

[54] **SKI-HOLDING AND TRANSPORTING DEVICE**

[75] Inventors: **Roomet Aring**, Brooklyn; **Dan W. Clark**, New York, both of N.Y.

[73] Assignee: **Joyous Designs, Inc.**, New York, N.Y.

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[58] Field of Search...280/11.37 A, 11.37 K, 11.37 E, 280/47.13 R, 43.1, 107; 188/84, 80, 70; 24/81 SK, 67.9, 255

[56]

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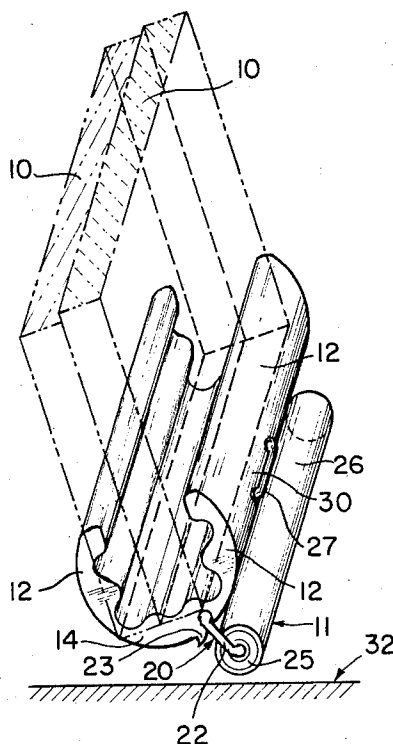
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Primary Examiner—David Schonberg
Assistant Examiner—David M. Mitchell
Attorney, Agent, or Firm—Alfred W. Vibber

[57] **ABSTRACT**

A device to facilitate the carrying of a pair of skis. The rear or lower ends of a pair of skis placed together in confronting relationship are embraced and gripped by a clip which may be made as an integral body of elastomeric material. The legs of the clip are pried apart somewhat by the skis, and thus hold the skis firmly. The device has a roller means at the bottom of the slip which selectively permits the pair of skis in upright or slightly inclined position to be rolled along on the sidewalk or street or to permit the thus-gripped skis to be stably held when propped against a support such as a wall in nearly vertical position.

