Dec. 9, 1969 H. H. GLEISNER 3,482.336

SKI BOOT

Filed July 3, 1967

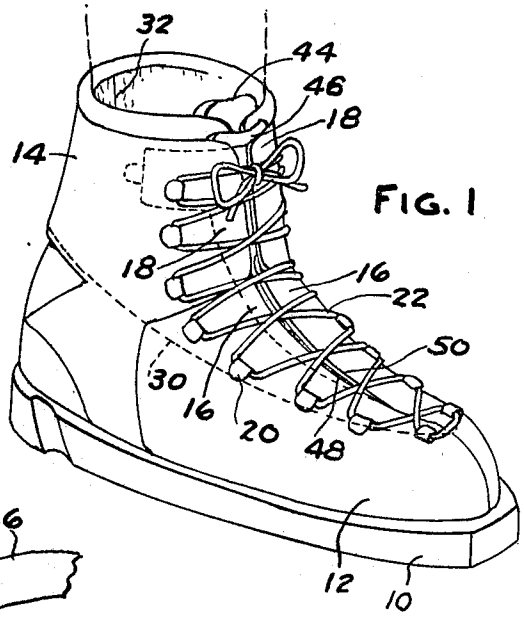


FIG. 1

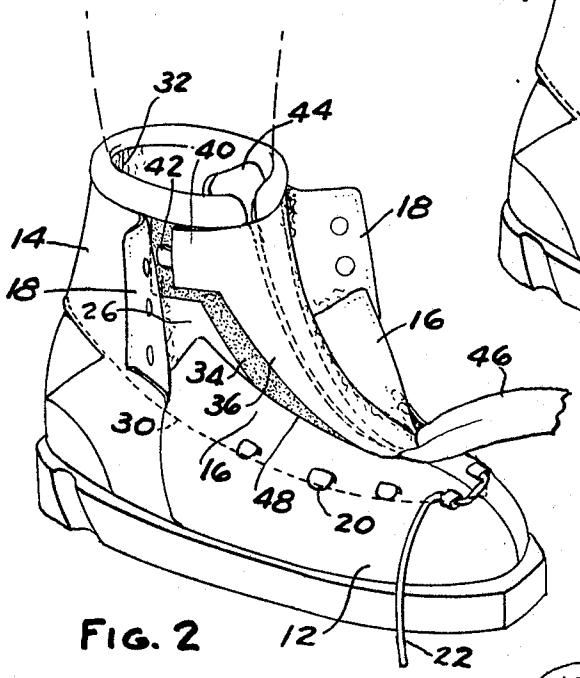


FIG. 2

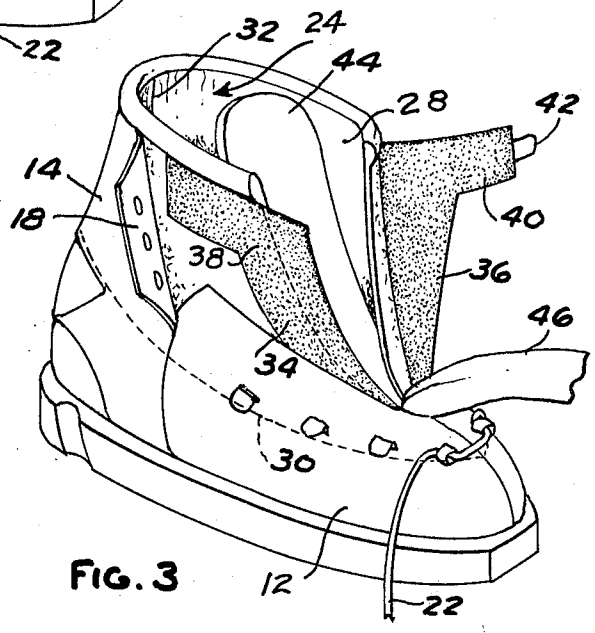


FIG. 3

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3,482,336
Patented Dec. 9, 1969

3,482,336

SKI BOOT

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Filed July 3, 1967, Ser. No. 650,750
Int. Cl. A43b 5/04
U.S. Cl. 36—2.5 4 Claims

ABSTRACT OF THE DISCLOSURE

A ski boot having an inner boot for supporting the foot and ankle of the wearer which includes a pair of flaps which are overlapped upwardly along the wearer's instep and around the ankle with the contacting surfaces of the overlapping portions of the flaps formed of fabric materials of the type adapted to releasably adhere to one another when pressed together so that the flaps can be secured to one another by simply pressing them together.

