Oct. 24, 1950 W. P. HAWKINS 2,526,946

OUTBOARD MOTOR CONTROL

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Fig. 1.

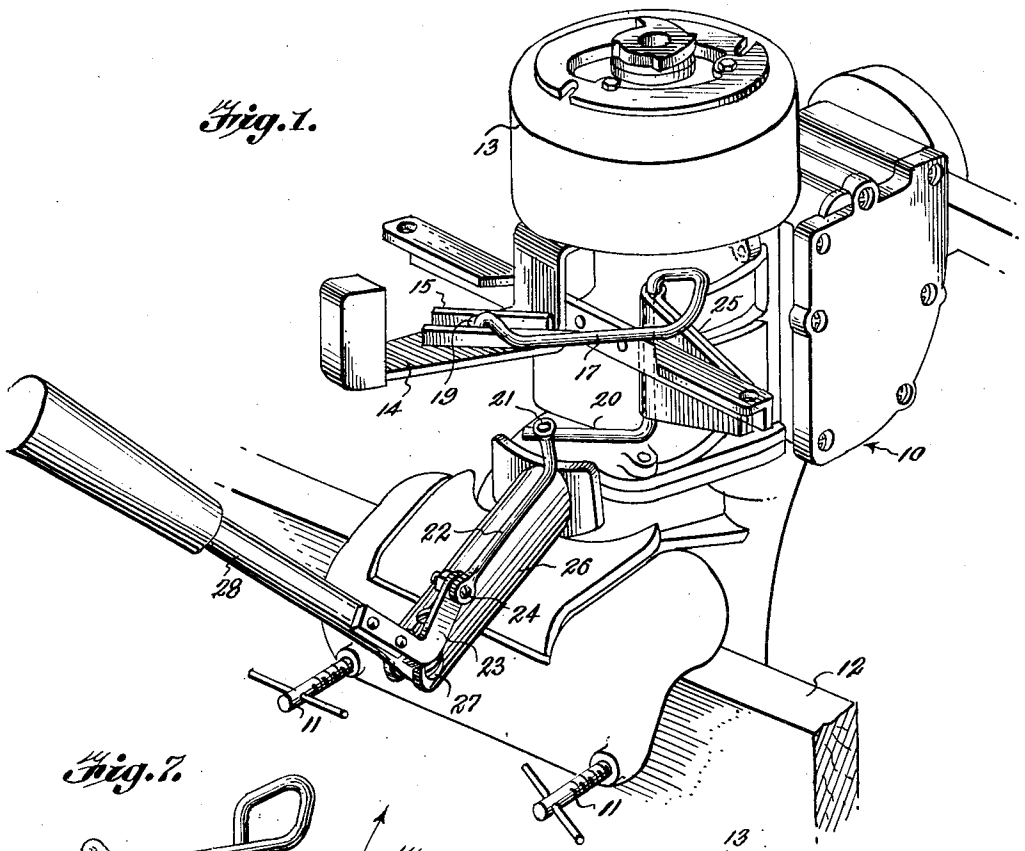


Fig. 7.

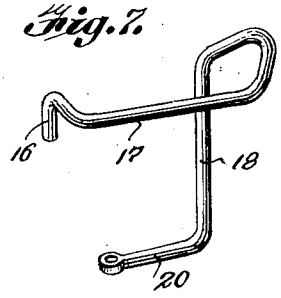


Fig. 2.

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Fig. 3.

