of canvas or other stout textile fabric and is formed to cover the outer surfaces of the body portion and feather and the lip and rib, as shown in Fig. 2, the reinforcing layer having an offset portion 17 closely fitting the ridge formed by the lip and the reinforcing member.

The offset portion 17, the lip 14, and the reinforcing member 15 collectively constitute a compound rib or wale adapted to engage the inseam-stitches 18, which unite the upper 19 and welt 20 to the innersole, as shown in Fig. 4. The reinforcing layer 16 is cemented to the body portion, and its offset portion 17



bears closely upon the lip and reinforcing member, holding the outer edge of the lip bent over the reinforcing member, so that the inseam-stitches passing either through or  
 5 under the reinforcing member cannot displace or force outwardly the reinforcing member to such an extent as to make it a part of the surplus material of the rib, which is subsequently trimmed off by the inseam-trimmer. By reference to Fig. 4, where the  
 10 surplus material removed by the inseam-trimmer is indicated by the parts above the line  $x\ x$ , it will be seen that the reinforcing member is confined below said line by the offset portion of the reinforcing layer and by the  
 15 bent edge of the lip interposed between said offset portion and the reinforcing member 15. Hence the reinforcing member is not liable to be touched by the inseam-trimming cutter,  
 20 which is used after the stitching operation.

My improvement, consisting in the inclusion in the offset portion 17 of the reinforcing layer of a reinforcing member 15 in addition to the usual lip, enables the material of the  
 25 body portion to be made lighter and thinner and of less expensive material than would otherwise be necessary, the reinforcing member 15 materially strengthening and increasing the thickness of the stitch-engaging rib  
 30 without correspondingly adding to the cost of manufacturing the innersole. In fact, the cost of the sole is not appreciably greater than that of the ordinary sole of this type, in which the lip alone is included in the offset  
 35 portion of the reinforcing layer.

I claim—

1. As an article of manufacture a welt-

shoe innersole comprising a body portion, split or channeled at its margin to form a feather and a lip, a reinforcing cord or member bearing  
 40 on the outer side of the body and on the inner side of the lip, and a reinforcing layer covering the outer side of the body portion and feather and having an offset portion covering the lip and its reinforcing member  
 45 and confining the latter in place, the said offset portion, lip and reinforcing member constituting a compound inseam-stitch-engaging rib or wale.

2. As an article of manufacture a welt-  
 50 shoe innersole comprising a body portion split or channeled at its margin to form a feather and a lip, a reinforcing cord or member bearing on the outer side of the body portion and on  
 55 the inner side of the lip, the outer edge of the lip being bent over the reinforcing cord, and a reinforcing layer covering the outer side of the body portion and feather and having an offset portion covering the lip and reinforcing  
 60 member and confining the latter in place, the bent portion of the lip, which contains the surplus lip material subsequently removed in the inseam-trimmer, being interposed between the reinforcing member and the crown  
 65 of the said offset portion and preventing the outward displacement of the reinforcing member by the inseam-stitches.

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

FRED M. WADE.

Witnesses:

JOHN F. ALLEN,  
 GEORGE HOWE.