

[54] **HOLDER APPARATUS FOR SKIS**
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 [51] Int. Cl. **A47f 7/00**
 [58] Field of Search..... **211/60 R, 60 SR, 60 G**

3,248,027 4/1966 Pfleider.....211/60 SK X

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[57] **ABSTRACT**

A hand carrier for ski equipment. In a first embodiment the carrier includes first and second arms capable of retaining ski equipment, such as skis and poles, securely together and permitting them to be easily and safely carried. The carrier can be fastened to a ski rack when not in use so that the ski equipment is securely stored during such times. There is also provided a carrier for retaining skis and including a strap permitting the carrier to be suspended over the shoulder of the user so that he may carry the skis while walking with both hands free.

9 Claims, 14 Drawing Figures

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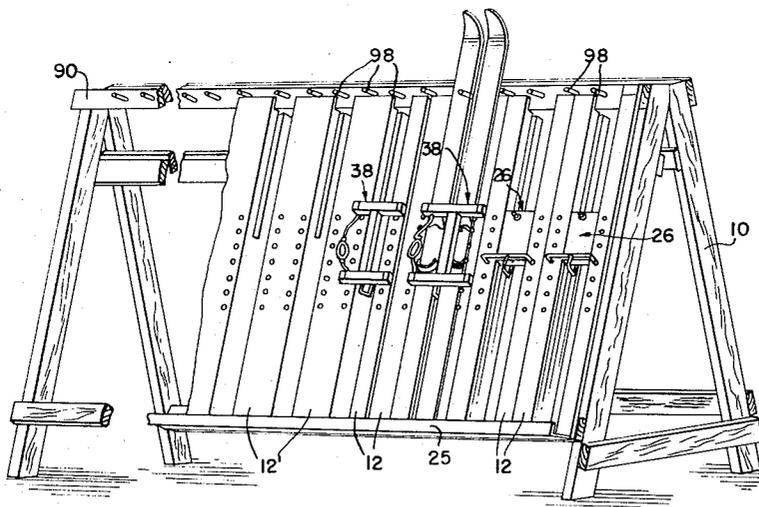


FIG. 1.

