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Larson

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[54] SKI CARRIER

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[52] **U.S. Cl.** .....**224/45 S,** 224/45 Q
[51] **Int. Cl.** **A45f 5/10**
[58] **Field of Search** .....224/45, 45 R, 46 R, 50, 51, 224/52, 54, 5 Z, 5 C

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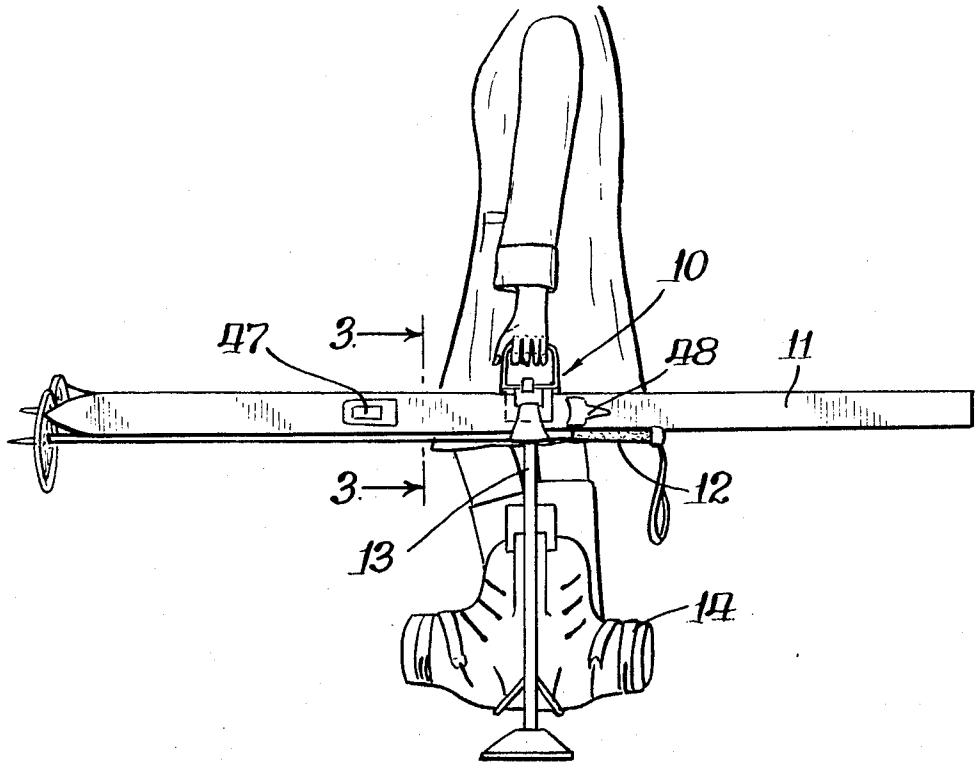
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[57] **ABSTRACT**

A ski carrier adapted to carry, in addition to a pair of skis, a ski boot carrier and a pair of ski poles. The carrier has a U-shaped frame which functions as a bail-type handle, from which a pair of panels are hung, each panel having a resilient strap by which a ski, or a ski and a ski pole, are secured to the panel. The panels, when not in use, swing into or adjacent the frame to form a small pocket-size package. A hook depending from one of the panels serves to support a ski-boot carrier, a clasp on the frame can be used to support the frame from the skier's belt to free one of his hands, and means are provided for hanging the ski carrier with skis secured thereto, from a wall hook. The carrier may be retained on the skis when the skis are secured to a ski rack on a car in either co-planar or parallel relationship to one another.

2 Claims, 8 Drawing Figures



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SHEET 1 OF 2

Fig. 1.

