Jan. 11, 1949. G. JOHNSON 2,458,602

SNOW PROTECTOR FOR SKIS

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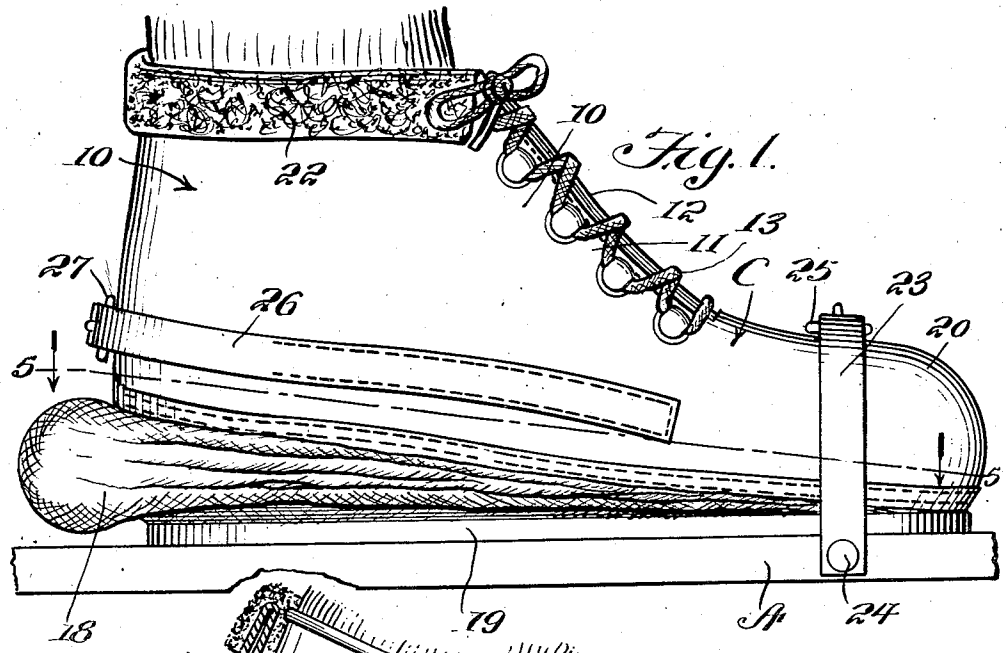


Fig. 1.

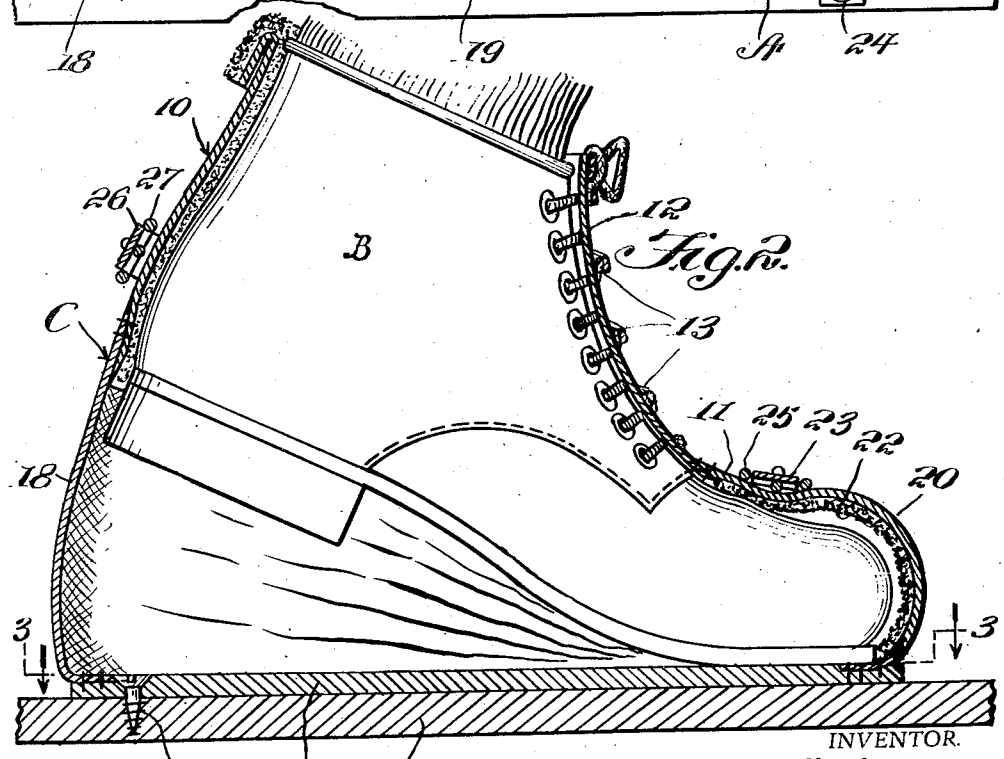


Fig. 2.

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Fig. 3.

