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WATER SKIING APPARATUS

2,828,491

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2 Sheets-Sheet 1

FIG. 1

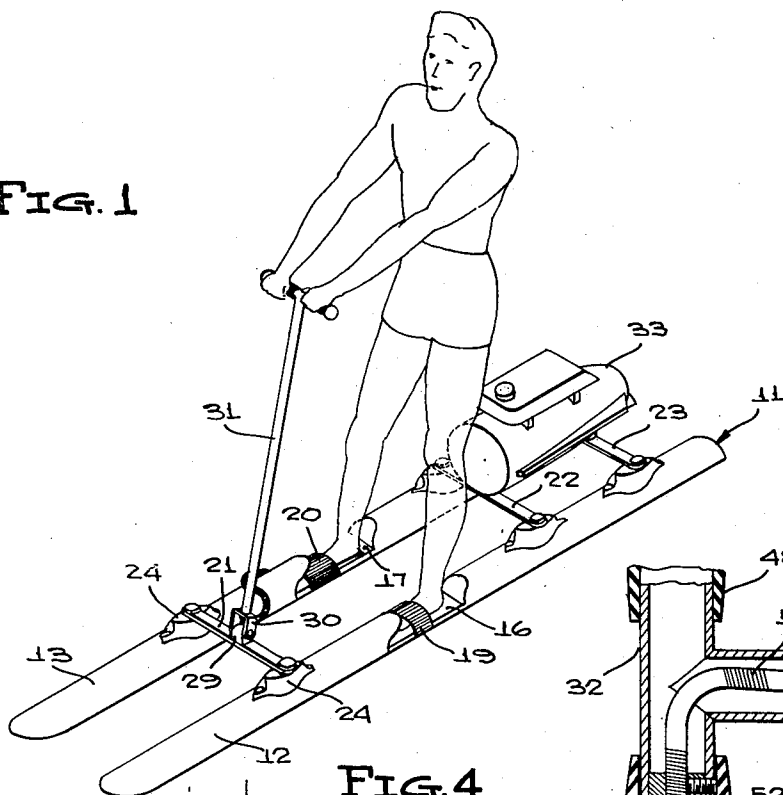


FIG. 4

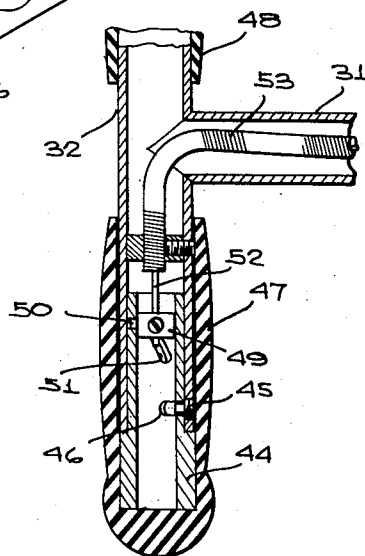
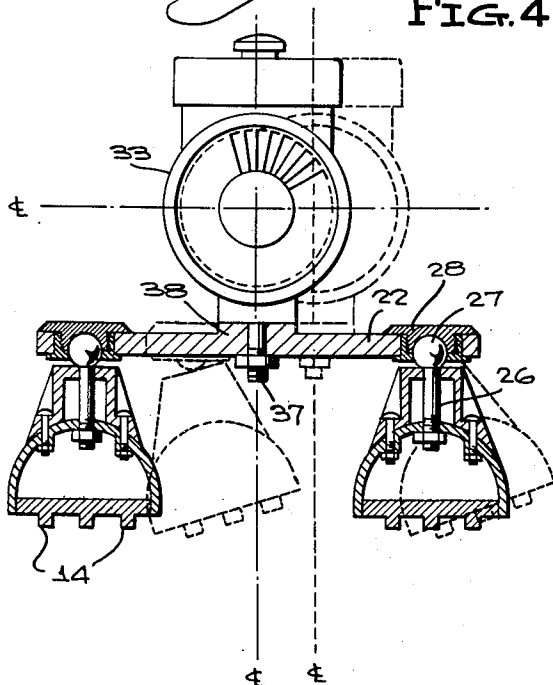


FIG. 5

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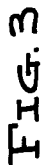
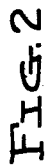
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2 Sheets-Sheet 2



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WATER SKIING APPARATUS

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2 Claims. (Cl. 9—21)

This invention relates to athletic equipment, and more particularly to an improved water skiing apparatus which is self-propelled and which may be employed without requiring the use of tractive means, such as a speed boat.

