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CLOSURE MEANS FOR ARTICLE OF FOOTWEAR AND METHOD OF MAKING SAME

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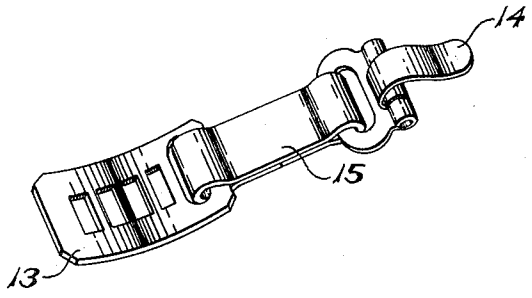


Fig-1

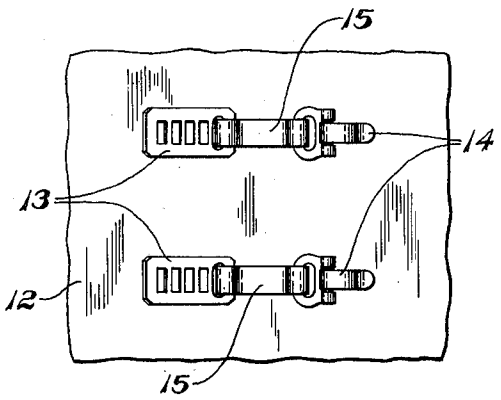


Fig-2

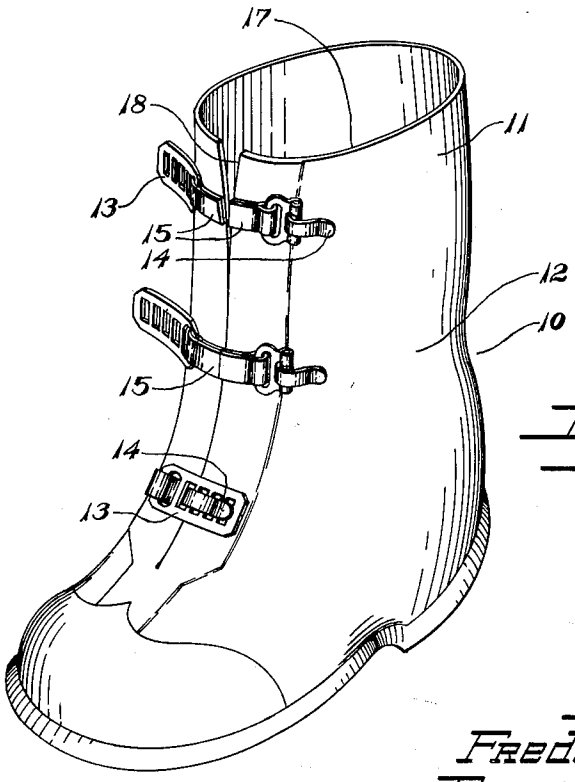


Fig-3

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CLOSURE MEANS FOR ARTICLE OF FOOTWEAR AND METHOD OF MAKING SAME

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6 Claims. (Cl. 36—7.3)

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This invention relates to an article of footwear and the method of making same, and is particularly concerned with an article of footwear of the overshoe or gaiter type having ladders and buckles secured thereto by means of concealed stays and the method for making such article.

Ladders and buckles are commonly used as closure means for overshoes and similar articles of footwear which have a divided uppers. It is necessary in making overshoes having ladders and bluckles as closure means to provide suitable means for securing the ladder and buckle components to the uppers of the article. The securing means commonly employed are paired stays which are separately secured to the outer face of the uppers at either side of the vent opening, with the respective ladder and buckle members being joined to the ends of the stays nearest the vent opening. The stays extending outwardly from the ladder buckle proper are unsightly and it is necessary to provide a shield over the outermost portion of each stay to partially conceal the stay and to keep the stay from being torn loose from the uppers. In making an overshoe or the like, the securing of the closure assembly is thus a tedious operation involving a number of operational steps.