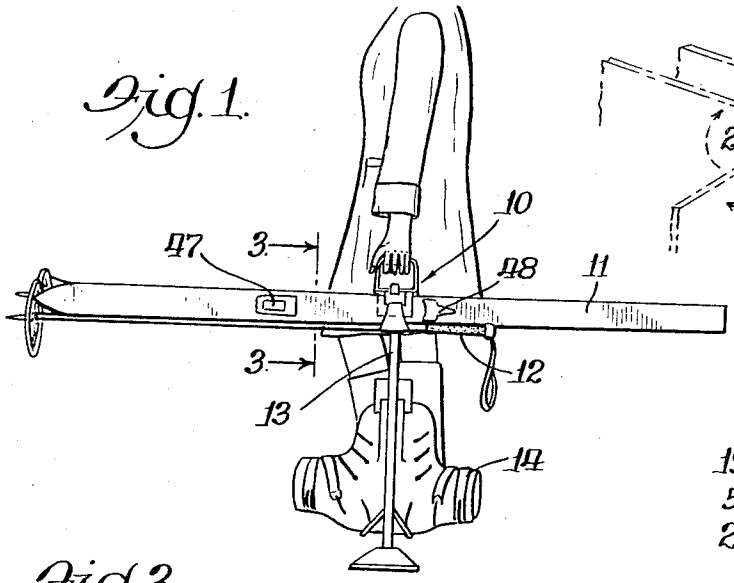


Fig. 2.

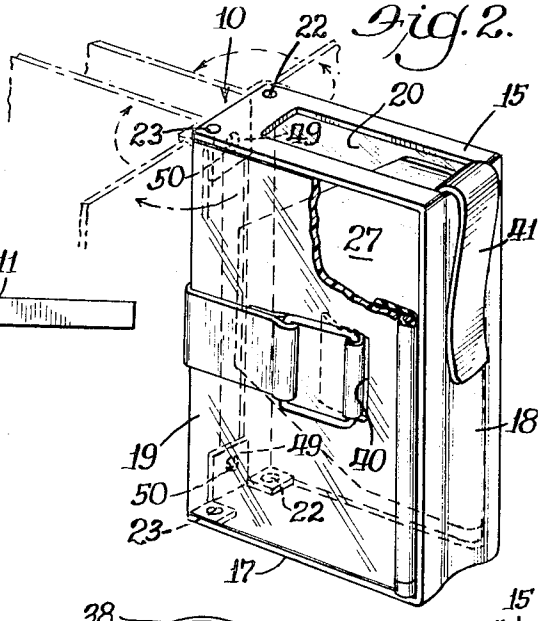
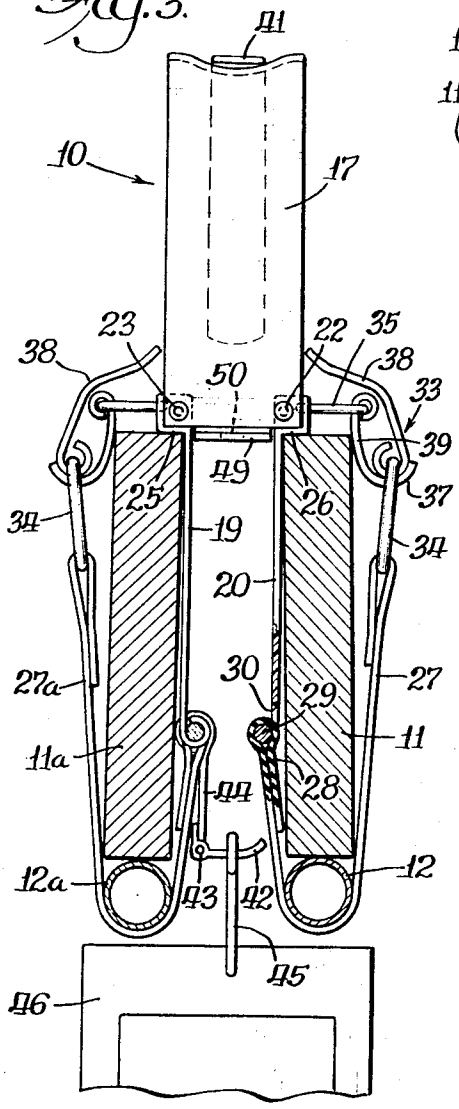


Fig. 3.



