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L. M. JETT

2,194,979

CLIMBING CLEAT FOR SKIS

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Fig. 1.

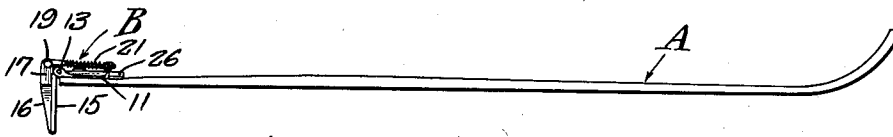


Fig. 2.

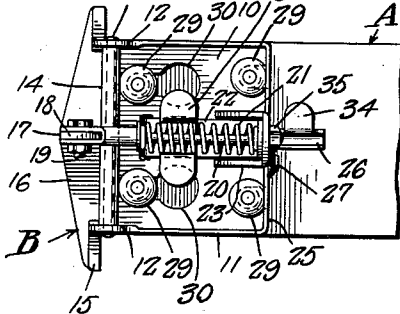


Fig. 4.

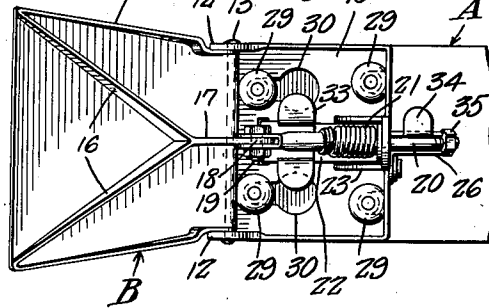


Fig. 3.

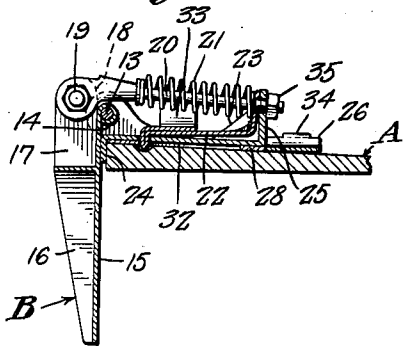


Fig. 5.

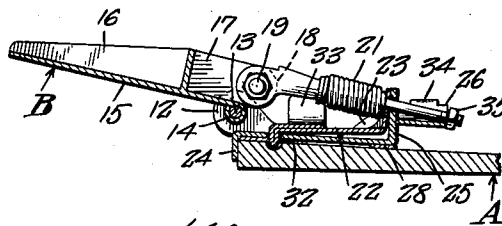


Fig. 7.

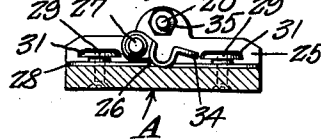
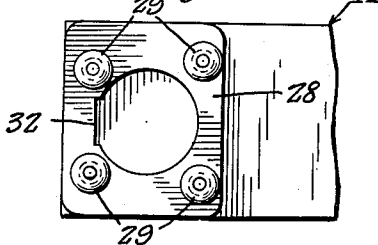


Fig. 6.



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CLIMBING CLEAT FOR SKIS

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Application April 17, 1939, Serial No. 268,379

2 Claims. (Cl. 280—11.13)

The invention relates to climbing cleats for skis and more especially to quick acting and detachable climbing wings or cleats for skis.

The primary object of the invention is the provision of a cleat of this character, wherein each ski carries at the heel end thereof the said cleat which is susceptible of quick automatic action for the setting thereof so as to enable a user of the skis to ascend inclines or hills, the cleat being susceptible of adjustment so as not to hinder forward motion, turning or jumping in the use of the skis.

Another object of the invention is the provision of a cleat of this character, wherein the same is of a construction that will permit adjustment thereof to down-hill position or up-hill position and will assure safety to the user of the skis for the climbing of hills and also in cross country runs, the cleat being readily detachable to relieve the skis of surplus weight, particularly when making a flat or substantially flat run or when ascending an incline or hill.

A further object of the invention is the provision of a cleat of this character, which is simple in its construction, readily and easily attachable to or demountable from a ski and when attached to the ski prevents any back slide in the use of the ski, particularly when climbing grades or hills and when descending a grade or a hill it can be relieved of any drag upon the ski, strong, durable, 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, illustrated in the accompanying drawing, which discloses the preferred embodiment of the invention and pointed out in the claims hereunto appended.

In the accompanying drawing:

Figure 1 is a side elevation of a ski showing a cleat constructed in accordance with the invention and in a position for grade climbing.

Figure 2 is a fragmentary top plan view.

Figure 3 is a vertical longitudinal sectional view thereof.

Figure 4 is a view similar to Figure 2 showing the cleat in a raised inactive latched position.