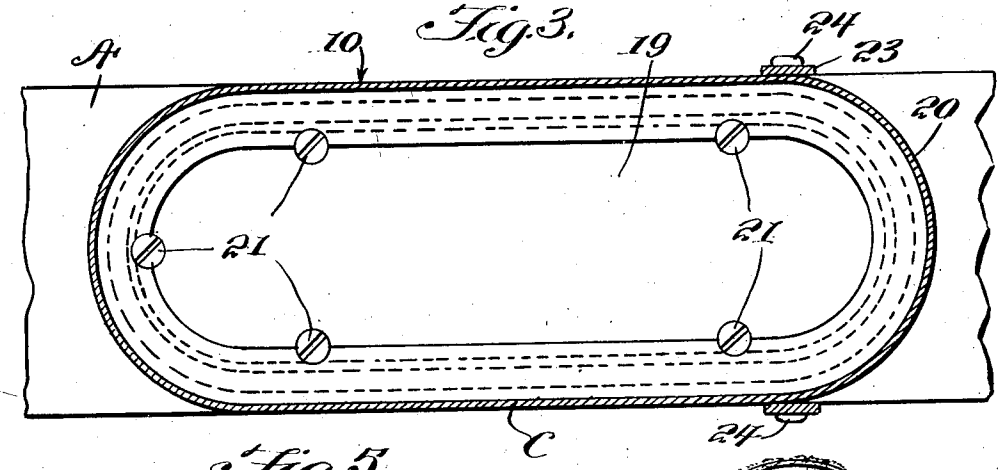


Fig. 5.

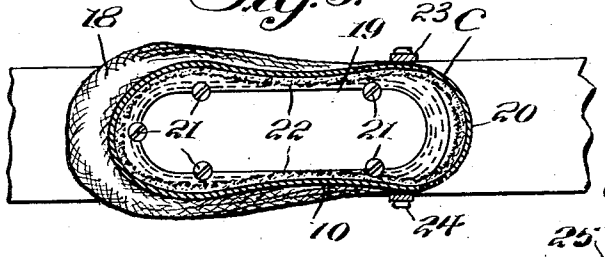


Fig. 6.

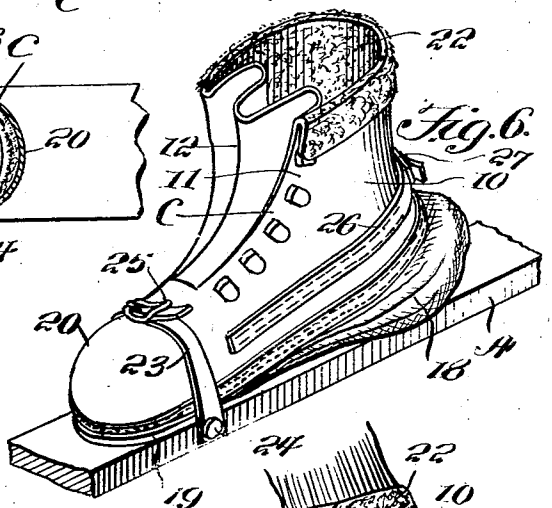


Fig. 4.

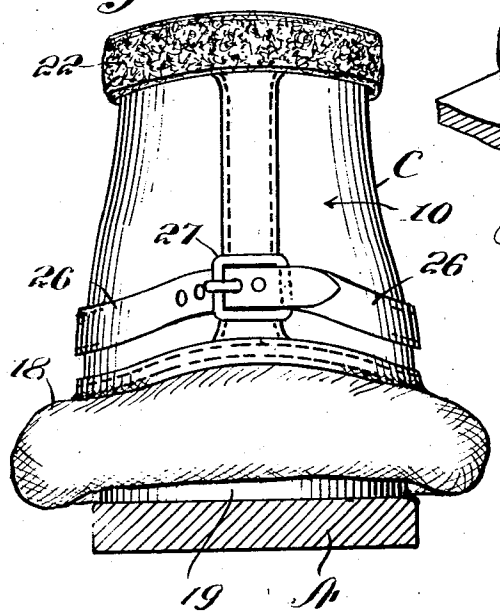
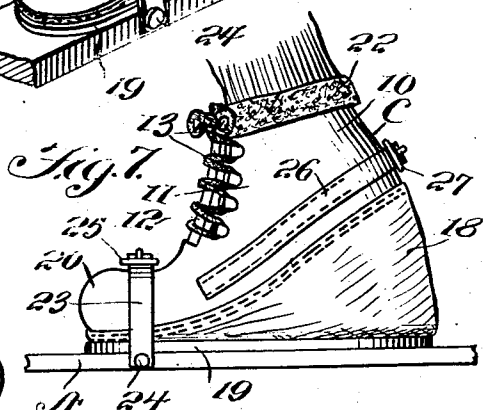


Fig. 7.



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UNITED STATES PATENT OFFICE

2,458,602

SNOW PROTECTOR FOR SKIS

George Johnson, Ironwood, Mich.

Application July 17, 1945, Serial No. 605,596

3 Claims. (Cl. 280—11.35)

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The invention relates to improvements in snow protectors for skis, and more especially to a protective foot boot attachment for ski use.

