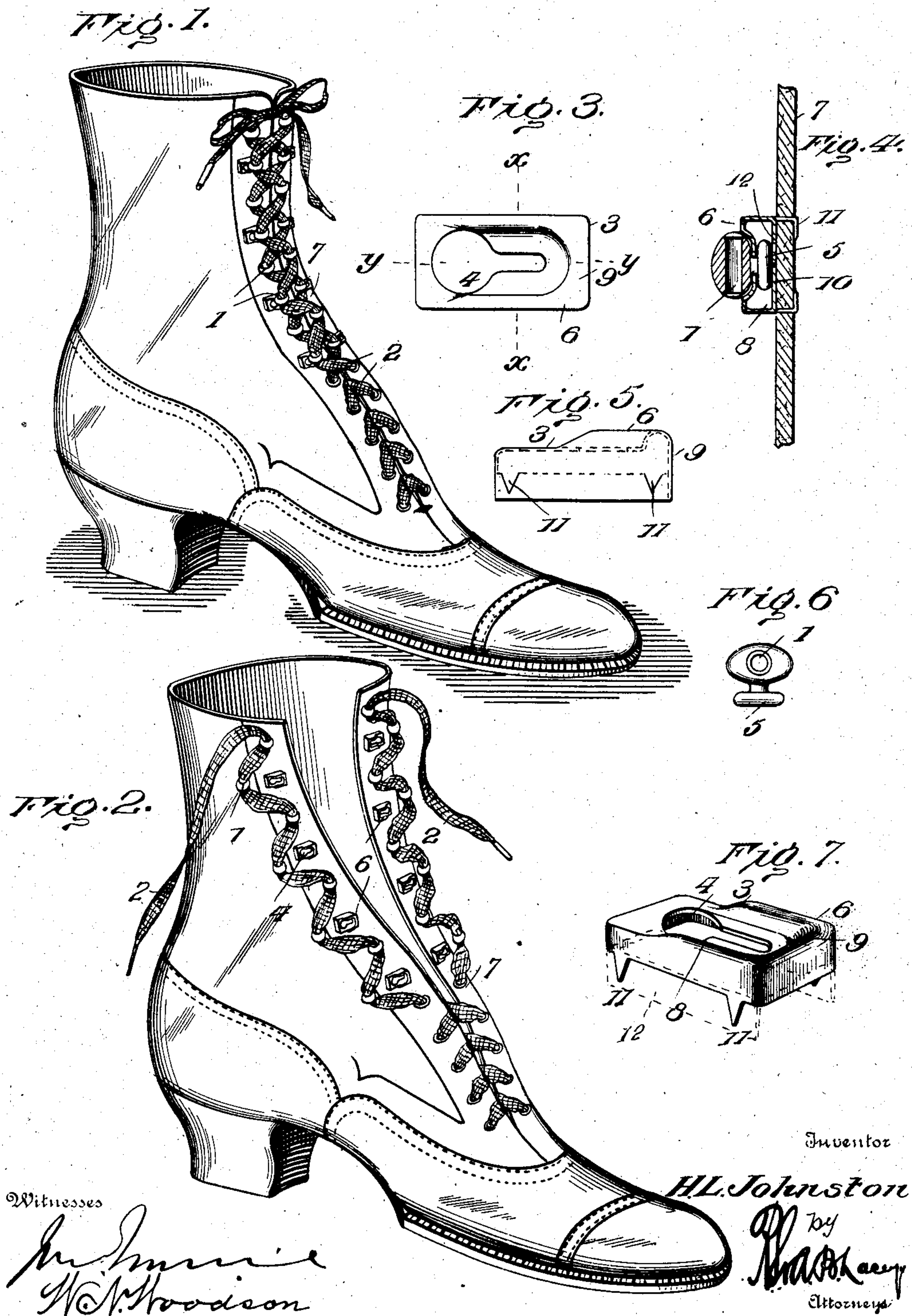


No. 835,068.

PATENTED NOV. 6, 1906.

H. L. JOHNSTON.  
SHOE LACING.

APPLICATION FILED JAN. 18, 1905.





# UNITED STATES PATENT OFFICE.

HOYT L. JOHNSTON, OF WASHINGTON, DISTRICT OF COLUMBIA.

## SHOE-LACING.

No. 835,068.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed January 18, 1905. Serial No. 241,710.

*To all whom it may concern:*

Be it known that I, HOYT L. JOHNSTON, a citizen of the United States, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Shoe-Lacings, of which the following is a specification.

