

Dec. 31, 1968

C. M. TYRRELL, SR., ETAL

3,418,733

SHOELACE ANCHOR

Filed June 19, 1964

FIG. 1.

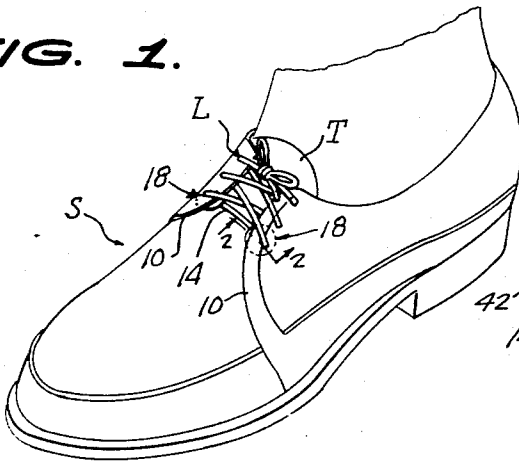


FIG. 2.

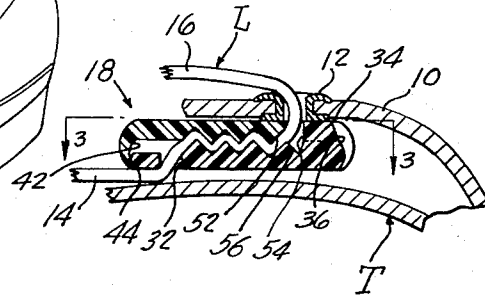


FIG. 3.

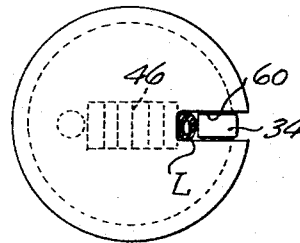


FIG. 4.

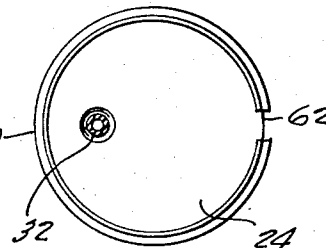


FIG. 5.

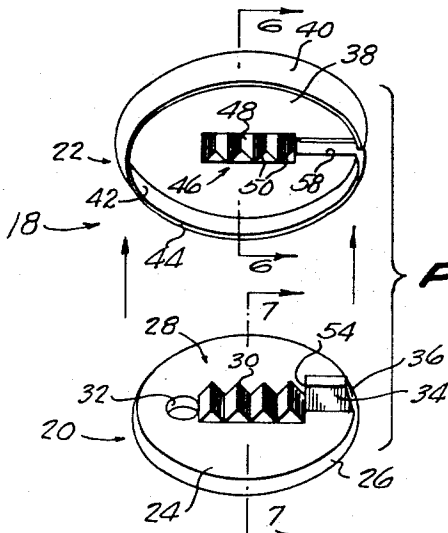


FIG. 6.

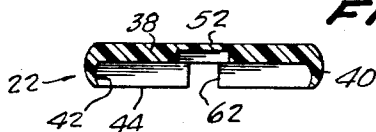
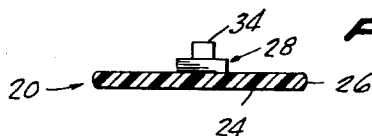


FIG. 7.



INVENTORS.

CYRIL M. TYRRELL, SR.

CYRIL M. TYRRELL, JR.

BY

McMorris, Berman & Davidson
ATTORNEYS.

1

3,418,733

SHOELACE ANCHOR

Cyril M. Tyrrell, Sr., and Cyril M. Tyrrell, Jr., both of
2302 Oak Knoll Drive, Santa Rosa, Calif. 95401

Filed June 19, 1964, Ser. No. 376,434

7 Claims. (Cl. 36—50)

This invention relates to a shoe lace detent or anchor.

The primary object of the invention is the provision of an efficient and easily used device of the kind indicated, which when installed, either singly or in pairs on a shoe lace between a shoe vamp and the underlying shoe tongue, prevents the lace from being shifted lengthwise, relative to the vamp, either by the stresses of foot movements or by repeated lacings of the shoe, which otherwise undesirably produce uneven lengths of lace, at either side of the vamp, which can only be corrected by partially or completely relacing the shoe.

