United States Patent Office 3,621,489
Patented Nov. 23, 1971

3,621,489

SHIN GUARD

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Filed Aug. 11, 1969, Ser. No. 848,860
Claims priority, application Germany, Aug. 31, 1968, G 67 51 308
Int. Cl. A41d *13/06*
U.S. Cl. 2—22 1 Claim

ABSTRACT OF THE DISCLOSURE

The shin is protected against the pressure from the uppers of a mountain climbing or ski boot by an axially slotted, flexible sleeve which fits around the shin and extends from the ankle to several centimeters above the boot. A soft lining is provided in the sleeve.

BACKGROUND AND SUMMARY OF THE INVENTION

The present invention relates to a shin guard protecting the shin against pressure from the uppers of mountain climbing or ski boots.

Boots of this type have uppers extending relatively high up on the leg and encompassing a portion of the shin bone. To provide good support and aid in avoiding accidents, the boot uppers are often quite rigid and firmly grip the shin. This often results in unpleasant damage to the skin, due to the pressure of the boot uppers, particularly if the wearer is not used to such footwear.

It is the primary object of this invention to overcome this disadvantage and to provide an effective shin guard to be worn around the leg within the boot uppers and reaching therebeyond.

It is a further object of the invention to provide such a shin guard in the form of a flexible clamp so that the same may be readily conformed to legs of different diameters so that only very few sizes will have to be stocked and are needed to fit most people.

The above and other objects and advantages are accomplished in accordance with the invention with a shin guard which comprises an elongated frusto-conical sleeve of flexible material wherein there is a sofe lining of a synthetic resin. The sleeve is shaped to conform to a leg around the shin. A lower edge of the sleeve is adapted to fit around an ankle and an upper edge is adapted to extend several centimeters beyond the upper edge of a boot worn by a user of the shin guard. The sleeve defines an elongated slot extending between the lower and upper sleeve edges so as to impart to the sleeve the form and function of a clamp.

According to one feature of the present invention, the sleeve has a pair of diametrically opposed protrusions along the upper edge substantially 90° removed from the slot to fit over the shin bone and the calf of the leg, respectively. It also has a pair of recesses along the lower edge, one of the recesses being substantially in alignment with one of the protrusions to accommodate the wrist of the foot and the other recess being substantially diametrically opposed to the slot to accommodate the ankle bone.

Such a shin guard has the effect of distributing the pressure from the boot uppers over an area of a length of about 15 cm. instead of a length of only about 2 cm. Since the sleeve has a soft lining, the thus distributed pressure will be effectively absorbed.

BRIEF DESCRIPTION OF DRAWING

The above and other objects and features of this invention will become more apparent in the following detailed description of now preferred embodiments, taken in conjunction with the accompanying drawing wherein:

FIG. 1 is a perspective view of a shin guard according to the invention;

FIG. 2 is an elevational view of the flattened shin guard;

FIG. 3 is a view similar to that of FIG. 2 of another embodiment; and

FIG. 4 shows the shin guard of FIGS. 1 and 2 on the leg of a user.

DETAILED DESCRIPTION

Referring now to the drawing and first to FIGS. 1 and 2, there is shown an elongated frusto-conical sleeve **1** shaped to conform to a leg around the shin, as shown in FIG. 4, the diameter of the sleeve at upper edge **5** being larger than its diameter at lower edge **6**. The sleeve defines an elongated slot **3** extending between the lower and upper sleeve edges so that it may be clamped about the leg, with the slot preferably extending along the outside of the leg. Obviously, if it were desired to leave no portion of the leg unprotected, the longitudinally extending sleeve edges defining the slot may overlap on the leg.

The sleeve may be made of any suitable flexible material adapted to receive and distribute the pressure from the uppers of a boot tightly encircling the lower portion of the leg above the foot. Many moldable synthetic resins forming flexible and preferably resilient sheets will be useful for this purpose, including acrylic resins, such as Plexiglas. Metal sheets may also be used for forming the sleeve **1**.

The sleeve is lined with an inner liner **4** of a synthetic resin forming a soft lining. Polyurethane foams may be useful material for this purpose. The lining **4** extends beyond the upper and lower edges of the sleeve **1**.

As shown in FIG. 2, the blank forming the sleeve **1** is of trapezoidal shape.

