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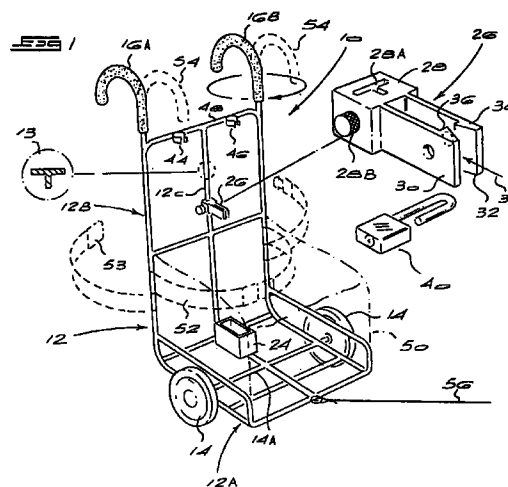
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**(54) Trolley for transporting snow skiing equipment**

(57) A trolley is provided for transporting snow ski equipments, the trolley comprising: a carriage for carrying the equipment; snow ski mounting means for mounting at least one snow ski or snow board to the carriage; ski boot support means for supporting at least one pair of boots on the carriage; and at least one wheel or skid attached to the carriage on which the carriage may be pushed or pulled by a user of the trolley.



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## Description

### BACKGROUND OF THE INVENTION

[0001] This invention relates to a trolley for transporting snow skiing equipment.

[0002] In order to reach snow ski areas, which are usually situated high up on mountain slopes or glaciers, skiers have to make use of crowded public transport or gondolas, buses, trains or ski lifts and often have to walk relatively far distances. Skiers usually carry their skis over their shoulders in a horizontal position and a careless turn can cause serious injuries to those around the skier. Also, snow skiing boots are particularly cumbersome and skiers elect to wear the boots rather than carrying them in a separate bag. Snow skiing boots are not made for walking and many injuries occur by wearing ski boots before the skis are attached, climbing up or down stairs, onto, in and off public transport etc.

### SUMMARY OF THE INVENTION

[0003] According to the invention there is provided a trolley for transporting snow ski equipment, the trolley comprising:

a carriage for carrying the equipment;  
snow ski mounting means for mounting at least one snow ski or snow board to the carriage;  
ski boot support means for supporting at least one pair of ski boots on the carriage; and  
at least one wheel or skid attached to the carriage on which the carriage may be pushed or pulled by a user of the trolley.

[0004] Preferably, at least one and more preferably a pair of curved handles are provided for allowing a skier to push or pull the trolley, the handles being shaped and sized to fit over the user's shoulders so that the trolley may be carried on the user's back.

[0005] Advantageously, the handles are movable from a carrying position in which they may be fitted over the user's shoulders through 90° or 180° to a stowed position.

[0006] Preferably, the trolley may be used as a sleigh with the ski boot support mean serving as a curved runner.

[0007] Conveniently, the trolley further comprises a waist strap attached to the carriage for strapping the trolley to the user's back.

[0008] Typically, the at least one ski is mounted to the trolley so that, in use, the at least one ski is oriented in a vertical position.

### BRIEF DESCRIPTION OF THE DRAWINGS

#### [0009]

Fig. 1 is a pictorial view of a ski trolley according to the invention.

Fig. 2 is a front view of a ski trolley according to the invention supporting snow skiing equipment;

Fig. 3 is a side view of a ski trolley of the invention being carried on a skier's back; and

Fig. 4 is a side view of a ski trolley of the invention being pulled like a sleigh.

### DETAILED DESCRIPTION OF AN EMBODIMENT

[0010] Referring to figs. 1 and 2, a ski trolley 10 according to the invention comprises a carriage 12 which is made from a lightweight metal alloy such as aluminium or a strong moulded plastics or composite material. In this embodiment, the carriage 12 comprises a frame which is made from T-shaped bars of aluminium as shown at enlargement 13.

[0011] The frame 12 is L-shaped, having a base portion 12A and a back 12B. A pair of wheels 14 are mounted to the base 12A via an axle 14A. A pair of curved handles 16A and 16B extend from the back portion 12B so as to allow a skier to push or pull the trolley 10 on the wheels 14. The base portion 12A is shaped to support a pair of boots 18 and an adjustable strap 20 with a buckle 22 is provided for strapping the boots to the frame 12.

[0012] Ski mounting means in the form of a box 24 located at the base portion 12 of the carriage and a clip 26 located on a central bar 12C of the carriage are provided for attaching a pair of snow skis 27 to the trolley 10. The box 24 is sized to receive the trailing ends of the skis 27. The clip 26, as shown in the enlarged view, is made from a resilient plastics material and comprises a mounting block 28 which is mounted to the carriage via a T-shaped mounting slot 28A and a knurled locking screw 28B and two resilient arms 30 and 32 which define a slot 34 for receiving the skis in a snap fit. Barbs 36 and 38 are provided at the end of each arm to hold the skis in place. The one arm of the clip has a quick release spring to release the skis quickly and easily by pushing the one arm open. A padlock 40 may be inserted through holes 42 defined in the arms for locking the snow skis to the carriage.

