Sept. 13, 1966 R. E. PFLEIDER 3,272,413

CARRIER DEVICE FOR SKIERS

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FIG. 1

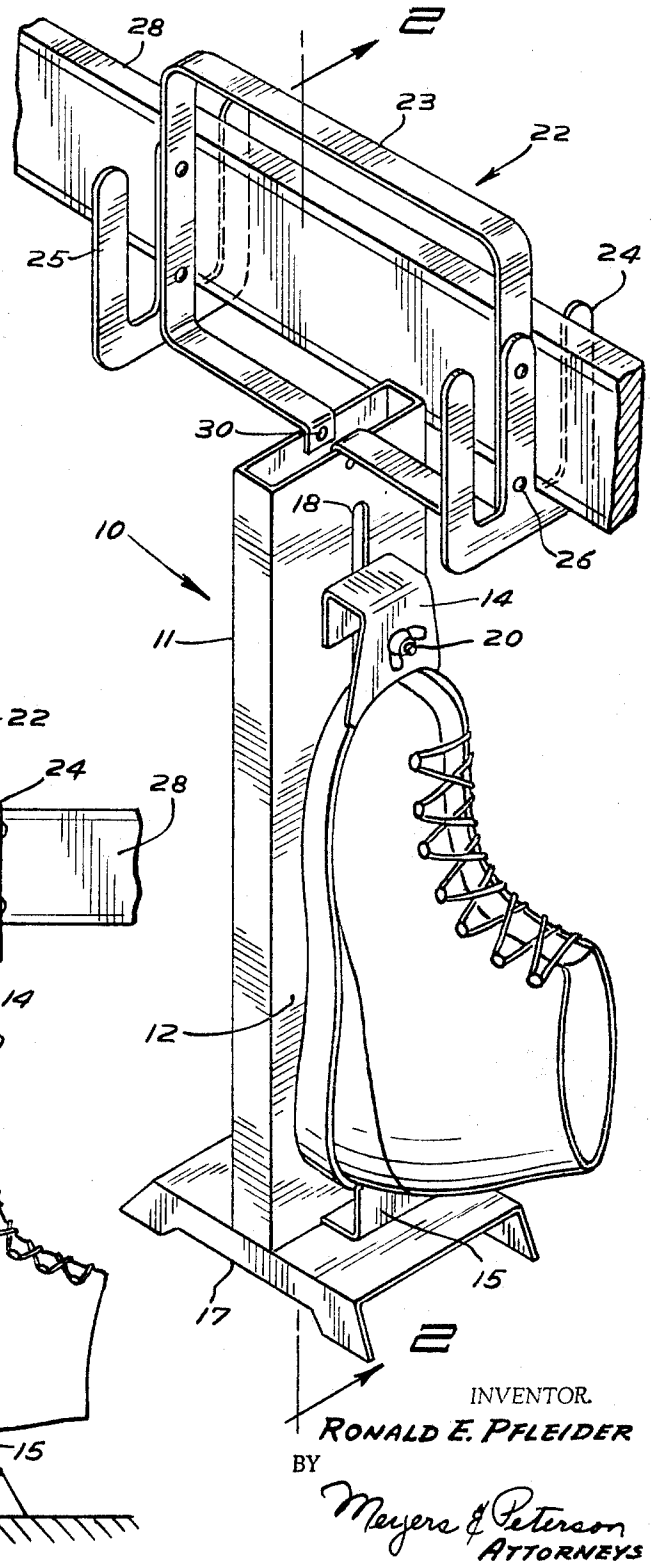
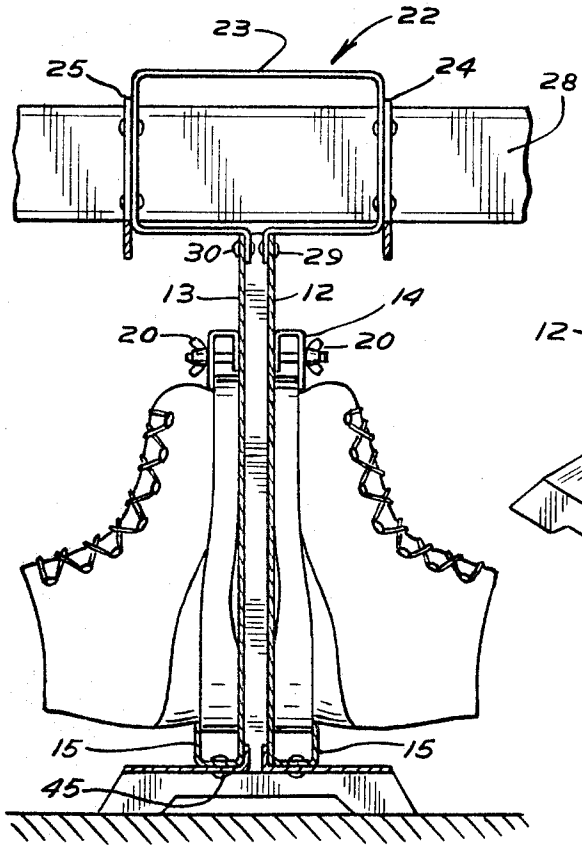


