

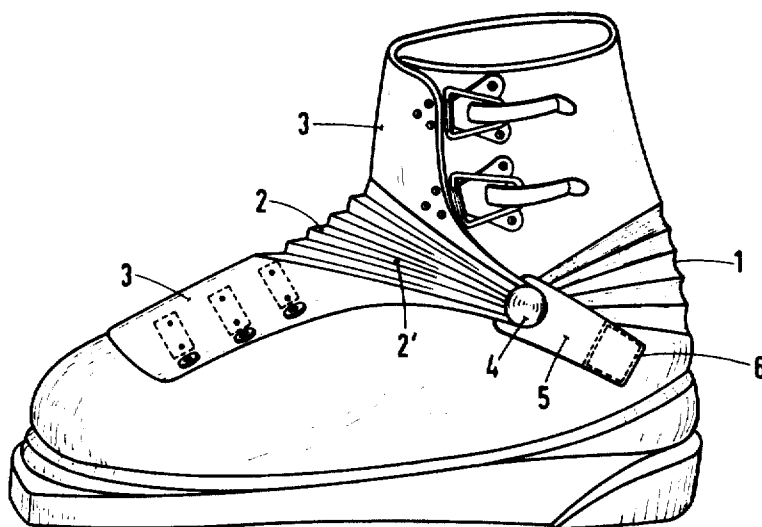
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SKI BOOT

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SKI BOOT

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9 Claims

ABSTRACT OF THE DISCLOSURE

A ski boot having an upper consisting of a foot part and a leg part and a pleated accordionlike part between and secured to the foot and leg parts which permits them to be bent to a limited extent relative to each other.

The present invention relates to improvements in ski boots.

In order to enable a skier to bend forwardly in normal skiing, the leg part of the upper of each ski boot, that is, the part which surrounds the lower end of the leg above the ankle joint, must be capable of being bent forwardly relative to the main foot-enclosing part of the boot. Prior to this invention this has been achieved by the provision of hinges which were built laterally into the upper. The use of such hinges usually required the upper to be made of two parts. Apart from the fact that the installation of such hinges was a complicated and expensive procedure and that the skier wearing such boots usually disliked them because of the disagreeable pressure which was exerted by these hinges upon his feet, the construction of the upper of several parts had the disadvantage that moisture could penetrate easily into the upper.

It is an object of the present invention to provide a ski boot which permits the leg part of the upper to be bent forwardly relative to the lower foot part without requiring any hinges and which thus eliminates the abovementioned disadvantages which are due to the use of such hinges.

According to the present invention this object is attained by providing especially the heel part of the upper and preferably also its front part substantially at the level of the ankle joint with a pleated accordionlike connecting part which is resilient under tension and pressure. This connecting part may be provided in the form of an insert between the leg and foot parts of the upper or if the upper is molded, for example, of plastic, the pleated connecting part may be molded integrally with the leg and foot parts of the upper. A ski boot which has a construction in accordance with the invention allows the skier the required freedom of movement to bend his leg at the ankle joint forwardly from and back to a vertical position relative to the ski.

The features and advantages of the present invention will become further apparent from the following detailed description thereof which is to be read with reference to the accompanying drawing which shows a side view of a ski boot according to the invention.

As illustrated in the drawing, the ski boot according to the invention comprises an upper the heel part of which

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is provided at the level of the ankle joint of the foot with a pleated accordion-like insert 1 and with a similar insert 2 within the closure flap 3. The pleated insert 2 has a straplike end 2' projecting from the closure flap 3 for closing the latter when this end 2' is connected to an element on the lateral side of the upper. According to the embodiment of the invention as shown in the drawing, this connecting element consists of a snap fastener the snap button 4 of which is connected to the strap-like end 2' of the insert 2, while its counterpart is mounted on a resilient strap 5 one end of which is secured by seams 6 to one side of the upper near the heel. This resilient strap 5 may consist, for example, of a strip of fabric containing rubber threads and may be expanded primarily in the direction of the traction which acts upon the end 2' of the pleated insert 2 when the snap fastener is closed.

This resilient strap 5 and a rotatable connection of the snap button 4 to the end 2' of the pleated insert 2 further increase the free moveability of the lower part of the leg of the skier relative to his foot. Of course, in place of a snap fastener with a rotatable snap button, it is also possible to provide any other suitable rotatable joint between the end 2' of the pleated insert 2 and the body of the upper.

As indicated in the drawing, the pleats of the inserts 1 and 2 converge in the direction toward the lateral sides of the upper where the ends of the corresponding pleats of both inserts substantially meet each other. This prevents the occurrence of a torque from the forces which are conducted in the direction of the pleats toward the lateral sides of the upper.

The additional means as indicated in the drawing for closing and opening the closure flap 3 may be of any desired type and do not form a part of the present invention.

Although my invention has been illustrated and described with reference to the preferred embodiment thereof, I wish to have it understood that it is in no way limited to the details of such embodiment but is capable of numerous modifications within the scope of the appended claims.

Having thus fully disclosed my invention, what I claim is:

1. A ski boot comprising an upper having a leg part adapted to be bent forwardly relative to the lower foot-enclosing part, and a pleated accordion-like resilient part within the front area of said upper intermediate said leg part and said foot part, said upper having a closure flap and said pleated part being provided within said flap, and means for releasably connecting the end of said pleated part of said flap to a lateral side of said upper.

2. A ski boot as defined in claim 1, in which said upper has a second pleated accordion-like resilient part at least within the heel area of said upper intermediate and secured to said leg part and said foot part.

3. A ski boot as defined in claim 1, in which said end of said pleated part projects like a strap from the remainder of said closure flap, said connecting means comprising at least two parts adapted to be connected to and disconnected from each other and secured to said projecting end and to the main body of said upper, respectively.

4. A ski boot as defined in claim 3, in which at least one of said connecting parts is rotatable.

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5. A ski boot as defined in claim 3, in which said connecting parts comprise operatively associated snap fastening elements.

6. A ski boot as defined in claim 5, in which said connecting part on said projecting end consists of a snap button which is rotatably mounted on said end of said second pleated part.

7. A ski boot as defined in claim 3, further comprising a resilient strap secured at one end to said main body of said upper, one of said connecting parts being secured to the other end of said strap.

8. A ski boot as defined in claim 7, in which said strap is resilient primarily in the direction of the traction acting upon said connecting means.

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9. A ski boot as defined in claim 1, in which said upper including said pleated part is molded integrally of a plastic.

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