This invention relates to a ski boot and more particularly to a ski boot of the type which includes an inner boot or support for providing maximum support to the wearer's foot and ankle.

Ski boots of the type having an inner boot or an inner ankle support are usually provided with laces or buckles on the outer boot and laces on the inner boot or inner ankle support. The use of laces for the inner boot or ankle support involves several disadvantages. During skiing laces frequently become loose and have to be tightened from time to time. Frequently, particularly in the case of men skiers, the laces on the inner boots are pulled too tightly. This results in poor circulation and eventually cold feet. Furthermore, lacing is not only time consuming when the boot is originally put on but is annoying to a skier when he loosens his boots for a period of relaxation such as for lunch, etc. and then has to relace them again before skiing.

It is an object of this invention to provide a ski boot wherein the inner boot for support is constructed so that it can be secured around the foot and ankle of the wearer in a minimum of time, so that it will not loosen and so that it cannot be secured too tightly.

More specifically the invention contemplates a ski boot wherein the inner boot or ankle support includes a pair of flaps which are dimensioned to be overlapped upwardly along the wearer's instep and around his ankle, the overlapping portions being formed on their contacting surfaces of fabric materials adapted to releasably adhere to one another when pressed together so that the inner boot or support can be tightly embraced around the wearer's foot and/or ankle by simply overlapping the flap portions and pressing them together.

Other objects and features of the ski boot of the present invention will become apparent from the accompanying description and drawings in which:

FIGURE 1 is a perspective view of a ski boot according to the present invention in the laced position.

FIGURE 2 is a perspective view of the ski boot with the inner boot closed and the outer boot unlaced.

FIGURE 3 is a perspective view of the ski boot of the present invention with both the inner boot and the outer boot in the opened condition.

Referring to the drawings, the ski boot of the present invention includes an outer boot having a heavy sole **10** to which is attached a boot upper consisting generally of two side panels **12** having side and ankle reinforcement panels **14**. The outer boot is of conventional construction and configuration and is adapted to be laced or buckled up the front. In the specific embodiment illustrated the two side flaps **16** of panels **12** and the two side flaps **18** of

panels **14** which encircle the ankle are provided with hooks **20** to accommodate laces **22**. If desired, buckles of the type conventionally used on ski boots can be used in place of laces **22** and hooks **20**.

The ski boot of the present invention includes an inner boot in the form of a lining **24** within the outer boot. Liner **24** consists of a pair of side panels **26, 28** generally having the configuration of the inner surface of the outer boot. Panels **26, 28** preferably cover the entire inner surface of the outer boot and are secured to the sole **10** by any suitable means. However the upper portion of the inner boot formed of panels **26, 28** is for the most part unconnected to the outer boot. For example, it is preferred that the portion of the inner boot extending upwardly from the broken line designated **30** is unconnected to the outer panels **12, 14** except perhaps at the rear vertical seam **32** of the boot. The unconnected relationship between the inner and outer boot at the upper portions thereof is desirable because while the outer boot is relatively stiff the inner boot is pliable and is adapted to be tightened securely around the wearer's foot and ankle to provide rigid yet comfortable support to the wearer. The portion of the inner boot above the line **30** is preferably padded for maximum comfort to the wearer's foot.

In a conventional ski boot the inner boot is tightened around the wearer's foot by means of laces. In the boot of the present invention the use of laces on the inner boot is eliminated. Instead there is applied to the free edge portions of the inner panels **26, 28**, which extend upwardly along the instep of the boot, overlapping flap members **34, 36**. In the arrangement illustrated flap **34** is adapted to underlie flap **36** as shown in FIG. 2. The inner or bottom surface of flap **36** and the outer or upper surface of flap **34** are fashioned with fabric materials of the type which are adapted to adhere to one another in a releasable fashion when they are pressed together. The most common of these materials is illustrated in U.S. Patent No. 2,717,437 and is sold commercially as "Velcro." Closures of this type usually include one surface provided with a plurality of hook-shaped synthetic filaments adapted to be pressed into and engaged with a short pile fabric surface in order to secure or bond the two surfaces together.