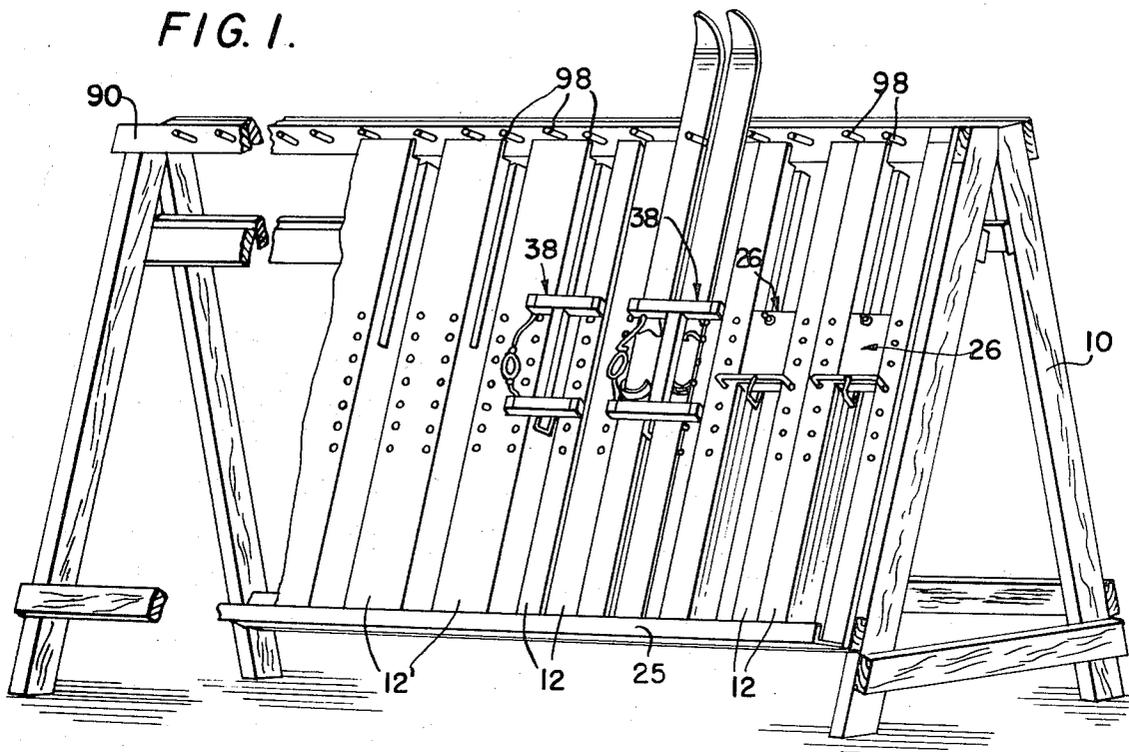


FIG. 2.

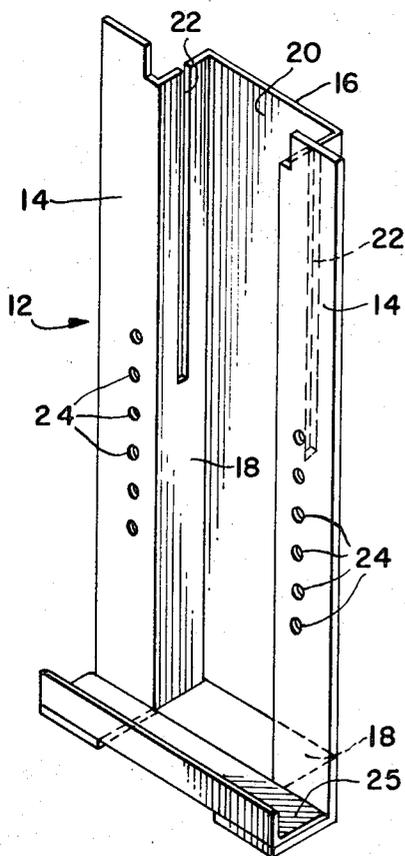


FIG. 4.

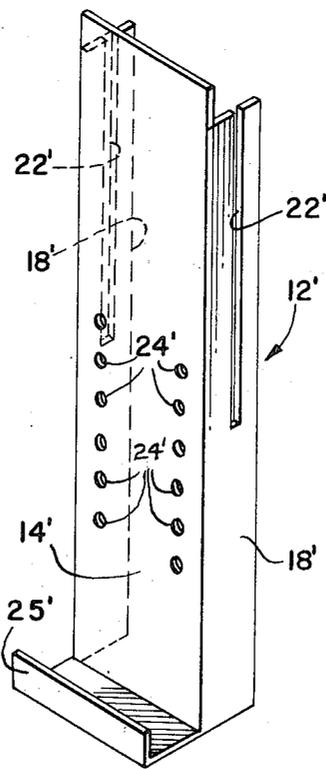
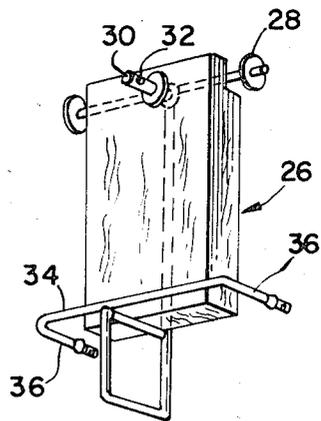


FIG. 3.



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FIG. 5.