A main object of the invention is to provide a novel and improved water skiing apparatus which is self-propelled, which is simple in construction, and which provides a novel and improved type of performance as compared with that obtained by the use of water skis employed in the conventional manner.

A further object of the invention is to provide an improved water skiing apparatus enabling a person to water ski without requiring the aid of a tractive means such as a speed boat, the improved apparatus being relatively inexpensive to manufacture, being rugged in construction, being accurately controllable, having increased safety, as compared with conventional skis, and having novel and exciting characteristics which are not obtainable by the use of conventional water skis.

Further objects and advantages of the invention will become apparent from the following description and claims, and from the accompanying drawings, wherein:

Figure 1 is a perspective view of an improved water skiing apparatus constructed in accordance with the present invention, shown in operating position in relation to a person employing same.

Figure 2 is an enlarged top view of the water skiing apparatus shown in Figure 1.

Figure 3 is a side elevational view of the water skiing apparatus of Figures 1 and 2.

Figure 4 is a transverse vertical cross sectional view taken on the line 4—4 of Figure 3.

Figure 5 is an enlarged cross sectional detail view taken on the line 5—5 of Figure 3.

Referring to the drawings, the improved water skiing apparatus is designated generally at 11 and comprises a pair of elongated pontoon members 12 and 13 of a length of the order of that of conventional water skis, the pontoon members having flat bottom walls provided with the longitudinal depending rib elements 14, as shown in Figure 4, and having upwardly and forwardly inclined forward end walls 15, as shown in Figure 3. The pontoon members 12 and 13 have generally semicylindrical top walls, but are recessed at their intermediate portions, as shown at 16 and 17 to define respective foot-receiving spaces. As shown in Figure 3, the semicylindrical top walls of the forward portions of the pontoon members overlie the forward portions of the foot-receiving spaces 16 and 17 to define hood-like toe-receiving recesses, as shown at 18.

Connecting the side edges of the pontoon members 12 and 13 at the intermediate portions of the respective foot-receiving spaces 16 and 17 are the respective foot straps 19 and 20.

The pontoon members 12 and 13 are connected together in parallel relation by a plurality of link bars 21, 22 and 23, the ends of the link bars being pivotally con-

nected to respective upstanding bracket members 24 secured on the arcuate top surfaces of the pontoon members, the pivotal connections of the link members with the bracket members 24 being provided by any suitable means, for example, by vertical bolts 26 connected to the bracket members 24, said vertical bolts having top ball elements 27 rotatably received in socket assemblies 28 engaged in the ends of the links 21, 22 and 23, as is clearly illustrated in Figure 4.

By providing the ball and socket pivotal connections at 27 and 28, the pontoon members 12 and 13 may pivot laterally, as shown in dotted view in Figure 4, and the pontoon members may also be moved toward and away from each other in parallel relationship, as indicated in dotted view in Figure 2.

Secured on the intermediate portion of the front link member 21 is an upstanding lug 29, and pivotally connected to the lug is the fork element 30 rigidly secured to the end of a tubular steering bar 31, said steering bar being provided with a transversely extending tubular top arm 32 communicating therewith, as shown in Figure 5. Designated at 33 is a conventional thrust jet engine, which is of well known design and which in itself forms no part of the present invention, said thrust jet engine being provided with a throttle lever 34 and with an ignition circuit having switch terminals 35 and 36, as shown in Figure 3.

As shown in Figure 4, each end of the engine 33 is connected to the intermediate portion of a respective link bar 22 or 23 by a vertical stud 37 extending through a boss 38 formed on the intermediate portion of the link bar. The link bars 22 and 23 are thus rotatable with respect to the jet engine 33, allowing the pontoon members 12 and 13 to be moved towards and away from each other in the manner above described while the apparatus is being used.

Designated at 39 is a foot-operated lever which is hinged to the foot-receiving portion 17 of pontoon member 13, said lever 39 having its hinge connection at 40, as shown in Figure 3, namely rearwardly of the foot strap 20, the forward portion of the foot pedal member 39 being biased upwardly by a coiled spring 41 provided beneath the forward end of the pedal 39 and the surface of recessed portion 17. Mounted on said surface beneath the pedal 39 is a switch 42 whose terminals are respectively connected to the respective ignition circuit terminals 35 and 36, the switch 42 being normally closed, and being opened by the engagement therewith of the pedal 39 when said pedal is pressed downwardly, whereby the ignition circuit of the thrust jet engine 33 may be opened by the user of the apparatus at any time by exerting foot pressure on the pedal member 39.