FIG. 2



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FIG. 3

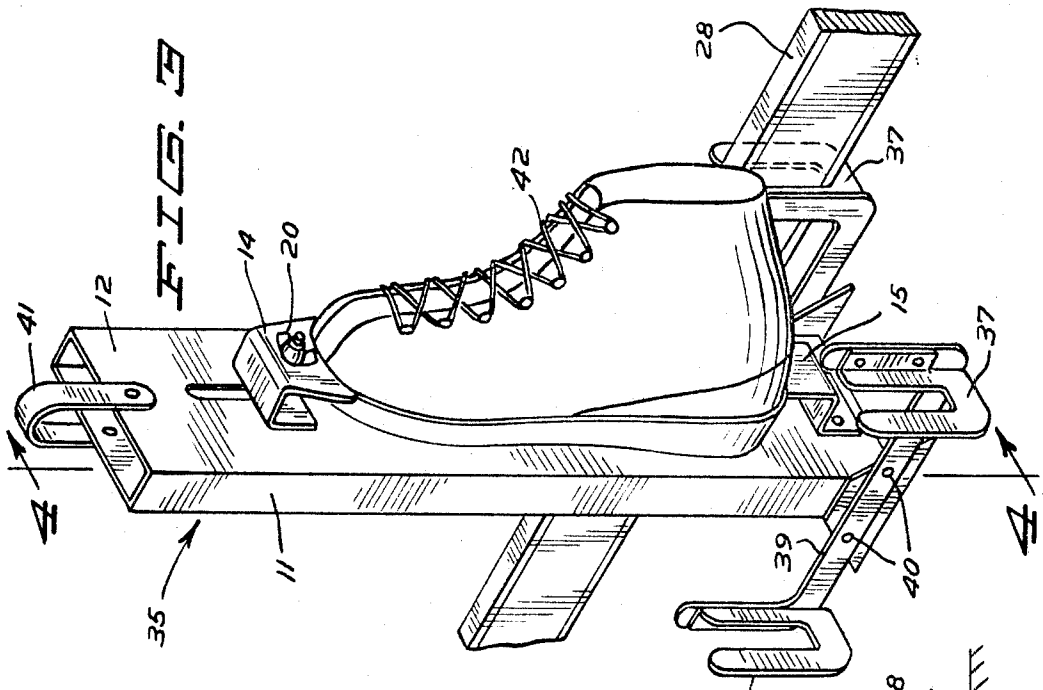
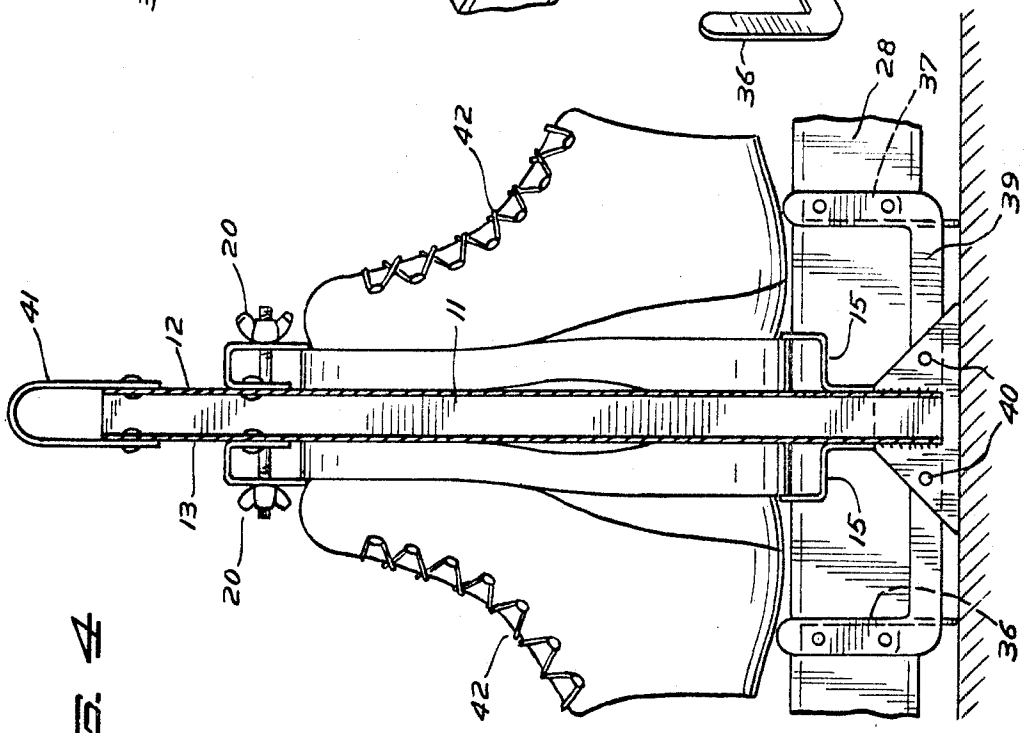