Another object of the invention is the provision of a simple, two-section device of the character indicated above, wherein the sections are designed to be snapped together, only when correctly aligned with each other in shoe lace gripping relationship, whereby assembling of the sections together on a shoe lace is facilitated, the lace gripping effectiveness is enhanced, and the correct positioning of the device, between shoe vamp and shoe tongue, and in registry with a lower vamp eyelet is rendered easy.

In the drawings:

FIGURE 1 is a perspective view of a blucher type shoe showing, in phantom lines, devices of the present invention installed and anchoring the lace of the shoe;

FIGURE 2 is an enlarged fragmentary section taken on the line 2—2 of FIGURE 1;

FIGURE 3 is a horizontal section taken on the line 3—3 of FIGURE 2;

FIGURE 4 is a bottom plan view of the device;

FIGURE 5 is an exploded perspective view of the device, showing its sections separated and aligned for assembly thereof; and

FIGURES 6 and 7 are transverse sections, taken on the lines 6—6 and 7—7, respectively, of FIGURE 5.

Referring in detail to the drawings, the illustrated shoe S has opposed and separated vamp sections 10, having lowermost shoe lace receiving eyelets 12, through which the ends of a middle portion 14 of a shoe lace L are passed upwardly, before the otherwise free flights 16 of the lace are successively passed through upper eyelets for lacing and tying the shoe. The shoe has a tongue T which speedily underlies the vamp sections 10.

While the use of a single device 18 of the present invention may sometimes be sufficient to prevent the objectionable shifting of the lace L, the use of a pair thereof is effective under all ordinary service conditions.

Each of the devices 18 consists of a lower section 20 and an upper section 22, which can be made of semi-rigid metal or plastic material, and are to be as thin as feasible in order to eliminate bulk.

The lower section 20 comprises a flat circular disc 24, substantially larger in diameter than a lace eyelet 12, and having a rounded peripheral edge 26. On a diameter of the disc 24, a diametrically elongated, centered and upstanding lower lace-gripping jaw 28 is formed, which is equally spaced, at its ends, from the disc edge. The lower jaw 28 is constituted by similar and adjacent triangular teeth 30. A lace passing hole 32 is formed through the disc 24, at one end of the jaw 28. At the other end of this jaw an upstanding aligning lug 34 is formed, which, as shown in FIGURES 2 and 5, reaches above the jaw 28 and extends to the edge of the disc. The lug 34 is narrower than and is centered relative to the jaw 28, and

2

its outer edge is angled inwardly and upwardly, as indicated at 36.

The upper section 22 is of circular pan-shape and has a flat top wall 38, and a peripheral sidewall 40, the latter having a concave inner surface 42. The top wall 38 is of substantially the same diameter as the disc 24 of the lower section 20, and the concave surface 42 of the sidewall 40 is slightly larger in diameter than the disc 24. The sidewall 40 tapers downwardly in cross section to its lower edge 44, which is smaller in diameter than the disc 24. With this arrangement, the upper section 22 can be and is designed to be retainably snapped onto the lower section 20, so that the concave inner surface 42 of the upper section sidewall 40 grips the curved or convex peripheral edge 26 of the lower section, and the lower edge 44 of the sidewall 40 bears retainably against the bottom of the peripheral edge 26. The sections are adapted to be separated by pulling them apart.

For cooperation with the lower jaw 28 of the lower section 20, the top wall 38 of the upper section 22 is formed, in its underside, with an upper jaw 46 located on a diameter thereof, and constituted by adjacent V-shaped notches 48. As shown in FIGURE 2, the notches 48 are proportioned and positioned to receive the teeth 30 of the lower jaw 28. In the arrangement illustrated, the notches 48 indent the top wall 38, of the upper section, and between them define triangular teeth 50, similar to the teeth of the lower jaw 28, but somewhat smaller in cross section.

The angled side 52 of a tooth 50, at one end of the upper jaw 46, is spaced longitudinally from the inner edge 54 of the lug 34 of the lower section 20, when the sections are assembled, so that a passage 56 is provided between the tooth side 52 and the lug 34, for the associated lace L. The top wall 38 and the sidewall 40 are formed with a continuous aligning slot 58, which extends from the tooth side 52 and opens to the lower edge 44 of the sidewall 40. The slot 58 is narrower than and is centered, relative to the upper jaw 46. The horizontal portion 60 of the slot 58 is designed to receive the upper end of the aligning lug 34, only in a properly aligned condition of the sections, so that the sections cannot be incorrectly assembled, with the lower jaws thereof out of aligned lace-gripping relationship. The vertical portion 62 of the slot 58 serves to afford the upper section sidewall 40 sufficient flexibility to enable it to be easily snapped over the edge of the lower section and as an entrance for the shoe lace into the horizontal portion of the slot.

