

No. 736,306.

PATENTED AUG. 11, 1903.

E. D. SMITH.
SHOE LACE FASTENER.
APPLICATION FILED FEB. 27, 1903.

NO MODEL.

Fig. 1.

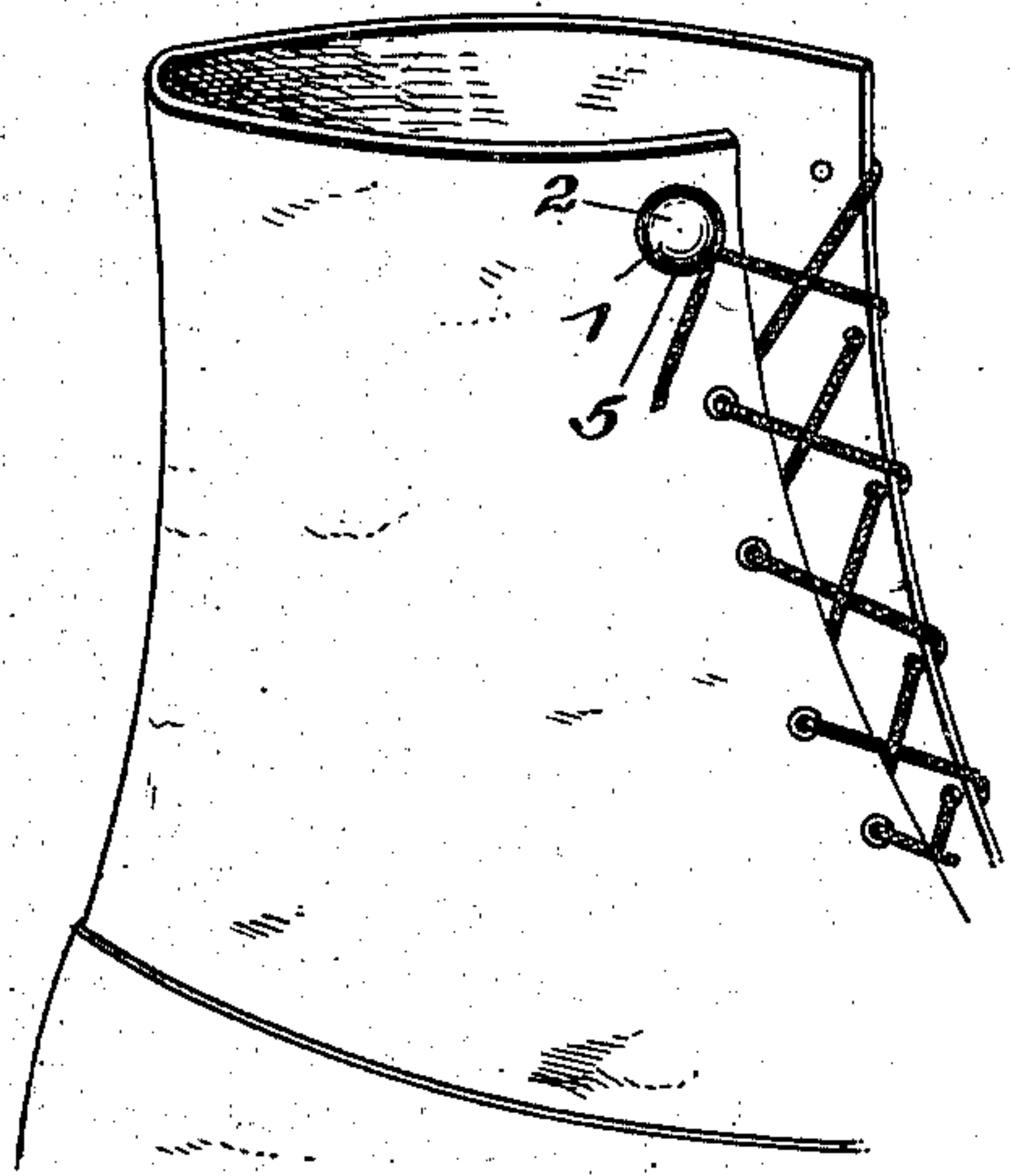


Fig. 3.