[0013] Jubilee receiving clips 44 and 46 are located on a top bar 48 of the carriage 12 for ski poles 49 with two apertures in the ski boot support to rest the bottom ends of the poles.

[0014] A waterproof canvas bag, indicated in broken outline at 50 may be provided for covering the boots and for serving as a container for other skiing accessories such as ski gloves, goggles, a first aid kit or skiing tools.

[0015] The curved handles 16A and 16B are shaped and sized to fit over a skier's shoulders so that the trolley

can be carried on the skier's back. The inner surfaces of the handles 16A and 16B are padded to make the trolley more comfortable to wear. An adjustable waist strap 52 with a quick-release buckle 53 is provided for strapping the trolley 10 to the skier's back.

[0016] An added feature of the handles 16A and 16B is that they may be rotated through 180° to a position indicated in broken outline at 54. In this position, the back 12B of the frame provides a flat surface on which it may be dragged along a snow surface like a sleigh. The vertical bars of the frame serve as the runners of a sleigh with the base portion 12A serving as the curved front portion of the runners. A strap 56 is attached to the base portion 18 of the carriage 12 for dragging the trolley along a snow surface. The handles 16A and 16B may also be rotated inwardly through 90° so that they do not protrude from the frame. This is useful when the trolley is stored, placed on a vehicle roof carrier or on public transport, or when taking the trolley into a crowded environment.

[0017] Referring to fig. 3, the trolley is shown strapped to the back of the skier 66. This is most useful when there is a long walk to the ski slope or when riding a bicycle, leaving the hands free to steer the vehicle. Once the skier has donned his skiing equipment, he can put his shoes and other articles of clothing into the trolley (rather than leaving them at the return site) and ski down a ski slope with the trolley on his back. It should be noted that the buckle 53 is a quick-release buckle, so that the trolley can be quickly discarded in the case of a fall, or the belt may simply be left unattached from the skier while skiing.

[0018] Referring to fig. 4, the ski trolley 10 may be used as sleigh to drag skiing equipment over a snow surface 68. The handles 16 have been rotated 180° so that they do not catch in the snow. Furthermore, the base portion 12A acts as a curved runner. The ski trolley may also be used as a toboggan for casavac situations in emergencies to transport injured persons down ski slopes.

[0019] The advantage of the trolley is that all the equipment is kept together, facilitating the transport of cumbersome skis, boots and poles. The skis may be unclipped quickly to allow them to be located in a gondola ski rack, for example, before the skier climbs into the gondola with the trolley. Another advantage is that the trolley carries the skis in a vertical orientation helping to prevent them from inadvertently hitting passers by. Also, the skis and boots can be locked to the trolley and the trolley in turn can be locked to a structure such as a railing to prevent theft of the skis and boots.

[0020] It should be noted that although the ski trolley according to the invention has been described with regard to one set of skiing equipment, the ski trolley can be modified to accommodate two or more sets of equipment, or to accommodate a snow board.

## Claims

1. Trolley for transporting snow ski equipment, the trolley comprising:

a carriage for carrying the equipment;  
snow ski mounting means for mounting at least one snow ski or snow board to the carriage;  
ski boot support means for supporting at least one pair of ski boots on the carriage; and  
at least one wheel or skid attached to the carriage on which the carriage may be pushed or pulled by a user of the trolley.

2. Trolley as set forth in claim 1, wherein at least one and more preferably a pair of curved handles are provided for allowing a skier to push or pull the trolley, the handles being shaped and sized to fit over the user's shoulders so that the trolley may be carried on the user's back.
3. Trolley as set forth in claim 2, wherein the handles are movable from a carrying position in which they may be fitted over the user's shoulders through 90° or 180° to a stowed position.
4. Trolley as set forth in any of the foregoing claims, wherein said trolley may be used as a sleigh with the ski boot support means serving as a curved runner.
5. Trolley as set forth in any of the foregoing claims, wherein said trolley further comprises a waist strap attached to the carriage for strapping the trolley to the user's back.
6. Trolley as set forth in any of the foregoing claims, wherein said at least one ski is mounted to the trolley so that, in use, the at least one ski is oriented in a vertical position.
7. Trolley as set forth in any of the foregoing claims, wherein supports are provided for ski poles.
8. Trolley as set forth in any of the foregoing claims, wherein a cover, such as a canvas bag or alike, is provided for covering the equipment carried on the trolley.