Figure 5 is a longitudinal sectional view thereof.

Figure 6 is a fragmentary plan view of the heel end of the ski with the cleat detached.

Figure 7 is a vertical transverse sectional view through the ski showing the cleat in end elevation.

Similar reference characters indicate corre-

sponding parts throughout the several views in the drawing.

Referring to the drawing in detail, A designates generally a ski of conventional construction while at the heel end or the trailing end of the ski is the cleat B constructed in accordance with the invention and hereinafter fully described.

The cleat B comprises a flat base plate 10 of the required length and having a width substantially equal to the width of the ski A while formed at opposite sides of this plate and also at the inner end thereof is a marginal upstanding flange. The side portions 11 are formed with perpendicularly directed forwardly inclined pivot ears 12 for a pintle or pivot 13 accommodated within a pintle sleeve formation 14 on the cleat or wing proper 15 so that the latter can swing clear in a vertical direction with respect to the heel or trailing end of the ski A in the use of the cleat.

The wing or cleat has integral therewith or separately joined thereto a bracing rib involving rearwardly divergent branches 16 and a main stem 17, respectively. This stem 17 protrudes beyond the pintle sleeve formation 14 in a forward direction with respect to the ski A and constitutes a pivot ear 18 to which is pivoted at 19 a plunger or throw rod 20. About the plunger or throw rod 20 is a coiled expansion spring 21 having one end fixed relative to the rod or stem and the other end tensioned against a latching dog 22 loose upon the stem or rod 20 and confined between guides 23 formed with the base plate 10, the latching dog 22 being adapted for latching engagement to hold the base plate 10 separately fastened to the ski in a manner presently described. The guides 23 also serve as a brace as well as a guide for holding the back from bending in either direction.

The spring 21 functions to throw the cleat or wing 15 in a positive working position to enable the ascent of a grade, incline, hill or the like in the use of the ski A. The cleat or wing 15, when in working position, abuts a stop flange 24 turned downwardly from the outer end of the base plate 10 to overlie the heel or trailing end proper of the ski.

Pivoted to the end portion 25 of the flange on the base plate 10 and swingable in the path of movement of the plunger or rod 20 is a holding latch 26, being pivoted at 27, and engages with the said plunger or rod 20 to hold the wing or cleat 15 in a non-working or inactive position, namely, raised to the position as shown in Figure 5 of the drawing. This holding latch 26 can be

dislodged from the plunger or rod 20 with a ski stick or the like so that there is no need for a user to remove the ski or bending into awkward position for such purpose.

- 5 Permanently applied to the ski A at the heel or trailing end, that is, at the upper face thereof is a keeper plate 28 having round headed male keeper members 29, these being accommodated within keyhole shaped slots 30 and 31, respectively, formed in the base plate 10 and the end flange 25 thereof for the fastening of the base plate 10 superimposed upon the keeper plate 28, the latch 22 being engageable in an abutment notch 32 provided in the keeper plate 28 so that
- 10 the said base plate 10 will be detachably locked to the keeper plate 28. In this way the climbing cleat is separably fastened to the ski and is usable for grade climbing.

- The latch 22 is formed with finger grips 33 and
- 20 the latch 26 is also formed with a finger grip 34 for convenient manual manipulation of these parts. The free end of the plunger or rod 20 is fitted with an abutment nut 35 cooperating with the latch 26 as exhibited in Figures 4 and 5 of the drawing.

- 25 The keeper members 29 are freely released from the slots 30 when registering with the larger open portions thereof.

- The spring 21 functions to actuate the latch
- 30 22 in a latching position for engaging the abutment notch 32, as will appear in Figures 3 and 5 of the drawing, and in this manner the cleat is detachably latched with the ski.

What is claimed is:

1. A cleat for a ski having a keeper plate at the rearmost end, comprising a vertically swingable wing, a base plate pivotally supporting said wing and having separable connection with the keeper plate, means latching said plates in connected relation to each other, means active upon the wing for placing the same under tension, means for relieving tension on said wing and maintaining it in an elevated position, and a stop flange formed with the keeper plate for limiting the throw of the wing in one direction, the said first-named means including a plunger and a spring coacting therewith.

2. A cleat for a ski having a keeper plate at the rearmost end, comprising a vertically swingable wing, a base plate pivotally supporting said wing and having separable connection with the keeper plate, means latching said plates in connected relation to each other, means active upon the wing for placing the same under tension, means for latching the last-named means for relieving tension on said wing and maintaining it in an elevated position, a stop flange formed with the keeper plate for limiting the throw of the wing in one direction, the said first-named means including a plunger and a spring coacting therewith, and grips on the latching means.

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