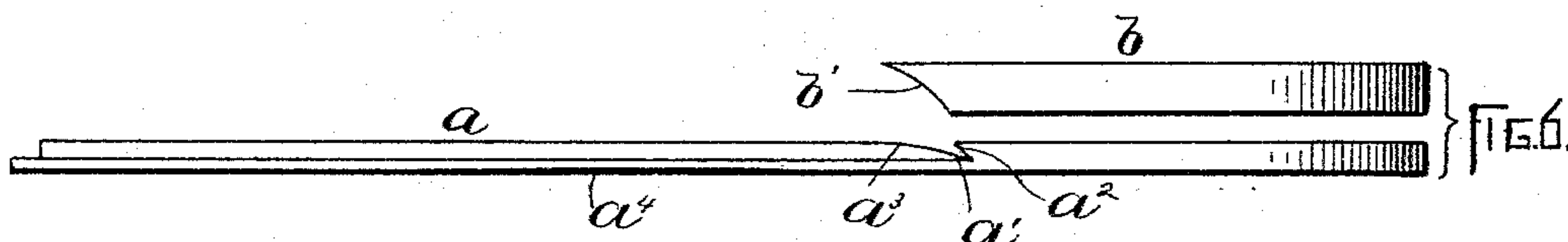
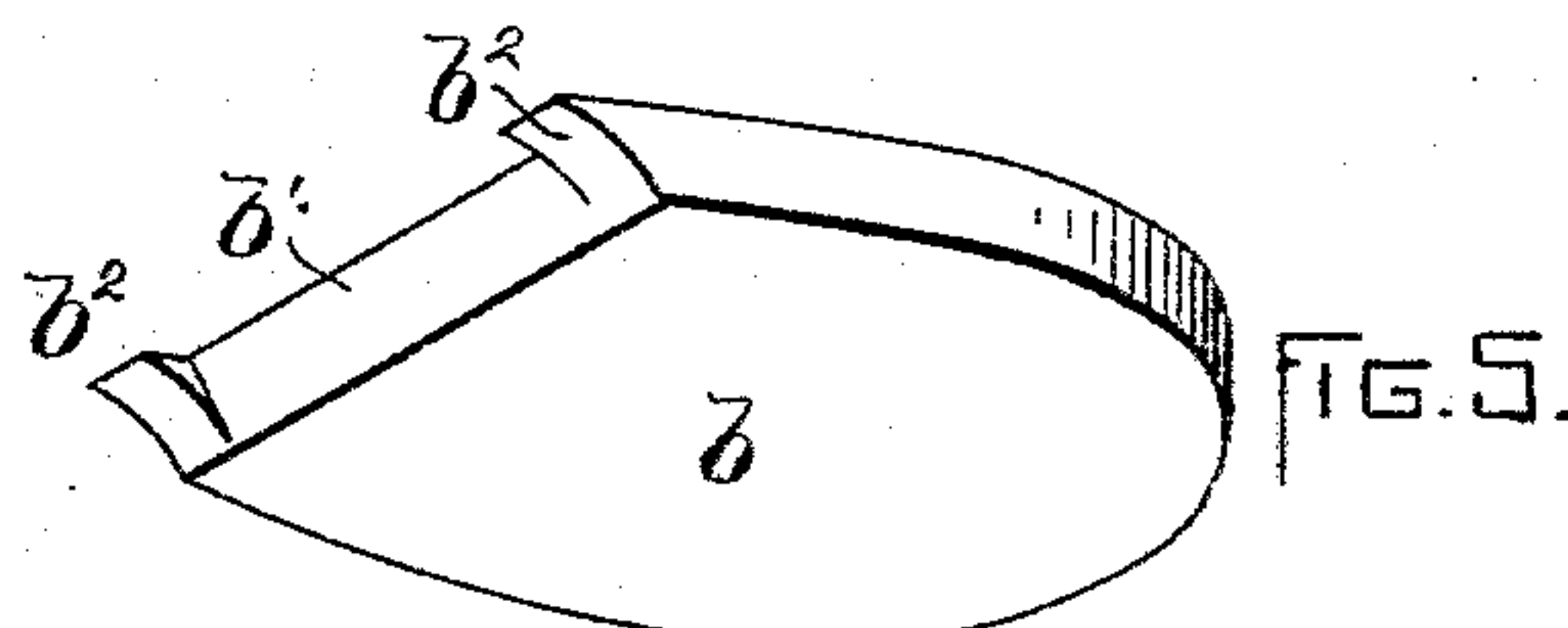
