

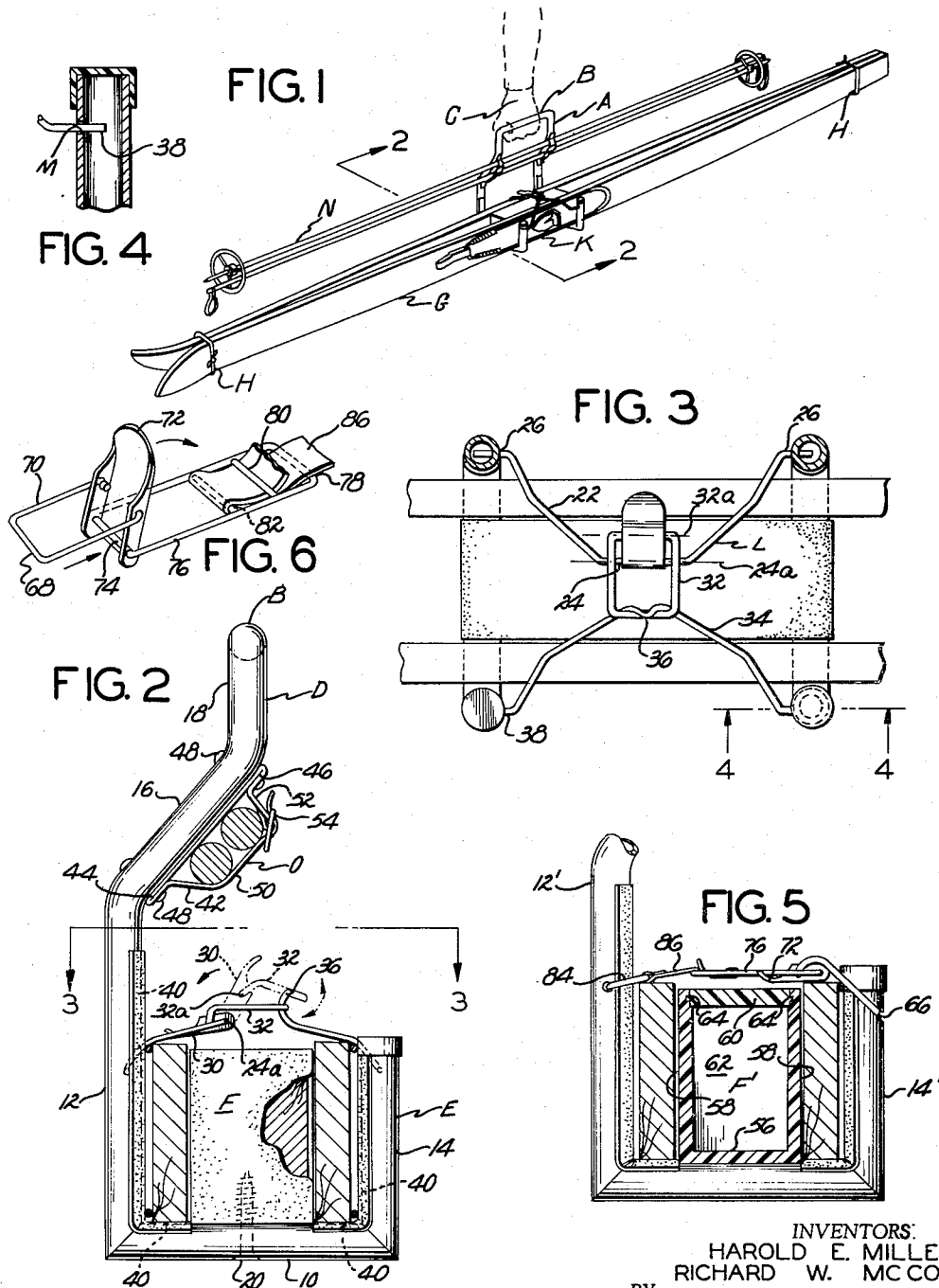
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SKI EQUIPMENT CARRIER

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SKI EQUIPMENT CARRIER

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The present invention relates generally to sports equipment, and more particularly to a carrier for removably supporting skis in correctly cambered position, with ski poles in a fixed relationship to the skis, and a container for ski wax, and the like.