4 Claims, 5 Drawing Figures



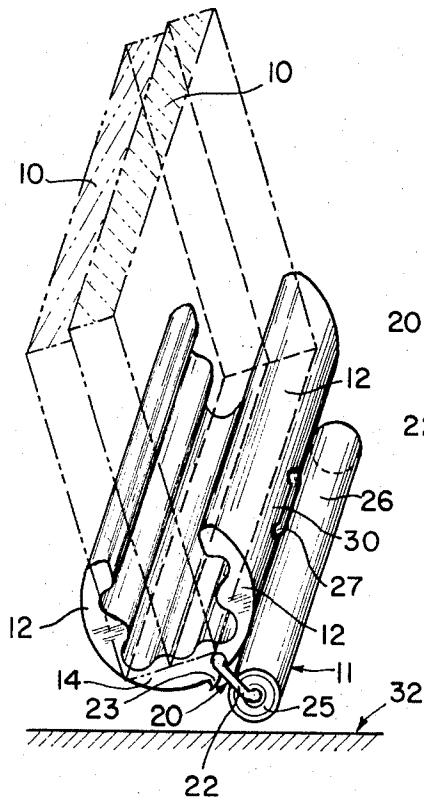


FIG. 1

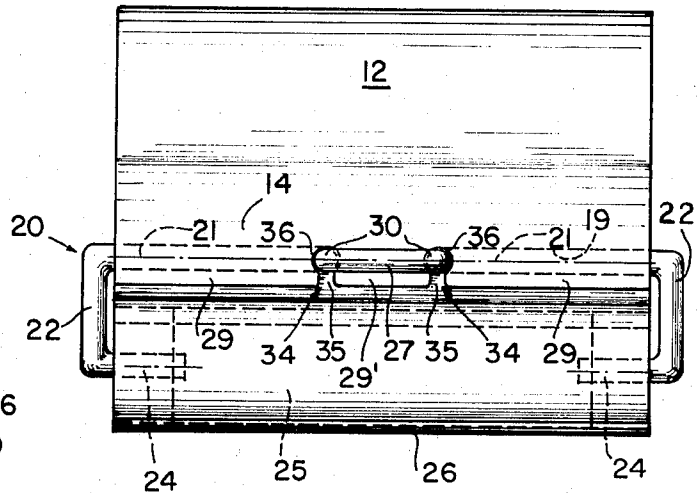


FIG. 2

FIG. 4

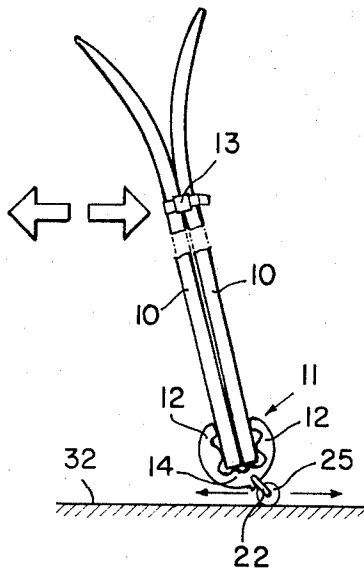


FIG. 5

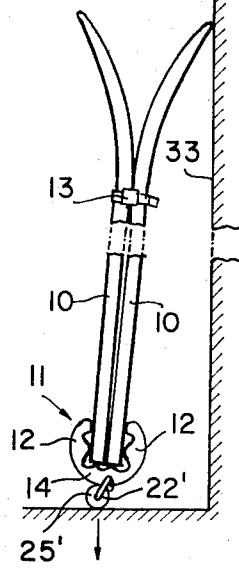
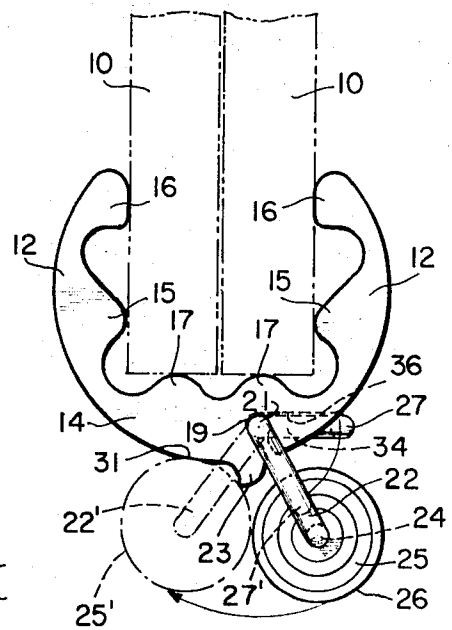


FIG. 3

SKI-HOLDING AND TRANSPORTING DEVICE

This invention relates to a device for facilitating the carrying of a pair of skis. In a preferred embodiment thereof, it also selectively permits the skis to be stably held when propped against a support such as a wall in nearly vertical position.

The manual carrying of skis tends to become burdensome, particularly in fairly crowded places, such as on sidewalks and streets, or in buildings, e.g., hotel and motel lobbies, along corridors, etc. Space limitations under such conditions practically require that the skis be held and carried in at least a generally vertical position; this becomes tiresome after awhile since the person carrying the skis must sustain their full weight. When the skis are supported in a fixed location in generally vertical position with their rear or lower ends on the floor, sidewalk, or the like, the rear end surfaces of the skis may be marred.

The ski-carrying device in accordance with the invention has among its objects the facilitating of the manual transportation of skis along a surface by providing surface-engaging means on the skis which support their weight, thereby permitting the skier to transport the skis merely by pushing or pulling them along.

A further object of the invention is the provision of cushioning means embracing the rear or lower ends of the skis and thereby preventing them from being injured as by being marred and scratched when the skis are stored by being propped in generally vertical position against a wall or the like while resting upon their rear ends.

A still further object of the invention is the provision of a device of the character indicated wherein a single roller may be selectively made free for rotation and locked against rotation whereby the skis may be easily pushed or pulled along in generally vertical position or stably supported while propped in generally vertical position, respectively.

The above and further objects and novel features of the invention will more fully appear from the following description when the same is read in connection with the accompanying drawings. It is to be understood, however, that the drawings are for the purpose of illustration only, and are not intended as a definition of the limits of the invention.

In the drawings, wherein like reference characters refer to like parts throughout the several views;

FIG. 1 is a view in perspective of a ski-carrying device in accordance with the invention, the lower or rear ends of a pair of opposed skis being shown in phantom lines mounted in the main, clip-like body of the device, the ski-supporting roller being shown in position wherein it is freely rotatable;

FIG. 2 is a view in front elevation of the ski-supporting device as it is shown in FIG. 1, the view being taken in a direction from right to left in FIG. 1;

FIG. 3 is a view in end elevation of the device as it is shown in FIG. 1, the ski-supporting roller being shown in phantom lines swung clockwise from its solid line position into a position wherein it is locked from rotation thereby stably to support the skis when they are propped in generally vertical position;

FIG. 4 is a view in end elevation of the ski-supporting device and a pair of skis mounted therein, the skis and device being shown in the position which they assume

when they are being pushed or pulled along a sidewalk or the like in the direction of the arrows; and

FIG. 5 is a view in end elevation of the ski-supporting device and the pair of skis upon which the device is secured, the ski-supporting roller of the device being shown pivoted into its non-rotatable position, and the device and skis being shown in a position somewhat inclined to the vertical and propped against a wall.