In the embodiment of FIG. 3, the upper edge **5'** of the sleeve **1'** is shown to have a pair of diametrically opposed segments **7, 7** protruding along the upper edge substantially 90° removed from the slot when the illustrated blank is flexed into a sleeve of the type shown in FIG. 1. A pair of segmental recesses **8, 8** are provided along the lower edge **6'**. One of the recesses **8** is substantially in alignment with one of the protrusions **7** to accommodate the wrist of the foot therein when the sleeve is mounted on the leg. The other recess **8** is substantially diametrically opposed to the slot to accommodate the inner ankle bone of the wearer.

As shown in FIG. 4, the shin guard is so mounted on the leg **2** that the lower edge **6** thereof is about adjacent the ankle bone **9** and extends upwardly a few centimeters above the uppers of a boot (not shown). The length of the shin guard depends on the length of the boot uppers and may vary between about 12 and 20 cm. for instance, the portion extending beyond the uppers being, for example, about 3 to 6 cm.

I claim:

1. A shin guard protecting the shin against pressure from the uppers of boots, comprising an elongated frusto-conical sleeve of flexible material, the sleeve being shaped to conform to a leg around the shin, with a lower edge of the sleeve adapted to fit around an ankle and an upper sleeve edge adapted to extend several centimeters beyond the upper edge of a boot worn by a user of the shin guard, the sleeve defining an elongated slot extending between the lower and upper edges of the sleeve, the sleeve having a pair of diametrically opposed protrusions along the upper edge substantially 90° removed from the slot, and a pair of recesses along the lower edge, one of

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Fig.1

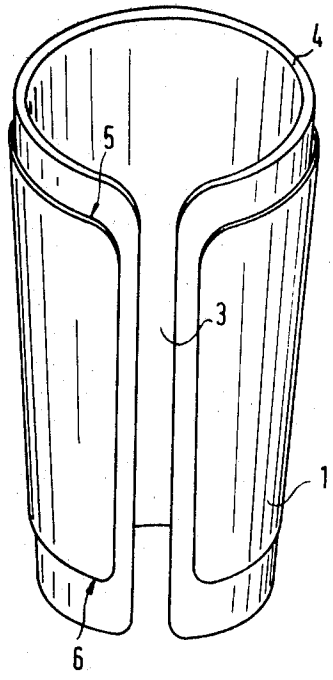


Fig.2

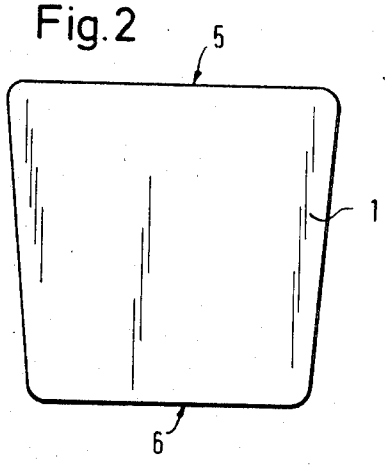


Fig.3

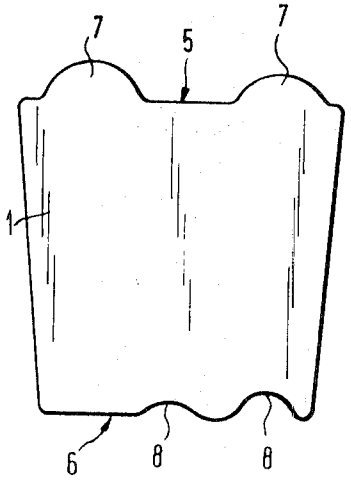
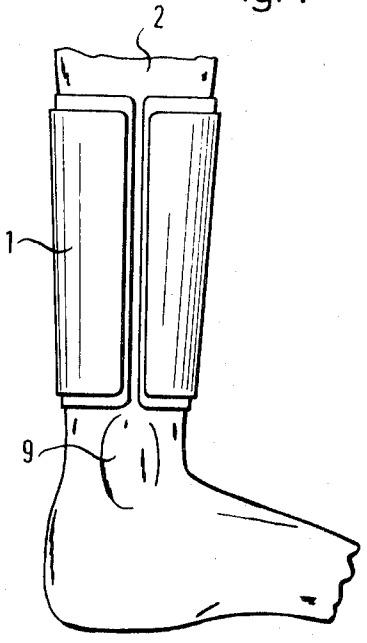


Fig.4



INVENTOR
EDMUND KELLER
By [signature]
AGENT