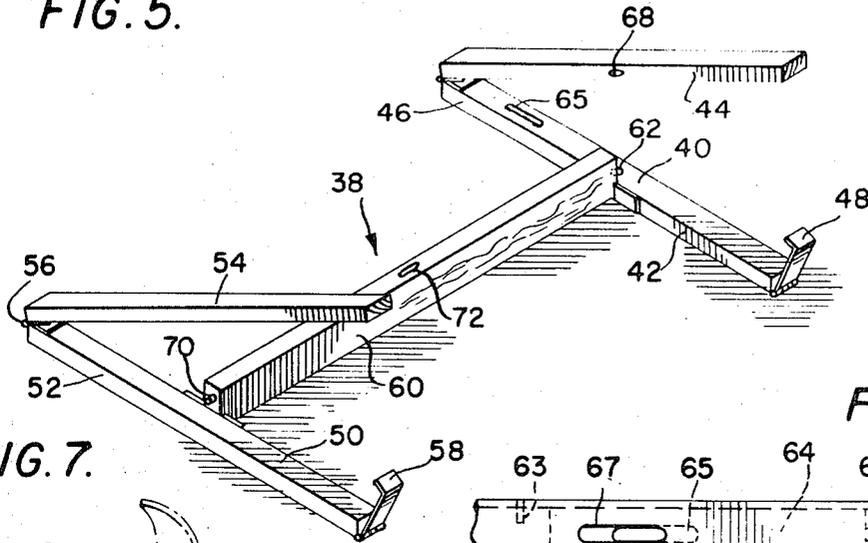


FIG. 6.

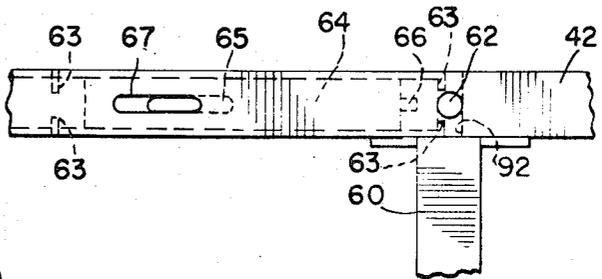


FIG. 7.

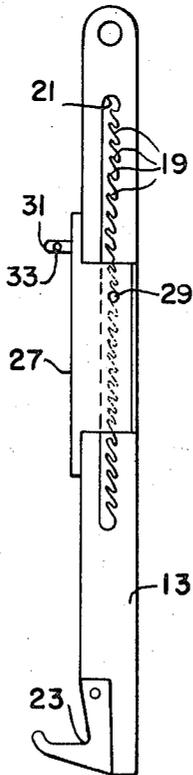
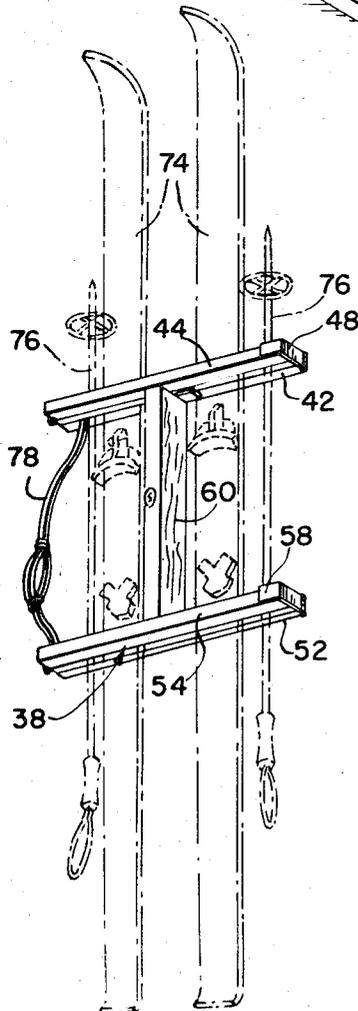


FIG. 9.

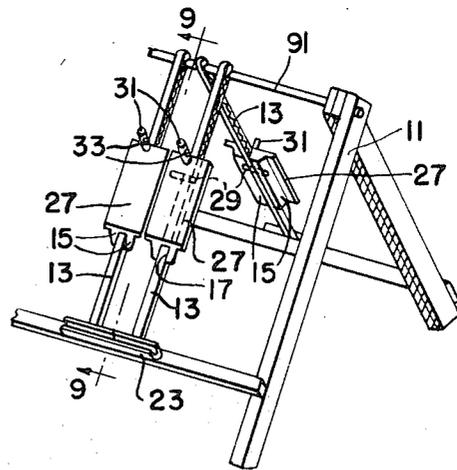


FIG. 8.

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FIG. 13.

