June 3, 1958 H. ALTINGER 2,836,908

TOE COVERS FOR ICE SKATES

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Fig. 1.

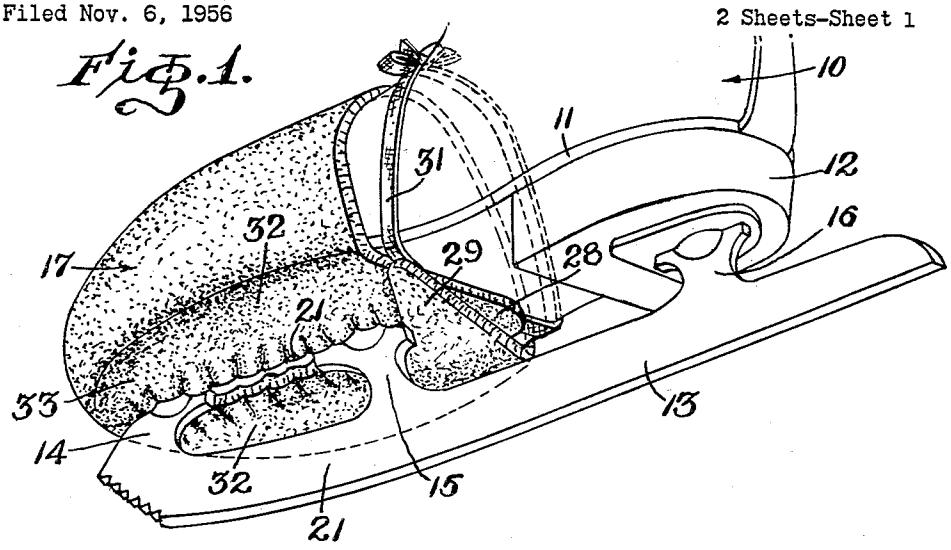


Fig. 2.

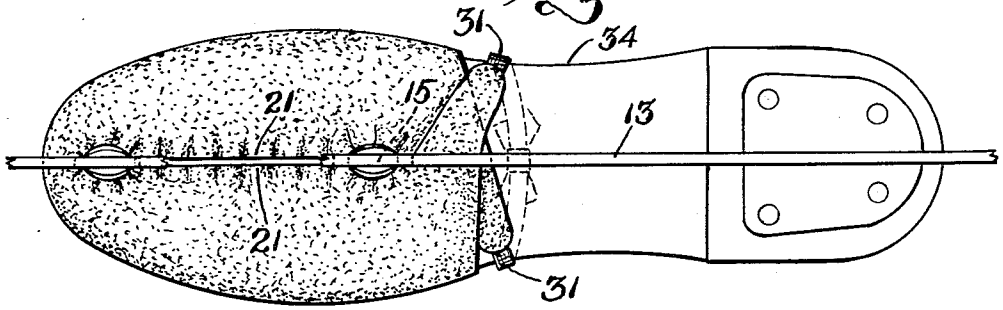
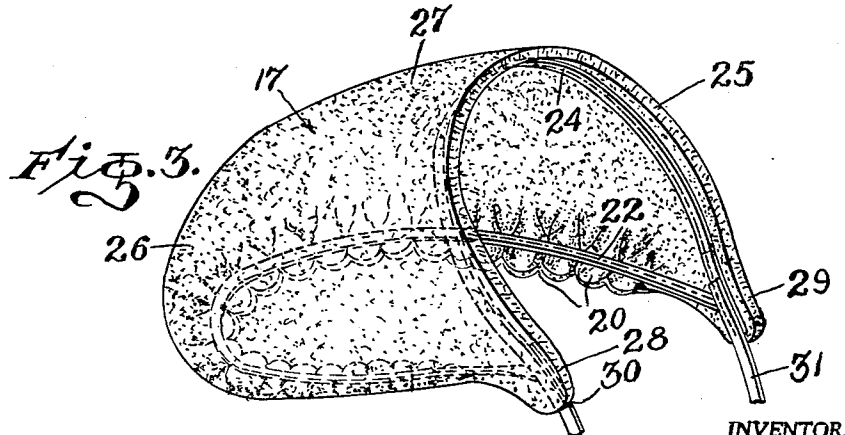


Fig. 3.