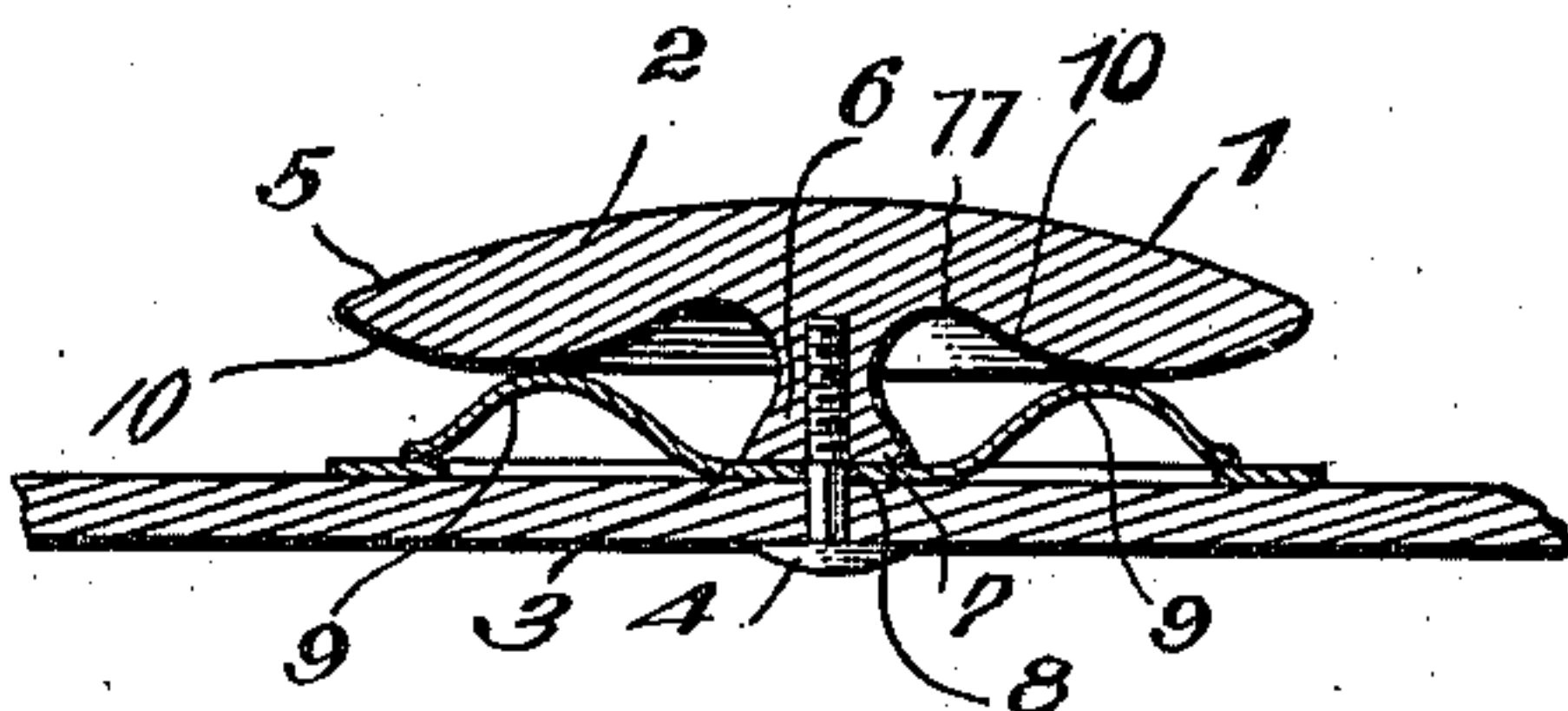


Fig. 2.