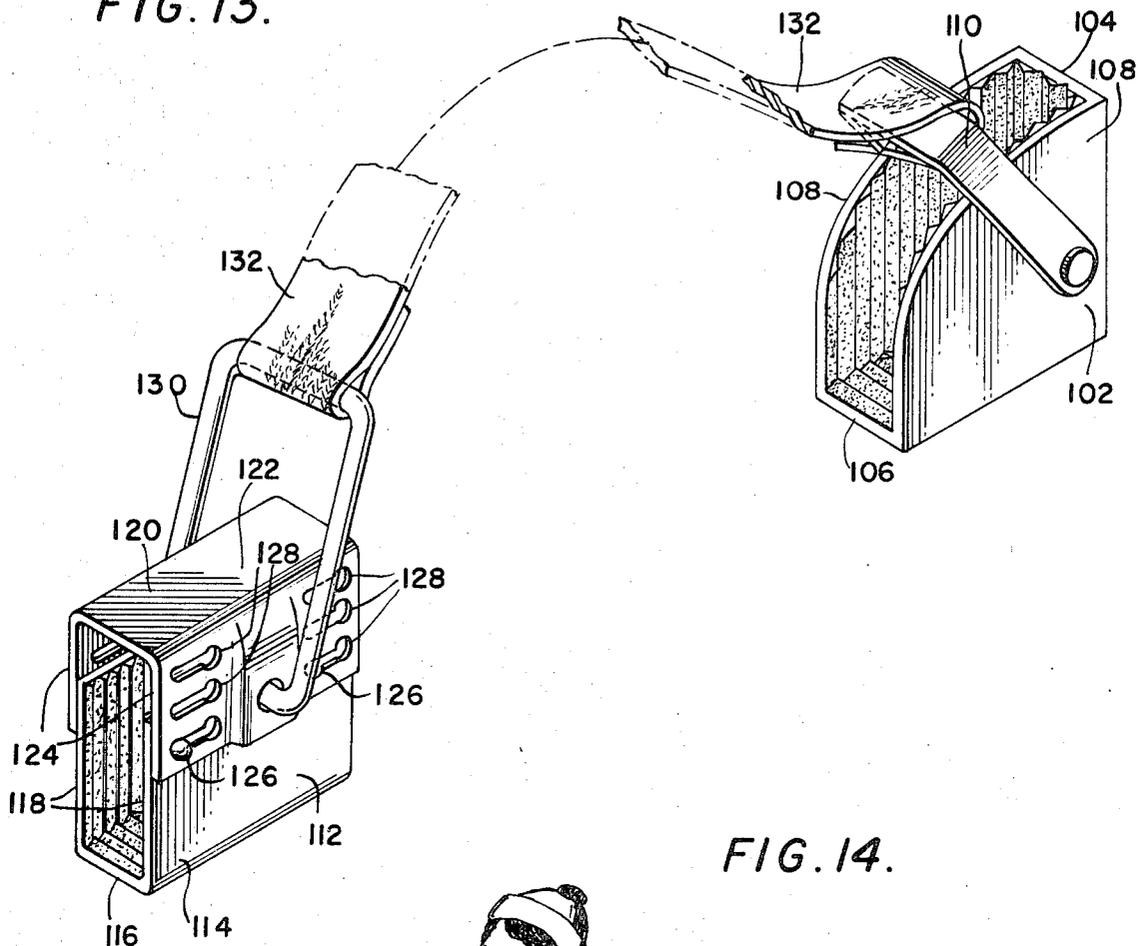
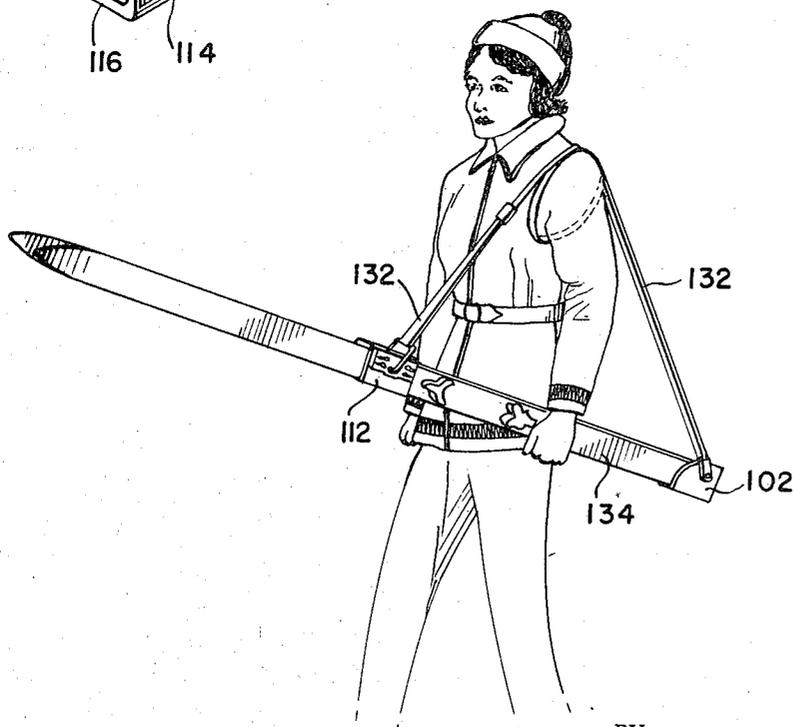