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Fig. 4.

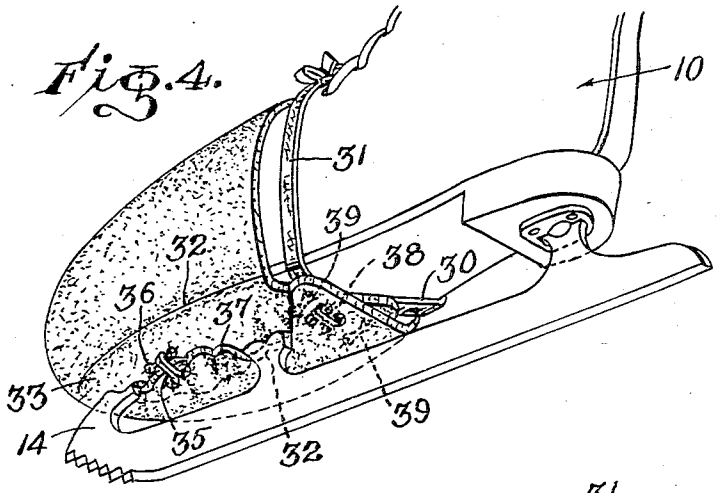


Fig. 5.

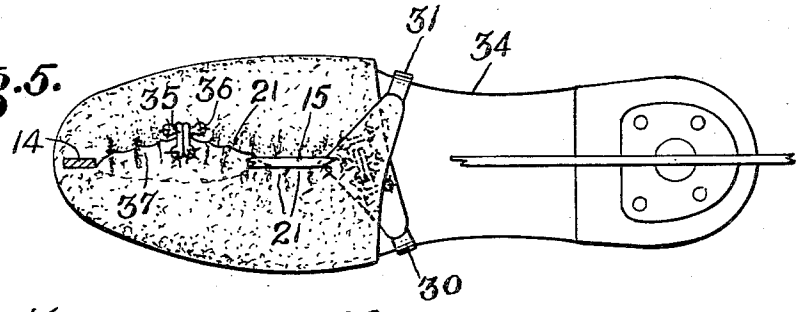
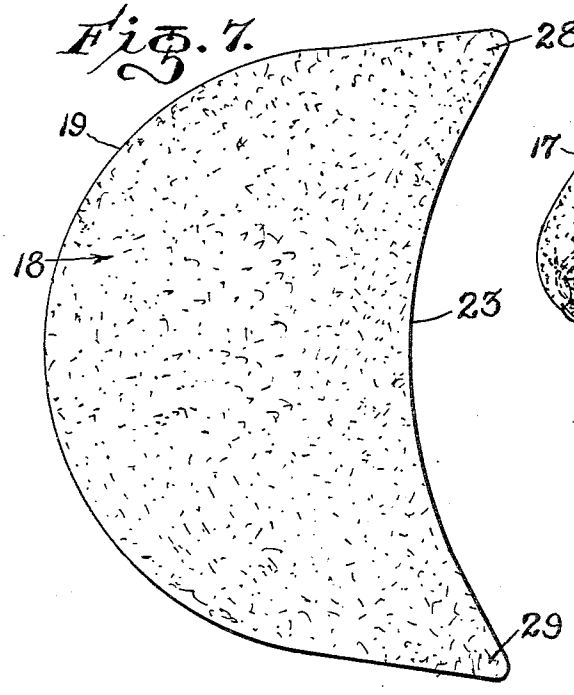


Fig. 7.



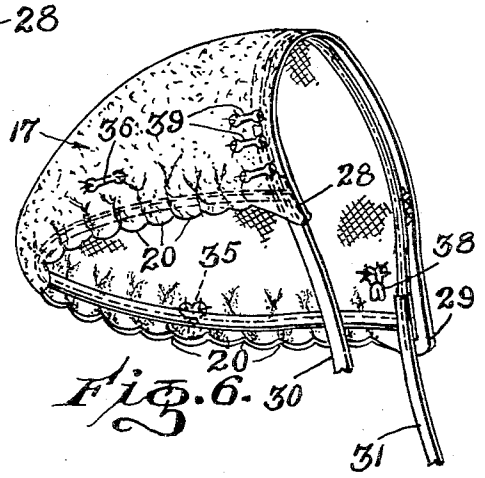


Fig. 6.