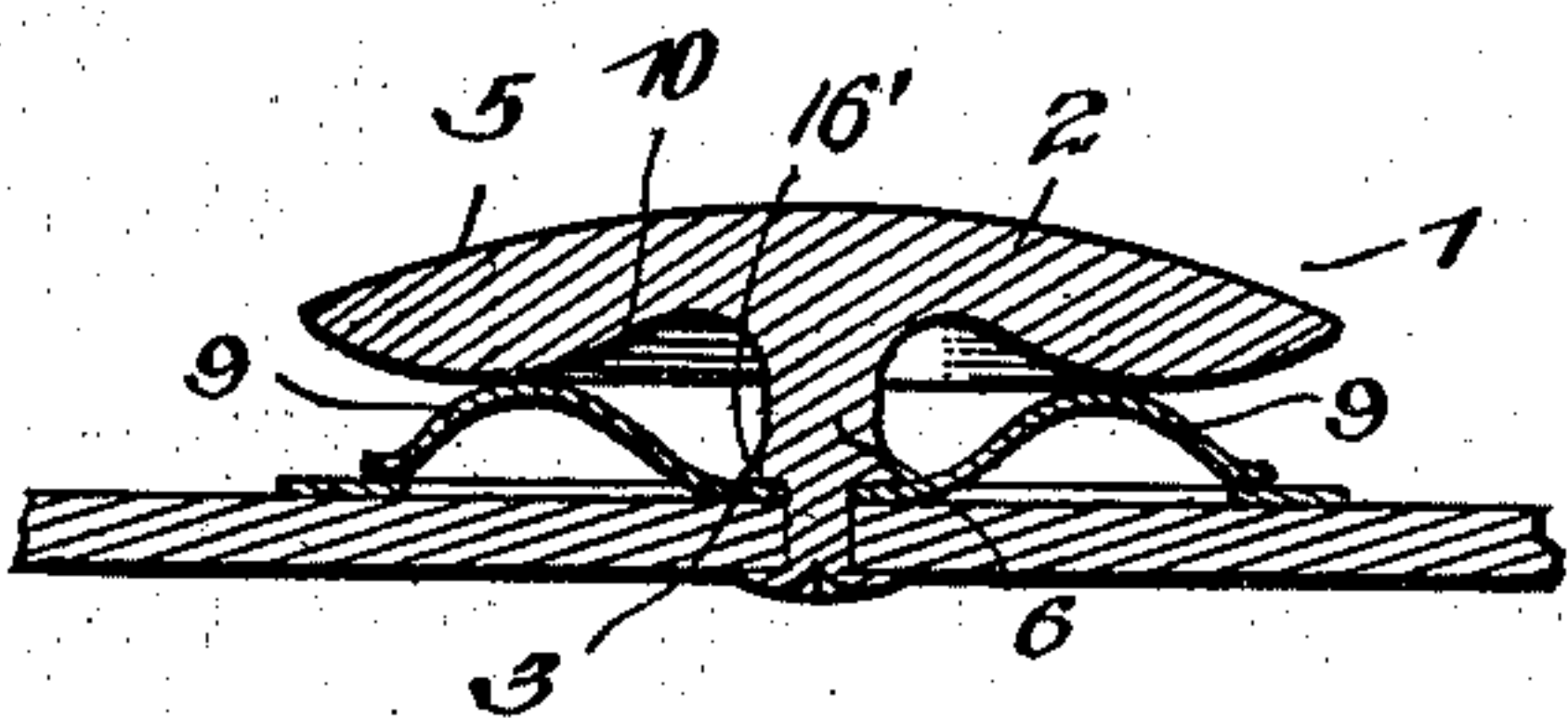
