

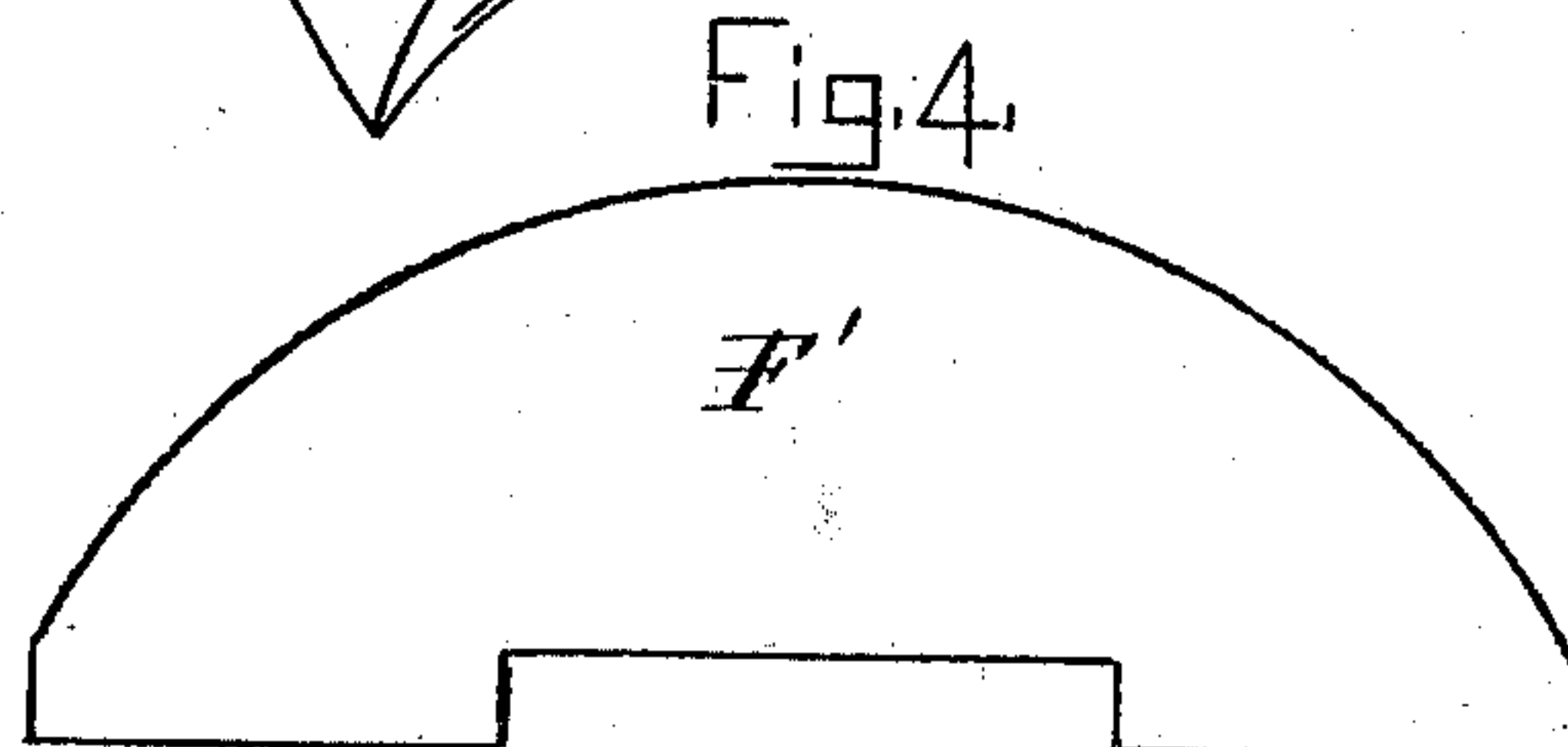