It is an object of this invention to provide a construction for an overshoe, gaiter, or the like, wherein the stay members securing the ladder and buckle to the article are effectively concealed and shielded by the closure assembly itself when the ladder and buckle are in fastened relation. It is a further object of the invention to provide a unitary closure assembly which can be secured to the uppers in a single operation so as to greatly simplify the method of constructing the article of footwear. Another object is to provide a method of securing buckles and ladders to overshoes and the like which will ensure proper alignment of the mating elements. Other objects will be apparent from the description which follows.

The article of footwear embodying this invention is constructed by building an overshoe or the like including an undivided uppers, securing to the outer face of the uppers a closure assembly which consists of a ladder and a buckle secured to the opposite ends of a strap-like stay member, and thereafter slitting the uppers and stay member so that the uppers is divided along a vertical zone with half the stay member being disposed on each side of the slit adapted to lie under and be concealed by the closure assembly when the ladder and buckle are fastened. The front of the uppers may be slit before the closure assembly is applied if desired, the edges of the slit being held together during application of the stays and the stays being subsequently separately cut. It is obviously more expedient, however, to apply the unitary closure assembly previous to the slitting step so that both the upper and the stays of the closure assembly may be cut simultaneously.

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The invention is best described with reference to a preferred embodiment as shown in the accompanying drawings.

Of the drawings:

Fig. 1 is a perspective view of the unitary closure assembly preferably employed in practicing the invention;

Fig. 2 is a fragmentary perspective view of a portion of an overshoe uppers with a plurality of the closure assemblies secured to the outer face of the uppers during the building operation; and

Fig. 3 is a perspective view of a finished overshoe after the uppers has been slit illustrating the relative positions of the component parts of the closure assembly.

In constructing a rubber overshoe 10 which constitutes a preferred embodiment of the invention, an uppers 11 is built in conventional manner, the uppers 11 including an ankle-encircling portion 12 which initially is undivided and comprises a vulcanizable rubber composition either alone or associated with textile fabric reinforcement.

A closure assembly (Fig. 1) is provided consisting of a ladder 13 and buckle 14 secured to opposite ends of a strap-like stay 15. The ladder and buckle are preferably of metal and the stay of rubberized fabric. The assembly is made by threading the ends of the stay strap through the slotted ends of the ladder and buckle, respectively; the end portions of the stay are then folded back upon the stay proper and secured in this position by cementing or in any suitable manner leaving a loop at each end of the stay in which the ladder and buckle are free to move into fastening relation. The distance between the loops of the stay is substantially equal to the length of the ladder member of the assembly so that the ladder member overlies and conceals the stay when the ladder and buckle are in the closed position.

The assembly is positioned on a frontal zone of the ankle-encircling portion 12 with the stay 15 extending generally horizontally across the zone. The stay 15 is secured to the outer face of the uppers 11 preferably by means of a suitable rubber cement. A plurality of other such

assemblies may be positioned on the uppers in like manner in spaced relation along the vertical frontal zone.

The uppers 11 is then slit from the upper margin 17 thereof downwardly through the vertical frontal zone on which the closure assemblies are positioned. The stays are cut at the same time near their midpoint to provide paired stay members extending outwardly from the margins of the vertical slit 18 with the ladder 13 and buckle 14 being positioned respectively on opposite sides of slit 18 secured to the outermost ends of the paired stays. The ladder and buckle are thus adapted to engage in fastening relation to hold the opposed margins of the divided uppers together. When the ladder and buckle are fastened, they overlie substantially the extent of the paired stay members to effectively conceal and shield the stays.

The overshoe is then finished in conventional manner by attaching a rubber sole, foxing strip, etc., and the assembly is vulcanized in conventional manner. If desired, the uppers and stays may be cut or slit after the article has been vulcanized rather than while the article is unvulcanized. It is also apparent that the closure assembly may be affixed to the uppers at some later stage of the manufacturing process, even after vulcanization of the overshoe has been completed.

By applying the closure assembly as a unit, including both the ladder and buckle members, to the uppers and severing the stay which joins the members only after the assembly is secured to the uppers, the proper alignment of the two cooperating members is ensured. This is in contrast to the method employed heretofore in which the ladder member and the buckle member with their respective stays were separately secured to the uppers and required careful positioning with respect to each other as well as with respect to the opening in the uppers.