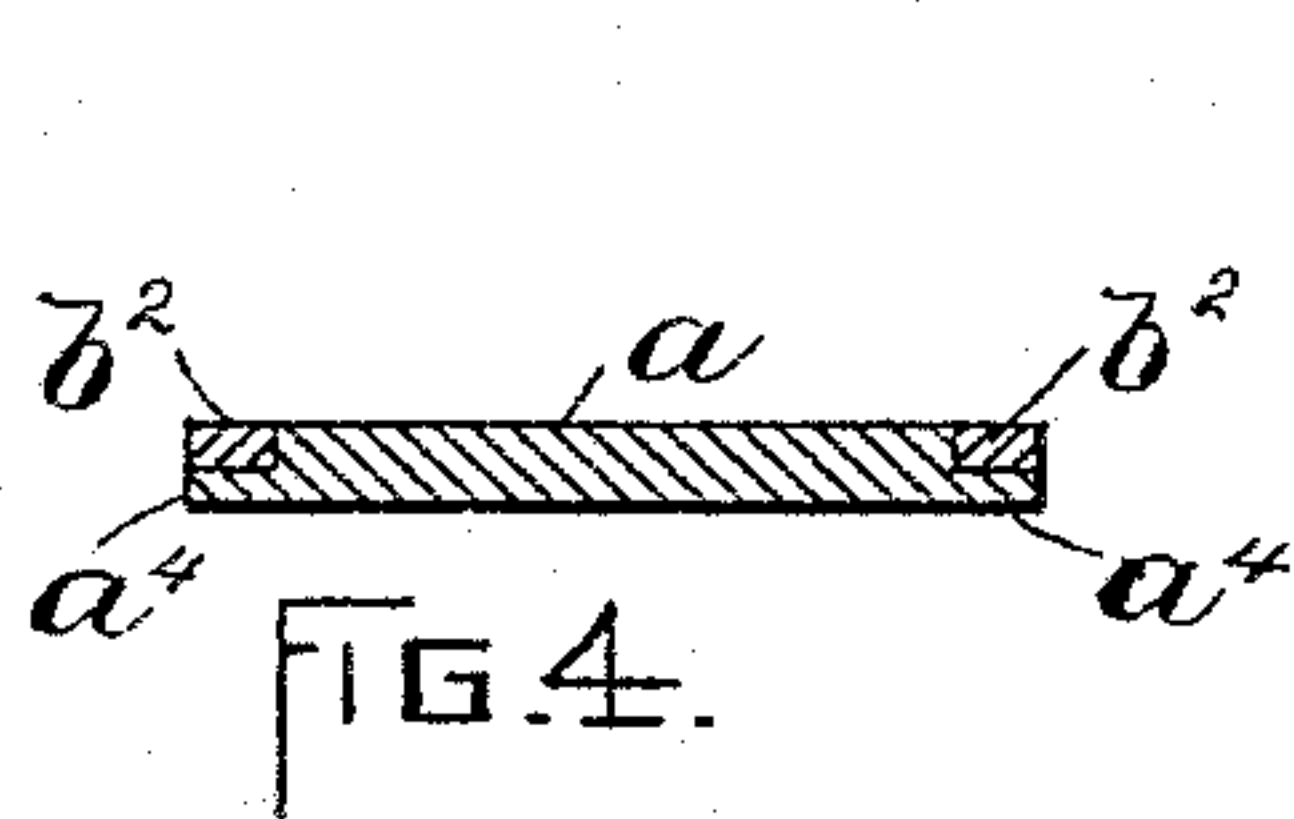
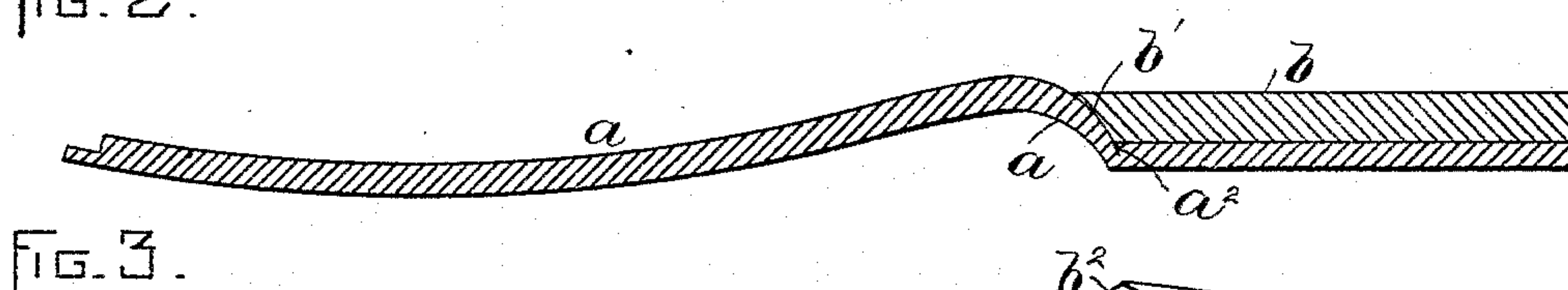