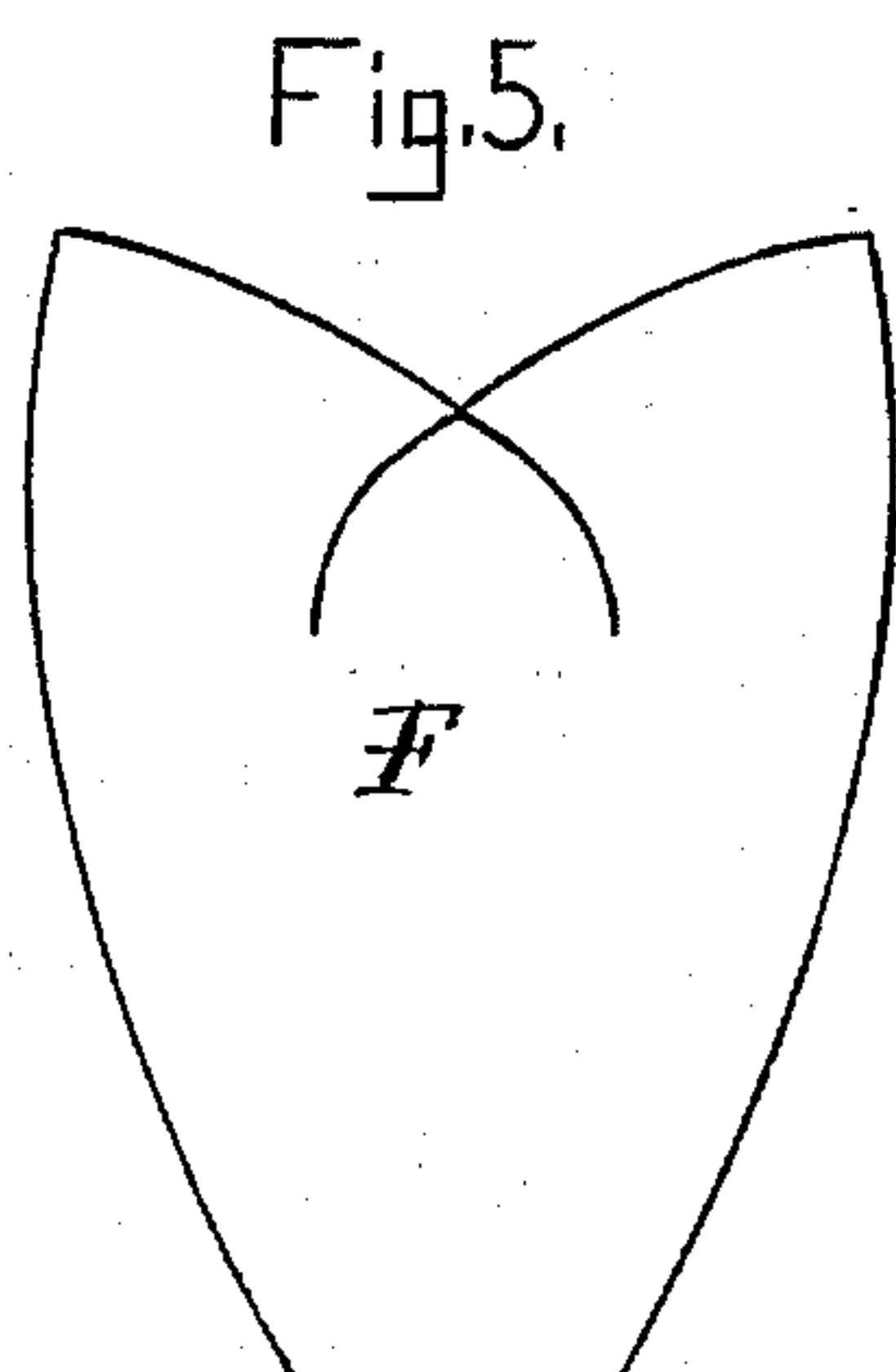
