

March 4, 1969

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3,430,298

SKI BOOT SNAP FASTENERS

Filed June 19, 1967

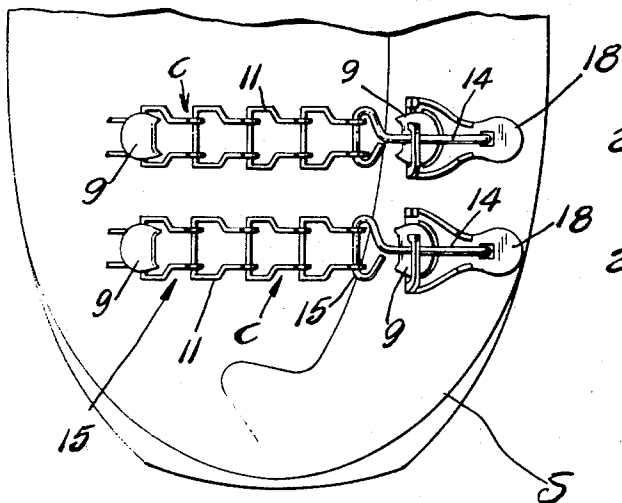


Fig. 1

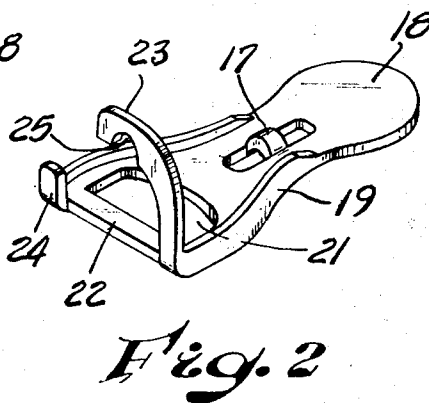


Fig. 2

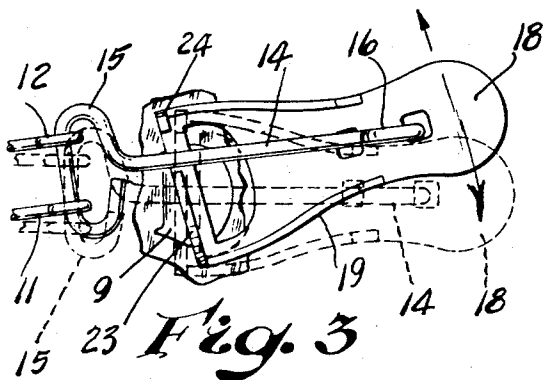


Fig. 3

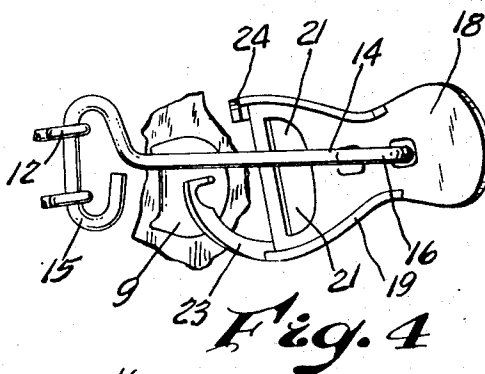


Fig. 4

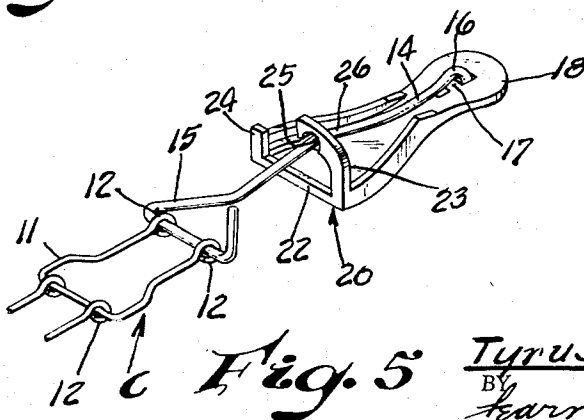


Fig. 5

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SKI BOOT SNAP FASTENERS

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Filed June 19, 1967, Ser. No. 647,029

U.S. Cl. 24-69

4 Claims

Int. Cl. A44b 21/00; A43b 23/00

ABSTRACT OF THE DISCLOSURE

Ski boot snap fastening means and elimination of laces.

This invention relates to ski boots and more particularly to ski boot snap hook fastening means for securing the boots on the skier's feet, eliminating the ski laces and cords presently in general use on conventional ski boots.

One of the prime objects of the invention is to provide a simple, practical, and relatively inexpensive means for holding the ski boot in proper position on the wearer's feet, and also prevent their being accidentally released from the lace hooks of the boot.

Another object of the invention is to provide ski boot fasteners which can be freely and easily attached to the inner and outer overlapping flaps of the boots, and which can be readily moved to locked position to firmly retain the boots in position on the skier's feet.

Still a further object is to provide a boot fastener that is more convenient than, and provides better adjustment than possible with cord laces, also can be more easily and quickly applied, locked and unlocked, and which utilizes the lace hooks presently on the conventional ski boots in general use at the present time.

With the above and other objects in view, the present invention consists in the combination and arrangement of parts, hereinafter more fully described, illustrated in the accompanying drawing, and more particularly pointed out in the appended claims, it being understood that changes may be made in the form, size, proportion and minor details of construction, without departing from the spirit, or sacrificing any of the advantages of the invention.

In the drawing:

FIG. 1 is a fragmentary, top plan view of a ski boot showing a pair of fasteners in locked position thereon.

FIG. 2 is an enlarged perspective view of the locking lever.