In use, a shoe lace L having been passed upwardly through the lower eyelets 12 of the vamp sections 10 of the shoe S, and its free flights 16 drawn out to equal lengths, so as to define a centered middle portion 14, underlying the vamp sections 10, the lace is slacked off, at one vamp section. The upper section 22 is then positioned against the underside of the related vamp section 10, with its slot 58 in line with the related eyelet 12, and moved outwardly relative to the inner edge of the vamp section, so as to cause the lace to be received in the slot 58 and bear against the outer side 52 of the jaw of the upper section 22.

The lower section 20, through whose hole 32 the lace L had been passed upwardly, prior to threading the lace upwardly through the eyelet 12, is positioned beneath the part of the lace which underlies the upper section 22. The lower section 20 is then moved, relative to the upper section until its aligning lug 34 passes into the slot 58 of the upper section and the lower section jaw 28 is beneath and is aligned with the upper section jaw 46, whereupon the sections are forcibly pressed together so as to snap the upper section over the lower section and clamp the lace between the jaws.

What is claimed is:

1. In combination, a shoe having a tongue and laterally spaced vamp sections formed with lace receiving eyelets including lowermost eyelets, a lace having free flights passed upwardly through the lowermost eyelets and a middle portion extending across and above the tongue and beneath the vamp portions, at least one lace anchor applied to said middle portion and secured by engagement with the underside of one vamp section, said anchor comprising a thin, flat lower section having a peripheral edge and lying in a single plane, a thin, upper pan-shaped section having a top wall and a flexible shallow sidewall of a height substantially equal to the thickness of said lower section, said sidewall being adapted to be snapped over and grip the peripheral edge of the lower section, said lower section having a jaw on its upper surface, said upper section having a complementary jaw on the undersurface of its top wall, one of said jaws being recessed within its supporting surface and said jaws being normally aligned and registered to interfit with each other for gripping a lace therebetween when the sections are assembled.

2. A device of the character described, comprising a thin, flat lower section having a peripheral edge and lying in a single plane, a thin upper pan-shaped section having a top wall and a flexible shallow sidewall of a height substantially equal to the thickness of said lower section, said sidewall being adapted to be snapped over and grip the peripheral edge of the lower section, said lower section having a jaw on its upper surface, said upper section having a complementary jaw on the undersurface of its top wall, one of said jaws being recessed within its supporting surface and said jaws being normally aligned and registered to interfit with each other for gripping a lace therebetween when the sections are assembled, whereby said device is of such thinness as being capable of insertion under a shoe vamp to anchor a shoe lace.

3. A device according to claim 2, wherein said lower section is formed with a lace passing hole at one end of its jaw, and said upper section is formed in its top wall and its sidewall with a lace passing slot.

4. A device according to claim 2, wherein said lower

section is formed with a lace passing hole at one end of its jaw, and the top wall and the sidewall of the upper section are formed at one end of its jaw with a lace passing slot, said slot opening to the lower edge of the sidewall.

5. A device according to claim 2, wherein said lower section is formed with an upstanding aligning lug, and the top wall and the sidewall of the upper section are formed with a diametrical aligning slot adapted to receive the aligning lug only when the sections are brought together with their jaws in alignment with each other.

6. A device of the character described, comprising a flat lower section having a peripheral edge, an upper pan-shaped section having a top wall and a flexible sidewall, said sidewall being adapted to be snapped over and grip the peripheral edge of the lower section, said lower section having a jaw on its upper surface, said upper section having a complementary jaw on the undersurface of its top wall, said jaws being normally aligned and registered with each other for gripping a lace therebetween when the sections are assembled, said lower section being formed with an upstanding aligning lug, and the top wall and the sidewall of the upper section being formed with an aligning slot adapted to receive the aligning lug only when the sections are brought together with their jaws in alignment with each other.

7. A device according to claim 6 wherein said aligning lug and said aligning slot are located at the ends of and in line with the jaws of the sections.

References Cited

UNITED STATES PATENTS

1,140,442	6/1915	Cardy	24—143,4
2,022,554	11/1935	Williams	36—54
3,074,135	1/1963	Brodowski	24—117

JORDAN FRANKLIN, *Primary Examiner*.

H. HAMPTON HUNTER, *Assistant Examiner*.

U.S. Cl. X.R.

24—117, 143