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Trostad

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[54] **PLANING WATERCRAFT**

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[52] **U.S. Cl.** ..... **9/310 C**, 114/235 WS

[51] **Int. Cl.** **A63c 15/00**

[58] **Field of Search** ..... 9/310 R, 310 C, 310 B; 114/235 WS; 115/21, 22, 27

[56] **References Cited**

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[57] **ABSTRACT**

A planing watercraft adapted to be towed by a speed boat comprises at least one planing ski rigidly connected to an upright stand. A seat and a transverse steering bar are attached on the stand along with a releasable catch for selectively releasing a towing line.

7 Claims, 2 Drawing Figures

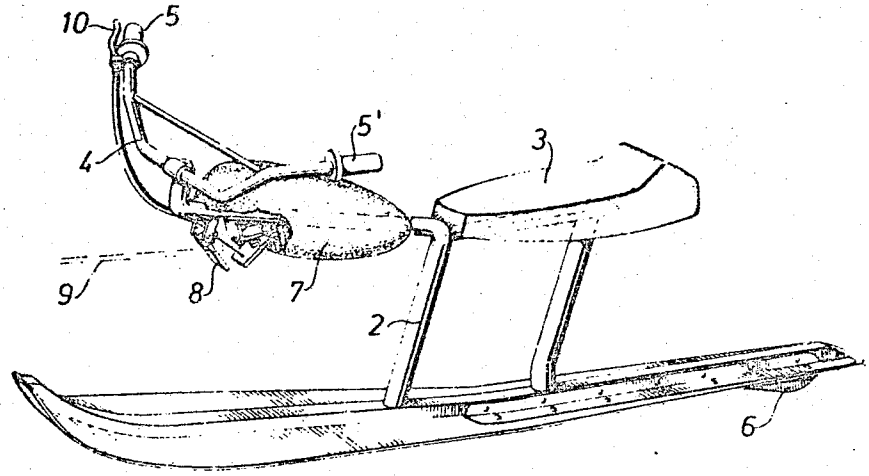


Fig.1

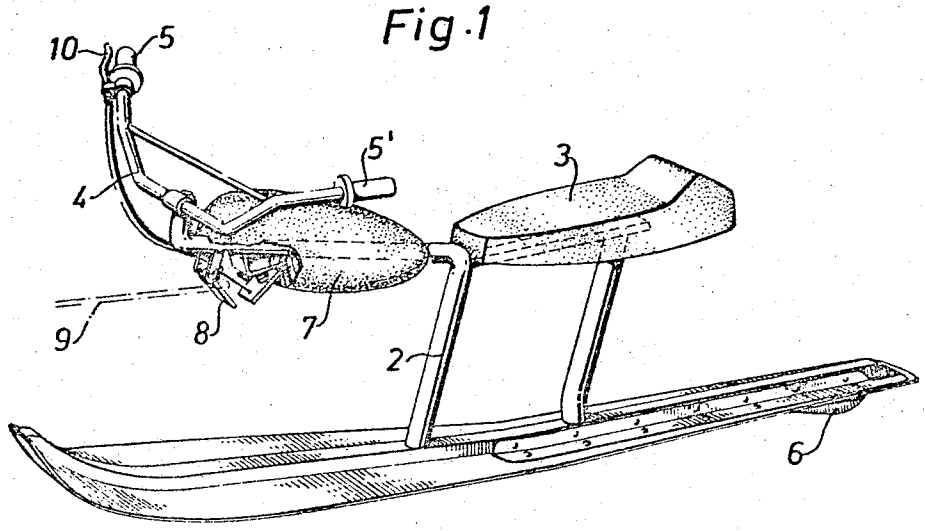
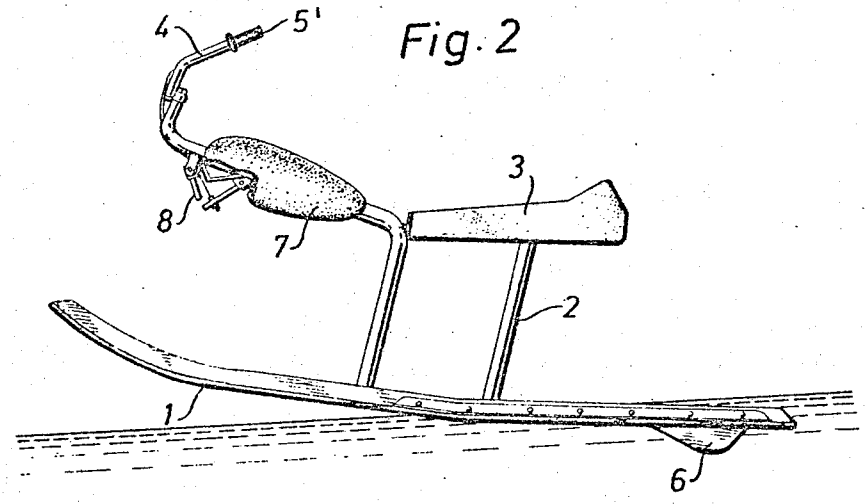