A primary purpose in devising the present invention is to provide a light-weight carrier of simple structure for concurrently supporting a pair of skis in correctly cambered position, together with a pair of ski poles in a fixed position relative thereto, which carrier serves to not only support the skis and poles in a fixed relationship during transport thereof, but permits storage thereof as a compact unit for long period of time without the hazard of warping or other damage to the skiing equipment.

Another object of the invention is to supply a ski equipment carrier which also includes a readily accessible receptacle in which ski wax and the like may be stored when not in use.

Yet another object of the invention is to supply a ski equipment carrier that is compact, occupies a minimum of space when not in use, and can be fabricated from standard commercially available material, whereby it can be retailed at a sufficiently low price as to encourage its widespread use.

A still further object of the invention is to provide a carrier in which one set of skis, ski poles and other skiing accessories may be grouped together as an integral unit and be easily transported with a minimal possibility of confusion of one's equipment with another's.

These and other objects and advantages of the invention will become apparent from the following description of a first and alternate forms thereof, and from the accompanying drawing illustrating the same, in which:

FIGURE 1 is a perspective view of a first form of the invention showing skis supported therein in correctly cambered position, with the ski poles being removably supported in fixed position relative thereto, and with the skis being separated at the mid-sections thereof by a camber block that may be either solid or hollow to permit skiing accessories to be carried therein;

FIGURE 2 is a combined transverse cross-sectional and end elevational view of the carrier, taken on line 2-2 of FIGURE 1;

FIGURE 3 is a combined transverse cross-sectional view and top plan view of the first form of the invention, taken on line 3-3 of FIGURE 2;

FIGURE 4 is a fragmentary enlarged vertical cross-sectional view of the ski-supporting portion of the first form of the carrier, taken on line 4-4 of FIGURE 3;

FIGURE 5 is an end view of an alternate form of the carrier; and

FIGURE 6 is a perspective view of an alternate form of ski fastening device.

With continuing reference to the drawing for the general arrangement of the first form of the invention, it will be seen to include a tubular frame, generally denoted by the letter A. An elongate handle B is provided on

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frame A which may be grasped by one hand C of the user, and has two connectors D extending downwardly from the ends thereof.

Two parallel J-shaped rigid members E are provided, one of which is shown in detail in FIGURE 2. Each of the members E comprises a cross piece 10, a first leg 12 that projects upwardly from a first end of said cross piece, and a second leg 14 which extends upwardly from the second end of the cross piece. Each leg 12 preferably extends upwardly higher than the leg 14. The lower end of each connector D is joined to an upper end of one of the first legs 12. Each connector D has an upwardly and inwardly extending lower portion 16, the upper end of which merges with an upper portion 18 that is preferably parallel to the first and second legs 12 and 14.

Due to the configuration of the connectors D relative to the first legs 12, the handle B is located above and in substantially the same vertical plane as the center portions of the cross pieces 10. A rectangular body F is supported on the upper central portions of the cross pieces 10 in a longitudinally extending position, as may best be seen in FIGURES 2 and 3, and is held in this position by screws 20, or other fastening means, which project upwardly through the cross pieces to engage the body. The body F may be either a solid block as shown in FIGURE 2, or a hollow box F' as shown in FIGURE 5 in which ski wax and other accessories may be kept in a readily accessible location.

A pair of skis G is shown in FIGURE 1 supported in a carrying position in the first form of the carrier, with the ends of the skis being held in abutting contact by resilient bands or short lengths of rope which serve as fasteners H. Portions of the running surfaces of the skis G opposite the bindings K thereof are in abutting contact with opposite longitudinal surfaces of the body F, as shown in FIGURES 1, 2 and 3. The body F must be sufficiently thick so that when the end portions of the skis G are brought into abutting contact by the fasteners H they are tensioned and held in correct cambered relationship.