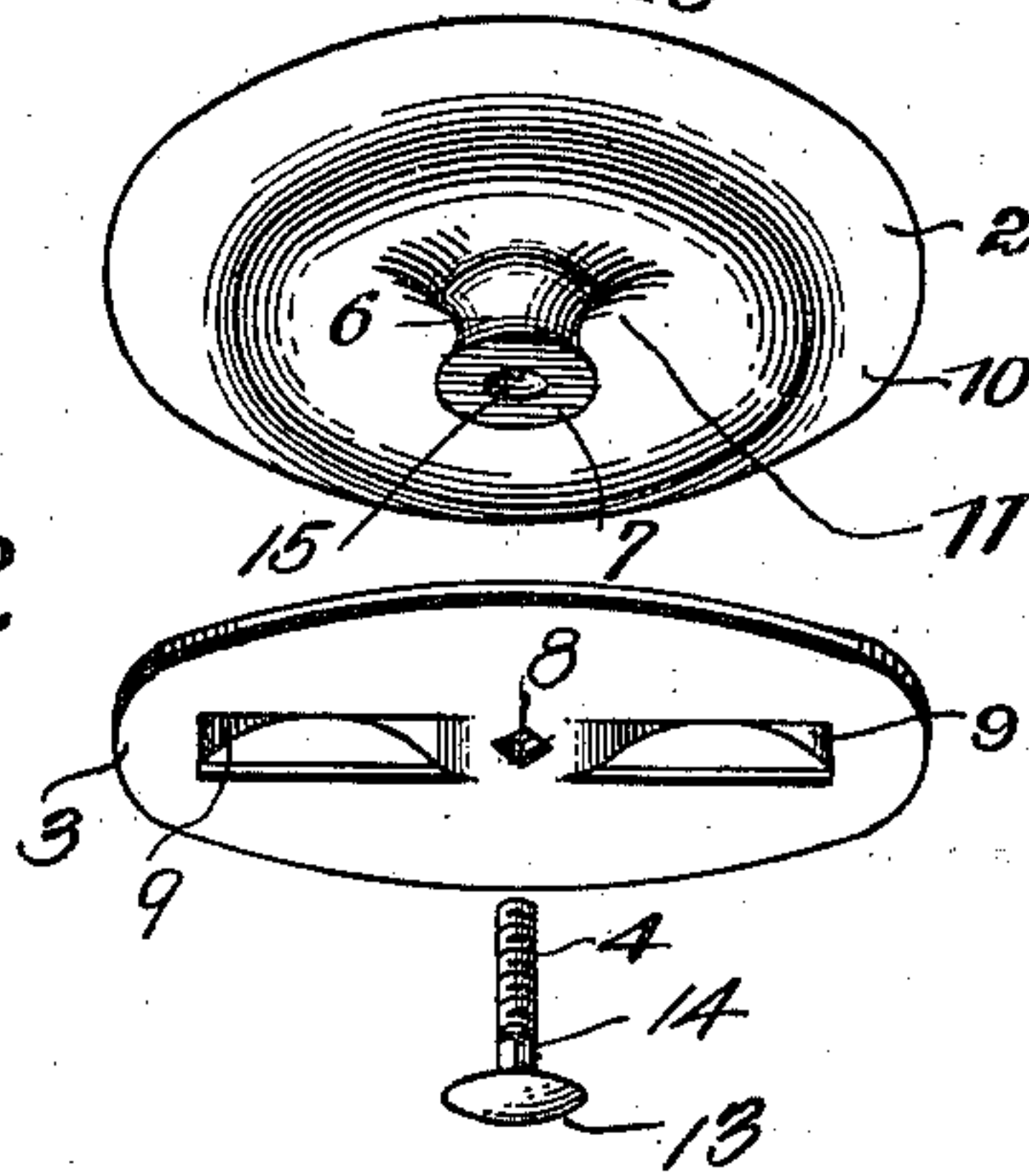