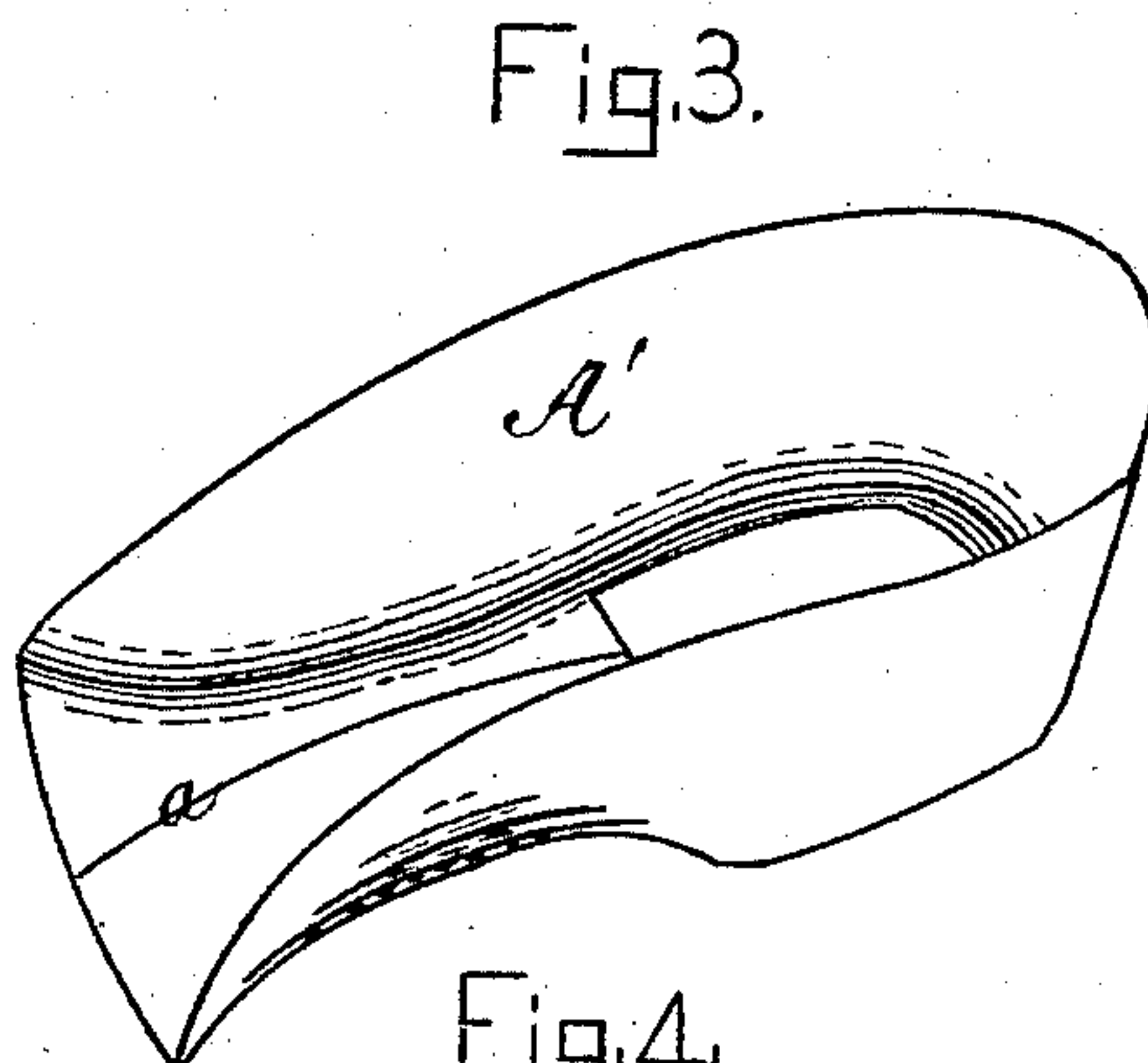