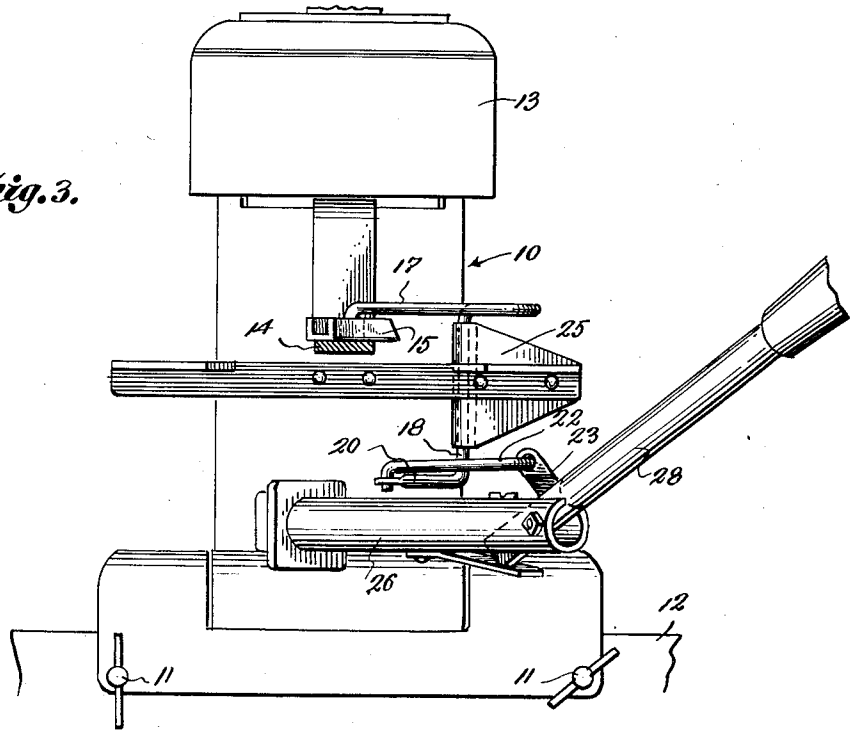


Fig. 4.

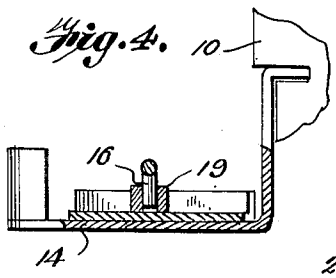


Fig. 5.

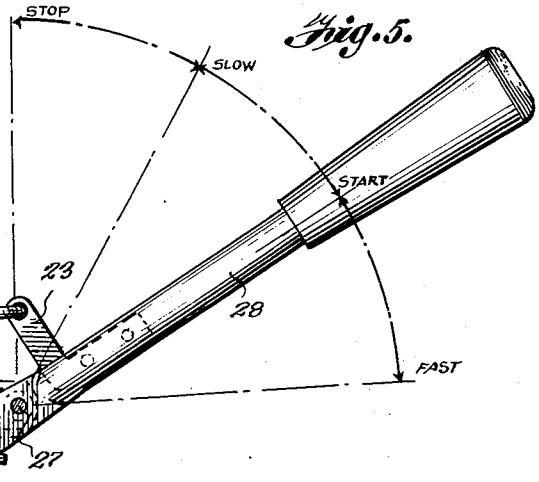
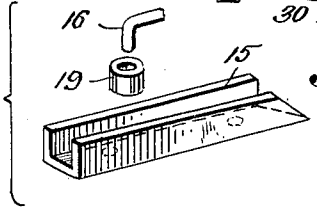


Fig. 6.



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OUTBOARD MOTOR CONTROL

William P. Hawkins, El Paso, Tex.

Application February 18, 1949, Serial No. 77,194

3 Claims. (Cl. 115—18)

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The present invention relates to outboard motor controls and it consists in the combinations, constructions and arrangements of parts herein described and claimed.

Generally there is provided a one-hand control for outboard motors in which a single handle is utilized and which is pivoted in such manner that vertical movement of the handle will cause a regulation of the ignition and fuel control while horizontal movement of the handle will steer a boat to which the motor is attached in the conventional manner.

It is accordingly an object of the invention to provide a device of the character set forth which is simple in its construction and operation and yet effective and efficient in use.

Another object of the invention is the provision of novel means for controlling a combination fuel and ignition lever.

Another object of the invention is the provision of a novel arrangement of linkages and levers for effecting the above-mentioned object.

Other and further objects of the invention will become apparent from a reading of the following specification taken in conjunction with the drawings, in which:

Figure 1 is a fragmentary perspective view of an embodiment of the invention,

Figure 2 is a plan view of Figure 1,

Figure 3 is an elevational view of the device as shown in Figures 1 and 2,

Figure 4 is an enlarged fragmentary sectional view illustrating certain details of the invention,

Figure 5 is a plan view, partly broken away, illustrating certain details of the invention,

Figure 6 is an exploded perspective view showing certain elements of the invention, and

Figure 7 is a perspective view of an element of the invention.

