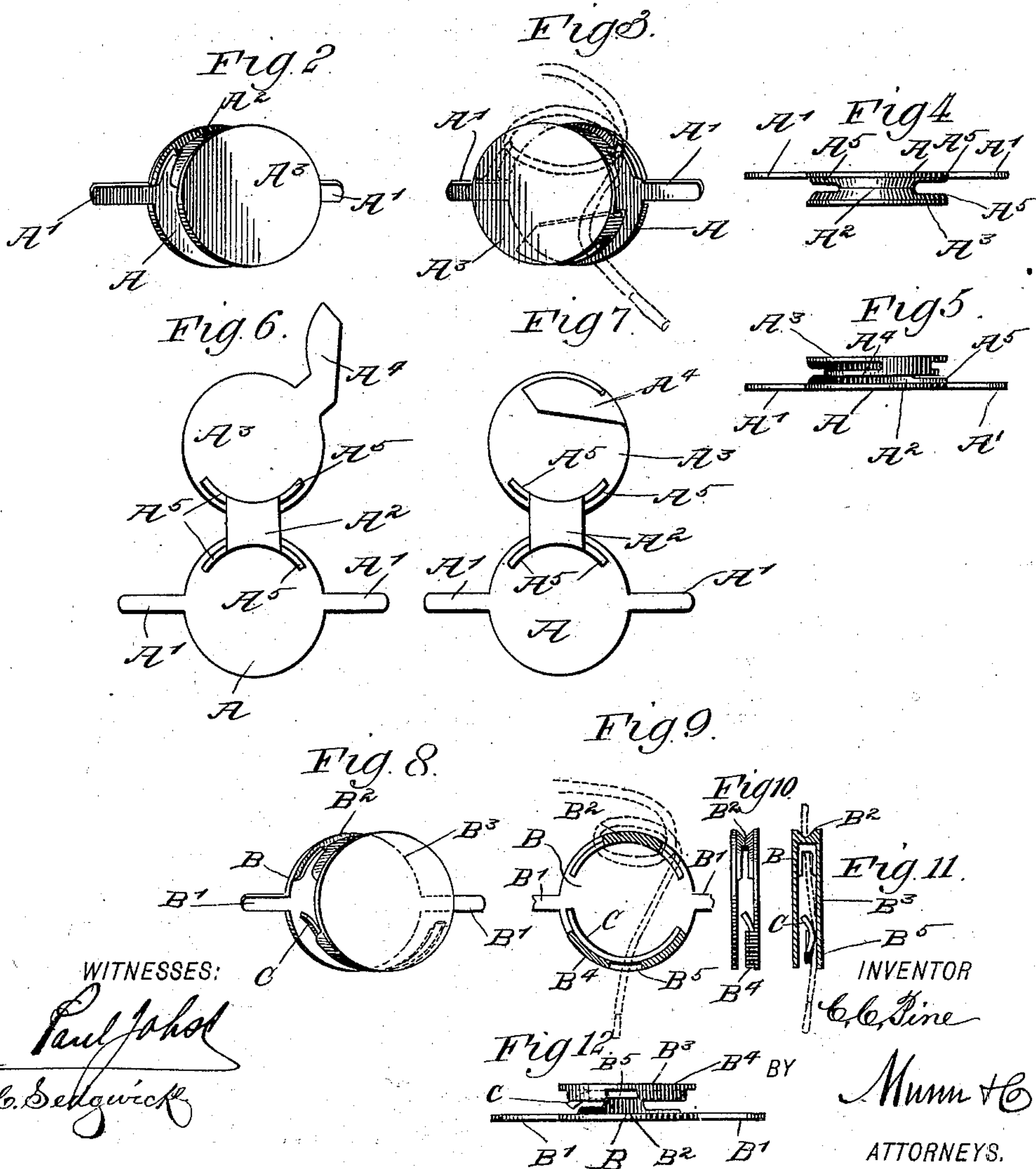