Rotatably secured in one end portion of the transverse tubular handle member 32 is a sleeve 44 formed with an arcuate slot 46 through which extends a pin 45 secured in the end portion of the transverse handle bar element 32, as shown in Figure 5, limiting the rotary movement of the sleeve 44 and preventing the sleeve from being detached from the tubular handle bar element 32. A rubber hand grip member 47 is secured on the outer end portion of sleeve 44 and covers the adjacent portion of the tubular handle bar member 32. A similar rubber hand grip member 48 is secured on the opposite end portion of the handle bar member 32.

Slidably engaged in the sleeve 44 is a plunger element 49 having a lug 50 engaging in a spiral internal groove 51 formed in the inside surface of the sleeve 44, whereby the plunger element 49 may be moved longitudinally responsive to the rotation of said sleeve 44. The plunger element 49 is secured to the end of a Bowden cable 52 extending through a flexible sleeve 53, as shown in Figure

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5, said sleeve 53 being secured rigidly at its end in the transverse cross bar element 32 and extending through the tubular steering bar 31.

As shown in Figure 3, the flexible sheath 53 emerges from the lower end of the steering bar 31 and extends along the pontoon member 13, being secured to said pontoon member, and extending to the jet engine 33. The end of the sheath 53 is fastened at 56 to the jet engine 33, and the Bowden cable 52 is connected to the end of the throttle lever 34. Thus, the lever 34 may be rotated by rotating the hand grip element 47, whereby the groove 51 produces a camming action on the lug 50, causing the plunger element 49 to move longitudinally in the sleeve 44, and actuating the Bowden cable 52, whereby the motion of the Bowden cable 52 is transmitted to the lever 34.

In operation, the person using the apparatus places his feet in the recesses 16 and 17 beneath the respective straps 19 and 20, the ignition circuit of the jet engine 33 being closed under normal conditions, whereby the reaction thrust produced by the jet engine will propel the apparatus over the water, the engine being controlled by means of the rotary hand grip element 47 to control its speed. When it is desired to cut off the engine, the operator exerts foot pressure on the pedal member 39, opening the ignition circuit of the engine.

As will be readily apparent, a substantial speed may be developed, enabling the operator to execute numerous water skiing maneuvers, simulating the type of maneuvers obtained in snow skiing, and the operator may control the speed of the apparatus as well as its direction in an independent and safe manner, whereby the operator of the apparatus need not rely upon the action of a tractive vehicle such as a speed boat, as employed in conventional water skiing.

While a specific embodiment of an improved water skiing apparatus has been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claims.

What is claimed is:

1. A water skiing apparatus comprising a pair of pon-

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toon members, a plurality of spaced links connecting said pontoon members in parallel relation, respective foot straps on the intermediate portions of said pontoon members, a steering bar connected to one of said links located forwardly of said foot straps, a reaction thrust motor mounted on a pair of said links located rearwardly of said foot straps, said motor being provided with an ignition circuit, a cut-out switch connected in said ignition circuit and located on one of the pontoon members adjacent the foot strap thereon, and a foot pedal pivoted on said last named pontoon member subjacent the foot strap thereof and being formed and arranged to control said cut-out switch.

2. A water skiing apparatus comprising a pair of pontoon members, a plurality of spaced links connecting said pontoon members in parallel relation, respective foot straps on the intermediate portions of said pontoon members, a steering bar connected to one of said links located forwardly of said foot straps, a reaction thrust motor mounted on a pair of said links located rearwardly of said foot straps, said motor being provided with a throttle lever, a movable control element mounted on said steering bar, flexible shaft means extending through said steering bar and connecting said control element to said throttle lever, said motor being provided with an ignition circuit, a cutout switch connected in said ignition circuit and located on one of the pontoon members adjacent the foot strap thereon, and a foot pedal pivoted on said last-named pontoon member subjacent the foot strap thereof and being formed and arranged to control said cutout switch.

References Cited in the file of this patent

UNITED STATES PATENTS

2,509,603	Marin	May 30, 1950
2,744,267	Roby	May 18, 1956

FOREIGN PATENTS

399,760	Great Britain	Oct. 12, 1933
871,693	France	May 5, 1942
1,011,381	France	June 23, 1952
1,026,729	France	Apr. 30, 1953