United States Patent [19]

Johnson

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[54] **SKI WITH COLLAPSIBLE RIDING SEAT**

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[52] **U.S. Cl.** ..... **280/12 K**
[51] **Int. Cl.** **B62b 13/00**
[58] **Field of Search** ..... 280/12 K; 108/112, 108/115, 150, 81

[56] **References Cited**

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[57] **ABSTRACT**

This invention relates to a ski adaptable for use both in snow skiing or water skiing and comprises a single ski having a rigid upright pivotally or hingeably connected to the upper surface of the ski between its ends, with suitable socket forming and upright supporting elements attached to the surface of the ski and engaging the upright near its end which rest upon the ski, together with seat forming members hingeably connected to the upper end of the upright which may be moved in right angular positions to the upright when used as a seat and collapsed into position substantially parallel to the upright when the upright is folded downwardly on the ski to form a compact easily portable unit. The invention further comprises hinged supporting braces connecting the upright to the ski and the seat forming members to the upright. The hinge brackets embody spring pressure means to securely hold the brackets in extended position and prevent their accidental collapse.

1 Claim, 4 Drawing Figures

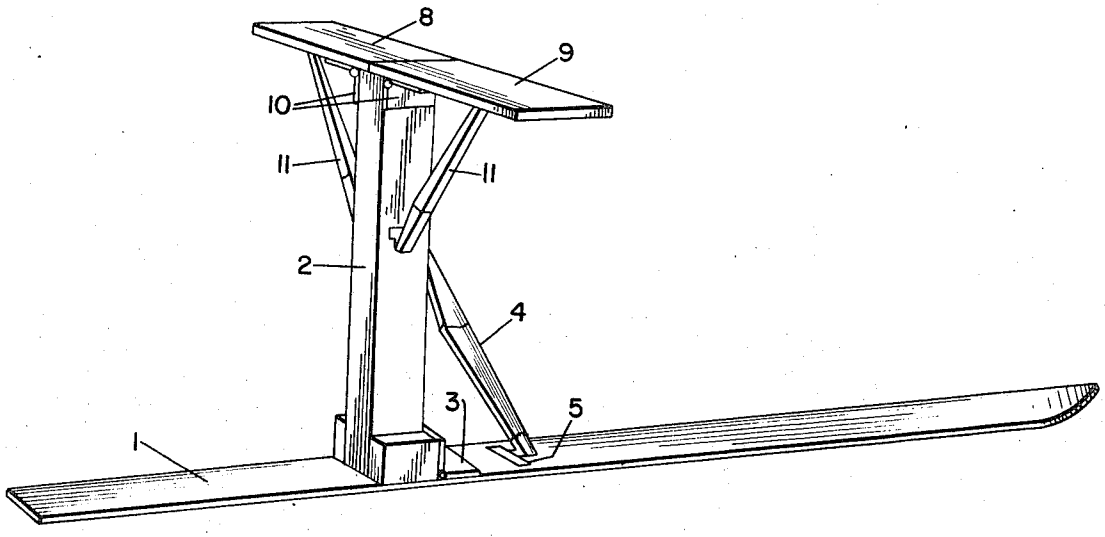


FIG. 1

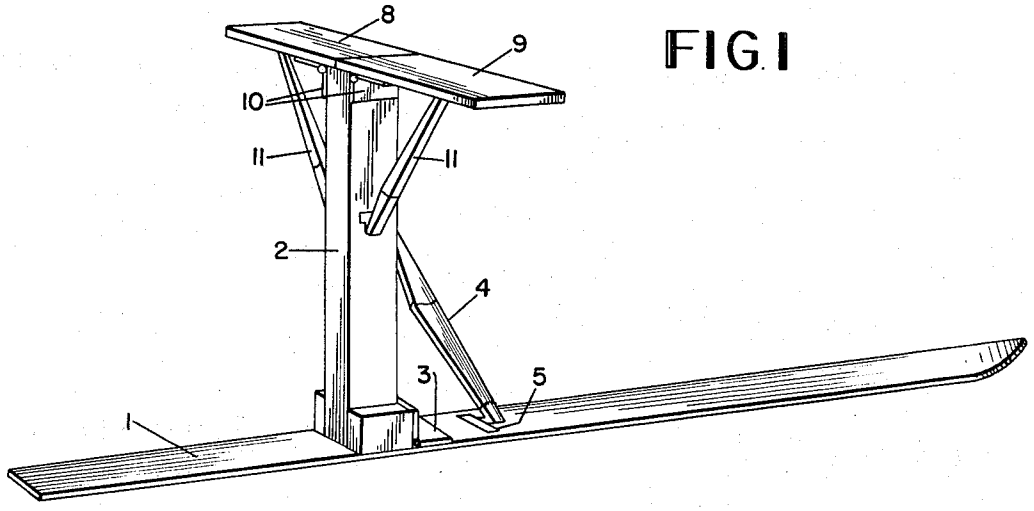


FIG. 2

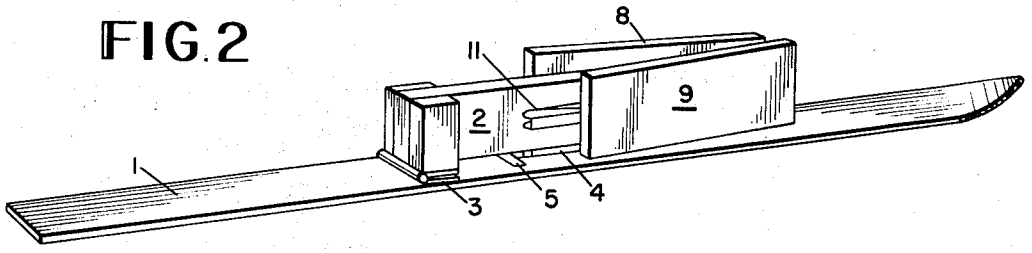
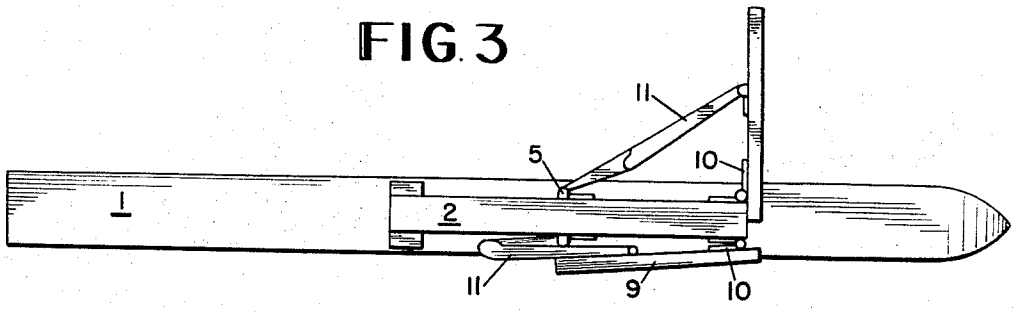


FIG. 3



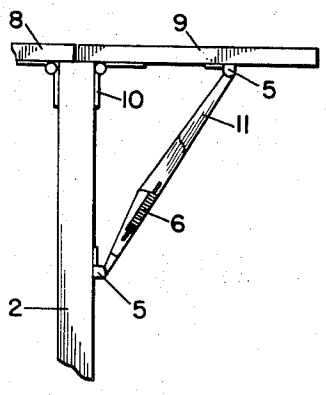


FIG. 4

SKI WITH COLLAPSIBLE RIDING SEAT

"Ski bobbing" is becoming a popular sport in snow skiing, but apparently has not, as yet, become a water skiing sport, and an object of the present invention is to provide a ski structure including a seat upon which the skier may ride which is adaptable for use either on snow slides or in water skiing.

The structures used in "ski bobbing" are relatively complicated, wholly unadaptable for water skiing, are expensive and relatively cumbersome for transportation and it is an object of the present invention to provide a simple umcomplicated structure which is readily collapsible into compact form for transportation and equally as easily extended for use, being so simple in its construction that even a child can readily operate it and also so constructed that when it is opened out for use its foldable elements will be securely and rigidly supported in such manner as to wholly preclude accidental collapsing or folding or any movement out of their proper operating positions.

In the present invention the upright and the collapsible seat structure are rigidly held in place relative to each other and to the ski so as to prevent any movement of these elements relative to each other and to the ski, thereby permitting accurate control of the travel of the ski and preventing any liability of independent bouncing or swinging of the seat relative to the ski with the accident-providing potentialities incurred by bouncing and swinging movement of the seat relative to the ski while in motion.

With these and other objects in view, as may appear from the accompanying specification, the invention consists of various features of construction and combination of parts, which will be first described in connection with the accompanying drawings, showing a Ski with Collapsible Riding Seat of a preferred form embodying the invention and the features forming the invention will be specifically pointed out in the claims.

In the drawings:

FIG. 1 is a perspective view of the ski structure in position ready for use.