FIG. 3 is a top plan view, the solid lines and arrows illustrating the movement of the fastening means when the parts are swung to position for connection to one of the hooks.

FIG. 4 is a view similar to FIG. 3 showing the position of the locking members when swung to position for locking.

FIG. 5 is a perspective view of the fastening means with the parts shown in locked position.

Referring now more particularly to the drawing in which I have shown the preferred embodiment of my invention. The letter S indicates a conventional ski boot equipped with lace hooks 9 which are engaged by conventional ski boot laces (not shown) to hold the boots in position. These lace hooks are secured in spaced apart relation on the boot and are normally used as the anchoring means to which the fastening means is releasably secured. The fastening means is in the form of a link chain C comprising a plurality of U-shaped links 11, the ends of the links being bent to form loops 12 for pivotal, loose engagement with the next succeeding link, all of the links being of a size to readily fit over any one of the lace hooks 9, and thus serve, when connected, to anchor one end of the chain to said lace hook, and

any one of said links can be engaged with any one of the lace hooks to provide easy adjustment and secure the proper tension when the mechanism is swung to locked position. A lock bar 14 is secured to the opposite end of the chain C, said bar being formed with a flat loop 15 for connection to the chain, thence extending substantially horizontally, with the opposite end of the bar being loop-shaped as at 16 for loose rockable engagement with a cross bar 17, formed by stamping the face of the locking lever 18 to form said bar and permit swinging movement of the locking lever in any direction, with one of the hooks serving as a pivot point when the locking lever is swung. The locking lever 18 is preferably in the form of a stamping, the marginal edges being reinforced as at 19, the end 20 of the lever being bent at right angles to the main body (see FIG. 5 of the drawing), and is stamped as shown to form an opening 21 thereat, and a hook engaging bar 22 spans the locking lever 18. Transversely disposed spaced apart rib extensions 23 and 24 are provided on the locking lever 18, the longest rib extension 23 having a bar seat 25 provided on the inner face of the rib extension and for a purpose to be presently described, and the short rib extension 24 is spaced from the long rib extension 23 and thus provides necessary space therebetween to accommodate the locking bar 14 when swinging it to locked and/or unlocked position as indicated in broken lines in FIG. 3 of the drawing.

The transversely disposed hook engaging bar 22 spans the locking lever 18, and the locking bar 14 is formed with an upwardly bowed section 26, at a point intermediate its length, to provide for ready engagement in the seat 25 when the lever is moved to locked position.

To apply the fastener to the ski boot, the user merely hooks a selected chain link into engagement with a selected lace hook on one side of the boot, he then grasps the free end of the locking lever 18, swings it sidewise to position shown in FIG. 3 of the drawing, then swings the locking lever 18 to substantially vertical position, moves the locking lever to bring the transverse bar 22 into locking engagement with the companion lace hook, and then swings the lever downwardly, which motion tightens the chain bar lever assembly, drawing the companion lace hooks toward each other. During the downward motion he must swing the handle end of the locking lever slightly in the direction of the open side of the locking lever's ribs, allowing the lock bar 14 to clear the extended rib 23 and pass below it. The lever is then pressed downward until the lock bar 14 clears the rib 23. The lever is then moved back into the line of the two companion hooks, which motion brings the lock bar 14 into the opening between the ribs 23-24. At this point the lever is released and the tension on the assembly forces the lock bar 14 into the bar seat 25. The tension holds the lock bar 14 into the bar seat 25, locking the device and the companion lace hooks into position. To unlock the device the motion is reversed. To alter the adjustment for tightness, the device is unlocked, a different link on the chain selected for engagement with the lace hook opposite the locking lever, and the device moved to lock position again. The process is repeated as often as the user likes until the proper fit is obtained.

From the foregoing description it will be obvious that I have perfected a very simple, practical, and inexpensive ski boot fastening means, and I wish it understood that it is in no way limited to the details of such embodiments, but is capable of numerous modifications.

I claim:

1. A clamping arrangement for drawing together the overlapping flaps of a ski boot of the type which has rows of spaced apart hooks secured to said flaps comprising:

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a flexible means engageable with a selected hook on the boot; a locking lever connected to the securing means and releasably engageable with a companion hook on the opposite flap and hingedly connected to a locking bar; a hook engaging bar provided on the locking lever; a projecting rib disposed above said bar and forming an enlarged opening to said locking lever; a turned section on said locking lever and engageable with one of said hooks, said locking bar being pivotally connected to the free end of the flexible securing means and to said locking lever; a seat formed in said rib for accommodating said locking bar to hold said members in locked relation when the locking lever is swung to locked position.

2. A clamping arrangement for drawing together the overlapping flaps of a ski boot of the type which has rows of spaced apart hooks secured to said flaps comprising: a flexible securing means engageable with a selected hook on the boot; a locking lever connected to the securing means and releasably engageable with a companion hook on the opposite flap and hingedly connected to a locking bar; a turned section on said locking lever and engageable with one of said hooks, said locking bar being pivotally connected to the free end of the flexible securing means and to the locking lever, one end of the locking lever being formed with a circular rib extension having a seat provided therein; and an opening adjacent the end

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of the seat of the rib to provide free passage of the locking bar into and out of said seat.

3. The combination defined in claim 2 in which the locking bar is upwardly bowed at a point intermediate its length for engagement with the seat on the locking lever when said locking lever is swung to closed position.

4. The combination defined in claim 2 which includes a main frame in which transversely spaced apart ribs are provided on said main frame; and a bar seat provided on at least one of said ribs for accommodating said locking bar when the bar is in its locked position.

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