FIG. 4



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United States Patent Office 3,272,413
Patented Sept. 13, 1966

3,272,413

CARRIER DEVICE FOR SKIERS

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Filed Aug. 10, 1964, Ser. No. 388,413
5 Claims. (Cl. 224—45)

The present invention relates generally to a carrier device for skiers, and more particularly to a carrying device which functions as a compact supporting member and carrier for skis and ski boots. In an ordinary skiing situation, a skier is frequently obliged to carry his skis and boots, as well as other equipment including poles, from one area to another, and this equipment is difficult to move not because of its mass but because of its unusually cumbersome size.

The quantity of equipment normally used by the skier is substantial. Skis are normally quite long and accordingly difficult to carry. Furthermore, his equipment includes a pair of boots which are normally required to be blocked or otherwise held or maintained flat in order to preserve the shape or configuration thereof. Thus, the skier's equipment will normally include a boot tree for maintaining the soles of the boot in substantially flat, planar, and noncurled configuration. This is particularly important when the boots are wet, and accordingly, the skier will be frequently required to carry boots which are necessarily blocked along with his skis and poles. In accordance with the present invention, a compact carrier device has been devised which functions as a compact unit for supporting or carrying skis and also poles, if desired; the unit also serving as a rigid supporting panel and carrier for boots. The carrying device comprises a main panel or body member, and the boots are adapted to be retained in opposed relationship along flat boot engaging surfaces thereof, while the ski supporting portions are disposed adjacent to the boot engaging surfaces. The weight of the individual items is equally distributed on opposite sides of the center axis of the carrier device, thus the device, when loaded, provides an evenly balanced, evenly distributed, and easily transported load. Furthermore, the skis are adapted to be engaged by the ski supporting portions along the central axis or balance point thereof, thus providing for additional ease in transporting the load.

Therefore, it is an object of the present invention to provide an improved carrier device for skiers which comprises a substantially rigid panel member wherein the panel is provided with a surface for receiving a pair of boots therealong, and means to receive a pair of skis, each ski being disposed along opposite sides of a central axis through said carrier device.

It is a further object of the present invention to provide an improved carrier device for skiers which includes a substantially rigid panel having means for receiving a pair of boots and a pair of skis, the boots in substantially opposed disposition, the skis in substantially balanced disposition along either side of the central axis of said support member.

It is yet a further object of the present invention to provide a substantially light-weight and rigid panel which is adapted to receive a pair of ski boots and a pair of skis, the ski boots being held in clamped relationship thereon, the skis being supported along an axis which is generally transverse to the longitudinal axis of the boots.

