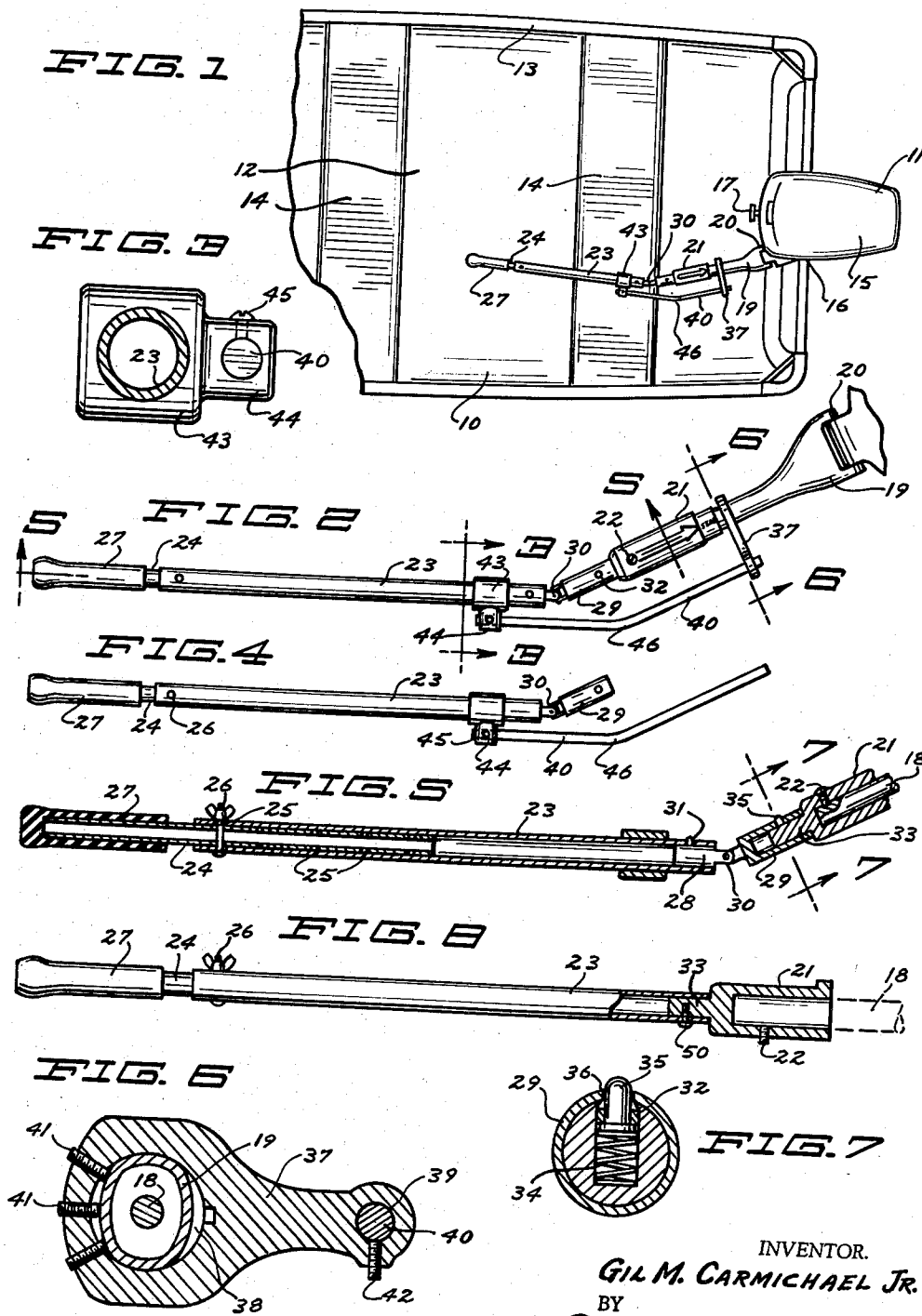


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AUXILIARY HANDLE FOR OUTBOARD MOTORS

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AUXILIARY HANDLE FOR OUTBOARD MOTORS

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3 Claims. (Cl. 74-484)

The invention herein has relation to an auxiliary handle useful for the purpose of controllably regulating the speed of operation of an outboard motor and directing the course of travel of a boat propelled by the outboard motor.

This application is a continuation-in-part of my pending application Serial No. 631,196, filed December 28, 1956, now abandoned, and presents improvements over the disclosure thereof.

