

May 7, 1940.

C. J. RIO

2,199,758

SHOELACE FASTENER

Filed July 27, 1939

Fig. 1.

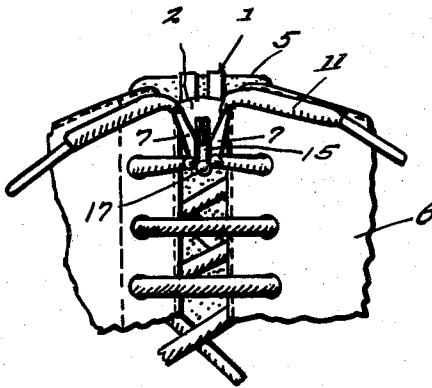


Fig. 2.

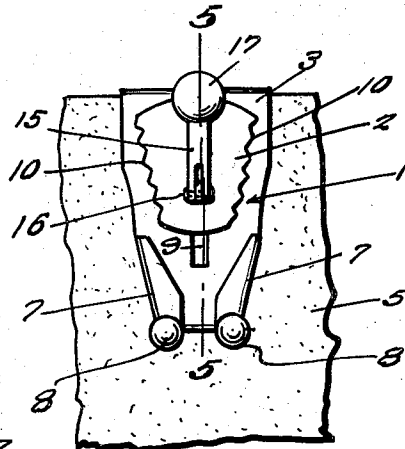


Fig. 3.

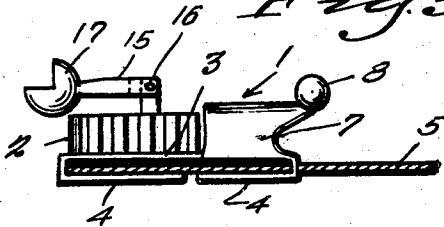


Fig. 4.

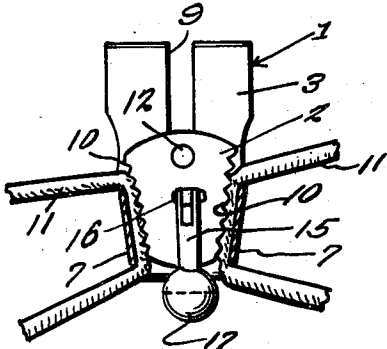


Fig. 5.

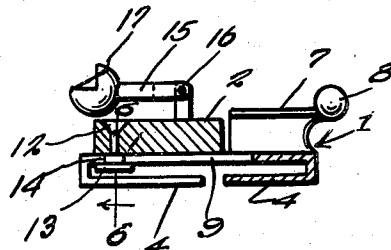
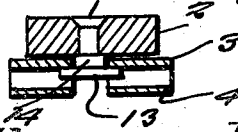


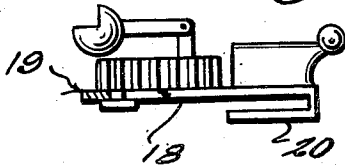
Fig. 6.



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Fig. 7.



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SHOELACE FASTENER

Clarence J. Rio, Tyler, Pa.

Application July 27, 1939, Serial No. 286,913

2 Claims. (Cl. 24—117)

My invention relates to shoelace fasteners of the type featured in my U. S. Letters Patent, No. 2,164,123, dated June 27, 1939, over which the instant invention is designed as an improvement.

The principal object in view is to provide a fastener of the wedging clamp type, such as is shown in said Letters Patent, adapted for quick and secure attachment to the tongue of a shoe without impairing the usefulness of the tongue or rendering it uncomfortable to the wearer of the shoe, and equipping the fastener with means whereby it may be attached to the shoelaces with greater ease and in less time.

To the accomplishment of the above, and subordinate objects presently appearing, a preferred embodiment of my invention, and one modification thereof, have been illustrated in the accompanying drawing, set forth in detail in the succeeding description, and defined in the claims appended hereto.

In said drawing:

Figure 1 is a fragmentary view in front elevation illustrating the preferred embodiment of the invention applied to a shoe tongue and with the parts in fastening position,

Figure 2 is a fragmentary view in front elevation of the tongue and fastener with the parts shown in releasing position,

Figure 3 is a view in side elevation with the tongue of the shoe shown in longitudinal section,

Figure 4 is a view in front elevation of the fastener detached with the parts shown in fastening position,

Figure 5 is a view in longitudinal section taken on the line 3—3 of Figure 2 showing the fastener detached,

Figure 6 is a view in transverse section taken on the line 6—6 of Figure 5 and drawn to an enlarged scale, looking in the direction of the arrows, and

Figure 7 is a view in side elevation of the modification of the invention.

Referring to the drawing by numerals, the fastener of the instant invention comprises as its basic elements, a pair of fixed and movable clamping members 1, 2, respectively, of wedging type.

The fixed clamping member 1 has the form of an elongated plate 3 equipped with a pair of bendable end extensions 4, in the preferred embodiment of the invention, and by means of which it may be attached to the tongue 5 of a shoe 6 to extend lengthwise downwardly along the front of the tongue centrally of the same and

from the upper end thereof. Preferably one of the extensions 4 is bent around the top edge of said tongue 5 and under the same to extend down along the back of the tongue. The other extension 4 is extended through the tongue 5 and bent to extend upwardly along the back thereof. As best shown in Figures 2 and 4 the side edges of the plate 3, adjacent the lower end thereof, converge and said plate adjacent said end is provided with a pair of outstanding side edge flanges 7 of substantially right-angled form in cross-section, respectively, and forming on the front of the plate a pair of downwardly converging, laterally spaced clamping jaws open at the upper and lower ends thereof. The jaws terminate at their lower ends in a pair of laterally spaced ball members 8, respectively, disposed on top of the jaws in unobstructing relation to the lower ends thereof. A longitudinally extending slot 9 is provided in said plate 2; said slot extending from the top edge of the plate along the center thereof and of the top extension 4 and terminating short of the lower end of the plate. The purpose of the ball members 8 and slot 9 will presently appear.

