Dec. 1, 1931. O. I. HOPPE ET AL 1,834,401

SHOE BUCKLE OR FASTENER

Filed May 13, 1927

Fig. 1.

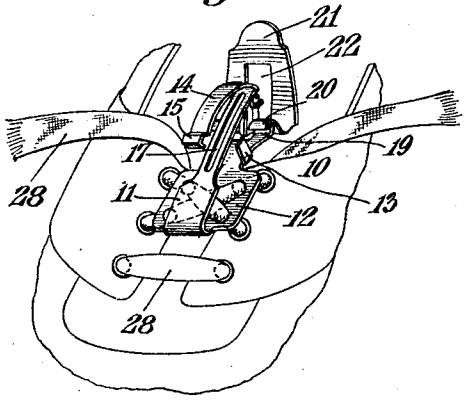


Fig. 8

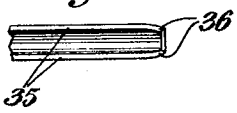


Fig. 7.

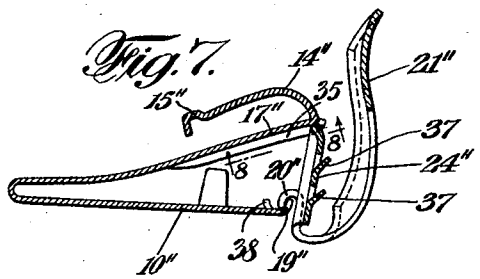


Fig. 2.

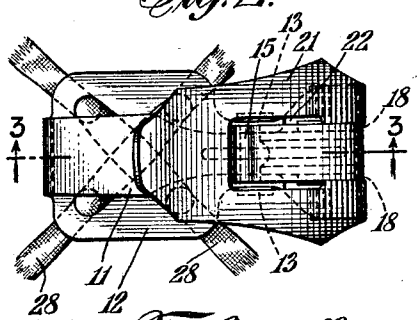


Fig. 5.

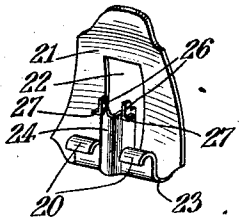


Fig. 3.

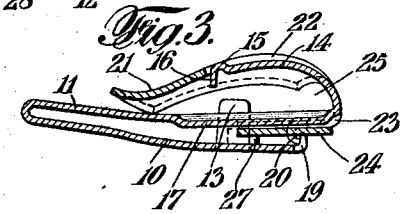


Fig. 4.

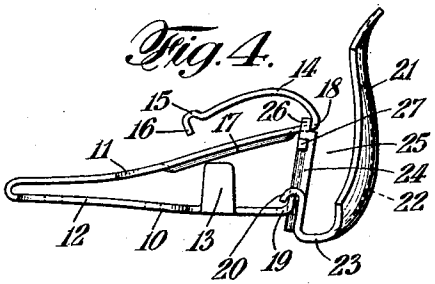
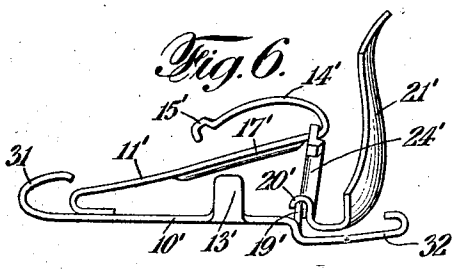


Fig. 6.



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UNITED STATES PATENT OFFICE

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SHOE BUCKLE OR FASTENER

Application filed May 13, 1927. Serial No. 191,014.

This invention relates to a device by which the ends of shoe laces may be grasped to keep the same in place, and at the same time, the device serves as an ornament for a shoe. The device can be readily applied and detached; is securely held in place, and is simple to construct and operate so that repairs or replacements are not apt to be needed. The device serves not only as an ornament for the shoe, but also enables the shoe laces to be kept in place, thus eliminating the necessity of tying the same. The invention will be understood from the description in connection with the accompanying drawings, in which Fig. 1 is a perspective view showing the device in place on a shoe upper; Fig. 2 is a plan view of an embodiment of the invention; Fig. 3 is a section along the line 3—3 of Fig. 2; Fig. 4 is a side view of the device; Fig. 5 is a perspective view of one of the details; Fig. 6 is a side view of a modification; Fig. 7 is a section similar to Fig. 4 through another modification; and Fig. 8 is a plan view of one of the details broken away.