Fig.2



PLANING WATERCRAFT

BACKGROUND OF THE INVENTION

Conventional planing watercraft, such as surfboards and water skis, are normally designed for standing movement which becomes tiring to the rider, especially during lengthy rides. Attempts to seat a rider on such watercraft have generally failed to provide a stabilized and comfortable ride. In addition, conventional watercraft do not provide adequate steering apparatus and attendant means for expeditiously releasing a towing cable therefrom.

SUMMARY OF THE INVENTION

An object of this invention is to overcome the above, briefly described problems by providing an economical planing watercraft which exhibits high degrees of comfort and stability. The watercraft comprises at least one planing ski having an upright stand secured thereto and a seat and transverse steering bar attached to the stand. In the preferred embodiment of this invention, a rider-controlled quick release means is provided for selectively releasing a towing line from the watercraft.

BRIEF DESCRIPTION OF THE DRAWING

Other objects of this invention will become apparent from the following description and accompanying drawing wherein:

FIG. 1 is a perspective view of a watercraft embodying this invention; and

FIG. 2 is a side elevation view of the watercraft.

DETAILED DESCRIPTION

The illustrated watercraft comprises a horizontally disposed planing ski 1 removably attached to an upright stand. The upright stand 2 is comprised of a pair of spaced vertical support members disposed on said ski with the forward member having a horizontal and forwardly extending section extending from its upper end and terminating in an upward section. A seat 3 is connected to and supported on said members 2 vertically above the ski and a transverse steering bar 4 removably attached to the upward section. The steering bar terminates at its outer ends at two handle grips 5 and 5'. The planing ski has a longitudinally extending stabilizing fin 6 secured under its rear end portion.

A suitably composed float and protective device 7 is attached to said horizontal forwardly extending section of the stand, forwardly of the seat with the lower edge of the seat disposed beneath that of the device. A pivoted member 8 of a quick release means may be bifurcated at its lower end to releasably hold the knotted end of a towing line 9 therein. A spring-loaded latch member is normally held in locked position on member 8 by manual control means, such as a cable controlled hand lever 10, mounted adjacent to handle 5. The latch member could comprise a hooked end, for example, which would automatically release member 8 under the force of the spring upon release of lever 10.

Seat 3 and float 7 preferably comprise a floatable material having a specific gravity substantially less than 1.0 to normally prevent the ski from sinking below water level by providing a composite specific gravity for the watercraft which is less than 1.0. Such floating means will thus maintain the craft upright to facilitate embarking and debarking in deep water even though the stand and ski may have specific gravities greater than 1.0. In addition, when the craft is started in shallow water or from a beach, the rider has the advantage of a relatively low center of gravity due to the construction and arrangement of the frame and attendant constructions.