In the accompanying drawing forming a part of this specification,

Fig. 1 is a plan view of a fragment of a boat equipped with an outboard motor, disclosing an auxiliary handle made according to the invention as when applied to use;

Fig. 2 is an enlarged elevational view of the auxiliary handle as when assembled with a main handle for controlling the outboard motor;

Fig. 3 is a detail sectional view, taken on line 3-3 in Fig. 2;

Fig. 4 is an elevational view of the auxiliary handle as when detached from said main handle;

Fig. 5 is an enlarged longitudinal sectional view, taken on line 5-5 in Fig. 2;

Fig. 6 is a detail sectional view, taken on line 6-6 in Fig. 2;

Fig. 7 is a detail sectional view, taken on line 7-7 in Fig. 5; and

Fig. 8 is an elevational view, partially in section and partially broken away, of an auxiliary handle of modified construction incorporating features and characteristics of the invention.

With respect to Figs. 1 to 7 of the drawing and the numerals of reference thereon, 10 denotes a boat equipped with an outboard motor 11 suitably and conveniently supported, in customary or preferred manner, upon an upper portion of the stern of the boat.

The boat 10 can be of any material suitable to its purpose, such as aluminum, glass fiber, or so-called plastic material. Passenger space of the boat, above a floor 12 thereof, is bounded by a gunwale 13. A thwart 14 is as disclosed situated in a rearward portion of the passenger space, in forwardly spaced relation to the outboard motor.

A main body 15 of the outboard motor is mounted upon the stern of the boat for rotary movement of said outboard motor in a horizontal plane, and a gear housing 16 of the outboard motor extends downwardly from the main body. Propellers (not shown) of the outboard motor are at the elevation of a lower portion of the gear housing, and said gear housing functions as a rudder for the boat. A hand piece 17 is to be manually manipulated to initiate combustion of the outboard motor.

An outer, forward end portion of a main handle 18, for controllably regulating the speed of operation of the outboard motor and directing the course of travel of a boat propelled thereby, is encased in a tubular member 19 pivotally supported, at 20, on an extension of the gear housing for swinging movement in a vertical plane. The

main handle 18 includes separate members suitably assembled with each other at the location of the pivotal support 20. A hand grip 21 on the outer, forward end of said main handle is fixedly secured thereto by a set screw 22.

An outboard motor of construction as hereinbefore described is known to the art and as such forms no part of the present invention. The speed of operation of the outboard motor is altered, increased and decreased, in response to rotational movement of the main handle 18, and steering of a boat being driven by the outboard motor is accomplished by swinging said handle from side to side.

The auxiliary handle which the invention introduces is constituted as a forward extension secured upon the main handle 18.

First and second tubular elements, denoted 23 and 24, respectively, of the auxiliary handle are snugly, telescopically fitted the one to the other for relative longitudinal adjustment. The overall length of said auxiliary handle, or forward extension, can be altered, lengthened or shortened, by sliding the tubular elements 23 and 24 relative to each other and detachably securing them in fixed relation when the auxiliary handle, or forward extension, is of a desired length. Any ordinary or preferred means can be employed to detachably connect the tubular elements in each of a plurality of different positions to which they may be relatively longitudinally adjusted. As disclosed, the tubular element 23 has a single set of diametrically aligned apertures and the tubular element 24 is provided with a plurality of longitudinally spaced sets of diametrically aligned apertures, each indicated 25. A headed and nutted bolt 26, to extend transversely of the tubular elements through selected aligned sets of apertures in both tubular elements, is for detachably securing the tubular elements in fixed relation. A hand hold 27, of rubberized material as disclosed, is rigidly secured upon the forward end portion of the second tubular element 24.

A coupling unit of the auxiliary handle is constituted as a shank 28 and a tubular member 29 interconnected by a universal joint 30 of construction to permit relative lateral swinging movement of said shank and tubular member in any direction and to prevent their relative rotation. As shown, the universal joint 30 is comprised as a pair of pivotal connections in perpendicular relation to each other.

A rearward end portion of the first tubular element 23 is detachably, fixedly secured, as at 31, upon the shank 28 of the coupling unit, and the tubular member 29 of said coupling unit is detachably, fixedly secured, as at 32, upon a lug 33 projecting forwardly from the hand grip 21.

The detachable connection 32 is disclosed in detail in Fig. 7 of the drawing. The lug 33 is snugly fitted into the tubular member 29 and a compression coil spring 34 within said lug resiliently retains a stud 35 in an aperture 36 in said tubular member. Stated differently, the detachable connection 32 is constituted as a spring loaded fastening means. The detachable connection 31 can be of the same general construction as is the detachable connection 32.