In the drawings, reference character 10 indicates a base that is preferably made of metal. A spring 11 is attached to one end of the base 10 or made integral therewith, in such a manner that the tendency is for a portion of the sides of the spring and base to rest against each other with firm contact. The base 10 may be widened near the end where the spring is attached, as shown at 12, and the widened portion provided with a hole or holes through which the shoe lace may be passed to retain the device in position on the shoe, or the base may be fastened to the shoe upper or tongue by rivets. Upstanding lugs 13 that may be integral with the base 10 are provided on each side thereof between which lugs the spring 11 moves. These lugs also limit the distance the shoe laces pass between the base and spring which will be more clearly understood as the description proceeds. The spring 11 is provided at its end opposite that at which it is attached to the base 10, with a reverse bend portion 14. The bend portion 14 has a shoulder 15 near the end that is bent downwardly, as shown at 16. The portion 17 of the spring 11 is made narrower than the reverse bend 14 so that shoulders 18 are left on each side of the portion 17 to operate as stops for a spring operating tongue to be described below. The portion 17 is preferably rounded on its lower side to fit a correspondingly shaped channel in the tongue. The base 10 and spring 11 constitute a somewhat U-shaped member, and the free end of the spring extends slightly farther outwardly than the free end of the base 10. The free end of the base 10 is bifurcated and provided with a pair of upwardly extending lugs 19 to serve as fulcrums or pivots for a spring operating member.

A U-shaped pivot member or spring operating member with hooks 20 is pivoted upon the lugs 19 and the front face 21 thereof is somewhat oval in shape, having a concave underside and a convex outside. The front face 21 of the pivot member may be decorated or ornamented in any appropriate manner to enhance the appearance of the article, and is provided with a wide longitudinal opening 22, through which the reverse bend 14 of the spring 11 projects when the device is in the closed position, as indicated most clearly in Fig. 3. A tongue 24, constituting one leg of the U-shaped pivot member is located between the hooks 20 and a space 25 is left between the tongue 24 and the front face 21 to accommodate the shoe laces. The upper end of the tongue 24 is provided with spaced projections 26, between which the narrow portion 17 of the spring 11 passes. The side of the tongue 24 is provided with a channel in which the rounded part of the portion 17 of the spring fits when the device is in the closed position. Lugs 27 are provided upon opposite sides of the tongue 24 near the upper end thereof.

The operation is as follows: The base 10 is attached to the shoe lace 28 by threading the lace through the holes in the portion 12, as indicated most clearly in Figs. 1 and 2, or the device may be slipped into the space between the shoe lace and the tongue of the shoe before the lace is fastened, or may be riveted to the shoe upper or tongue. The de-

vice is put in place in the open position, as shown in Fig. 4, and the loose ends of the lace are laid in the space 25 with folds, if desired, to simulate a bow knot, and the pivot member is turned anticlockwise by pressing on the face 21 thereof, so as to cause the same to assume the closed position, as shown in Fig. 3. The upper end of the tongue 24 slides along the lower side of the portion 17 of the spring 11, being guided by the extensions 26, and the spring 11 causes the pivot member to snap downwardly after the dead center has been passed. At the same time, the portions of the shoe laces in the space 25 are carried into the space between the ends of the spring 11 and the base 10, and are securely clamped and held therebetween when the device closes. The lugs 27 on the tongue 24 contacting with the edges of the lugs 13 on the base 10, prevent the pivot member from becoming accidentally displaced, and also prevent the shoe laces from being carried too far inward. The pivot member can, however, be taken off and a different one substituted merely by pulling the ends of the spring and base member away from each other. When it is desired to unfasten the shoe, it is only necessary to pull upwardly upon the end of the face member 21 whereupon the tongue 24 will lift the spring and release the shoe lace. The device is kept in the open position when the lugs 26 on the tongue 24 rest against the shoulders 18 on the spring 11.

Instead of placing the ends of the shoe laces in the space 25, as just described, the ends may simply be laid across the reverse bend portion 14 and folded, if desired, after which the pivot member is turned to the closed position and the laces are thereby kept in place. The slot 22 is made slightly wider than the portion 14, so that the pivot member can be turned to the closed position even with the shoe laces resting on the reverse bend portion 14.