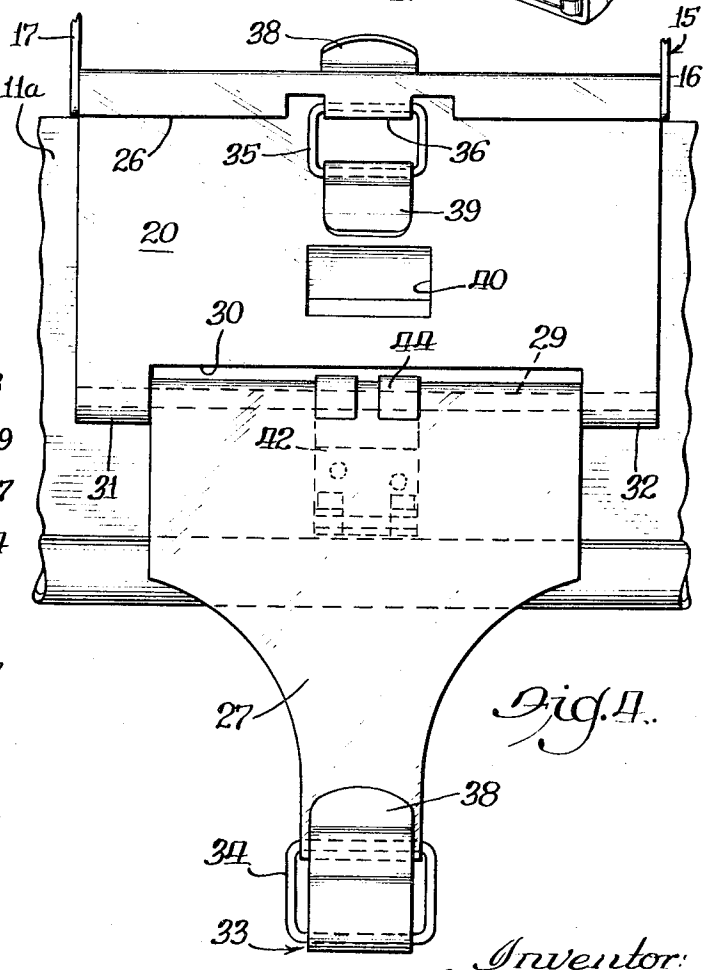


Fig. 4.

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Fig. 5.

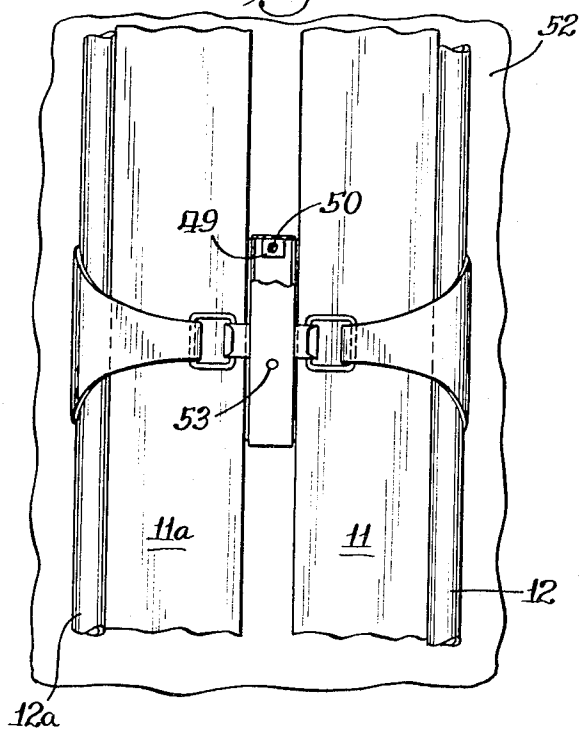


Fig. 6.

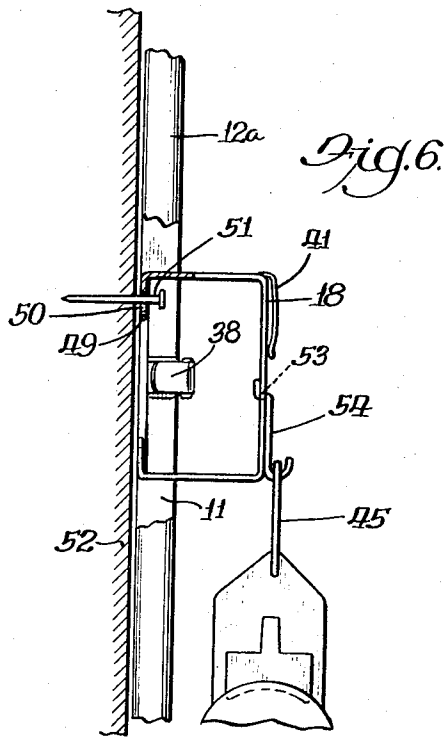


Fig. 8.

