[54]	SHO	DE A	ND FASTENING THEREFOR		
[72]	Inve	ntor:	Beth Levine, New York, N.Y.		
[73]	Assig	gnee:	Herbert Levine, Inc., New York, N.Y.		
[22]	Filed	i:	June 25, 1971		
[21]	Appl	l. No.:	156,905		
[52]	U.S.	Cl	36/11.		
			A43b 3/1		
[58] Field of Search					
			24/140; D2/287, 292; 2/240, 311, 33		
[56]			References Cited		
		U	NITED STATES PATENTS		
3,455	,037	7/19	69 Vlas et al36/11		
3.281	.624	10/19	66 Patchen		

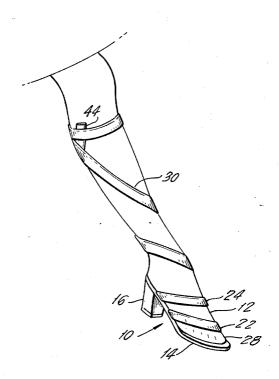
1,697,270	1/1929	Fischer	2/311
2,136,084	11/1938	Perugia	36/11.5
2,469,708	5/1949	Alexander	36/11.5
2,862,311	12/1958	Ellis	36/11.5
2,680,309	6/1954	Peterson	36/11.5
3,464,125	9/1969	Conway	36/2.5 R
3,482,335	12/1969	Ornsteen	36/1

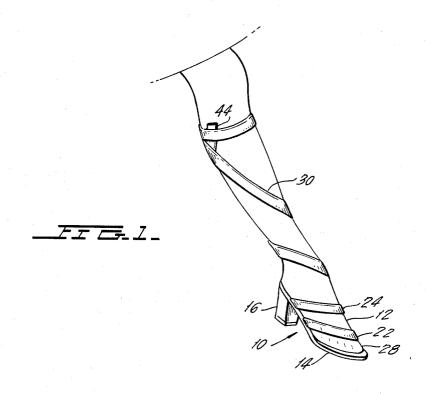
Primary Examiner—Patrick D. Lawson Attorney—Sidney G. Faber et al.

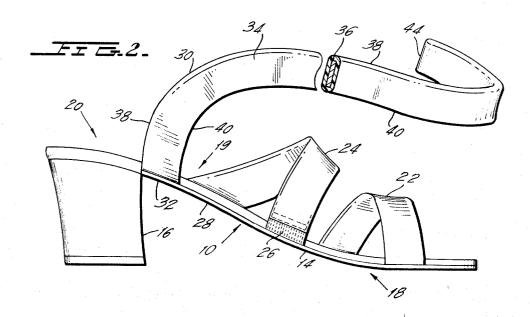
## [57] ABSTRACT

A shoe including means for engaging the forward portion of the foot and including a single, elongated strap extending out from the inside of the shoe at the sole, for being wrapped around the leg of the wearer a number of times, the strap being elastic to stretch as the wearer's leg moves.

8 Claims, 2 Drawing Figures







INVENTOR. BETH LEVINE

BY OstrolerH, Faber, Gerb & Soffen ATTORNEYS

## SHOE AND FASTENING THEREFOR

The present invention relates to a shoe and particularly to a means for fastening the shoe on the leg of the wearer. Current fashion dictates that the shoe of the invention be worn by women. However, the invention could be adaptable for men's 5

As a wearer of a shoe walks, the rear portion of his foot at the heel usually twists and slides inward toward the other foot and the front portion of his foot correspondingly twists or slides outward. A shoe includes means for holding it on the 10 foot. Usually, this includes a covering secured to the sole of the shoe at the forward, i.e., the vamp, or middle, i.e., the shank, of the shoe. This covering passes over the forward portion of the foot and the covering prevents the front of the foot from sliding outward.