The movable clamping member 2 has the form of a flat elongated wedge of substantially the same length as the jaw-forming flanges 7 and provided with serrated side edges 10 designed to fit between and within the flanges 7 to coact therewith in clamping the shoelace 11 between said edges and flanges with a wedging action. Movable clamping member 2 is slidably mounted on said plate 3 for endwise adjustment longitudinally thereon, small end lowermost, into and from such clamping relation to the flanges 7. A stud 12 extending centrally through said member 2 and through the slot 9 of the plate 3 with a head 13 thereon in the rear of the plate 3 provides for mounting said member 2 on said plate. Preferably the stud 11 is provided with a square part 14 fitting into the slot 9 to prevent the member 2 from turning in the slot.

A bar 15 is pivotally mounted at one end, as at 16, on the front, or top, of the movable member 2 for swinging movement to dispose the same between the before-mentioned ball members 8 and provided at its other end with a ball member 17 adapted in the clamping relation of the member 2 to be swung downwardly between said members 8 and to wipingly coact therewith to cam the member 2 downwardly in the flanges 7 and thereby effect a tight clamping of the laces 11 between said flanges 7 and member 2. Hence, and as will be clear, the ball members 8

and the bar member 14 and ball member 17 form a camming clasp for retaining the movable member 2 in clamping relation to the flanges 7.

It is to be particularly noted that the member 2 is movable, or adjustable, out of clamping relation to the flanges 7 into a position completely clear of the latter. This feature is of particular advantage in that, in said relation of the member 2 and flanges 7, the lace 11 may be easily entered into the flanges by way of the space between the same without this operation being in any way obstructed.

The modified form of the invention shown in Figure 7 is the same as that described in the foregoing with the exception that the plate 18 of the fixed clamping member 19 is provided with a lower end extension 20, only, for securing the fastener to the tongue of the shoe, the upper extension of the previously described form of the invention being eliminated.

The use and operation of the described invention will be readily understood. With the movable clamping member 2 adjusted upwardly from clamping relation and held in such relation, the ends of the lace 11 are introduced into the flanges 8 in the manner already made clear and held taut with one hand. The clamping member 2 is then shoved downwardly into the flanges 7 in which position the side edges 10 thereof coast with said flanges 7 to grip, or clamp, the lace therebetween. The bar 15 is next swung down to position the ball member 17 between the ball members 8 and thereby cam the member 2 into tight clamping relation to the flanges 7. To release the lace 11, it is merely necessary to swing the ball member 17 upward from between the ball members 8 and pull the member 2 out of the flanges 7 clear thereof, whereupon the lace 11 may be manipulated out of the flanges 7 if desired. Preferably the head 13 of the stud 12 frictionally engages the back side of the plate 3 so that said member 2 is frictionally held in upwardly adjusted position.

It will be understood that the use and operation of the modified form of the invention shown in Figure 7 is the same as that described with reference to the preferred embodiment.

The foregoing will, it is believed, suffice to impart a clear understanding of my invention without further explanation.

Manifestly the invention as described, is susceptible of modification in other respects than as disclosed herein without departing from the inventive concept and right is herein reserved

to such other modifications as fall within the scope of the subjoined claims.

What I claim is:

1. In a shoelace fastener, a plate-like member adapted to be attached to the tongue of the shoe to extend downwardly from the top edge of the tongue, said member having a bendable extension for clampingly engaging said tongue and a pair of laterally spaced flanges of angular form in cross-section extending along opposite side edges thereof, respectively, in downwardly convergent relation and providing opposed clamping jaws for receiving the ends of the shoelace therein, a wedge-shaped clamping member slidably mounted on said plate for movement into and out of said flanges, respectively, to clamp said ends against said flanges and release the same, said wedge-shaped member being movable from said flanges into a position clear of the same to facilitate locating the ends of the laces in said flanges, and clasp devices on said fixed and wedge-shaped members, respectively, coacting to cam said wedge-shaped member inwardly of said flanges and to couple said members together.

2. In a shoelace fastener, a plate-like member adapted to be attached to the tongue of the shoe to extend downwardly from the top edge of the tongue, said member having a bendable extension for clampingly engaging said tongue and a pair of laterally spaced flanges of angular form in cross-section extending along opposite side edges thereof, respectively, in downwardly convergent relation and providing opposed clamping jaws for receiving the ends of the shoelace therein, a wedge-shaped clamping member slidably mounted on said plate for movement into and out of said flanges, respectively, to clamp said ends against said flanges and release the same, said wedge-shaped member being movable from said flanges into a position clear of the same to facilitate locating the ends of the laces in said flanges, and clasp devices on said fixed and wedge-shaped members, respectively, coacting to cam said wedge-shaped member inwardly of said flanges and to couple said members together said devices comprising a pair of ball members fast on said flanges, respectively, and a ball member pivotally mounted on said wedge-shaped member for swinging movement into engagement with the ball members of said pair.

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