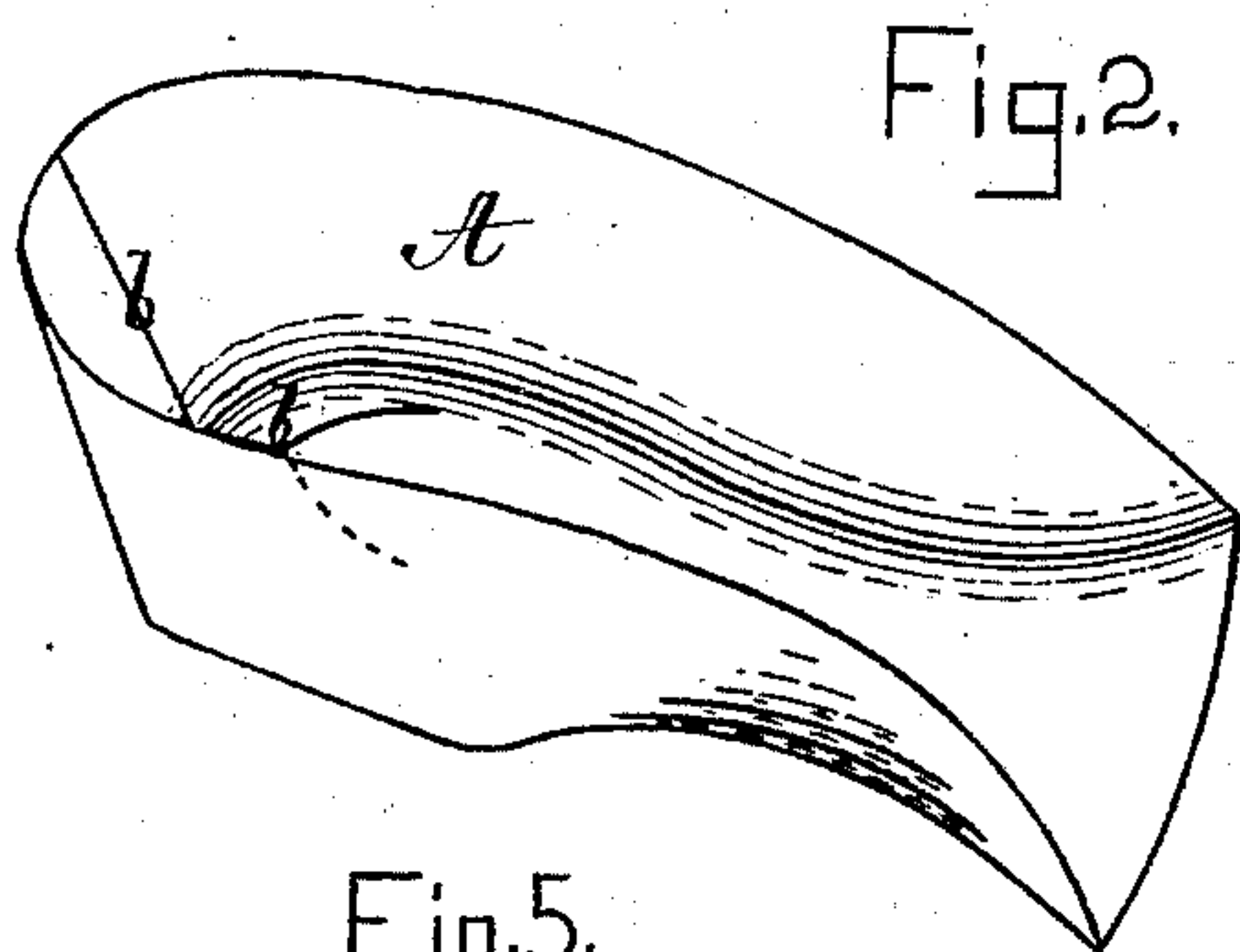
