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WATER SKI WITH SPOUT

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Fig. 1

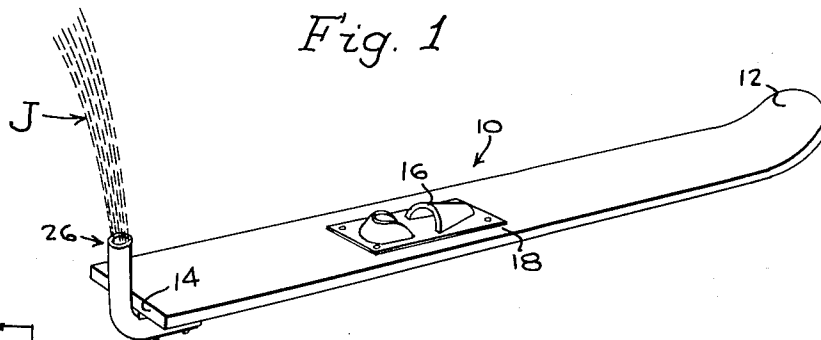


Fig. 2

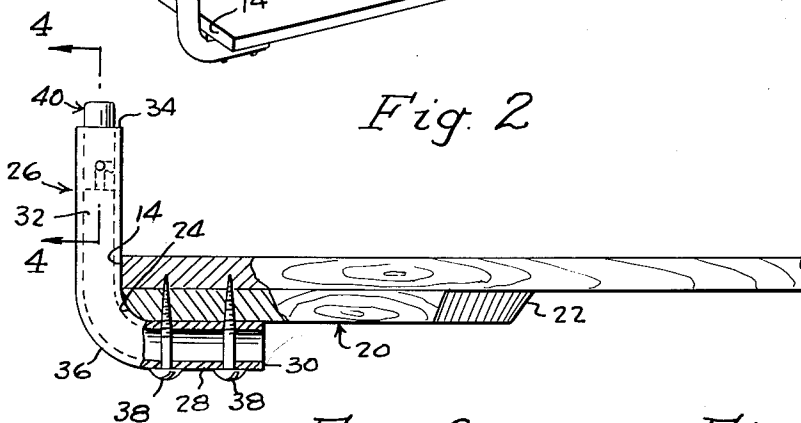


Fig. 3

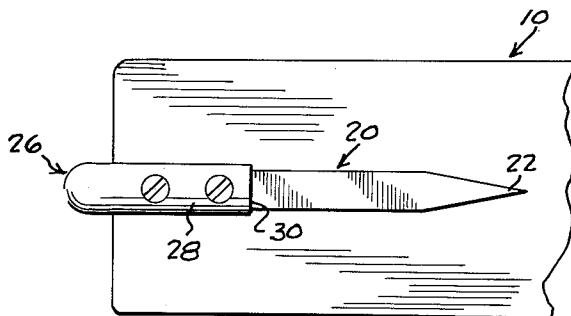


Fig. 4

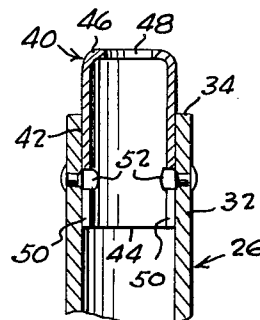


Fig. 6

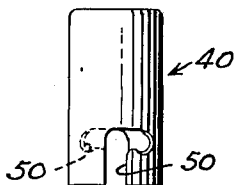
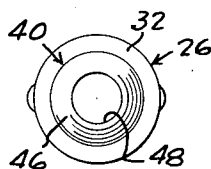


Fig. 5



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WATER SKI WITH SPOUT

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1 Claim. (Cl. 9—310)

This invention relates to a novel water ski having a spout which produces a jet spout or "rooster tail" of water behind the ski as the skier is pulled forwardly in the water.

The primary object of the invention is to provide a ski of the character indicated which produces an attention-attracting and speed indicating trailing jet or spout of water behind a water skier, simulating the "rooster tail" produced by high speed motor boats, which rises above the water level to greater heights as the speed of the skier in the water is increased.

Another object of the invention is the provision of a ski of the character indicated above, wherein the spout is attached to or formed on the rudder element of the ski, in trailing relation to the rudder element, so that the spout produces no substantial additional resistance or drag in the water.

A further object of the invention is to provide, in a ski of the character indicated above, a spout in the form of an accessory or attachment which is quickly and easily installable, without special tools, in secure and rigid manner.

Other important objects and advantageous features of the invention will be apparent from the following description and the accompanying drawings, wherein, for purposes of illustration only, a specific form of the invention is set forth in detail.

