

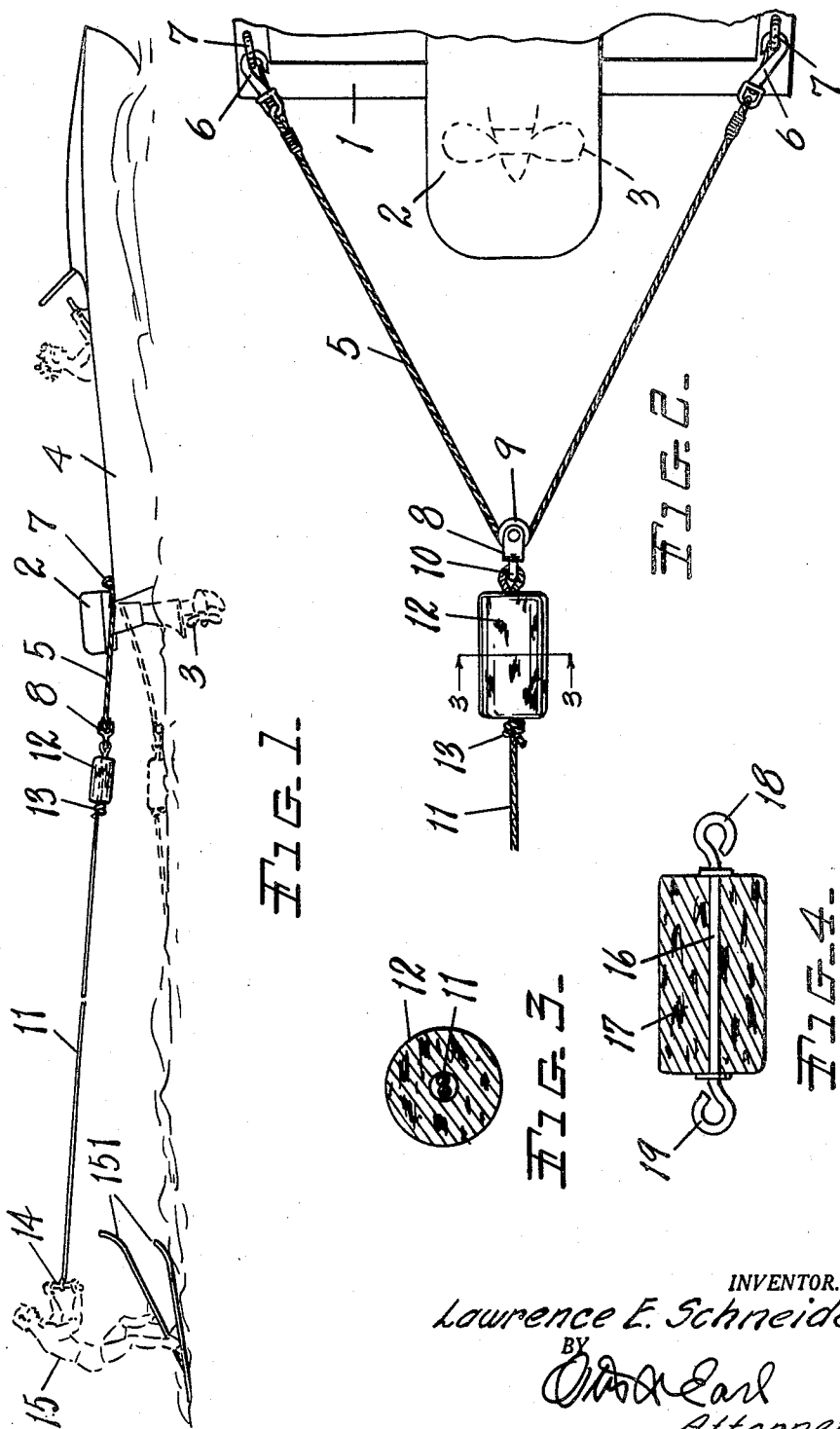
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TOW FOR MOTOR BOATS

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TOW FOR MOTOR BOATS

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This invention relates to tows for motor boats well adapted for use in towing skiers and particularly with outboard motor propelled boats.

The main objects of this invention are:

First, to provide a tow device adapted for attachment to boats provided with outboard motors, the tow device having means preventing the entangling of any of its parts with the propeller of the outboard motor when the tow device is subject to load when in use and also when without load.

Second, to provide a tow device for outboard motors having these advantages and in which there is an even or uniform pull on the tow line when the boat is on a turning or curved course, and also when the boat is traveling in a zigzag manner.

Third, to provide a tow device having these advantages which is simple and economical in its parts.

Further objects relating to details and economies of the invention will appear from the description to follow. The invention is defined and pointed out in the claims.

A preferred embodiment of the invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a side elevational view partially comprised of a tow device embodying my invention shown in operative relation to a boat driven by an outboard motor and a skier grasping a tow line being conventionally illustrated, the position of the device when without load is indicated by dotted lines.

Fig. 2 is an enlarged fragmentary plan view, the outboard motor being conventionally illustrated.