FIG. 14.



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HOLDER APPARATUS FOR SKIS

The present invention pertains to a hand ski carrier. More particularly, the present invention pertains to apparatus for holding ski equipment to permit its being carried readily and safely and also to a ski carrier capable of being securely attached to a ski rack, thereby preventing theft.

In recent years skiing has become increasingly popular and larger numbers of people engage in skiing each year. Ski resorts have consequently become very popular and crowded. Many people traveling to such resorts have their own ski equipment which they bring with them. The skis must frequently be carried a considerable distance, for example, from a parking area to a ski lodge. Because of the large number of people frequently found in such areas and because the ski lodges are generally located on mountain slopes, if ski equipment is dropped, it is likely to cause a considerable inconvenience if not injury. While in the ski lodge the skiers will generally have extended periods of time during which they are not utilizing their skiing equipment, for example, during meals. The ski lodges usually provide racks for holding skis during such times. Because of the large number of people at such ski lodges and because of the lack of identifying indicia on the skis, it would be easy for a person to remove another person's skis from such a rack either inadvertently or intentionally. When utilizing ski equipment there are often occasions when it is necessary to carry the skis while walking a moderate distance rather than wearing them.

The present invention is a ski carrier which will hold a pair of skis and poles firmly together so that only the one item must be held in the hand, thereby decreasing the likelihood of accidentally dropping part or all of the skiing equipment with resultant inconvenience or injury and which can be securely attached to a ski rack, for example by a key-operated lock, so that the skis can be removed only by their owner or other proper user. In another aspect the present invention is a ski carrier suitable for carrying skis while walking and leaving both hands free. In accordance with the present invention, a ski carrier is provided including first and second pairs of hinged members for securely clamping the skis and means for locking the hinged members in a closed position. Means are further provided for attaching the ski carrier to a ski rack and locking the carrier in place thereon. Additionally in accordance with the present invention there is provided a ski carrier for securely and easily carrying skis on shorter distances, and including first and second retaining members for securely holding the skis adjacent the ends thereof and which are coupled together by a strap which can be supported by the shoulder of the skier.

These and other aspects and advantages of the present invention are more apparent in the following detailed description and claims particularly when read in conjunction with the accompanying drawings. In the drawings:

FIG. 1 is a perspective view of a ski rack and ski carrier incorporating the present invention for securely retaining skis;

FIG. 2 and FIG. 3 depict components of the ski rack of FIG. 1;

FIG. 4 depicts an embodiment of component suitable for use as an alternative to that of FIG. 2;

FIG. 5 is a representative view of a ski carrier in accordance with the present invention;

FIG. 6 is a fragmentary view depicting details of the ski carrier of FIG. 5;

FIG. 7 is a perspective view of a ski carrier in accordance with the present invention and illustrating the retention of skiing equipment thereon;

FIG. 8 is a perspective view of a modified ski rack for retaining a ski carrier in accordance with the present invention;

FIG. 9 depicts a component of the ski rack of FIG. 8;

FIG. 10 depicts an additional embodiment of ski rack retaining a ski carrier in accordance with the present invention;

FIGS. 11 and 12 depict details of the equipment of FIG. 10;

FIGS. 13 and 14 depict a ski carrier in accordance with the present invention for carrying the skis supported over the shoulder of the skier.