Fig. 5.

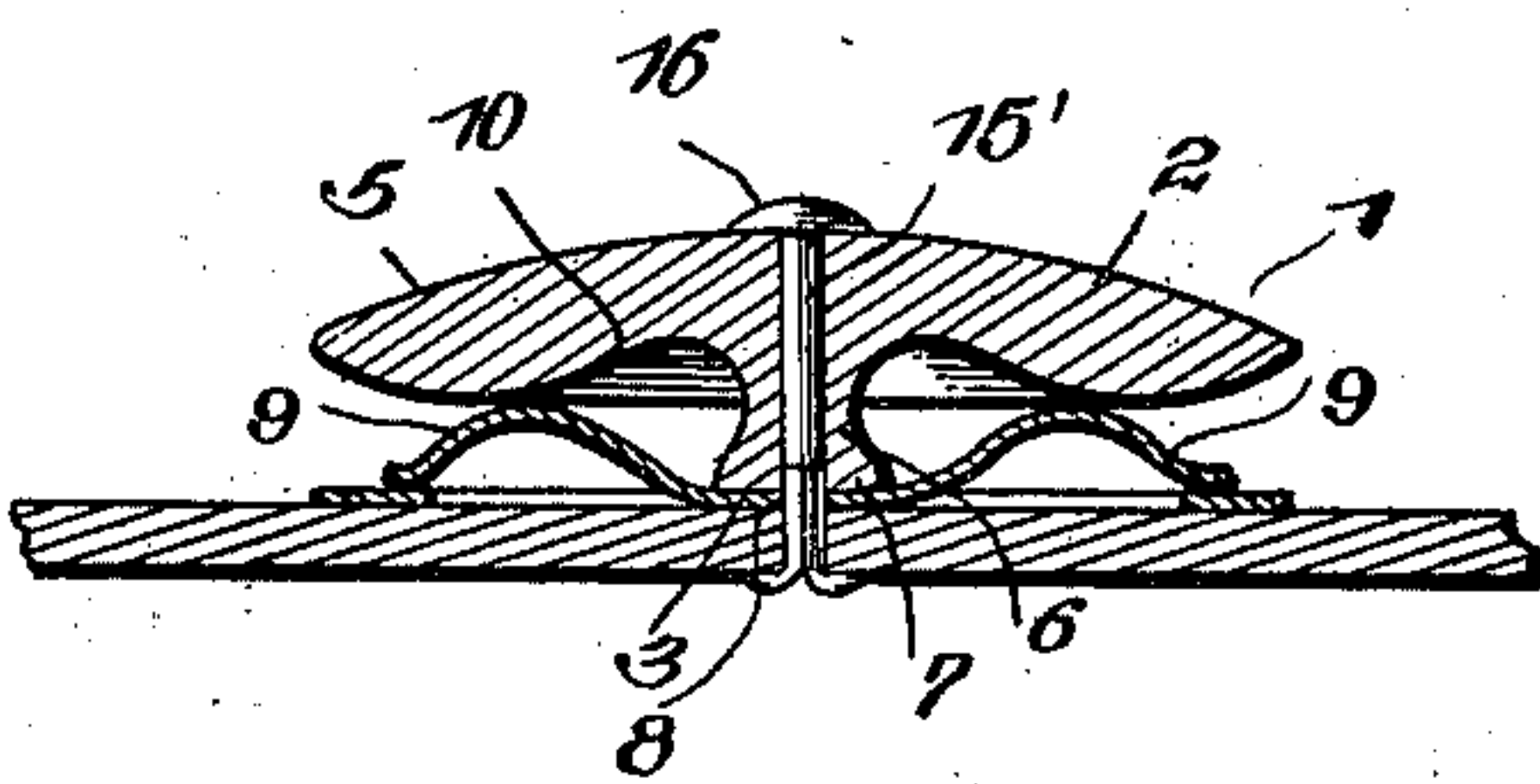


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

EDWARD D. SMITH, OF LUDINGTON, MICHIGAN.

SHOE-LACE FASTENER.

SPECIFICATION forming part of Letters Patent No. 736,306, dated August 11, 1903.

Application filed February 27, 1903. Serial No. 145,388. (No model.)

To all whom it may concern:

Be it known that I, EDWARD D. SMITH, a citizen of the United States, residing at Ludington, in the county of Mason and State of Michigan, have invented a new and useful Shoe-Lace Fastener, of which the following is a specification.

This invention relates to an improved cord or lace fastener for securing the ends of shoe-strings and other lacing-cords, and has for its object to provide a simple, inexpensive, and efficient device of this character which may be quickly attached to a shoe or glove and which will effectively retain the end portions of the string or cord without knotting or otherwise tying the same.

A further object of the invention is to provide means for winding the surplus cord after the shoe or glove has been laced and securely holding the lacing-cord under tension, thereby keeping the shoe or glove tightly laced at all times.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

In the drawings, Figure 1 is a perspective view of a shoe having a fastener constructed in accordance with my invention applied thereto. Fig. 2 is a perspective view showing the several parts comprising the fastener detached. Fig. 3 is a vertical sectional view showing these several sections assembled. Fig. 4 is a vertical sectional view showing a modified form of fastener, and Fig. 5 is a similar view showing a further modification.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates the fastener, which consists of a pair of clamping members 2 and 3, adjustably secured together by means of a threaded pin 4, as will be more fully explained hereinafter.

The upper clamping member 2 consists of a button or disk formed of metal or other suit-

able material circular in contour and provided with an upper rounded or convex surface 5 and a depending stem or shank 6, the lower end of which is flared or flanged, as shown at 7, and rests on the lower clamping member 3.