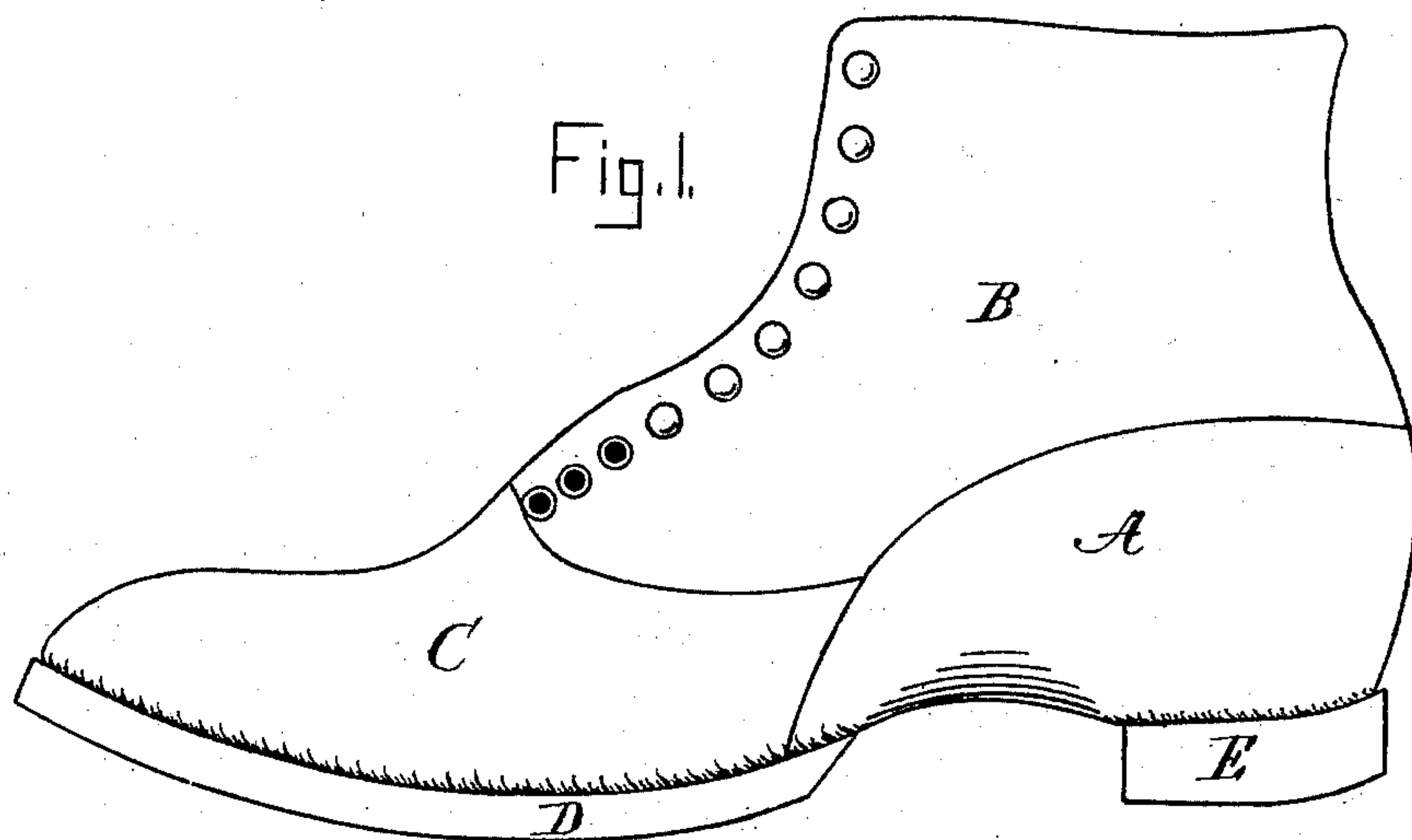
(No Model.)