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TOE COVERS FOR ICE SKATES

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2 Claims. (Cl. 36—72)

This invention relates to covers for the front or toe portions of ice skate shoes, and the main object is the provision of such a cover embodying certain new and useful improvements to more effectively keep the toes warm as well as the forward portion of the foot by protecting or insulating the said portion of the foot from the cold in all directions including the cold emanating from the ice and tending to chill the toes from below.

Another object of the invention is to provide a cover of the type mentioned, which includes flaps which cover the underside of the forward portion of the skate shoe sole as well as the shoe vamp, and which is made out of an approximately crescent-shaped pattern the cusps of which overlap each other under the shoe sole part at the forward portion of the instep of the sole, together with tying means for drawing the cusps in opposite directions and thus snugly securing the cover in place. As a result, the cover is not only firmly and snugly attached, but it is adaptable for use with all common types of skates, such as, for example, figure skates, hockey skates, and racing skates.

Another advantage of the structural features mentioned in the preceding paragraph, is that in securing the cover to the shoe by the tying means referred to, the tendency is to draw the cover back from the toe, thus assuring a very snug fit of the cover on the shoe.

A further object of the present invention is the provision of an added improvement in the cover as briefly discussed above, in the form of means for overlapping the opposed edges of the cover on the underside of the shoe between the first and second columns by which the skate is held to the shoe, thus assuring a desirable insulation of that portion of the shoe sole from the cold emanating from the ice.

A still further object is the provision of yet another added improvement in the form of a hook-and-eye interengaging means having several steps of adjustment, for varying the degree of overlap of the two aforementioned cusps to lock the cover on the shoe so that the cover may fit various sizes of shoe and also that it may be able to accommodate for stretching of the cover through repeated use. With this last-mentioned improvement, it is possible to do away with the tying means above-mentioned, and this would be especially desirable in the case of covers made for children, as some children may have difficulty in manipulating tying means in the form of laces. However, laces may be provided either to be tied or having snap button or other interengaging means for locking the ends of the laces together.

The above as well as additional objects will be clarified in the following description wherein reference numerals refer to like-numbered parts in the accompanying drawing. It is to be noted that the drawing is intended solely for the purpose of illustration and that it is therefore neither desired nor intended to limit the invention necessarily to any or all of the exact details of construction or operation shown or described except insofar they may be deemed essential to the invention.

Referring briefly to the drawing, Fig. 1 is a bottom perspective view of a combination ice skate and shoe, illustrating a cover mounted thereon which embodies the features of the present invention.

Fig. 2 is a bottom plan view of Fig. 1.

Fig. 3 is a perspective view of the cover of Figs. 1 and 2, per se.

Fig. 4 is a bottom perspective view similar to Fig. 1 but showing a modified form of the cover.

Fig. 5 is a bottom plan view of Fig. 4.

Fig. 6 is a perspective view of the cover of Figs. 4 and 5, per se.

Fig. 7 is a view showing the laid out pattern from which the covers of Figs. 1 and 4 are made.

Referring in detail to the drawing, the numeral **10** indicates a skate shoe having the sole **11** and the heel **12**, to which the skate **13** is secured by means of its columns **14**, **15** and **16**.

The cover **17** is formed out of an approximately crescent-shaped pattern of suitable cloth, fabric, fur or other material, such as shown at **18** in Fig. 7. In preparing the pattern for the cover, the substantially convex edge **19** of the pattern is crimped and thus shortened in length, as indicated by the crimps **20**, so that, in the well known manner, the edge **21** of the cover may readily be stretched. An elastic tape **22** is sewed against the entire crimped edge **21**, so that the said edge is normally shrunk but readily stretchable along with the tape. The edge **23** of the pattern which forms the edge **24** of the cover, need not be crimped but it also has an elastic tape **25** sewed thereon, thus permitting a lesser amount of stretching than that permitted the edge **21** of the cover. When the tape **22** is relaxed, the cover assumes the shape shown in Figs. 3 and 6, with the shrunk edge **21** causing the material of the cover there-adjacent to be pulled inward and hence to bulge the remainder of the material upward and outward, as indicated at **26** and **27**, to simulate the form of the forward part of a shoe including the toe portion. In other words, the pattern has then been converted into proper fit for the cover **17**, with the cusps **28** and **29** of the pattern shown by the same reference numerals in Figs. 3 and 6.