In making the rubber overshoe, it may be desirable to place a reinforcing strip over the extent of the zone of the uppers which is to be slit before the closure assemblies are positioned thereon. Other variations may be effected in accordance with conventional construction practices.

The invention is particularly applicable to constructing rubber overshoes or the like having a divided uppers provided with ladder and buckle closure means. The invention may be embodied in any article of footwear, however, including canvas or leather footwear. The article may have either a single closure assembly or a plurality of such assemblies. Although it is desirable to attach the ladder and buckle to the uppers while secured to a single stay, the finished article may be attained by use of paired stay members which are then positioned in accordance with this invention so that the stays are concealed and shielded by the ladder member.

Although the invention has been described in considerable detail with reference to a preferred embodiment thereof, it will be understood that variations and modifications may be effected within the spirit and scope of the invention as defined in the appended claims.

I claim:

1. An article of footwear having an upper with a front vent opening, and closure means for said opening, said closure means comprising a pair of flexible elongated straps relatively wide as compared with their thickness, each said strap being folded upon itself lengthwise at its mid-

point having its ends adjacent each other and having its opposing faces secured together throughout most of their extent to form a stay having a loop at one end, said stays being secured substantially throughout their extent on opposite sides of said vent opening in face-to-face relation with the outer face of said upper and extending in a direction generally normal to the edge of said vent opening and in line with each other, the looped end of each said stay being remote from said vent opening and the opposed end of said stay being adjacent the edge of said vent opening, a ladder having one end pivotally engaged in the loop of one said stay, and a buckle engageable with said ladder pivotally engaged in the loop of the opposing stay.

2. An article of footwear having an upper with a front vent opening, and closure means for said opening, said closure means comprising a pair of flexible, elongated straps, each said strap being folded upon itself lengthwise and having its opposed faces secured to each other throughout their extent except in the zone of said fold to form a stay having a loop at one end, said looped stays being secured along their extent in contact with the outer face of said upper on opposite sides of said vent opening in line with each other at right angles to the edges of said vent opening, each said stay having its looped end remote from said vent opening and its other end adjacent the edge of said vent opening, a ladder approximately as long as the total length of both stays having one end pivotally engaged in the loop of one said stay, and a buckle engageable with said ladder pivotally engaged in the loop of the opposing stay.

3. A closure assembly for use with an article of footwear having a vent opening, which assembly comprises a unitary stay member comprising a flexible enlongated strap having its ends folded back flat against its mid-section with the opposing faces of the folded strap secured to each other throughout their extent except in the zones of said folds to provide a loop at each end of said stay member, a ladder approximately as long as said stay member having one end pivotally engaged in one of said loops, and a buckle engageable with said ladder pivotally engaged in the other of said loops.

4. A closure assembly for use with an article of footwear having a vent opening, which assembly comprises a unitary stay member comprising a flexible elongated strap of rubberized fabric relatively wide as compared to its thickness having its ends folded back flat against its midsection in abutting relation to each other and with the opposing faces of the folded strap secured to each other throughout their extent except in the zones of said folds to provide a loop at each end of said stay member, a ladder approximately as long as said stay member having one end pivotally engaged in one of said loops, and a buckle engageable with said ladder pivotally engaged in the other of said loops.

5. In a method of making an article of footwear having an upper with a vent opening provided with ladder-and-buckle closure means, the steps which comprise engaging said ladder and said buckle with a flexible elongated strap, folding the ends of said strap back flat against its midsection to leave said ladder and buckle engaging said strap adjacent said folds, securing together the opposing faces of said folded strap throughout their extent except in the zones adjacent said folds to form a unitary stay member having said ladder and said buckle pivotally en-

gaged in loops at opposite ends thereof, securing said stay member throughout its extent to the outer face of said upper across said vent opening, and severing said stay member approximately at its midpoint.

6. The method of claim 5 in which said stay member is secured to a closed upper and the upper is severed simultaneously with the stay member to form the vent opening.

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