Flaps **34, 36** are dimensioned and have a configuration such that the overlapping portions thereof are generally triangularly shaped as shown in FIG. 2. Thus, the area of attachment between flaps **34, 36** is of progressively increasing extent in a direction upwardly along the instep of the boot.

The upper portions of the two flaps **34, 36** are fashioned with overlapping extensions **38, 40**, respectively. Extension **38** preferably extends circumferentially around the outer side of the boot to a point adjacent the side of the ankle. Extension **40** is adapted to wrap around the ankle and overlie the extension **38** so as to provide a firm support for the ankle. At its free edge extension **40** is preferably formed with pull tab **42**. Tab **42** is formed of a plain fabric or leather material and provides a convenient gripping location for pulling the flaps **34, 36** into overlapping relation and also for separating them.

It is preferred that an inner tongue **44** be provided inside the side panels **26, 28** which underlies flaps **34, 36**. Likewise the provision of an outer tongue **46** of conventional configuration and construction is also preferred for underlying the free edges **48, 50** of the outer boot and overlying flaps **34, 36**.

In using the boot of the present invention the wearer slips his foot into it when it is completely opened as is shown in FIG. 3. Thereafter, the wearer smooths down the flap **34** over the tongue **44** and pulls the flap **36** tightly over the flap **34** and wraps the extension **40** around

the outer side of the ankle so that it overlies the extension **38** on flap **34**. After the two flaps have been arranged in this manner, they are pressed together to temporarily hold them in this position firmly embracing the foot and ankle of the wearer. Thereafter, the outer boot is laced or buckled, as the case may be, so as to further press the two flaps **34, 36** into contacting adhering relation.

With the ski boot described herein the time consuming operation of lacing the inner boot is eliminated. The inner boot is designed to tightly and firmly embrace the wearer's foot and ankle by simply pulling the outer flap **36** tightly over the inner flap **34** and pressing them together. In this connection, it should be apparent that it would be most difficult to secure the inner boot too tightly on the wearer's foot since the user can only exert a limited amount of force to the flap **36** as distinguished from the mechanical advantage the user has when he tightens laces. In view of the fact that the outer boot is tightly laced or buckled over the inner boot and particularly over the overlapping flaps **34, 36** these flaps are held in tightly pressed relation by the outer boot and their likelihood of pulling apart laterally is reduced to a minimum. Thus, once the wearer adjusts the flaps **34, 36** to the desired tightness on his foot and around his ankle, he is assured that the inner boot will remain in that tightened condition.

I claim:

1. A ski boot comprising an outer boot having a pair of outer side panels which have unconnected free edges along the instep portion of the boot extending from adjacent the toe of the boot to the upper end of the boot to facilitate insertion of the wearer's foot, said outer boot terminating at a location just above the wearer's ankle, means for securing said edges of the outer boot together, an inner boot comprising a pair of inner side panels which have free unconnected edges that extend upwardly along the instep portion of the boot, each inner side panel being connected to its adjacent outer side panel along the line spaced laterally outwardly from and below said free edge of the outer side panel so that each inner side panel is unconnected to the outer boot in the area of the instep up to the ankle-encircling portion of the boot, the inner side panels being dimensioned such that the free edge portions thereof can be juxaposed in overlapping relation throughout substantially the entire length thereof in a direction upwardly along the instep and at least partially around the ankle of the wearer, the inner opposed surfaces of said overlapping portions being formed throughout substantially the entire area thereof of fabric materials adapted to releasably adhere to one another when pressed together.

2. A ski boot as called for in claim **1** including a tongue on the outer boot adapted to overlie the overlapping portions of the inner side panels and to underlie the free edges of the outer boot along the instep portion thereof.

3. A ski boot as called for in claim **1** wherein the free unconnected edges of the inner side panels extend upwardly along the instep of the boot from adjacent the toe of the boot to the upper end of the boot so that when said inner side panels are wrapped around the wearer's foot to tightly embrace the foot the foot is firmly supported by said inner side panels from adjacent the toe portion to above the ankle.

4. A ski boot as called for in claim **3** wherein the area of adhering overlap of the two inner panels increases in a direction upwardly along the instep.

References Cited

UNITED STATES PATENTS

2,526,831	10/1950	Schaeffler	36—2.5
3,327,410	6/1967	Park et al.	36—50 X

FOREIGN PATENTS

1,456,085	10/1966	France.
423,624	8/1947	Italy.

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