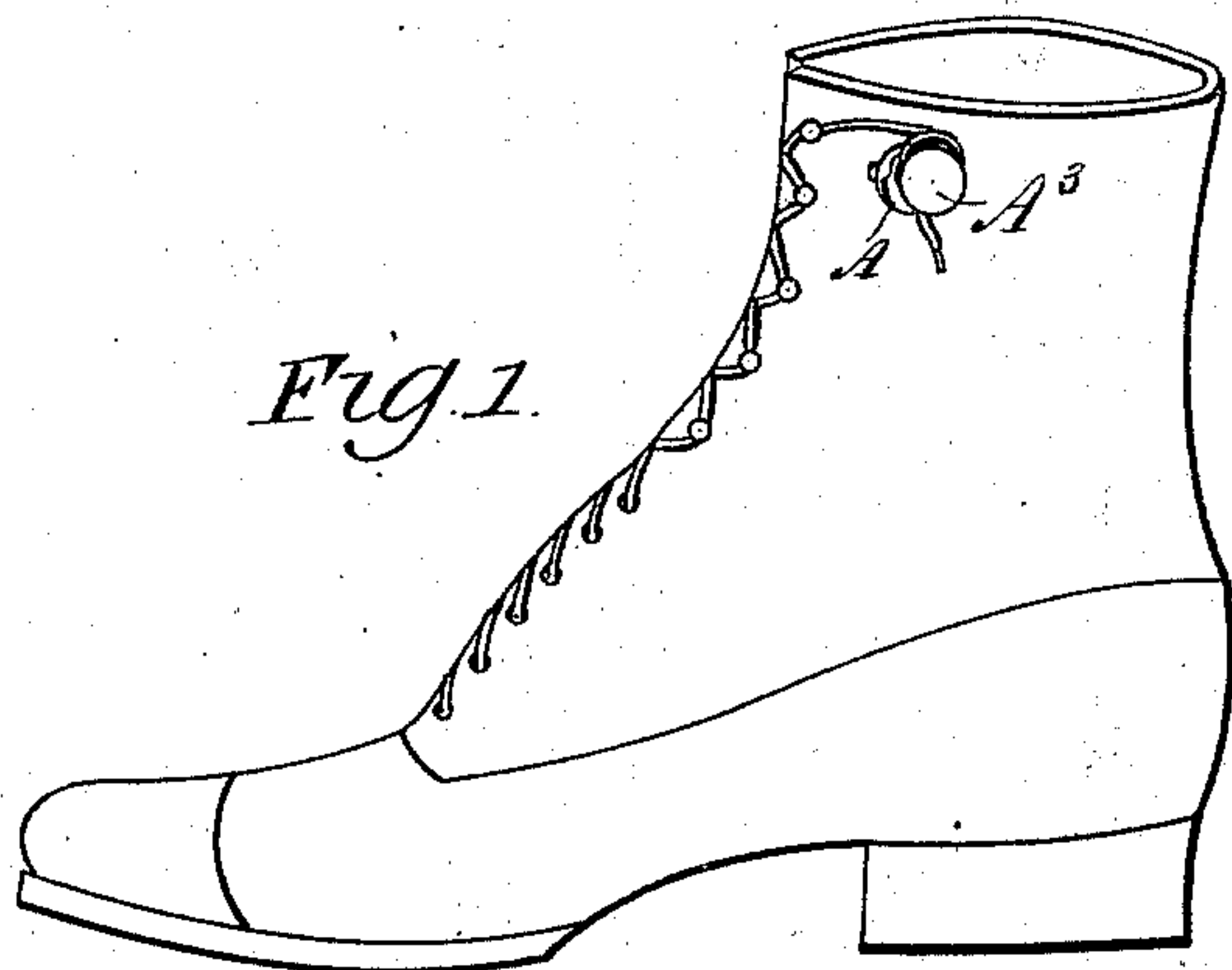