In the modification shown in Fig. 6, the same parts are designated by the same reference characters with primes, so that it will not be necessary to describe the same again. In this modification, the spring 11′ is attached to the base 10′ by soldering, or the like, instead of being made integral therewith. The base 10′ is provided at opposite ends thereof with hooks 31 and 32, respectively, which enables the device to be hooked onto the transverse portions of a shoe lace extending between the eyelets, and the ends of the shoe lace can be kept in position, without requiring the same to be tied, as above described in connection with the other embodiment of the invention.

In the modification shown in Figs. 7 and 8, the parts similar to those already described are referred to by the same reference characters with double primes. In this modification, the portion 17″ is made with depending flanges 35 along its edges, thereby making a trough or groove in which the upper end of the tongue 24″ slides. The ends of the flanges 35 are turned inwardly a slight distance, as shown at 36, to limit the travel of the end of the tongue 24″. The end of the tongue 24″ is rounded, as indicated, so that the cooperation of the flanges 35 and the rounded end of the tongue 24″ will keep the shoe laces from getting caught when the device is opened for removing the laces. The tongue of the pivot member may be provided with pins or projections 37 that may be made by striking up the metal to stick into the shoe laces, thus preventing the same from slipping when the device is closed. Instead of having shoulders upon the tongues to contact with lugs on the base, the base 10″ may be provided with projections 38, with which the hooks 20″ contact in the closed position to prevent the pivot piece from moving longitudinally with respect to the base when the device is closed.

We claim:

1. A shoe buckle comprising a base member, a spring portion connected to said base member, and means comprising two substantially parallel extensions pivoted on said base member and cooperating with said spring portion to open the same.

2. A shoe buckle comprising a base member provided with means to enable it to be retained in place by shoe laces, a spring portion connected to said base member, and means pivoted on said base member and cooperating with said spring portion to open the same.

3. A shoe buckle comprising a base member having a spring portion, and means pivoted on said base member and cooperating with said spring portion to open the same, said base member being provided with holes for the passage of shoe laces therethrough.

4. A shoe buckle comprising a base member having a spring portion, and means pivoted on said base member and cooperating with said spring portion to open the same, said means extending over said spring portion in its closed position.

5. A shoe buckle comprising a base member having a spring portion with a reverse bend, and means pivoted on said base member and cooperating with said spring portion to open the same and being limited in its opening position by said reverse bend.

6. A shoe buckle comprising a base member having a spring portion with a stop on said spring portion, and means pivoted on said base member and cooperating with said spring portion to open the same and adapted to contact with said stop to limit its opening position.

7. A shoe buckle comprising a base member having a spring portion, and means having two spaced parts pivoted on said base

member at a point on said base member beyond which said spring portion extends and cooperating with said spring portion to open the same.

8. In a shoe fastener, a U-shaped member, and a U-shaped operating member having substantially parallel legs, for said first-named member, said operating member being pivoted to one of the legs of the first mentioned member near the end of said leg, one of the legs of said U-shaped operating member lying entirely between the legs of said first named U-shaped member.

9. In a shoe fastener, a U-shaped member, and a U-shaped operating member for said first-named member having substantially parallel legs, said operating member being pivoted to one of the legs of the first mentioned member near the end of said leg, one of the legs of said operating member being located between the legs of said U-shaped member.

10. In a shoe fastener, a U-shaped member, and a U-shaped operating member for said first-named member, said operating member being pivoted to one of the legs of the first mentioned member near the end of said leg, one of the legs of said operating member being located between the legs of said U-shaped member and the other overlapping the legs of said U-shaped member in the closed position.

11. A shoe buckle comprising a base and a spring portion adapted to grip a shoe lace between said base and spring portion, means connected to said base and spring portion for introducing a shoe lace between said base and spring portion, and means to prevent said shoe lace from getting caught while said buckle is being opened.

12. A clasp comprising in combination, a base member, an intermediate member secured adjacent one end to said base member whereby a solid material may be entered between said members, at least one of said members being resilient and having tension towards the other, and a third member pivotally connected to one of said members at a shorter distance from the point where said intermediate member is secured to said base member than the length of said intermediate member and having means for prying apart the two first-named members for insertion or removal of the material to be clamped.

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