A shoe frequently includes means to prevent the rear of the foot from sliding inward. This could be a means which secures the rear portion, i.e., the quarter, of the shoe to the wearer's foot, e.g., the quarter wraps about the rear of the foot. In what are known as open back shoes, the quarter does not wrap 20 about or hold the shoe on the foot. Other means for securing the quarter of the shoe can be provided. For example, it is known to provide a plurality of straps to be wrapped about the wearer's leg. For style reasons, however, and in accordance with the present invention, it has been found desirable to reduce the number of straps to only one.

In the present invention, for the first time, a single strap is provided to securely hold the shoe to the wearer's foot. The shoe, which may be open backed, includes a conventional means for holding the vamp on the wearer's foot. A separate single strap is attached to the shoe, preferably to the foot support of the shoe, e.g., the sole, the insole or between the sole and insole, etc. and extends out from the foot support at the inside of the shoe at a location near the junction between the 35 shank and the quarter. The strap is sufficiently elongated to be wrapped at least once about the leg of the wearer, but is preferably long enough to be wrapped around the leg a number of times for style reasons and for adequate securement of the shoe. The strap would be wrapped in a spiral up 40 the leg. The strap holds the rear of the foot from sliding inward

In addition, as the wearer's leg bends, the leg muscles flex and the foot bends with respect to the leg, thereby periodically applying stretching stresses on the strap. The strap is elastic to 45permit it to stretch and contract as needed and to ensure that the strap will remain secured about the wearer'leg, without an additional fastening being needed at the end of the strap to hold it in place.

legs is that it cuts into the leg and causes discomfort. Consequently, the strap in accordance with the invention has sufficient width to distribute the pressure over a wider area, and its edges are preferably relatively thick and rounded so as to reduce cutting into the wearer's leg.

Accordingly, it is a primary object of the present invention to provide a means, which is part of a shoe, for securing the shoe to the leg of the wearer.

It is another object of the present invention to provide a means for holding the rear portion of the wearer's foot in 60 place in the shoe.

It is a further object of the present invention to provide a means for being wrapped about the wearer's leg, which secures the shoe and minimizes the wearer's discomfort.

It is another object of the present invention to realize the 65 foregoing objects through the use of only one elongated strap.

These and other objects of the present invention will become apparent from the following description of the accompanying drawings, in which:

cordance with the invention; and

FIG. 2 is a side view of a left shoe in accordance with the in-

Turning to the drawings, shoe 10 is placed on the foot 12 of the wearer. Shoe 10 includes sole 14 and heel 16, which 75

together support the foot. The shoe has a forward portion or vamp 18, a central portion or shank 19 and a rearward portion or quarter 20.

For holding shoe 10 on the forward portion of the wearer's foot, there are provided two spaced apart non-elastic straps 22, 24, which are anchored to the opposite sides of sole 14, at or in the vicinity of the vamp of the shoe. One end of strap is anchored at the shank. Various other means which are anchored at the vamp or shank, may be used to hold the shoe on the forward portion of the foot. Integrated into strap 24 is short elastic strip 26, which permits slight stretching of strap 24 as the wearer's foot bends forward during walking.

Shoe 10 is open-backed, having no support at quarter 20 to extend up from the sole to engage the wearer's foot. The shoe also has an open shank. The invention is equally adaptable for use with a closed shank or quarter.

Strap 30 holds quarter 20 and shank 19 and, therefore, the entire shoe securely on the wearer's foot. Strap 30 is attached at sole 14 and extends out from the sole along the inside edge of the shoe, i.e., the edge facing toward the other foot when the shoes are worn, immediately before heel 16 in the vicinity of the junction of shank 19 and quarter 20. The precise location along the edge of the shoe is not critical, so long as adequate wrapping of the strap, as described below, can be obtained and so long as the strap is far enough back so that its point of attachment 32 to the shoe will block the wearer's foot from sliding off the shoe while she is walking.

Strap 30 is sufficiently elastic to stretch as the wearer's foot and leg bend and her muscles flex during walking, but is not so easily stretched as to permit the shoe to separate from the wearer's foot as she walks and her foot bends. For example, strap 30 is covered with a layer of elastic material, e.g., a suitable leather or vinvl or other fabric with elastic properties, and has an interior support layer 36 of support material, e.g., buckram, or the like, which gives the strap rigidity to maintain its shape and limits its elasticity.