The primary object of the invention is the provision of a novel protective device of this character, in the use of which snow and ice is prevented from building up between the ski and the shoe worn by the user of such ski, such as would otherwise seriously interfere with efficiency in skiing performance and result in great inconvenience by requiring the removal of the ski for the cleaning of the snow and ice therefrom.

Another object of the invention is the provision of a protective boot of this character, wherein its heel portion is extensible and retractible, thereby giving the skier free foot motion, which is necessary for proper and efficient skiing performance.

A further object of the invention is the provision of a protective device of this character, which is to be fastened in place on a ski and over the shoe as worn by the skier, thus enclosing the shod foot to the exclusion of snow and ice formation between the same and the ski.

A still further object of the invention is the provision of a structure of this character, which is comparatively simple in construction, thoroughly reliable and efficient in operation, strong, durable, readily and easily applied, removable with dispatch, assuring safety during ski riding, and inexpensive to manufacture and install.

With these and other objects in view, the invention consists in the features of construction, combination and arrangement of parts as will be hereinafter more fully described in detail, illustrated in the accompanying drawings, which show the preferred embodiment of the invention, and pointed out in the claims hereunto appended.

In the accompanying drawings:

Figure 1 is a fragmentary side view of a ski showing structure constructed in accordance with the invention in applied position.

Figure 2 is a vertical longitudinal section view through the boot when worn and showing the heel area of the foot in a raised position.

Figure 3 is a sectional view taken on the line 3—3 of Figure 2 looking in the direction of the arrows.

Figure 4 is a rear elevation with the boot in the position shown in Figure 1.

Figure 5 is a sectional view taken on the line 5—5 of Figure 1 looking in the direction of the arrows.

Figure 6 is a perspective view with the boot in the position shown in Figure 1, and the shoe wearing foot removed.

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Figure 7 is a view similar to Figure 1 showing the boot in the position indicated in Figure 2.

Similar reference characters indicate corresponding parts throughout the several views in the drawings.

Referring to the drawings in detail, A designates generally a portion of the runner of a ski, B the shoe worn by the ski rider, and C the boot constructed in accordance with the invention, as hereinafter set forth.

The protective boot C is to be detachably secured on the runner A and about a shod foot of the skier, and is comprised in a body 10, having the front of an upper portion 11 provided with a gap which is closed by a gusset 12 to prevent water, snow or sleet from gaining entrance therethrough to the interior of the body 10, and a lacing 13 to draw the edges of the gap together to secure the upper snugly about the shoe B and the ankle of the wearer.

The upper portion 11, of the boot body 10 is secured to a bellows-like extensible and collapsible heel and arch portion 18, which is secured about the top edge portion of a bottom tread plate 19, the latter also having a toe portion 20 secured thereto in a like manner. This plate 19 is secured in place on the upper face of the runner A, by suitable fasteners, such as screws 21. The portion 18 due to the fullness thereof permits of substantially free foot motion to the shoe B as may be necessary for proper ski maneuvering. The upper 11 is provided with a fleece lining 22 to avoid wear on the shoe B and to afford comfort and warmth to the wearer of the boot C, and is preferably carried into the toe portion 20 of the latter to that end.

The toe portion 20 is exteriorly reinforced by a strap 23, which is made fast at 24 to the runner A, the strap being provided with an adjusting buckle 25. Similarly carried exteriorly about the heel and arch portion 18 is a strap 26, which is also provided with an adjusting buckle 27, both straps 23 and 26 being for the purpose of holding the upper 11 of the body 10 firm about the upper 14 of the shoe B, so as to permit of the aforesaid free bellows-action of the heel and arch portion 18 of the boot C when worn by a skier. The foot motion of the skier in the wearing of the boot C is best seen in Figures 1, 2, 4, 6 and 7 of the drawings.

From the foregoing, it should be apparent that it is impossible that snow or sleet lodge between the shoe B and the runner A when the boot C is fastened in place on the runner. Also, that the boot C, when made from appropriate material

or materials, is substantially moisture-proof and will satisfactorily add to the comfort and well-being of the skier.

What is claimed is:

1. A protective attachment for skis, comprising a foot supporting plate having the general form of the sole of a shoe and adapted to be fastened on the top side of a ski, a body made of a flexible material and adapted to enclose the shod foot of a skier, said body being formed with an upper ankle engaging portion, a toe engaging portion, and a lower heel and arch enclosing portion, arranged in unitary assembly, said heel and toe portions being secured about the top side of the edge of said foot plate, said upper portion having a gap in its front side, a gusset closing said gap, and means for detachably securing the edges of said gap together to draw said upper portion firmly about the like part of the shoe worn by the skier, said lower portion having a fullness to admit of its bellows-like extension and contraction incident to the movements of the skier's foot in the performance of skiing manoeuvres.

2. The invention as defined in claim 1, with the said upper and toe portions of the body fleece-lined in order to assure comfort and warmth to the foot of the skier.

3. The invention as defined in claim 1, with rearwardly extending straps secured on the opposite sides of said upper portion of the body adjacent the line of joinder of the same with said lower portion, and a buckle adjustably connecting the free ends of said straps.

GEORGE JOHNSON.

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