FIG. 1 depicts a ski rack 10 such as commonly found at ski lodges and including a plurality of locking frames 12 one of which is shown in greater detail in FIG. 2. As seen in FIG. 2, each frame 12 includes first and second front members 14 each of a height slightly less than that of ski rack 10. Members 14 are coupled together by channel 16 which includes first and second side portions 18 and back portion 20 joining the two side portions 18. Each side portion 18 has a slot 22 extending from the top thereof a substantial distance down the length thereof, for example a distance in the order of one-half the length. Each front member 14 has a plurality of holes 24 distributed in a line over a short portion of the length thereof and generally about half way up each member 14. The holes 24 in the two front members 14 are aligned to provide a plurality of pairs of holes. A retaining trough 25 extends along the bottom front edge of frame 12 and preferably is lined with, for example, rubber.

FIG. 3 depicts a retaining block 26 adapted to fit within channel 16 of locking frame 12. Retaining block 26 includes a horizontal bar 28 near the upper end thereof, a pin member 30 extending forwardly from the front of block 26 near the upper end thereof and having a hole 32 passing horizontally therethrough, and a second horizontal bar 34 near the lower end thereof and having rearwardly extending legs 36. As seen in FIG. 1, a plurality of locking frames 12 are securely mounted as a part of ski rack 10, and a retaining block 26 is provided within the channel 16 of each frame 12. The ends of bar 28 of each block 26 extend into the slots 22 of the associated frame 12, and the ends of each leg 36 of the block 26 are inserted into a pair of holes 24 in the associated frame 12. Accordingly, the height of the block 26 can be adjusted by moving the legs 26 into the desired pair of holes 24 so that a ski carrier in accordance with the present invention can be attached at the height preferred by the user.

FIG. 4 depicts an alternative embodiment of locking frame 12' including a front member 14' having a plurality of holes 24' aligned in pairs in two vertical lines and having two side portions 18' extending rearwardly. Each side portion 18' includes a slot 22' extending from the top thereof a substantial distance down the length thereof. When locking frames 12' are provided on the ski rack 10, legs 36 of retaining block 26 are inserted into a hole 24 in each of two adjacent frames 12', as illustrated in FIG. 1.

FIG. 5 depicts a ski carrier 38 in accordance with the present invention. Carrier 38 includes first arm member 40 made up of a lower arm half 42 and an upper arm half 44 which are connected together by hinge 46. Arm half 42 includes clamp 48 which permits securing of the arm halves in a closed position. Ski carrier 38 further includes second arm member 50 made up of a lower arm half 52 and an upper arm half 54 joined together by hinge 56 and having clamp 58 to permit securing the arm halves in a closed position. First arm member 40 and second arm member 50 are joined by center member 60. Lower arm half 42 has a first opening 62 extending through it along a line transverse the longitudinal axis of center member 60 and a second opening 92 extending into it along a line parallel with the longitudinal axis of center member 60. Both opening 62 and opening 92 are situated in lower arm half 42 adjacent its attachment to center member 60, and so opening 62 and opening 92 intersect. As seen in FIG. 6, lower arm half 42 is hollow and includes bolt 64 which slides within arm 42. Bolt 64 has a slot 65 which when bolt 64 is in a neutral position matches slot 67 in the upper surface of lower arm half 42. The sidewalls of arm half 42 have a plurality of indents 63, four being visible in FIG. 6, to prevent bolt 64 from oversliding openings 62 and 92. Movement of bolt 64 is controlled by means of a key inserted in slots 65 and 67 in either extreme position of bolt 64.

Upper arm half 44 includes a hole 68 on the inner side thereof which is adjacent center member 60 when upper arm half 44 is closed against lower arm half 42. Hole 68 extends into but not necessarily through upper arm half 44. Likewise, upper arm half 54 includes a hole on the inner surface thereof which is adjacent center member 60 when upper arm half 54 is closed against lower arm half 52. Center member 60 is hollow and encloses first and second bolts 70, one of which extends outwardly from locking device 72 in the middle of center member 60 toward upper arm half 44 and the second of which extends outwardly from locking device 72 toward upper arm half 54. Each bolt 70 is movable in response to actuation of locking device 72 to a position in which the bolt 70 extends beyond the end of member 60.