FIG. 2 is a perspective view of the ski structure collapsed for transportation.

FIG. 3 is a top view showing the upright collapsed, one section of the seat in collapsed position and the other section of the seat in extended position for use.

FIG. 4 is an enlarged view showing in plan one of the supporting brackets and positions of the upright and seat.

Referring more particularly to the drawings, the invention includes a conventional ski 1 which may be of any practible design now in use and adaptable for either water or snow slide skiing having the usual upwardly curved, preferably pointed front end with the flat body extending rearwardly therefrom.

An upright 2 is connected to the flat body of the ski at a predetermined position intermediate the ends of the ski to insure proper balance and positioning of the rider on the ski by a hinge 3. In the drawings the end of the upright 2 which engages flatwise on the ski is shown enlarged by means of blocks attached to each side of the ski, although this lower end of the upright may be enlarged in any other suitable manner to provide relatively wide, firm flatwise engagement of the end of the upright against the ski.

A collapsible hinge bracket 4 has one end rigidly attached to the ski and the other end rigidly attached to the front edge of the upright by means of suitable attaching brackets 5 to which the respective ends of the bracket sections are pivoted. The bracket arm is formed of two sections hingedly connected at their meeting ends so as to permit the bracket arm to be broken intermediate its ends to allow the upright to be folded downwardly along the upper surface of the ski as clearly shown in FIG. 2 of the drawings. A spring 6 clearly shown in FIG. 4 of the drawings is provided for holding the hinged sections of the bracket arm in extended bracing position.

The seat formed in two sections 8 and 9 which are hingedly connected by hinges 10 to the sides of the upright at its end remote from the end hinged to the ski and are so designed that when, in extended seat-forming position their inner ends firmly and smoothly engage preventing the forming of a crack or open space between them. The seat sections, when extended, are in a plane substantially parallel to the upper surface of the ski and at right angles to the vertical plane of the upright. Each section of the seat has a supporting bracket 11 pivotally connected to its under surface intermediate its ends. These brackets 11 are identical in construction to the bracket 4 excepting only that their length may be varied from that of the bracket 4 to provide the proper support for the seat sections. From the drawings, it will be noted that the supporting brackets 4 and 11 each comprise a short arm and a long arm and that the short arm of the bracket 11 is uppermost and connected to the upright, while the long arm of the brackets 11 are connected to the seat sections and the short arms to the upright. This arrangement is made to permit the various elements to lay in a more compact relationship to each other when the seat sections and upright are folded, as shown in FIG. 2 of the drawing for ready transportation. The upright 2 is made of solid material and is rigid and also its connection and engagement with the ski is such that when in its upright position it will in effect be a rigid part of the ski to prevent any relative bouncing or swinging movement of the upright independently of the ski, and also that the seat sections 8 and 9 are so constructed and connected to the upright 2 that when in their extended seat-forming positions they are rigidly connected to the upright and incapable of movement independently of the upright. Thus, it will be seen that when the present ski structure is extended a person sitting on the seat will have absolute control of the ski so as to provide movement of all parts of the ski in unison, thereby eliminating unseating of the rider by independent movement of any part of the ski.

From the foregoing it will be apparent that a collapsible ski structure including a seat upon which the rider may sit while skiing has been provided which is simple in construction, inexpensive in manufacture, provides the maximum of possible safety to the rider as well as control of the ski structure, and one which may be easily and quickly collapsed into folded form for easy transportation.

It will be understood that the invention is not to be limited to the specific construction or arrangement of parts shown, but that they may be modified within the invention defined by the claims.

What is claimed is:

1. In a ski structure with collapsible seat adaptable for snow slide or water skiing, a ski of usual construction, an upright hingedly connected at its lower end to

the ski intermediate the ends of the ski, a seat structure hingedly connected to the ends of the upright remote from the end of the upright hinged to the ski and collapsible brackets connecting the upright to the ski and the seat structure to the upright to hold the upright and seat structure rigidly in extended position and permit folding of the seat structure downwardly along the upright and the upright downwardly along the ski, said upright is formed of rigid material, said hinge connecting the upright to the ski is attached to one edge of the upright and the bottom of the upright is constructed to engage flatly and firmly against the upper surface of the ski so as to always move in complete unison with the ski, said seat is formed of two sections designed to meet in a smooth joint against the top of the upright when in their extended seat-forming positions, hinges connecting each seat section to said upright to permit the seat forming-sections to fold towards the sides of the upright upon collapsing of their hinged braces.

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