It is yet a further object of the present invention to provide an improved self-supporting carrier device for skiers which employs a substantially rigid panel having means for receiving a pair of ski boots in clamped relationship along opposed boot engaging surfaces thereof, and means for receiving and supporting a pair of elongated skis therealong.

Other and further objects of the present invention will become apparent to those skilled in the art upon a study of the following specification, appended claims, and accompanying drawings, wherein:

FIGURE 1 is an isometric view showing the ski boot and ski supporting portions of the carrier device of the present invention;

FIGURE 2 is a vertical sectional view taken along the line and in the direction of the arrows 2—2 of FIGURE 1;

FIGURE 3 is an isometric view of a somewhat modified carrier device prepared in accordance with the present invention; and

FIGURE 4 is a vertical sectional view taken along the line and in the direction of the arrows 4—4 of FIGURE 3.

In accordance with the preferred modification of the present invention as shown in FIGURES 1 and 2, the carrier device generally designated 10 includes an elongated rigid body panel 11 having a central longitudinal axis and having a pair of opposed flat boot engaging surfaces 12 and 13. Clamping means such as the toe clamps 14 and heel clamps 15 are provided in order to firmly engage the portions of the boot and lock it securely against the flat boot engaging surfaces 12 and 13. The design and operation of this portion of the carrier is described more fully hereinafter. The panel 10 is provided with a lower flanged supporting plate 17 which extends outwardly at right angles from the panel 11 in order to provide a suitable base or platform upon which the carrier assembly may rest. In order to accommodate various boot lengths, the boot engaging surfaces 12 and 13 are slotted as at 18, the clamp 14 being slidable within the slot together with the bolt and wing nut, as shown at 20. For convenience, the slot 18 is disposed along the plane of the central axis, and also along the longitudinal central axis of the boot, when mounted on the boot engaging surfaces 12 and 13.

The ski carrying portion and the handle portions are shown generally at 22, the carrying handle being designated 23 and the channel forming double U members being designated 24 and 25. Members 24 and 25 are secured to the handle portion by means of rivets or the like as at 26. The members 24 and 25 form a pair of U-shaped channels which have a common axis, and which are adapted to receive the skis in edge supported relationship therein. The spaced disposition of the members 24 and 25 forms a pair of closely spaced ski receiving channels having a central handle therebetween. In this modification, the ski carrying axis is generally transverse to the axis of the boot tree.

As shown in FIGURE 1, a portion of a ski 28 is shown in one of the ski-receiving channels. For purposes of achieving proper balance of the carrier, the handle member 23 is secured to the plate 11 by means of rivets or the like such as are shown at 29 and 30. The handle is secured to this plate along the central axis thereof, hence the over-all balance of the unit is preserved. While the longitudinal axis of the ski is generally transverse to the axis of the boot tree, this over-all balance is not disturbed. In this regard, however, the support plate 17 is preferably sufficiently long so as to accommodate any modest imbalance which may result when a person places a ski such as the ski 28 in the ski-receiving channel at a point where the balance point of the ski is not substantially over the center of the carrier device.

When the skier desires to carry his equipment, the skis are placed within the ski-receiving channels, and the skier may then grasp his ski poles and the handle 23 in one

hand and readily and easily transport his equipment. For purposes of adding rigidity to the carrier, the handle **23** is preferably arcuately bowed about its longitudinal axis or otherwise shaped in order to enhance the rigidity of the assembly.

Attention is now directed to FIGURES 3 and 4 wherein a somewhat modified form of carrier is shown. The carrier generally designated **25** includes a boot supporting member **11** which is similar to the carrier shown in FIGURES 1 and 2 and has boot engaging surfaces **12** and **13** which are comparable to that device, and in addition, the boot is mounted in the same manner by means of the toe clamps **14** and heel clamps **15**. The distinction in the devices lies in the positioning of the ski supporting members relative to the boot engaging surfaces **12** and **13**. In this connection, the ski supporting channels are disposed at the bottom of the unit in somewhat depending relationship. A pair of U members **36** and **37** form one ski receiving channel, while a similar pair of U shaped members are available on the opposite side of the unit. A bracket such as the bracket **39** is shown secured to the carrier member **11** by means of rivets **40**, the bracket **39** serving as a mount for the U-shaped carriers **36** and **37**. As indicated, the members **36** and **37** are relatively spaced and form ski-receiving channels adapted to support skis on edge. The carrying handle is shown at **41**, this handle being disposed along the central longitudinal axis of the carrier **35**. As indicated, the individual ski-receiving channels are arranged in equally and oppositely disposed relationship to this central longitudinal axis in order to preserve balance in carrying the arrangement. It will be appreciated that the skis, in the arrangement shown, will be disposed adjacent to the edge surfaces of the boot shown at **42**.