(No Model.)

C. C. PINE.
STRING FASTENER.

No. 559,206.

Patented Apr. 28, 1896.



UNITED STATES PATENT OFFICE.

CHARLES C. PINE, OF NEW YORK, N. Y.

STRING-FASTENER.

SPECIFICATION forming part of Letters Patent No. 559,206, dated April 28, 1896.

Application filed July 10, 1895. Serial No. 555,484. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. PINE, of New York city, in the county and State of New York, have invented a new and Improved String-Fastener, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved string-fastener, more especially designed for use on shoes, corsets, gloves, and other articles to be laced, and arranged to permit the wearer to securely fasten the end of the string in a very simple manner.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a reduced perspective view of the improvement as applied on a shoe. Fig. 2 is a perspective view of the improvement from one side. Fig. 3 is a similar view of the same from the other side. Fig. 4 is a plan view of the improvement. Fig. 5 is an inverted plan view of the same. Fig. 6 is an inner face view of the blank for forming the fastener. Fig. 7 is a like view of the same with the tongue bent over its plate. Fig. 8 is a perspective view of a modified form of the improvement. Fig. 9 is a sectional face view of the same. Fig. 10 is an edge view of the same. Fig. 11 is a cross-section of the same, and Fig. 12 is an inverted plan view of the same.

The improved string-fastener is preferably made of a single piece of sheet metal and is provided with a back plate A, having prongs A' for securing the fastener to the article on which it is to be applied. Thus, as shown in Fig. 1, for instance, the article is represented on a shoe, and the plate A is attached to the shoe near the upper end thereof and at one side of the buttons, as plainly indicated in the said figure, or can be used in place of the upper button, the string then passing from the last button on the other side to the fastener.

The plate A is preferably made in the form of a disk and is connected at its upper end by a cross-bar A² with a second plate A³, extending in front of the back plate A, and like-

wise made in the form of a disk. The cross-bar A² is made in the form of a grooved rim, as will be readily understood by reference to Fig. 4, and around this bar is wrapped once the string to be fastened in place.

On the front plate A³ and near the lower end thereof is arranged a tongue A⁴, extending over part of the inner surface of the said plate to receive the end of the string after it has been once wrapped around the cross-bar, as plainly indicated in dotted lines in Fig. 3. The cross-bar A² is continued on the inner or opposite faces of the plates A and A³ by segmental flanges A⁵ for binding the string, and which also form an entrance to the groove of the cross-bar, so as to permit of readily passing the string to the cross-bar and wrapping the string around the same before passing it between the tongue A⁴ and the inner face of the plate A³ for a final holding. It will be seen that by this arrangement the strain from the upper button on the shoe draws the string very tight on the cross-bar A², and there is no danger of the string becoming disconnected or unwrapped from the fastener.

In the modified form shown in Figs. 8 to 12 the back plate B, having the prongs B', is connected by a cross-bar B² with a front plate B³ in the same manner as in the fastener shown in Figs. 1 to 7 and as above described. Instead of the integral tongue A⁴, however, the front plate B³ is provided with a separate spring-tongue C, fastened at one end at the front plate B³ and extending along a peripheral flange B⁴ on the inner face of the front plate B³ and at the bottom thereof. This flange B⁴ is cut out at its lower part to form an opening B⁵ for the passage of the string passed between the tongue C and the said flange. Otherwise this fastener is used in the same manner as described above in reference to Figs. 2 and 3—that is, the string is wrapped once or twice around the cross-bar and the end of the string is passed under the tongue to securely hold it in position.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A string-fastener, comprising two oppositely-arranged plates connected by a cross-bar provided on its outer side between said

plates with a groove extending transversely of the cross-bar to the edges thereof and adapted to receive the string, said cross-bar being continued on the inner faces of the
5 plates by spaced segmental flanges inclosing between them a slot forming an entrance to the groove of the cross-bar substantially as described.

2. A string-fastener, comprising two oppos-
10 ing plates connected by a cross-bar, and a tongue arranged between the said plates and extending along the circumference of one of the said plates from a point opposite the cross-bar toward the same, the free end of the tongue
15 being nearest to the cross-bar, substantially as described.

3. A string-fastener, comprising two oppositely-arranged plates connected by a cross-bar provided on its outer side between said
20 plates with a groove extending transversely

of the cross-bar to the edges thereof and adapted to receive the string, and a tongue secured to one of the plates and extending between them along their circumference to engage the end of the string, substantially as
25 described.

4. A string-fastener, comprising two opposing plates of approximately circular shape, a cross-bar connecting the same at their marginal or peripheral portions, and a tongue at-
30 tached to one of the plates at a point opposite to the cross-bar, and extending between the plates along the circumference thereof, said tongue having its free end curved toward the cross-bar, substantially as described.

CHARLES C. PINE.

Witnesses:

THEO. G. HOSTER,

C. SEDGWICK.