The position of seat 3, float 7 and handle grips 5 in relation to ski 1 may be adjusted by means, not fully shown, to accommodate riders of various sizes. The rider is normally seated on seat 3 to have his knees placed on opposite sides of float 7, his feet on ski 1 and his hands on handle grips 5 and 5'. Thus, a comfortable posture is realized in that the rider's upper arms and lower legs are disposed essentially parallel to the trunk of his body and his lower arms and thighs are maintained roughly perpendicular thereto.

It has been established through actual testing that it is preferable to place the seat immediately above the ski and intermediate the ends thereof and that the length of the ski on each end of the seat should approximate at least two and preferably four times the vertical height of the seat from the ski. In addition, the width of the ski directly under the seat should approximate one-half of such vertical sitting height. Also, the width of the ski's rearward or trailing end is preferably constructed to be narrower (e.g., two-fifths) than its forward end. As further shown in FIG. 1, the ski is preferably tapered rearwardly and is rounded at its forward end.

Tests have further shown that the vertical height of quick release means 8 for the tow line should essentially equal the vertical height of the seat. Furthermore, the quick release means should be positioned at a longitudinal distance from the seat which is preferably not less than one-third of the overall length of the ski. Also, the front half of the ski preferably points upwardly relative to the rear half thereof (FIG. 1) to form an obtuse planing surface angle so that planed water will be thrown aside to prevent impairment of the rider's vision.

Various modifications can be made to the above described embodiment without departing from the scope of this invention. For example, the single ski could be replaced by two or more parallel skis laterally spaced at a suitable distance and connected together by a plate covering the space therebetween. The plate could be made adjustable in a lateral direction to selectively change the distance between the two skis. Such a modification would facilitate starting, reduce water splash during travel and provide additional space for the rider's feet, especially when the rider wears miniature skis or webbed flippers for stunt-riding. As suggested above, the ski, seat, steering bar and float may be made detachable from each other by the use of standard couplings to permit the watercraft to be disassembled for transport purposes.

What is claimed is:

1. A planing watercraft adapted to be towed comprising a single substantially horizontally disposed planing ski, an upright stand rigidly connected to said ski and comprised of two vertical spaced supports with said forward support having a forward horizontal portion at its upper end terminating in an upward section, a seat mounted on said supports extending lengthwise in the direction of said ski, vertically above and intermediate the ends thereof, a transverse steering bar mounted on said upward section forwardly of said seat, said ski comprising a front section terminating in an upwardly

curved leading portion and a rear section with the front section forming an upwardly directed obtuse angle relative to the rear section to thereby form an obtuse planing surface under the ski for directing the water to the sides thereof, said rear section having a width approximately two-fifths of the width of the front section, said front and rear sections having a length approximately four times as long as the vertical height between said ski and said seat with the width of said ski directly under said seat being approximately one-half of said vertical height, and a combined float and protective member attached to said forward horizontal portion between said steering bar and said seat and disposed at approximately the same vertical height as said seat with the lower edge of the seat disposed beneath that of said member, said seat and said combined float and protective member each comprising a volume of material having a specific gravity substantially less than 1.0 and said watercraft having a composite, specific gravity less than 1.0 to normally prevent said watercraft from sinking below water level.

2. The watercraft of claim **1** further comprising a longitudinally extending fin secured under a rear end portion of said ski.

3. The watercraft of claim **1** further comprising quick release means attached on a forward end of said watercraft for selectively releasing a towing line therefrom.

4. The watercraft of claim **3** wherein said quick release means is at least approximately positioned at the same vertical height as said seat and at a distance from said seat which is not less than one-third of the length of said ski.

5. The watercraft of claim **3** further comprising manually actuated control means attached to said steering bar and operatively connected to said quick release means for selectively releasing a tow line from said watercraft.

6. The watercraft of claim **1** wherein the specific gravities of said ski and stand are more than 1.0 and wherein the composite specific gravity of said watercraft is less than 1.0 whereby said watercraft will float in water.

7. The watercraft of claim **1** wherein said ski, seat, steering bar and combined float and protective member are detachably secured to said stand to facilitate disassembly and transport of the watercraft.

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