An anchoring bracket 37 of the auxiliary handle is constituted as a flat element of elongated configuration. A larger end portion of the anchoring bracket is hollowed out, as at 38, to receive the forward end portion of the tubular member 19 on the gear housing 16 and a smaller end portion of said anchoring bracket is provided with an aperture 39 for receiving a rearward end portion of an anchoring rod 40 of the auxiliary handle. The anchoring bracket is in a horizontal plane and extends toward the port side of the boat. Clamping screws 41 retain

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said anchoring bracket in fixed position upon the tubular member 19 and a set screw 42 retains said anchoring rod in fixed position in the anchoring bracket.

The first tubular element 23 of the auxiliary handle is snugly and freely rotatable in a bearing member 43 mounted upon said first tubular element, and a protuberance 44 upon said bearing member fixedly receives, as at 45, a forward end portion of the anchoring rod 40. The protuberance 44 is in a horizontal plane and extends toward the port side of the boat.

As very clearly disclosed in the drawing, the anchoring rod 40 is bent inwardly at a midportion 46 thereof and is in a single plane. A straight forward end portion of said anchoring rod is in parallel relation to the first and second tubular elements, a straight rearward end portion of the anchoring rod is in parallel relation to the main handle 18 and said anchoring rod is at the port side of said first and second tubular elements and main handle in spaced relation thereto.

The auxiliary handle of Fig. 8 is in many respects of the same construction as is the auxiliary handle of Figs. 1 to 7, inclusive, and parts which are similar have been given like reference numerals.

A rearward end portion of the first tubular element 23 in Fig. 8 is secured, by a fastening screw 50, upon the lug 33. The first and second tubular elements are longitudinally aligned with the main handle in Fig. 8.

By reason of the fact that control handles, such as 18, of outboard motors, such as 11, employed on boats, such as 10, to accomplish their propulsion, have been accessible only at and adjacent to the sterns of the boats, it has heretofore been necessary for operators of the outboard motors to locate themselves far to the rear of the boats, thus frequently to cause the boats to be tilted upwardly from rear toward front and the efficiency of the outboard motors to be impaired or reduced.

Auxiliary handles, or forward extensions, made according to the present invention can be conveniently accessible at any locations in boats where operators may care to situate themselves. The necessity for the presence of an operator at the rear, where his weight is liable to tilt the boat in the absence of counterbalancing forwardly positioned weight, is eliminated. The speed of operation of the outboard motor will be altered, increased and decreased by rotating the hand hold 27 thus to rotate the auxiliary handle and the main handle in corresponding direction, and steering of the boat will be accomplished by swinging the hand hold, together as a unit with said auxiliary and main handles, from side to side.

The obvious purpose of offsetting the auxiliary handle of Figs. 1 to 7, inclusive, is to situate the hand hold 27 at a location where it will be more readily accessible to an operator occupying the center of the thwart 14. The

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anchoring bracket 37, anchoring rod 40, the bearing member 43, etc., will retain the other elements of the auxiliary handle in the offset relation which is intended, and the first tubular element 23 of the auxiliary handle will be freely rotatable in said bearing member in response to rotation of said hand hold. The main handle 18 of course will be rotated in response to rotation of the hand hold and first and second tubular elements, through the instrumentality of the coupling unit constituted as the shank 28, the tubular member 29 and the universal joint 30.

What is claimed is:

1. An auxiliary handle for assembly with a manipulating handle of an outboard motor constituted as an elongated element, a coupling unit for securing said elongated element to said manipulating handle to permit their relative lateral movement and prevent their relative rotary movement, an anchoring bracket to be made rigid with the manipulating handle, a bearing member in which the elongated element is snugly rotatable, said anchoring bracket and bearing member being at opposite sides of said coupling unit, and an anchoring rod for retaining said manipulating handle and said elongated element in offset relation to each other extending between and rigid with said anchoring bracket and said bearing member.

2. The combination as specified in claim 1, and spring loaded fastening means for detachably securing said coupling unit to and between said manipulating handle and said elongated element.

3. In combination, an outboard motor including a manipulating handle rotatable to controllably regulate the speed of operation of said outboard motor and swingable from side to side, a hand grip on said manipulating handle, a lug rigid with and extending forwardly from said hand grip, an auxiliary handle, to be manually rotated to cause said manipulating handle to be rotated and swung from side to side to cause the manipulating handle to be swung from side to side, including a tubular element receiving and extending forwardly from said lug, and spring loaded fastening means for detachably securing the lug within said tubular element.

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