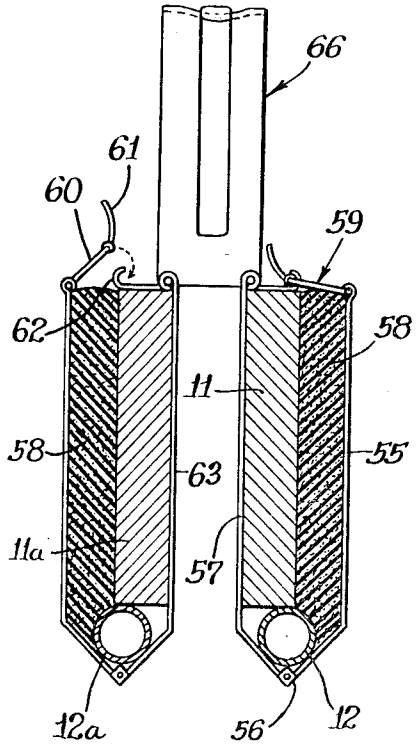
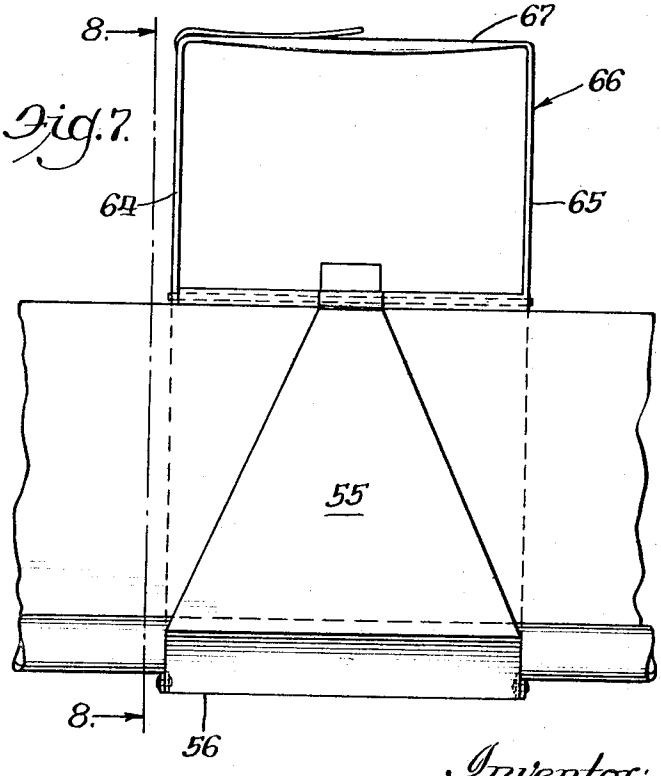


Fig. 7.



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SKI CARRIER

This invention relates to a ski carrier which may be carried from place to place by the skier, with skis, poles and ski boots mounted on the carrier.

The carrying of skis, ski poles and ski boots, as well as their storage when not in use, creates problems because of their size and number. Skis are generally secured to racks on cars for transport to and from a ski lodge, and they and their accessory poles and boots must be carried to and from the car. The racks vary in design from those which secure the skies in parallel, side-by-side relationship to those which clamp them in opposed relation to one another on their sides.

Various carriers have been designed in the past for transporting skis and accessories to and from a car, the construction of said carriers, however, requiring that they be removed from the skis when the latter are secured to a car ski rack.

It is an object of this invention to provide a ski carrier for carrying a pair of skis to and from a car or other means of transportation, said carrier being designed to remain on the skis when they are secured to a vehicle rack, regardless of whether the vehicle rack is designed to hold skis in side-by-side position or in opposed relation.

It is also an object of this invention to provide means on a ski carrier for carrying ski poles and a ski boot carrier with said ski carrier so that said skis, poles and boots can be carried with one hand, said ski carrier being of such design as to remain secured, without the boots, to the skis while the latter are mounted on a vehicle ski rack.