The skis G are removably held within the confines of the J-shaped member E in the first form of the carrier by the locking device L shown in FIGURES 2 and 3. The locking device L includes a first bail 22 having a straight central portion 24 and two straight end portions 26. End portions 26 are pivotally supported in openings M formed in the first legs 12, and the central portion 24 pivotally supports an elongate member 30 on which manual force may be exerted. A substantially rectangular link 32 is pivotally supported from member 30. Link 32 is pivotally connected to member 30 outwardly from that part thereof engaged by the portion 24 of bail 22, as can best be seen in FIGURE 2. A second bail 34 is provided that includes an upwardly extending, centrally disposed, engageable hook 36. Bail 34 is also provided with two straight end portions 38 that are pivotally supported in openings M formed in the second legs 14, as illustrated in FIGURE 4.

When the skis G are disposed in the first form of the carrier in the manner shown in FIGURE 1, the member 30 may be pivoted to the position shown in phantom line in FIGURE 2 where the link 32 engages the hook 36. Upon application of force to the left to member 30 when it is in the position shown in phantom line in

FIGURE 2, it is pivoted in a counter-clockwise direction to come to rest in the position shown in solid line in that figure where the link 32 is caused to exert a substantial force on the hook 36. The two bails 22 and 34 serve to removably hold the skis G in carrying position in the first form of the carrier as shown in FIGURE 1. It will be noted in FIGURE 2 that when the member 30 is disposed in the position shown in solid line, the pivotal connection of the link 32 to member 30 is situated below first bail 22 whereby a toggle action is effected by member 30 and bail 22 that will hold the skis G within the confines of the J-shaped members E. The skis G will be so held until such time as the member 30 is manually rotated in a clockwise direction to bring the center line 32a of link 32 above the center line 24a of the central portion 24. When center line 32a is above the center line 24a, the member 30 may be pivoted to the position shown in phantom line in FIGURE 2 and the link 32 easily disengaged from the hook 36.

The interior surfaces of the legs 12 and 14, as well as the outer portions of the cross pieces 10 are preferably covered with strips of a non-metallic sheet material 49 to protect the surfaces of the skis G from damage due to frictional contact therewith.

A pair of ski poles N may be held in fixed position relative to a pair of skis G in the first form of the carrier due to the provision of two holding means O, shown in detail in FIGURE 2. Each of the holding means O includes a strap 42 of leather, or the like, that has doubled-over end portions 44 and 46 which are rigidly affixed to the lower portion 16 of each connector D by rivets or other suitable fastening means 43. Two free portions 50 and 52 of the strap 42 extend towards one another from the rivets 43, and each portion 52 supports a conventional buckle 54 or the like that can removably engage the strap portion 50.

When the strap portions 50 are so engaged, the poles N are removably supported from the lower connector portion 16, as best shown in FIGURES 1 and 2. It will be noted that when the ski poles N and skis G are so supported in the first form of the carrier, they are in a fixed, substantially parallel relationship. Also, when supported in the carrier and the central portions of the skis G and poles N are engaged, they are carried in balanced position, both longitudinally and transversely, as best seen in FIGURES 1 and 2. As also illustrated in FIGURES 1 and 2, the lower connector portions 16 serve not only to support the J-shaped members E from handle B, but the holding means O as well.

An alternate form of the invention is shown in FIGURE 5, wherein it will be seen that the solid body F is replaced by a hollow box F' which is preferably transparent and defined by a bottom 56, longitudinal side walls 58, and a slidable top 60. The box F' also includes end pieces 62, one of which is grooved and cut out in the upper portion thereof to permit the top 60 to slidably engage grooves 64 formed in the upper interior portions of the walls 58.

Those portions of the frame F' common to the frame F are denoted by the same numerals, but to which a prime has been added for the sake of clarity. The second leg 14' has an upwardly and inwardly extending slot 66 formed therein. Each slot 66 is capable of receiving a cross portion 68 of a link 70 (FIGURE 6) that is pivotally connected to a rigid member 72 against which a manual force may be applied to place the cross piece in locking engagement with the slot.