Laces **30** and **31** are secured to the ends of the tape **25**, although they may be otherwise secured to the cusps **28** and **29**. The cover is fitted about the shoe as illustrated in Figs. 1 and 4, and when drawn back and secured about the foot by the laces with the cusps or tabs **28** and **29** overlapping, substantially as shown, the material adjacent the crimped edge **21**, mentioned above and shown in Figs. 1 and 4 by the reference numerals **32** at the sides of the cover and by the numeral **33** at the front or toe portion, is drawn together. Thus the two opposed portions of the edge **21**, Fig. 1, tend to lie closely parallel to each other on opposite sides of the median line of the shoe, with the portion **33** covering the shoe sole as far as the front skate column **14**. The laces **31** and **30** may be tied together in a knot in the usual manner, or they may be provided on their extremities with the common expedient of interengaging snap buttons, or other means, not shown, for locking them together.

It is to be noted that, by the overlapping of the tabs **28** and **29**, the operation of pulling on the laces **30** and **31** will cause the edge **21** and the material of the cover to be drawn rearward and thus assure a snug engagement of the cover with the shoe all around the forward part thereof. Further, since the two ends of the edge **21** in the attached cover extend rearward beyond the widest portion of the shoe sole into the narrower instep portion **34**, the attached and tied cover is additionally restricted from sliding forward and thus become loose.

Two additional improvements are illustrated in Figs. 4, 5 and 6, either or both of which may be incorporated

on the cover shown in Fig. 1. One such improvement consists in providing means for overlapping one side of the linear division or space between the two sides of the edge 21 in the attached cover with respect to the other side. This consists in interengaging means provided on both sides of said edge 21, which means may be in the form of a hook 35 on one side and an eyelet 36 on the other side. Thus, since the edge 21 is stretchable, one side, indicated in Fig. 5 and Fig. 4 as a flap 37, will overlap the other side and thus cover the sole portion between the skate columns 14 and 15 and insulating the same further from the cold rising, so to speak, from the ice.

The second of the two improvements referred to consists in provision of, for example, a hook 38 on the underside of one tab, 29, and a number of spaced eyelets 39 on the outer surface of the other tab 28. As a result, the two tabs may be locked together in a number of various positions with respect to each other to accommodate for different sizes of shoes as well as for stretching of the material of the cover. If this hook-and-eye engagement is used in conjunction with the laces 30 and 31, and the hook is engaged in that eye which maintains the tabs taut, then in case the laces should become undone the tabs will nevertheless remain interlocked and thus prevent the cover from loosening and perhaps falling off.

I claim:

1. A toe cover for a skate and shoe combination wherein the skate is secured to the shoe by spaced

columns including two columns positioned under the sole of the shoe comprising an originally crescent-shaped fabric deformed into a cover complementary to the forward part of the shoe with the originally convex edge of the fabric doubled back under the forward part of the shoe sole with the cusps of the orignially crescent-shaped fabric mutually overlapping under the shank of the shoe sole, said originally convex edge of the fabric having elastic means and hence normally shrinking the portions of the cover doubled back under the shoe sole, means on said cusps for pulling the same in mutually opposite directions transverse with respect to the sole to stretch said elastic means and said portions of the cover thereby tightening the cover on the shoe.

2. A toe cover according to claim 1, said doubled back portions of the cover having the opposed edges thereof parallel with and equidistant from the median line of the sole, and means partly on a part of each of said opposed edges positioned between said two columns for pulling one of said parts into overlapping position with respect to the other of said parts and for releasably locking the said parts in mutually overlapping position.

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