The use of this device will be essentially the same as that shown in FIGURES 1 and 2. When needed, the skier will load the boots and skis in the carrier **35**, grasp the handle **41**, and carry his equipment from one location to another.

In either of the modifications shown, the operation of the clamping mechanism is conventional. The heel clamps **15** are slotted and slidably adjustable relative to the thickness of the sole of the boot **42** by mean of the clamping bolt as shown at **45**. Thus, any heel thickness within the ranges normally encountered may be accommodated. The toe clamping arrangement is likewise conventional, a through-bolt together with a wing nut **20** being utilized to hold the toe clamp **14** against the sole of the boot **42**. In order to accommodate various thicknesses of soles, the toe clamp **14** may be arranged with a modest amount of pivotal action being possible between the clamp and the boot engaging surface. This can be accomplished by forming a slot along the upper surface of the clamp **14**. The head of the bolt member **20** retains the through-bolt in proper disposition relative to the slot **18**. If desired, a reinforcing plate, not shown, may be placed in the inner confines of the member **11**, and accordingly be employed to retain the head of the shoe bolt in proper disposition. For a complete disclosure of a suitable mounting technique for the boot clamping portions of this device, reference is made to my copending application Serial No. 360,505 filed April 17, 1964, entitled, "Carrier Device for Skiers."

In still a further modification of the present invention, it is possible to mount a pair of skis in a ski carrying position either above or below the boot carrying portion, the skis being maintained in back-to-back relationship within the confines of a C-shaped ski retaining member. In other words, a pair of C-shaped members may be mounted in spaced relationship to define a ski-receiving channel, and the skis then placed in back-to-back relationship as a pair within the confines of a ski retaining channel. Preferably, this channel is formed immediately below the handle carrying portion and above the boot carrying portion, and as is the case in the other devices the center of gravity of the skis coincides with the center of gravity of the boots. The C-shaped channel is formed with a height such that the normal camber in a pair of skis is adequate to retain the skis firmly within the carrying device.

It will, of course, be understood that various changes may be made in the form, details, arrangements and proportions of the parts without departing from the scope of the invention as set forth in the appended claims.

What is claimed is:

1. A carrier device for skiers comprising a substantially rigid support plate having a pair of elongated opposed flat boot engaging surfaces, said plate having a central axis extending along the vertical axial length thereof, clamping means disposed along said plate for retaining a pair of boots in clamped position thereon with the central axis of each boot being disposed substantially along the central axis of the support plate, means disposed adjacent to the base of said support plate and secured thereto for carrying a pair of skis, said ski carrying means including hook means forming a pair of spaced ski-receiving channels arranged in oppositely disposed relationship adjacent the base thereof and on either side of the central axis of and transverse to said supporting plate, and handle means at the top edge of said support plate and having a portion thereof coincident with said vertical axis for carrying said carrier device.

2. The carrier device as defined in claim **1** wherein said handle means are secured to said support plate along the longitudinal central axis thereof.

3. The apparatus as defined in claim **1** wherein said hook means are arranged on opposite sides of said supporting plate to receive a ski in edge supported position.

4. The carrier device as defined in claim **1** wherein the skis are supported and held adjacent to the edge surface of the boot engaging surfaces.

5. The carrier device for skiers comprising substantially rigid supporting plate having a pair of elongated opposed flat boot engaging surfaces, said plate having a central vertical axis extending along the axial length thereof, clamping means disposed along said plate for retaining a pair of boots in clamped position thereon with the central axis of each boot being disposed substantially along said central axis, means secured to said supporting plate for carrying a pair of skis, said ski carrying means including hook means forming at least one ski-receiving channel, the center axis of the aggregate of the ski-receiving channels being substantially co-planar with the central axis of said supporting plate, and handle means for carrying said supporting plate connected to the upper end thereof to intersect said vertical axis, said hook means secured to each side of the handle to carry skis in a position extending transversely of the supporting plate.

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