The lower clamping member 3 consists of a flat sheet-metal disk or plate, preferably die-struck and of approximately the same diameter as the disk 2, being provided with a central opening 8 and oppositely-disposed up-struck integral spring-tongues 9, which lie in close proximity to the under surface of the clamping member 2. The under side of the disk 2 is beveled or inclined downwardly and inwardly from the periphery of the disk, as shown at 10, to permit the easy introduction of the lacing cord or string, and the under side of said disk is also hollowed out or concaved at a point adjacent the shank to permit the winding of the surplus cord, as clearly shown at 11 in Fig. 3 of the drawings. The flared end of the shank 6 rests on the fixed ends of the spring-tongues 9, and the upper and lower clamping members are detachably secured together by means of a threaded pin 4, provided with an enlarged head 13 and a squared portion 14, which fits within the recess 8 in the disk 3, the threaded portion of the pin engaging the correspondingly-threaded walls of an opening 15 in the upper clamping member.

From the foregoing description the operation of my device will be readily understood and is as follows: When it is desired to secure the fastener on the shoe, the threaded pin is passed through the leather or other material of which the shoe is formed, with the head of the pin engaging the inside of the shoe. The lower clamping member is then fitted on the squared portion of the pin and the upper member or disk screwed on until its under face lies in close proximity to the spring-tongues 9. After the shoe has been laced the ends of the string may be secured without the necessity of tying or otherwise knotting the cord by simply passing the ends thereof between the spring-tongue and the upper clamping member, the surplus cord being wound around the shank 6 and the shoe-lace kept at the desired tension and prevented from slipping by contact with the spring-tongue. The distance between the

clamping-plates may also be regulated to accommodate the surplus cord by adjusting the upper clamping member on the threaded pin.

In Fig. 4 I have shown a slightly different form of fastener. In this case I provide a tubular pin 15', having an enlarged head 16, which rests on top of the upper clamping member, the lower end of the pin passing through the lower clamping member and the material of which the shoe is formed being clenched or otherwise secured thereto.

In Fig. 5 I have shown a further modification in which the pin for connecting the two parts is dispensed with, the shank of the upper clamping member being provided with lateral offsets or shoulders 16', which rest against the spring-tongues when the parts are assembled, and integral teeth or spurs which pass through an opening in the lower clamping member and the upper of the shoe, being clenched or otherwise secured thereto.

While I have described the fastener as being particularly adapted for securing lacing-strings, it is shown it may also be used with equally good results for fastening cord on packages, bags, &c., and for various other purposes, and the upper clamping-disk may be formed of metal, wood, bone, or other material and covered with cloth, if desired.

Having thus described the invention, what I claim, and desire to secure by Letters Patent, is—

1. A string-fastener comprising upper and lower clamping members, the under side of the upper member being provided with an annular cord-receiving groove or socket and the lower member provided with oppositely-disposed struck-up spring clamping-tongues, and means for securing the members together.

2. A string-fastener comprising a pair of clamping members, the upper clamping mem-

ber consisting of a disk the edge of which is beveled or inclined downwardly and inwardly from the periphery thereof and provided on its under side with a cord-receiving groove or socket, the lower clamping member being provided with oppositely-disposed struck-up spring clamping-tongues engaging the upper member at points in advance of the cord-receiving groove, and means for securing the clamping members together.

3. A string-fastener comprising a pair of clamping members, the upper member being inclined or beveled downwardly and inwardly from the periphery thereof and provided with a depending shank and cord-receiving groove or socket, the lower clamping member being provided with oppositely-disposed struck-up spring clamping-tongues engaging the upper member at points in advance of the cord-receiving groove, and a threaded pin for securing the members together.

4. A shoestring-fastener comprising an upper clamping-disk provided with a depending interiorly-threaded shank and an annular cord-receiving groove or socket, a lower clamping-plate provided with a central squared opening and oppositely-disposed struck-up spring clamping-tongues engaging the upper member at points in advance of the cord-receiving groove, a threaded pin having a squared shoulder fitting within the opening in the lower clamping-disk, the threaded end of the pin engaging the interior threads of the upper clamping-disk.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

EDWARD D. SMITH.

Witnesses:

JAMES MURRAY,
HENRY C. RANSOM.