FIG. 7 depicts skis 74 and poles 76 within the carrier 38. With upper arm halves 44 and 54 opened away from corresponding lower arm halves 42 and 52, skis 74 and poles 76 are put into position. The arm halves are then closed, and locking device 72 operated to cause bolts 70 to extend into holes 68 in upper arm halves 44 and 54. The upper arm halves therefore cannot be opened, and so the ski equipment is securely held within carrier 38. Preferably, locking device 72 is key-operated so that only the person having the proper key is able to remove the ski equipment from carrier 38.

When it is desired to store the skis on a ski rack, as depicted in FIG. 1, the heels of the skis are placed within trough 25. Upper arm half 44 of first arm member 40 is opened and the tip 66 of bolt 64 is withdrawn from hole 62. The skis and carrier are placed on the ski rack with pin 30 of block 26 extending through hole 62. Bolt 64 is moved to insert tip 66 through hole 32 in pin 30, and upper arm half 44 is then closed. Locking device 72 is operated and so upper arm half 44 cannot be raised. Consequently, tip 66 of bolt

64 is securely positioned within hole 32 of pin 30, and so carrier 38 cannot be removed from the ski rack. If desired, of course, a pair of skis can be placed bottom-to-bottom on the same side of center member 60 on carrier 38 and so the carrier is capable of retaining two pair of skis. Alternatively, first and second arm members 40 and 50 could be shortened so that the carrier is capable of carrying only one pair of skis bottom-to-bottom. Additionally, bolt 64 is operated in response to a key, preferably the same key as operates locking device 72. Preferably also, means, such as strap 78 connected to arms 40 and 50, are provided to permit carrier 38 to be carried readily in one hand or over the shoulder.

FIG. 8 depicts a modified ski rack in accordance with the present invention. Ski rack 11 has a plurality of locking member 13 affixed thereto. As seen in FIG. 9, each member 13 is an elongated bar extending the height of rack 11 and having a retaining trough 23 at the lower end thereof. An adjustment slot 21 extends over a substantial portion of the length of each member 13 and the back edge of slot 21 includes a plurality of adjustment grooves or teeth 19. A retaining block 27 is provided for each member 13 and includes on its rear side vertical rails 15 defining channel 17 adapted to fit about locking member 13. A pin 29 is connected between the rails 15 to catch in teeth 19 of slot 21, thereby supporting retaining block 27 on locking member 13. Each retaining block 27 has a pin member 31 extending forwardly from its front near the upper end thereof and having a hole 33 passing therethrough. With retaining block 27 supported on locking member 13, carrier 38 is secured in place by inserting pin member 31 through hole 62 and moving tip 66 of bolt 64 through hole 33 of pin 31.

FIG. 10 depicts a modified embodiment of the present invention suitable for securely attaching carrier 38 to a ski rack 82 which does not include locking frame 12. For this purpose, washer 84 and eyebolt 86 are provided coupled together by means such as chain 88 as depicted in FIG. 11. To secure carrier 38 to rack 82 chain 88 is looped about crossmember 90 of rack 82 as shown in FIG. 12. Eyebolt 86 is then passed through washer 84 and into hole 92 of lower arm half 42. Under the urging of a key inserted into slots 65 and 67 or other suitable means, bolt 64 is then moved toward center member 60, inserting tip 66 through hole 100 in the body of eyebolt 86, thereby locking carrier 38 to crossmember 90. Eyebolt 86 is then hung from peg 98 which is conventionally found on ski racks such as ski rack 82.