Turning now to the drawings, in FIGS. 4 and 5 there is shown a pair of skis 10 placed together in confronting relationship and held adjacent their upper or forward ends by means such as a strap 13. As shown more clearly in FIGS. 1 and 3, the lower ends of the skis are placed within and gripped by the opposing legs 12 of a U-shaped body 11. Body 11 may be made as an integral body of extruded elastomeric material such as neoprene, the body 11 having a length which is preferably at least equal to the width of the skis. Body 11 has a central thicker portion 14 disposed at the bottom thereof as the member is shown in the figures. The inner faces of the side portions or legs 12 of the body 11 have lower and upper confronting inwardly protruding longitudinal ribs 15 and 16, respectively, such ribs facilitating the insertion of the lower ends of the skis into the member 11. The upper surface of the main thicker lower portion 14 of the member 11 is provided with two upwardly extending longitudinal ribs 17 which are disposed so as centrally to engage and support the lower ends of the skis. All surfaces of the lower ends of the skis which would be normally exposed and prone to injury in the absence of the member 11 are thus engaged and protected by such member.

Extending through the lower, thicker portion 14 of the member 11 longitudinally thereof and offset substantially to the right (FIG. 3) from the central vertical longitudinal plane of the member 11 is a bore 19. Journalled in the bore 19 are two aligned, longitudinally extending portions 21 of a bail-like member 20 having parallel radially extending arms 22 on the opposite ends thereof. The lower, outer end of the arms 22 are bent inwardly to form aligned, confronting inwardly extending stub shafts 24 as most clearly shown in FIG. 2. Freely rotatable upon the stub shafts 24 is a ski-supporting roller 25 having an outer covering in the form of a neoprene tube 26. The bail-like member 20, including its arms 22 and the arms 27, to be described, constitute a bell-crank lever which is pivoted to the body 11 by its longitudinal portions 21.

The member 20 and the roller 25 journalled on the arms 22 thereof are selectively movable from the solid line position of FIG. 3, wherein the outer surface of the roller 25 is substantially spaced from the outer surface of the member 11 and the roller is freely rotatable, clockwise into the phantom line position (FIG. 3) wherein the covering layer of the roller 25 engages the outer surface of the member 11 along the line 31. The parts of the roller and the member 20, etc., in the phantom line of FIG. 3 are designated by the same reference characters with an added prime ('). The roller 25 and the arms 22 are stably held in their solid line position in FIG. 3 by means including a longitudinally centrally disposed radially outwardly extending U-shaped portion 27 of the member 20, the crank arms 30 of portion 27 of such member being received within respective larger parts 36 of keyhole slots 34 in the bottom portion 14 of the member 11. The smaller parts 35 of the keyhole slots between parts 29, 29' of body 14 in re-

laxed condition are narrower than the diameter of crank arms 30, and thus such crank arms are stably held in the solid line position in FIG. 3. Each of the confronting projections which together constitute the smaller part 35 of a keyhole slot constitutes resilient projection on the body 11 which a portion of an arm 27 of the bell-crank lever 20 passes and resiliently deforms as the roller is moved into its freely rotating position thereof, shown at the right in FIG. 3.

When it is desired to roll the skis in a generally vertical position along a sidewalk 32 or the like (FIG. 4), the roller 25 and its supporting member 20 are turned into the solid line position of FIG. 3 wherein, as above-explained, it is stably held. In such position of the device the skis may either be pushed along as shown in FIG. 4 or pulled, both while they are in generally vertical, slightly inclined position.

Should it be desired to stand the skis stably leaning against a wall 33 or the like (FIG. 5), the roller 25 is turned clockwise from the solid line position thereof shown in FIG. 3 to the phantom line position thereof shown in that figure. In such latter position, the surface 26 of the covering sleeve of the roller contacts the member 11 along the line 31, as above-explained, thereby to retain the roller 25 from rotation when the device 11 sustains its own weight and that of the skis.