The convenience of a ski and ski pole carrier makes it desirable to have the carrier available when the skier is walking to or from a ski slope which may be remote from a lodge so that he can remove the skis from the carrier, at the slope. If no convenient storage place is available for the carrier at the slope, it is desirable that the carrier be taken with the skier down the slope, and it is accordingly within the purview of this invention to provide a ski carrier which may be collapsed into a package small enough to fit into a skier's pocket.

These and other objects of this invention will become apparent from the following detailed description of a preferred form of the invention when taken together with the accompanying drawings of a preferred embodiment thereof in which:

FIG. 1 is a side elevational view of the carrier of this invention in use showing a pair of skis, poles and boots mounted thereon;

FIG. 2 is an elevation in perspective, on an enlarged scale, of the carrier of FIG. 1 in folded form as it would be carried in a skier's pocket;

FIG. 3 is an enlarged front elevational view of the carrier with the skis, poles and boot carrier mounted thereon, the view being taken in the direction of the arrows 3—3 in FIG. 1;

FIG. 4 is a side elevational view of the carrier on the scale of FIG. 3;

FIG. 5 is an enlarged front elevational view of the carrier of FIG. 1 in a different mode of use;

FIG. 6 is a side elevational view of the carrier in the mode of use shown in FIG. 5;

FIG. 7 is a side elevational view of a modified form of the carrier of FIG. 1; and

FIG. 8 is a side elevational view in section of the carrier of FIG. 7, taken along line 8—8 of FIG. 7.

Referring now to the drawings for a detailed description of the invention, and particularly to FIG. 1, the preferred form of the carrier is shown generally at 10 as it would be carried by a skier. Appropriately secured to the carrier by means hereinafter to be described in detail are a pair of skis 11 shown mounted on their sides, a pair of ski poles 12, a ski-boot carrier 13 and a pair of ski boots 14 shown secured to the ski-boot carrier. It may be observed that the carrier of this invention provides a means for carrying skis, ski poles and boots as a single pack in one hand of the skier.

The carrier itself, without the skis, ski poles and ski boots, is shown in folded compact condition in FIG. 2 as it would be carried in the skier's pocket. Said carrier 10 is comprised of a U-shaped rigid frame member 15 preferably made of light-weight metal, or it can also be made from a suitable molded plastic, said frame member 15 being shown on its side rather than horizontal, as in FIG. 1. Thus, the two sides 16 and 17 of the U are shown one above the other, and the connecting web 18 of the U is shown vertical. When in the carrying position shown in FIG. 1, however, the connecting web 18 is horizontal and uppermost, with the sides 16 and 17 depending from the web so that the U is inverted and forms a convenient bail-type handle.

Across the open end of the U are mounted two relatively rigid panels 19 and 20, each of said panels being pivotally mounted as at 22, 23 to opposite sides 16 and 17 of the frame. Thus, the panels 19 and 20 may be swung into a co-planar relation with one another so as to lie flat against a wall, if desired, or into a parallel relationship below the ends of the sides 16 and 17 of the frame, as in FIG. 1. Each panel 19 and 20 is relatively rigid and is adapted to support a ski which is firmly secured thereto. Thus, when the panels are in a co-planar relation with respect to one another and have skis mounted thereon, said skis will likewise be in a co-planar relation to one another and may thus be placed side by side, either on a car rack arranged to accept skis in such relation, or on a wall hook by means hereinafter to be described. Said skis may likewise be swung into parallel planes below the frame, as shown in FIG. 1, which is the normal carrying position to which they gravitate when carried by a skier. When thus disposed, they may be mounted on a car rack particularly designed to accept them in such parallel relation.

FIGS. 3 and 4 show the carrier of FIG. 1 on an enlarged scale. Panels 19 and 20 are shown in substantially parallel relationship to one another depending from the open end of the U-shaped frame 15. The pivotal mountings 22 and 23 for the panels 20 and 19, respectively, are shown near the end regions of the side 17. Each panel 19 and 20 has a step 25 and 26, respectively, formed near its upper end which provides an abutment against which the skis 11 may bear when they are fastened to their respective panels.