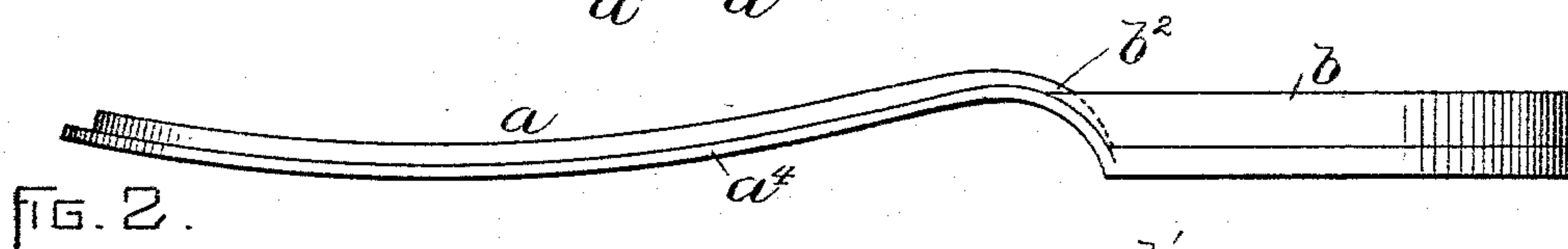
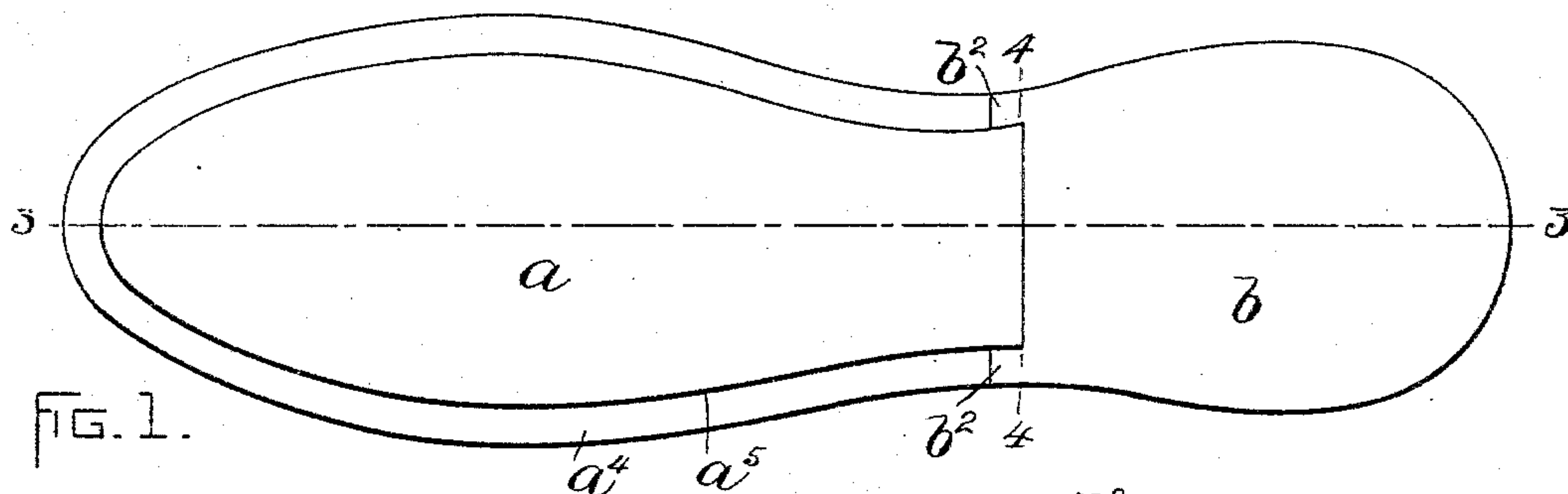