T. JOYCE.

HEEL STIFFENER FOR BOOTS OR SHOES.

No. 277,571.

Patented May 15, 1883.



Witnesses.  
Chauncey Bryant  
Dana Malone

Inventor,  
Thomas Joyce.  
By Henry Winn, Atty.

# UNITED STATES PATENT OFFICE.

THOMAS JOYCE, OF BUCKLAND, MASSACHUSETTS.

## HEEL-STIFFENER FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 277,571, dated May 15, 1883.

Application filed February 20, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS JOYCE, of Buckland, in the county of Franklin and State of Massachusetts, have made certain new and useful Improvements in Heel-Stiffeners and Shank-Supports for Boots or Shoes, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a view in elevation of a shoe made with my device. Fig. 2 is a view in elevation of my improved heel-stiffener and shank-support. Fig. 3 is a view in elevation of the same made from a different pattern with a different location of its seam. Fig. 4 shows on a reduced scale the pattern from which the device shown in Fig. 3 is made. Fig. 5 shows on a reduced scale the pattern from which the device shown in Fig. 2 is made.

A is my improved heel-stiffener and shank-support, and, in a shoe to which the same is applied, B is the quarter, C is the vamp, D is the outer sole, and E is the heel.

The device A is made from the pattern F, and when in proper shape has the seam *b* located, as seen in Fig. 2, and has the portion used to serve as the shank of the sole integral therewith and water-tight.

A' is an alternate form of my device made from the pattern F', and having the seam *a*. I prefer the pattern F, the device being made therefrom without any seam in the shank.

My heel-stiffener and shank-support is formed of sole-leather or other suitable material, shaped on a last in the usual manner or by any suitable process. It is made smooth, blacked, and otherwise finished on the outside in suitable manner to form part of the outer surface of the boot or shoe; and for this purpose I prefer to leave the grain of the leather on the outside of the device. Finished in this way the part of the device used as a heel-stiffener may be used to take the place of the counter in a shoe and dispense with the counter.

The shape of my device is such that it extends forward from the heel, as shown, and is attached to the front or outer sole of the boot or shoe in which it is used, and forms of itself the shank of the sole. It is also sewed or otherwise attached to the vamp, and extends forward, as shown, so that it serves as the rear portion of the vamp, as the same is custom-

arily made. In low shoes it may be attached to the vamp only of the upper, and the quarters may be dispensed with. The device has an upward curve in that part of it which takes the place of the shank of the sole, and thereby, when constructed of rigid material, it is well adapted to support the arch of the foot. If desired, a counter may be used outside the device, wholly or partially covering it; or the customary sole may be used outside the shank-support.

I am aware that a heel-stiffener and a sole have been made in one piece by molding or striking up a leather sole with a projecting portion in position to act as counter or heel stiffener; but I accomplish the support of the shank of the boot or shoe, and provide in one piece a heel-stiffener and shank-support, which saves the use of any external counter or other covering, without the expensive process and machinery necessary to strike up the stiffener and sole together, at the same time utilizing the smaller pieces of stock by making my device in the form shown independently of other parts, and securing the same to the other parts by pegs or stitching in the usual mode.

The manufacture of this device is also greatly cheapened over that of similar devices molded or struck up, while at the same time a better result is attained by the use of a seam, as seen in Fig. 2, whereby I am enabled to form the device without the expensive machinery aforesaid, and also to use thin pieces of leather, which would not retain their form if struck up, and which are especially desirable in those cases where flexibility is required in the shank.

What I claim as my invention, and for which I pray Letters Patent, is—

1. As an improved article of manufacture, the heel-stiffener and shank-support A, formed with a seam from a pattern, as described, and finished on its outer surface, as described, so as to form part of the outer surface of a boot or shoe.

2. The heel-stiffener and shank-support A, formed from the pattern F, substantially as described.

THOMAS JOYCE.

In presence of—

A. K. HAWKS,  
GEO. H. PRATT.