Means is provided for selectively retaining the roller 25 in the phantom line position thereof shown in FIG. 3. For this purpose, the body 14 is provided at its bottom with a cam-like projection 23, the right-hand surface (FIG. 3) of which is smoothly rounded, such surface continuing to the left to a peak and then an abrupt reentrant drop off to the main rounded surface of body 14. The projection 23 is of such size that its peak in relaxed condition lies further outwardly from the axis of shaft portions 21 than the surface of the covering 26 of roller 25 which is radially aligned with the axis of shaft portions 21. Thus when the roller 25 is thrust to the left (FIG. 3), it rolls and then snaps over projection 23, so that it is stably and firmly held with its surface engaging the body 14 along line 31.

Although the invention is illustrated and described with a limited number of embodiments in the accompanying drawings and described in the foregoing specification, it is to be especially understood that various changes in addition to those above-described, such as the relative dimensions of the parts, materials used, and the like, as well as the suggested manner of use of the apparatus of the invention, may be made therein without departing from the spirit and scope of the invention as will now be apparent to those skilled in the art.

What is claimed is:

1. A device for facilitating the manual transportation of a pair of skis disposed in outwardly facing opposed mirror relationship, said device comprising a body adapted for attachment to the rear ends of the thus-disposed skis, a roller disposed generally below the body, means journalling the roller on the body, whereby the pair of skis in generally vertical position may be moved along a surface while supported thereon, means for selectively retaining the roller from rotation whereby the pair of skis may be stably supported by engagement between the roller and said surface when propped in generally vertical position, the means journalling the roller being selectively movable from a first position in which the roller is freely rotatable to a second position, the roller sustaining the

weight of the skis in both positions, the means for selectively retaining the roller from rotation comprising means engaged by the roller when it is in the second position to retain the roller from rotation, the means journalling the roller comprising an arm pivoted at one end to the body and at the other end carrying means upon which the roller is journalled, means for limiting the pivoting of the arm when the roller is in its said first position so that the surface of the roller is spaced from the body, in the said second position of the roller at least a portion of its surface engaging the body and being pressed thereagainst by the weight of the skis, means for stably retaining the roller in both of said positions, the body being generally U-shaped in cross-section and being made of elastomeric material, the body having opposed spaced generally parallel legs connected by a central bight, the legs having opposed ski-gripping formations thereon, said formations on the respective legs being spaced apart a distance which is less than the combined thickness of the two juxtaposed rear ends of the skis when the body is in relaxed condition, whereby the legs are resiliently pried apart and the ski-gripping formations firmly grip the outer surfaces of the rear ends of the skis when the device is applied thereto.

2. A device for facilitating the manual transportation of a pair of skis disposed in outwardly facing opposed mirror relationship, said device comprising a body adapted for attachment to the rear ends of the thus-disposed skis, the body being generally U-shaped in cross-section and made of elastomeric material, the body having opposed spaced generally parallel legs connected by a central bight, the legs having opposed ski-gripping formations thereon, said formations on the respective legs being spaced apart a distance which is less than the combined thickness of the two juxtaposed rear ends of the skis when the body is in relaxed condition, whereby the legs are resiliently pried apart and the ski-gripping formations firmly grip the outer surfaces of the rear ends of the skis when the device is applied thereto with the lower, straight ends of the skis overlying the bight of the body, a roller supporting the device, the roller being disposed beneath the bight of the body with its axis parallel thereto, the roller having a length which is on the same order as the width of the bight of the body measured along the axis of the bight, means journalling the roller, comprising an arm pivoted at one end to the body and at the other end carrying means upon which the roller is journalled, means for limiting the pivoting of the arm when the roller is in a first position so that the surface of the roller is spaced from the body and the roller is freely rotatable in a second position of the roller at least a portion of its surface engaging the body and being braked by being pressed thereagainst by the weight of the skis, and means for stably retaining the roller in both of said positions.

3. A device according to claim 2, wherein the means for stably retaining the roller in both of said positions comprises a first retaining means for retaining the roller in its said first position, and a second, separate retaining means for retaining the roller in its said second position, said second retaining means comprising a resilient projection on the outer surface of the bight of the body which the roller rolls over and resiliently deforms as the roller is moved into its said second position.

4. A device according to claim 2, wherein the means for stably retaining the roller in both of said positions comprises a first retaining means for retaining the roller

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in its said first position, and a second, separate retaining means for retaining the roller in its said second position, the arm on which the roller is journaled being a first arm of a bell-crank lever having a second arm disposed at an angle with respect to the first arm and underlying the body when the roller occupies each of its

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said first and second position, and wherein said first retaining means comprises a resilient projection on the body and which a portion of the second arm passes and resiliently deforms as the roller is moved into its said first position.

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