Each member 72 below that portion thereof which pivotally engages the link 70 is pivotally connected to a transverse end portion 74 of a rectangular frame 76, which includes three longitudinally spaced transverse members 78, 80 and 82. Each first leg 12' pivotally supports a semi-circular wire member 84, and an end portion of a woven strap 86 is connected thereto. The free end portion of strap 86 may be extended over the first trans-

verse piece 78 of frame 76, then under the second and third transverse members 80 and 82 respectively, and thereafter over the third transverse piece 82 and under the second transverse piece 80. Upon exertion of force on strap 86, the transverse pieces 78, 80 and 82, together with the doubled-over portion of the strap, cooperatively hold frame 76 in fixed position relative to the strap.

In the alternate form of carrier, each frame 76 has a strap 86 associated therewith which is so adjusted that this strap may extend over the skis when held in the carrier in the manner shown in FIGURE 5, and the cross portion 68 of the link 70 removably inserted in one of the slots 66. The member 72 may then be rotated in a clockwise direction to draw the frame 76 and strap 86 towards the second leg 14' and tension the strap to removably hold the skis in position in the first form of the invention, as shown in FIGURE 5.

Although the present invention is fully capable of achieving the objects and providing the advantages hereinbefore mentioned, it is to be understood that it is merely illustrative of the presently preferred embodiments thereof and we do not mean to be limited to the details of construction herein shown and described, other than as defined in the appended claims.

We claim:

1. A carrier for removably supporting ski equipment in fixed spaced relationship, comprising:

- (a) two J-shaped rigid members that are spaced apart a substantial distance, each of which include a cross piece, a first leg projecting from a first end of said cross piece, with a second leg extending from a second end of said cross piece in the same direction as said first leg;
- (b) an elongate handle disposed above said J-shaped members in a direction substantially normal to said cross pieces;
- (c) two connectors that join the ends of said handle to the ends of said first legs that are opposite those ends connected to said cross pieces;
- (d) an elongate body supported on said cross pieces and intermediately disposed between said first and second legs;
- (e) first means for removably locking said skis in said J-shaped members with portions of the running surfaces of said skis in abutting contact with said body, with the thickness of said body being such as to impart the correct camber to said skis when the ends thereof are held together in abutting contact; and
- (f) second means on said connectors for removably supporting said ski poles therefrom in substantially parallel relationship with said skis.

2. A carrier as defined in claim 1 wherein each of said connectors includes an upwardly and inwardly inclined lower portion and an upwardly extending upper portion that is positioned in a direction substantially normal to said cross pieces, which connectors together with said first legs cooperatively position said handle above the center of said cross pieces.

3. A carrier as defined in claim 1 wherein said J-shaped members, handle, and connectors are integrally formed from rigid tubular material.

4. A carrier as defined in claim 1 wherein said body is a rectangular block of rigid material.

5. A carrier as defined in claim 1 wherein said body comprises a hollow rectangular box in which ski accessories may be stored.

6. A carrier as defined in claim 1 wherein said body comprises a transparent hollow rectangular box in which skiing accessories may be stored, which box has a cover that closes the same to maintain said accessories therein.

7. A carrier as defined in claim 1 wherein said first means comprise first and second bails pivotally supported from said first and second legs, which bails may be disposed above said skis when the latter are supported by said J-shaped members, which first means further in-

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cludes locking means for removably locking said bails together to hold said skis in a fixed position in said J-shaped members.

8. A carrier as defined in claim 1 wherein said first means comprise two straps, the end portions of which are connected to said first legs, two links adapted to removably engage upwardly and inwardly extending slots formed in said second legs, and locking means connecting said links and straps for tensioning said straps and hold said skis in said J-shaped members.

9. A carrier as defined in claim 1 wherein said second

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means comprise straps mounted on said connectors and strap engageable means for encircling said ski poles and removably supporting the same in fixed position relative to said connectors.

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