Fig. 3 is a sectional view on a line 3—3 of Fig. 2, showing details of the float to the tow line.

Fig. 4 is a fragmentary view, partially in longitudinal section, showing a modified form or embodiment of my invention, particularly the float member thereof.

In the accompanying drawing 1 represents a boat and 2 the outboard motor provided with a propeller 3. The boat is represented at 4. The tow device of my invention comprises a hitch rope 5 provided with snap hooks 6 at its ends which may be engaged with the eyes 7 secured to the boat desirably adjacent the rear corners thereof, as is illustrated in Fig. 2, but they should be located in substantially spaced lateral relation to the outboard motor one on each side thereof to support the hitch rope in a loop.

The hitch rope 5 is roved through the pulley block 8, the pulley 9 of which is engaged within the bight of hitch rope.

The pulley block is provided with an eye 10 to which the front end of the tow line or rope 11 is secured. In this embodiment the tow line 11 is inserted through the float 12 and engaged with the eye 10 of the pulley block. As illustrated, the end of the rope is also passed through the float, as is clearly shown in Figs. 2 and 3, and knotted at 13 to the rear of the float to secure the float against longitudinal movement on the tow line 11. The tow line is provided with grips 14 adapted to be grasped by the skier, as is indicated by dotted lines 15. Skis are con-

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ventionally shown at 151. The hitch rope is of such length that the bight thereof trails a substantial distance to the rear of the propeller of the outboard motor.

In the embodiment shown in Fig. 4, a rod 16 is disposed through the float 17 and provided with an eye 18 engaged with the eye 10 of the pulley and an eye 19 at its rear end to which the tow line 11 is secured. This embodiment functions the same as that shown in Figs. 1, 2 and 3 when in use, but has the advantage that if it is desired to change the tow line either as to length or to renew it, it can be readily attached to the float. While the tow device is especially designed for use in water skiing in connection with outboard motor propelled boats, which are used in large numbers, it may be used for towing other boats or objects. A uniform draft pull results even when the boat is carelessly or purposely erratically driven as the pulley travels in the loop in the event of a substantial varying of the direction of the propelling boat.

My improved tow device is a substantial safeguard both to the skier and to the motor. Even when there is no load or pull on the tow line the float has sufficient resistance in the water to maintain the hitch rope in its extended position and the float has sufficient buoyancy to support the hitch rope at or near the surface of the water under varying conditions to eliminate accident in use.

I have illustrated and described my invention in a highly practical embodiment thereof. I have not attempted to describe various other modifications and adaptations as it is believed this disclosure would enable those skilled in the art to embody or adapt my invention as may be desired.

Having thus described the invention, what is claimed as new and is desired to be secured by Letters Patent is:

1. The combination with a boat having an outboard motor propelling means disposed centrally at the rear end thereof, said boat having tow attaching means disposed one at each side of and spaced laterally from said outboard motor, of a tow device comprising a hitch rope, the ends of which are attached to said attaching means so that the hitch rope is in the form of a loop extending rearwardly from the boat when under load stress, the hitch rope being freely flexed and of such length that the bight thereof is substantially spaced from the boat when under such load stress, a pulley block through which said hitch rope is roved with its pulley within the loop thereof, said pulley block having an eye at its rear end, a float having a tie member engaged with said eye of said pulley block, and a tow line secured to the rear end of said tie member so that the pull of the tow line is sustained by said tie member, said float being of such buoyancy so as to support said pulley and the rear end of the looped hitch rope and constituting a drag keeping said hitch rope substantially taut when the float is in contact with the water with the boat moving forwardly.

2. The combination with a boat having a propelling means disposed centrally at the rear end thereof, of a tow device comprising a hitch rope, the ends of which are attached to the rear end of the boat on opposite sides of and in laterally spaced relation to the boat propelling means, the hitch rope so attached being in the form of a loop extending rearwardly from the boat when under load stress and being freely flexed and of such length that the bight thereof is substantially spaced from the boat when under such load stress, a pulley block through which the hitch rope is roved with the pulley within the loop thereof, a tow line connected to said pulley block, and a float connected to said pulley block and of such buoyancy as to support said pulley and the rear end of the looped hitch rope and constituting a

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drag keeping the hitch rope substantially taut when the float is in contact with the water with the boat moving forwardly.

3. The combination with a boat having a propelling means disposed centrally at the rear end thereof, of a tow device comprising a hitch rope, the ends of which are attached to the rear end of the boat on opposite sides of and in laterally spaced relation to the boat propelling means, the hitch rope so attached being in the form of a loop extending rearwardly from the boat when under load stress and being freely flexed and of such length that the bight thereof is substantially spaced from the boat when under such load stress, a pulley block through which the hitch rope is roved with the pulley within the loop thereof, a tow line connected to said pulley block, and a float connected to said pulley block and the front end of the tow rope and of such buoyancy as to support said pulley and a substantial portion of

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the loop of the hitch rope on or adjacent to the surface of the water.

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