This invention relates to a lace-fastening designed most especially for shoes, also adapted for general use, and embodying a series of fixed buttons, a like series of loose buttons arranged intermediate of the fixed buttons, a lace passed through the fixed and loose buttons, and fastenings intermediate of the fixed buttons to receive the loose buttons which make detachable connection therewith.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a perspective view of a laced shoe embodying the invention. Fig. 2 is a view similar to Fig. 1, showing the lace loosened and the detachable buttons disconnected from their respective plates. Fig. 3 is a top plan view of a button-attaching plate on a large scale. Fig. 4 is a transverse section of the button, plate, and material on the line *xx* of Fig. 3. Fig. 5 is a side view of the plate as it appears before bending the lower edge portion of the rim. Fig. 6 is a view in elevation of one of the buttons. Fig. 7 is a detail view of a button-attaching plate.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The shoe may be of any style, design, and make and is of the type fastened about the foot by means of a lace and cooperating fastenings.

The buttons are applied to the shoe-upper at each side of the opening, the intermediate ones being fixed and the alternate ones detachable. In general appearance and construction the buttons are similar, and the head of each is formed with a transverse opening 1, through which the lace 2 is passed. By having the alternate buttons detachable the lace when untied may be loosened sufficiently to admit of the shoe being readily placed upon the foot or drawn therefrom. The alternate buttons are placed in position or removed by a sliding movement, which

may be effected more easily than passing a lace through the accustomed eyelet, and by having the opening 1 formed transversely through the head of the button no projecting parts are presented for catching the clothing, which is one of the chief objections urged by ladies against shoes of the laced type provided with the usual hooks or lacing-studs.

The fixed buttons may be attached to the shoe or other article in any determinate way, whereas the removable buttons have detachable connection with plates 3, secured to the shoe or other article by means of spurs or like fastenings. Each of the plates 3 is provided with a keyhole-slot 4 for cooperation with the headed shank 5 of the button, the head of the shank being adapted to be passed easily through the enlarged portion of the opening 4 and to engage under the parts of the plate bordering upon the narrow or contracted portion of the slot, as will be readily comprehended. The plate 3 has a raised portion 6, surrounding the narrow portion of the slot 4, to form a guard or seat for the base portion of the button-head, thereby relieving the shank in a great measure of a part of the strain sustained by the button when the shoe is laced, rendering the plate more rigid and effectually preventing the catching of threads or garments. When the plate 3 is attached to the material 7 of the shoe or other article provided with the fastenings, a space 8 is provided to admit of the sliding movement of the head 5. Provision may be had for the space 8 in any construction. For the sake of illustration the plate is provided with a rim 9, which is adapted to bear against the material 7, so as to space the latter from the plate. Longitudinal portions of the rim are bent inward, as shown at 10, and inclose the inner or lower sides of the space 8 and prevent the material bulging inward and obstructing the path of the head 5 and interfering with the free operation of the fastening. Spurs 11 are cut from the rim portion 9 of the plate and are adapted to be passed through the material 7 and to be clenched, so as to confine said material between the points of the spurs and the inward turned portions 10, as shown most clearly in Fig. 4. Obviously any means may be resorted to for attaching the plates 3 securely to the material of the shoe or other article with which a lace may be employed as the fastening means.

While it is contemplated to apply the in-



vention to shoes, yet it is to be understood that it may be adapted to other articles of wearing-apparel utilizing strings or laces for drawing the parts together and serving  
5 as fastening means therefor. A shoe embodying the invention has the lace 2 passed through the openings 1 of the buttons in the usual manner, and when laced and tied the shoe appears as shown in Fig. 1. When the  
10 shoe is loosed, the alternate buttons are detached from the plates 3, but remain upon the lace, as shown most clearly in Fig. 2. After the shoe has been drawn upon the foot the loosed buttons may be quickly and easily  
15 attached to their respective plates by slipping the head 5 into the openings of the slots 4 and moving them so as to engage with the portions of the plates adjacent to the narrow portions of said slots, after which the lace  
20 may be drawn tight and tied in the usual manner.

Having thus described the invention, what is claimed as new is—

25 1. In a lace-fastening, the combination of a lace, a like series of buttons arranged at opposite sides of the space or opening of the part to be secured; the alternate buttons being fixed and the intermediate buttons being

loose and all the buttons having the lace passed loosely therethrough, and fastening  
30 means attached to the said part at each side of the opening and arranged midway between the fixed buttons, the loose buttons at each side of the opening being adapted to engage  
35 with the said fastening means located upon the opposite side of the said opening.

2. In a lace-fastening, the combination of a lace, a series of plates attached to the article at each side of the opening thereof, a series of buttons arranged intermediate of said  
40 plates and attached to the article at each side of the opening; and other buttons loose upon the lace and provided in like series upon opposite sides of the opening between the fixed  
45 buttons; the loose buttons upon one side of the opening being adapted to make detachable connection with the plates upon the opposite side of said opening, all the buttons  
50 of the two series having openings through which the lace passes loosely.

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

HOYT L. JOHNSTON. [L. s.]

Witnesses:

ELIZABETH L. MACFATE,  
W. N. WOODSON.