FIGS. 13 and 14 depict a ski carrier suitable for carrying over the shoulder of the user as he walks. First member 102 is provided with end 104, bottom 106, and sides 108. The inner surface of member 102 is preferably lined with a suitable resilient material such as rubber to prevent damage to the skis. Bracket 110 is rotatably connected to member 102. Second member 112 includes a first portion 114 having bottom 116 and first and second sides 118 and a second portion 120 having top 122 and first and second sides 124. The inner surface of portions 114 and 120 are likewise preferably covered with a suitable material such as rubber to prevent damage to the skis. Each side 118 of portion 114 has a pair of studs 126 extending therefrom, and each side 124 of portion 120 has several

pairs of keyholes 128 to receive studs 126 so that portions 114 and 120 may be adjustably coupled together. Bracket 130 is rotatably connected to portion 120, and brackets 110 and 130 are coupled together by suitable means such as an adjustable leather strap 132. As depicted in FIG. 13, skis 134 are inserted into members 102 and 104, and strap 132 is suspended from the shoulder of the skier as he walks, permitting him to readily carry the skis with both hands free.

The ski carriers of the present invention can be formed of any material that provides adequate strength, rigidity and workability and retains those properties at low temperatures encountered at ski resorts, for example temperatures as low as 40 degrees below zero Fahrenheit. Thus, although the present invention has been described with reference to preferred embodiments, numerous modifications and rearrangements could be made, and still the result would come within the scope of the invention.

What is claimed is:

1. A ski equipment carrier comprising first and second arm members, each arm member including an upper half and a lower half hingedly joined together to permit movement between a closed position which the upper half is closed substantially against the lower half in a ski equipment retaining relationship and an open position in which the upper half is opened from the lower half in a ski equipment releasing position; a center member connecting the first arm member lower half with the second arm member lower half; and locking means operative when said arm member upper halves are in the closed position for selectively locking the arm members in the closed position to prevent movement to the open position and unlocking the arm members to permit movement to the open position.
2. A ski equipment carrier as claimed in claim 1 further comprising carrier strap means connected to at least one of the arm members.
3. A ski equipment carrier as claimed in claim 1 in which the locking means comprises a first bolt within the center member and capable of extending from the center member to contact the first arm member upper half, a second bolt within the center member and capable of extending from the center member to contact the second arm member upper half, and lock control means for selectively extending the first and second bolts from the center member and withdrawing the first and second bolts into the center member, the first arm member upper half including a recess for receiving the first bolt and the second arm member upper half including a recess for receiving the second bolt.
4. A ski equipment carrier as claimed in claim 3 in which the lock control means is capable of operation

only by a key.

5. A ski equipment carrier as claimed in claim 1:
 - a. in which the lower half of one of the arm members has an opening therethrough and includes (1) bolt means capable of assuming a first position in which the bolt means extends across the opening and a second position in which the bolt means is withdrawn from the opening, and (2) bolt control means for selectively moving the bolt means between its first position and its second position; and
 - b. further comprising a ski rack including means for supporting ski equipment in a substantially upright position and a pin adapted to pass through the lower arm half opening and having an opening for receiving the bolt means when the bolt means is in its first position.
6. A ski equipment carrier as claimed in claim 5 further including means for adjustably connecting the ski rack pin to the ski rack to permit adjustment of the height of the ski rack pin with respect to the ski rack.
7. A ski equipment carrier as claimed in claim 1:
 - a. in which the lower half of one of the arm members has an opening therethrough and includes (1) bolt means capable of assuming a first position in which the bolt means extends across the opening and a second position in which the bolt means is withdrawn from the opening, and (2) bolt control means for selectively moving the bolt means between its first position and its second position; and
 - b. further comprising an eyebolt having a first opening therethrough, a washer adapted for placement about the eyebolt, and flexible connection means connecting the eyebolt to the washer, whereby with the flexible connection means looped about a fixed object, the eyebolt inserted through the washer and into the opening of said one arm member, and the bolt means in its first position, the carrier is connected to the fixed object.
8. A ski carrier comprising
 - a. a first member having a bottom surface, an end surface and first and second side surfaces all connected to ether to form a first ski receiver;
 - b. a second member having a bottom surface, a top surface and first and second side surfaces all connected together to form a second ski receiver; and
 - c. flexible strap means connecting the first ski receiver and the second ski receiver.
9. A ski carrier as claimed in claim 8 in which the first and second side surfaces of the second member each include a first portion having a stud extending outwardly therefrom and a second portion having a plurality of keyholes therethrough adapted to receive the stud to permit adjustable connection of the first and second portions to form the second member.

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