The means by which the skis are fastened to their respective panels comprises, in the form chosen to illustrate this invention, a resilient strap 27 which is secured at one end 28 around a pin 29 which, in turn, passes through a notch 30 formed in the panel. The ends 31 and 32 of the panel adjacent notch 30 encompass the pin 29 to hold said pin in place on the panel. Strap 27 is relatively wide and is preferably made of elastomeric material. A clasp 33 is secured to its other end, said clasp comprising a ring 34 secured to the end

of the strap 27 and a handle 38 secured to ring 34 by which the latter is manipulated. A ring 35 (FIG. 4) forming the fixed part of the clasp is pivotally mounted in a curled edge 36 on the opposite side of panel 20 from the side on which pin 29 is retained, and a curved receiver 37 is mounted for swinging movement on ring 35. Handle 38 is used to hook ring 34 over the end of the curved receiver 37.

It is contemplated that resilient strap 27 will be wrapped around the lower end of a ski 11 and, if desired, a ski pole 12 may be placed along the side of the ski so that the strap passes around both the ski pole and the ski. The length of strap 27 is such that it must be stretched in order to hook ring 34 over curled end 37 of the fixed part of the clasp and therefore it will exert pressure upon ski 11 to hold it against the step 26 in the panel which locates the ski precisely on the panel. Thus, the ski is held firmly in a vertical direction by the tension in the strap. It may be noted that the curved receiver 37 and the length of ring 35 are so proportioned relative to the thickness of a ski that the upper portion 39 of the curved receiver 37 overlaps and bears against the upper portion of ski 11 to press said upper portion against panel 20. Thus, ski 11 is made to assume a position parallel to step 26 and is also made to bear against panel 20 to assume a position parallel thereto. To all intents and purposes, therefore, the ski 11 becomes a fixed part of the carrier 10 so that the U-shaped frame may be used as a handle by which the ski can be carried.

It is apparent that a second ski 11*a* can be held against panel 19 and the step 25 therein by a strap 27*a* in precisely the same manner as the aforementioned ski 11, and that both skis, as well as the two ski poles 12 and 12*a* may be conveniently carried by the skier as a single pack.

Referring again to FIG. 2, when the carrier 10 is not used to carry skis, each strap 27 may be wrapped around its respective panel 20 or 19 and the handle 38 of each, may then be inserted into an opening 40 formed in the panel. Said opening is so disposed in the panel as to make it necessary to stretch the strap when the handle 38 is inserted thereinto. This puts in tension, the portion of the strap which is on the other side of the panel so that if handle 38 is inserted into the opening to point toward the hinge 26 or 27, it will be held there by the strap.

Thus, when the carrier is not in use, the panels assume the position shown in FIG. 2 and the straps are made secure so that the entire carrier resembles a small box which may be readily carried in the skier's pocket. If desired, suitable friction can be incorporated into the hinges 22, 23 or elsewhere between the panels and frame 15 to hold the panels in the position shown in FIG. 2.

Should the skier, while transporting his skis, desire to free at least one hand, while at the same time carrying the skis, he can do so with the present invention by making use of a spring clip 41 on frame 15 which overlies web 18 thereof. Thus, clip 41 may be slipped over the skier's belt or the rim of a pocket on his coat or jacket, and the skis will be supported in a vertical position while the skier can steady the skies in an upright position by one hand or one arm and make use of one or both of his hands.

To increase the usefulness of the carrier to the extent that it may be used to carry a ski-boot carrier, a pivoted hook 42 (FIG. 3) is used. Said hook may take various forms, but in the one illustrated, it is hinged at 43 to the end of a clip 44 fastened around the central portion of pin 29 (FIG. 4) either over strap 27, as shown in said figure, or directly upon said pin. Hook 42 is pivoted and constructed in such manner as to be limited in its movement to 90° or less from the plane of clip 44, such that when extended, it provides a horizontal hook portion adapted to engage a ring 45 secured to the upper end 46 of boot carrier 13. When hook 42 is not in use and panel 19 is folded into the U-shaped frame 15, hook 42 is pivoted upwardly out of the way so as to lie flat against clip 44.