(No Model.)

W. P. BRADFORD.
SPRING HEEL BOOT OR SHOE.

No. 533,630.

Patented Feb. 5, 1895.



WITNESSES:

A. D. Hammon.

Hollin Abell.

INVENTOR:

W. P. Bradford
by *Myrtle Brown Hossley*
Attys.

UNITED STATES PATENT OFFICE.

WINSLOW PARKER BRADFORD, OF HAVERHILL, ASSIGNOR TO THE FLAGG MANUFACTURING COMPANY, OF BOSTON, MASSACHUSETTS.

SPRING-HEEL BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 533,630, dated February 5, 1895.

Application filed May 2, 1894. Serial No. 509,748. (No model.)

To all whom it may concern:

Be it known that I, WINSLOW PARKER BRADFORD, of Haverhill, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Spring-Heel Boots or Shoes, of which the following is a specification.

This invention relates to the improvement set forth in Letters Patent No. 492,186, granted to me February 21, 1893, for an improvement in shoes, said Letters Patent showing a sole which has a transverse groove both sides of which are inclined in substantially the same direction, one side of the groove being considerably wider than the other, the arrangement being such that the wider side of the groove is adapted to be pressed against the inclined breast of a heel lift which is attached to the heel portion of the sole.

The present invention has for its object to enable the wider side of the groove to be more closely and accurately fitted to the breast of the heel lift, and further to prevent a crack or crevice between the sole and the breast of the heel lift at the edges of the sole when the sole is reduced along its edges to form a thin lip.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming part of this specification,—Figure 1 represents a top plan view of a sole and heel lift embodying my improvements. Fig. 2 represents an edge view of the same. Fig. 3 represents a section on lines 3—3 of Fig. 1. Fig. 4 represents a section on line 4—4 of Fig. 1. Fig. 5 represents a perspective view of the heel lift detached. Fig. 6 represents an edge view showing the sole and heel lift before they are connected.

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

In the drawings—*a* represents the sole having a transverse groove *a'*, and *b* represents the heel lift, which in the completed shoe is placed on the upper or inner side of the heel portion of the sole, and has its breast formed so that one side of the groove *a'* may be pressed against it and caused to conform to the shape of the breast.

b represents a heel lift having a breast *b'* which has a gradual curvature from its bottom to its top surface instead of having a straight beveled breast as heretofore. This curved form enables the wider side of the groove *a'* to more closely fit the breast of the heel than would be the case if the breast were flat or presented a plane surface, there being much less liability of the portion of the sole that is secured to the breast separating therefrom and showing a crack or crevice at any point. The groove *a'* has its other side *a²* inclined so that when the heel lift is placed upon the sole the side *a²* of the groove will constitute a continuation of the breast *b'*. The wider side *a³* of the groove is formed so that it will, under pressure, conform closely to the breast *b'* and said side *a³* is preferably formed with a curvature corresponding to that of the breast, so that when the sole is pressed against the breast, as shown in Figs. 2 and 3 it will accurately fit the latter.

It is customary to reduce the marginal portion of the sole along the shank and fore part to form a thin lip or flange *a⁴* at the inner end of which is a shoulder *a⁵*, said shoulder and flange extending back on to the part of the sole which bears upon the breast and the lift *b*. The difference in thickness between the flange and the main part of the sole makes it difficult to conform the sole closely to all parts of the breast of the heel, so that the sole is liable to separate slightly from the breast of the heel at the edges thereof. To obviate this difficulty, I provide the heel lift with two forwardly extending lips or projections *b²* *b³*, which are formed to bear upon and fit the rear portions of the flange *a⁴* or those portions of said flange which extend onto the part of the sole that is pressed against the breast of the heel lift. This construction enables the breast of the heel lift to be securely attached to the sole at the edge portions thereof, as will be readily seen.

I claim—

In a spring-heel boot or shoe, the combination of a sole having a reduced flange extending along its shank and fore part, and a transverse groove one side of which is wider than the other, said flange extending on to the

wider side of the groove, combined with a heel lift having a curved breast, and extensions at the ends of said breast formed to bear on the end portions of said flange, as set
5 forth.

In testimony whereof I have signed my name to this specification, in the presence of

two subscribing witnesses, this 16th day of April, A. D. 1894.

WINSLOW PARKER BRADFORD.

Witnesses:

ROBERT D. TRASK,
FRANK KEEZER.