Referring more particularly to the drawings, there is shown therein an outboard motor generally indicated at 10 and provided with conventional clamps 11 for affixing the same to the stern of a boat 12 and provided with the conventional fly wheel 13 and combination ignition and carburetor control lever 14.

A U-shaped trough 15 is affixed in angular relation to the upper side of the lever 14 and within the recess of the trough member 15 there is mounted for slidable movement a detent 16 of an upper arm 17 of a vertically extending revoluble shaft 18.

A bearing 19 surrounds the detent 16 within the trough 15. The lower end of the shaft 18 has integrally formed therewith a laterally extending arm 20 to which is pivotally connected, as indicated at 21, the inner end of a link 22 whose outer end is pivotally connected to a bracket 23 as indicated at 24.

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The shaft 18 is pivotally mounted in a bracket 25 carried by the motor 10 which latter is also provided with the conventional steering handle 26. To the upper end of which is pivotally connected, as indicated at 27, a vertically movable control handle 28.

The operation of the device is exceedingly simple in that the vertical positioning of the handle 28 causes a relative horizontal movement of the lever 14 to thereby control the carburetor and ignition of the motor 10. This is effected in the following manner: Upward movement of the arm 28 will cause an inward movement of the link 22 thereby causing the arm 20 to rotate clockwise as viewed in Figure 1, for example, thereby moving the shaft 18 in a clockwise direction and consequently the arm 17 in a clockwise direction. This movement in turn will cause a movement of the lever 14 to the left as viewed in Figure 1 through the pressure of the detent and its bearing 19 against the sides of the trough 15. A downward movement of the lever 28 will cause a reverse of the movements of the motor just described. Hence, any movement of the handle 28 will cause a consequent movement of the lever 14 to thereby control the operation of the motor. Again, a horizontal movement of the arm 28 will cause a like movement of the steering arm 26 to pivot the entire motor structure in conventional manner to thereby steer the boat 12. A leaf spring 30 is affixed to the arm 26 by means of a bolt 31 or the like and projects outwardly from the under side thereof and a screw 32 is vertically mounted in the arm 26 adjacent the outer end thereof and has its lower end bearing against the upper face of the spring 30 to thereby regulate the tension of the same. The outer end of the spring 30 bears against the inner end of the handle 28 to normally urge the same into a horizontal position.

It will thus be seen that there is provided a control wherein the operator of an outboard motor may utilize but a single hand whereby to control the speed, starting, stopping and steering thereof.

While but one form of the invention has been shown and described herein it will be readily apparent to those skilled in the art that many minor modifications may be made without departing from the spirit of the invention or the scope of the appended claims.

What is claimed is:

1. A device of the character described comprising the combination with an outboard motor having a carburetion and ignition lever and a steering lever, of means for simultaneously operating both of said levers, said means including a vertically pivoted handle for the steering lever, a trough-like member affixed angularly upon the carburetion and ignition lever, a vertically extending shaft carried by the motor, an upper arm affixed to the shaft, a dependent detent at the outer end of the upper arm slidably mounted in the trough-like member, a lower arm affixed to the shaft and a link interconnecting the lower arm and the handle.

2. A device of the character described comprising the combination with an outboard motor having a carburetion and ignition lever and a steering lever, of means for simultaneously operating both said levers, said means including a vertically pivoted handle for the steering lever, a trough-like member affixed angularly upon the carburetion and ignition lever, a vertically extending shaft carried by the motor, an upper arm affixed to the shaft, a dependent detent at the other end of the upper arm slidably mounted in the trough-like member, a lower arm affixed to the shaft and a bracket affixed to the handle and a link interconnecting the bracket and said lower arm.

3. A device of the character described comprising the combination with an outboard motor having a carburetion and ignition lever and a steering lever, of means for operating simultaneously both of said levers, said means including a vertically pivoted handle for the steering lever, a trough-like member affixed angularly upon the carburetion and ignition lever, a vertically extending shaft carried by the motor, an upper arm affixed to the shaft, a dependent detent at the outer end of the upper arm slidably mounted in the trough-like member, a lower arm affixed to the shaft, a link interconnecting the lower arm and the handle and a bearing revolvably mounted on said detent and adapted to bear against the inner sides of the trough-like member.

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