Strap 30 has a substantial width between its side edges 38 and 40. The strap is wider than conventional thin laces and is sufficiently wide to distribute the pressure exerted against the wearer's leg over a broader surface area, thereby minimizing discomfort. The strap has a few layers of thickness, shown where strap 30 is broken open. This makes edges 38, 40 thick. In addition, edges 38 and 40 of the strap are rounded to eliminate any sharp edges. This increased thickness and roundedness at the edges reduces discomfort from the strap from cutting into the wearer's leg.

As shown in FIG. 1, strap 30 is of sufficient length to be wrapped about the wearer's leg in spiralling fashion at least One of the problems with a strap wrapped about a wearer's 50 once and preferably a number of times. At the top, a fastening means may be provided in the vicinity of the free end 44 of strap 30. Alternatively, the portion of the strap in the vicinity of the free end may be passed under a prior winding of the strap. Because strap 30 is elastic, the windings of the strap are tight against the wearer's leg and hold the free end portion securely in place, preventing the free end 44 from slipping out.

> While strap 30 terminates beneath the wearer's knee, the length of the strap is a matter of choice and it may be increased to wrap about the wearer's thigh, for example. The number of windings about the wearer's leg depends upon the length of the strap, the thickness of the leg and the manner in which the wearer wraps the strap about the leg. At the least, however, the strap is sufficiently long to make a single complete winding about the wearer's leg.

> With the single strap of the present invention, a comfortable, easily donned shoe is provided, which securely remains in place on the foot and which causes minimal discomfort to the

Although this invention has been described with respect to FIG. 1 is a view of a wearer's right leg carrying a shoe in ac- 70 the embodiments of the apparatus of the invention, it should be understood that many variations and modifications will now be obvious to those skilled in the art, and it is preferred, therefore, that the scope of the invention not be limited by the specific disclosure herein, but only by the appended claims.

I claim:

1. In a shoe comprising,

- a vamp portion, a shank portion and a quarter portion, located, respectively, at front, middle and rear of said shoe:
- a wearer's foot support secured to all said portions of said 5 shoe; means secured to said foot support for engaging the forward portion of the wearer's foot;

the improvement comprising,

- a single strap for being wrapped about the wearer's leg above the foot; said strap being connected with said foot support near the junction of said shoe shank and quarter portions; said strap being sufficiently elongated to be wrapped in spiralling fashion at least once about the wearer's leg; said strap having a free end and a portion of the strap in the vicinity of said end; said strap being adaptable such that said vicinity of its said free end may be in engagement with a portion of said strap further down along said strap for securing said strap about the wearer's leg.
- 2. In the shoe of claim 1, the improvement further compris- 20 ing,
  - said shoe having an inside and an outside adapted to normally face, respectively, toward and away from the other foot when said shoe is worn; said strap being connected with said foot support to extend out from said shoe inside. 25
  - 3. The shoe of claim 2, wherein said shoe is open backed,

having no rear cover for the foot rearward portion, which cover would extend up from said shoe support.

- 4. In the shoe of claim 1, the improvement further comprising,
  - said strap being of increased width so as to minimize its cutting into the wearer's leg.
  - 5. In the shoe of claim 1, the improvement further compris-

said strap being elastic.

- In the shoe of claim 5, the improvement further comprising,
- said strap being of increased width so as to minimize its cutting into the wearer's leg.
- 7. In the shoe of claim 6, the improvement further comprising,
  - said strap having side edges extending therealong; said side edges being of such thickness as to minimize the strap's cutting into the wearer's leg.
- 8 In the shoe of claim 6, the improvement further comprising,
  - said shoe having an inside and an outside adapted to normally face, respectively, toward and away from the other foot when said shoe is worn; said strap being connected with said foot support to extend out from said shoe inside.

30

35

40

45

50

55

60

65

70