As shown in FIG. 1, carrier 10 is mounted between the boot clamps 47, 48 substantially at or above the center of gravity of the skis, poles and boots to be carried, and may be left on the skis when the latter are clamped to a car rack. Such car racks are broadly of two types, namely, one in which the skis are fastened to the carrier in a horizontal side-by-side relation, while in the other the skis are mounted on the carrier in a parallel relation to one another; that is, mounted on their sides with their bottom surfaces facing one another. Said car racks normally are so arranged so as to support the skis in spaced relation to a car top or car body and hence the presence of the frame, which normally extends beyond the surfaces of the skis, does not interfere with the fastening of the skis to a car carrier. The pivoted mounting of the panels 19 and 20 readily permits the skis to assume a co-planar side-by-side position, or a vertical parallel position such as is shown in FIG. 3 as required by the rack.

When the carrier 10 with the skis mounted thereon is not being transported, it may be hung on a nail on a wall, if so desired. As shown in FIGS. 5 and 6, the carrier 10 is provided with a tab 49 extending inwardly from one of the sides of the frame, the tab, in turn, being provided with an opening 50 through which a nail or hook 51 secured to a wall 52 may extend. To further increase the usefulness of the carrier 10, said carrier may be provided with an opening 53 in the web portion 18 through which a removable hook 54, similar in construction to the hooks used with well-known pegboards, may be passed. Said hook 54 may then be used to support the ring 45 of a ski-boot carrier.

In the modification shown in FIGS. 7 and 8, the resilient strap has been replaced by a metal plate 55 hinged at its lower end 56 to the free end of a modified panel 57 which is similar to panels 19 and 20 except that it is longer so as to extend beyond the lower end of the ski 11. In the space below ski 11 is retained the ski pole 12. The necessary resilience in the clamping action for the ski 11 and ski pole 12 is supplied by a pad 58 of sponge rubber or the like which may be appropriately adhered to plate 55 and is compressed against ski pole 12 and ski 11 by a clasp 59 so disposed on U-shaped frame 66 as to urge plate 55 against ski 11. Thus clasp 59 is comprised of a ring 60 hinged to the upper end of plate 55 and provided with a handle 61 on its other end by which ring 60 is manipulated over a hook 62 forming part of the clasp. Panel 57 and its opposite counterpart 63 are hinged to the open ends of the sides 64, 65 of the U-shaped frame 66, the latter

having an integral connecting web which functions as the handle for the carrier when the latter is in use.

The material of the panels **19** and **20**, and the panels **57** and **63** of the modification of FIGS. **7** and **8**, may be metal or a plastic molded to have the configurations required of such panels. It is understood that the selected plastic material will have the requisite strength for the purpose intended and will also be able to withstand safely both the cold temperatures encountered on ski slopes and the relatively warm temperatures encountered during storage in the summer months.

Thus the ski carrier described above provides a lightweight, compact and efficient means for transporting skis, poles, and if desired, boots from place to place, as well as providing a device for temporarily hanging the skis and accessories from a wall. When not in use, the carrier can be folded or collapsed into a packet small enough to be carried in the skier's pocket.

Although the carrier and modification thereof described above comprise the best mode of carrying out the invention of which I am presently aware, it is understood that minor changes can be made in the designs shown without departing from the spirit of the invention. The scope of the invention therefore is not to be limited to the forms disclosed above but is to be determined by the appended claims.

I claim:

1. A ski carrier comprising a U-shaped frame, a panel, means hinging said panel to the frame for swinging movement relative to said frame, releasable means for securing a ski to said panel, said releasable means comprising a substantially rigid plate, means hinging said plate to said panel for swinging movement of said plate to an overlapping position with respect to said panel, said ski being disposed between said panel and overlapping plate, resilient means disposed between the ski and plate, and releasable means securing the plate to the panel and compressing said plate and resilient means against the ski, said panel and plate extending below said ski to define with said ski a cavity, a ski pole in said cavity, said resilient means extending over said pole to hold said pole against the panel.

2. A ski carrier comprising a substantially U-shaped bail-type frame adapted to use as a handle and having side portions of pre-selected width adjoined at corresponding ends through a connecting portion which serves as a hand grip, panels hingedly secured in spaced relationship to opposite sides of the side portions at the ends thereof opposite the connecting portion and for swinging movements in opposite directions relative to the frame between positions adjacent and extending along opposite sides of the side portions in spaced and opposed relationship to one another and positions in which the panels extend away from the ends of the side portions in generally parallel and spaced relationship to one another, and means for releasably securing skis against opposite faces of said panels.

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