In the drawings:

FIGURE 1 is a perspective view of a ski of the present invention, showing a water jet or spout emerging therefrom;

FIGURE 2 is an enlarged fragmentary vertical longitudinal section taken through FIGURE 1;

FIGURE 3 is a bottom plan view of FIGURE 2;

FIGURE 4 is a further enlarged fragmentary vertical section taken on the line 4—4 of FIGURE 2;

FIGURE 5 is a side elevation, on the scale of FIGURE 4, of the adapter; and,

FIGURE 6 is a top plan view of FIGURE 4.

Referring in detail to the drawings, wherein like numerals designate like parts throughout the several views, the illustrated ski comprises a generally conventional water ski body 10, having an upturned and rounded forward end 12, and a squared rear end 14, a boot 16 being secured upon the flat intermediate portion 18 of the ski body. A generally conventional centered longitudinal rudder strip 20 is secured in suitable manner to the underside of the ski body 10, has a pointed forward end 22, and a rear end 24 which terminates at the rear end 14 of the ski body. The foregoing structure is substantially conventional and forms no part of the present invention, except in combination therewith.

In accordance with the present invention, the above ski form is supplemented by a water jet producing spout, generally designated 26, which comprises an L-shaped tubular form, made of suitable non-corrosive material, such as metal or plastic, and having a horizontal arm 28, having an open forward inlet end 30, and a right angular

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or perpendicular upstanding arm 32, having an open upper discharge end 34, the junction 36 between the arms 28 and 32 being preferably arcuate, so as to provide for free flow of water through the spout.

The diameter of the spout, as indicated in FIGURES 2 and 3, while not limited thereto, is preferably as great as, and preferably not substantially greater than the cross-section of the ski rudder strip 20, and the length of the horizontal arm 28 is substantially less than the length of the rudder strip 20, and is secured to the underside of the rudder strip 20, by suitable means, such as screws 38, passed diametrically through the arm 28 at spaced intervals therealong, and threaded into the rudder strip, with the spout junction 36 conformably engaged with the rear end 14 of the ski body and the rear end 24 of the rudder strip 20, and with the vertical arm 32 at right angles to and rising above the upper surface of the ski body.

When it is desired to select and predetermine the cross-section and volumetric character of a water jet J issuing from the open upper end 34 of the vertical arm 32 of the spout 26, a selection of adapter nozzles of different characteristics is provided, which are exemplified by the adapter nozzle 40, for removable engagement in the open upper end of the vertical spout arm 32.

The adapter nozzle 40 comprises a hollow inverted cup-shaped body having a cylindrical sidewall 42 having a free lower edge 44, and a top wall 46 which is formed with a central jet defining opening 48. The adapter nozzle is preferably shorter than the vertical arm 32 and is of a diameter to telescope closely into the upper end of the arm 32, with an upper portion thereof extending above the upper end of the arm 32, as clearly shown in FIGURE 4. The adapter nozzle sidewall 42 has diametrically opposed bayonet slots 50 therein, opening through the lower edge 44 of the adapter, which are provided to removably and securably engage internal studs 52 mounted on the sidewall of the vertical spout arm 32 on a level below the upper end thereof. This arrangement enables quickly and easily changing adapter nozzles in the spout 26 to obtain different desired water jets.

As indicated in FIGURE 1, a vertical water jet J is jetted out of the adapter nozzle 40 or the upper end 34 of the spout 26, as the case may be as the skier is drawn forwardly through the water, and that as the jet rises it is bent rearwardly, in the manner of a high speed motor boat "rooster tail," so as to provide spectator interest in watching water skiers, and so as to provide a visual indication of the forward speed of the skiers.

While there has been shown and described herein a preferred form of the invention, it is to be understood that the invention is not necessarily confined thereto, and that any change or changes in the structure of and in the relative arrangements of components thereof are contemplated as being within the scope of the invention as defined by the claim appended thereto.

What is claimed is:

A water ski comprising a ski body having upper and lower surfaces and a rear end, and an L-shaped tubular "rooster tail" producing spout fixed on the ski body, said spout consisting of a horizontal arm located at the lower surface of the body and having a forwardly facing water open inlet end and an upstanding arm at the rear end of the body having an upwardly facing discharge

end, and an adapter jet nozzle engaged on the discharge
 end of the spout having a reduced jet opening, said nozzle
 being an inverted cup-shape having a sidewall telescoped
 into the discharge end and an upper end wall in which
 the jet opening is formed, and bayonet slot and stud 5
 means securing the nozzle in place.

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