Jan. 12, 1960 F. C. SCHOENFELDT 2,920,393

OUTBOARD MOTOR MEASURING DEVICE

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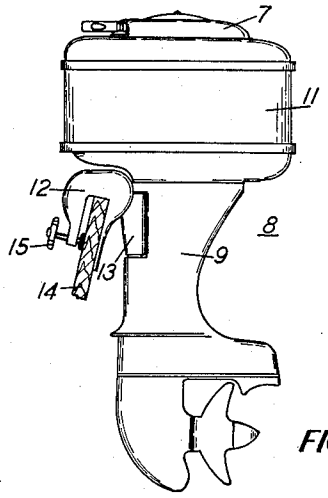


FIG. 1.

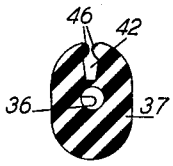


FIG. 6.

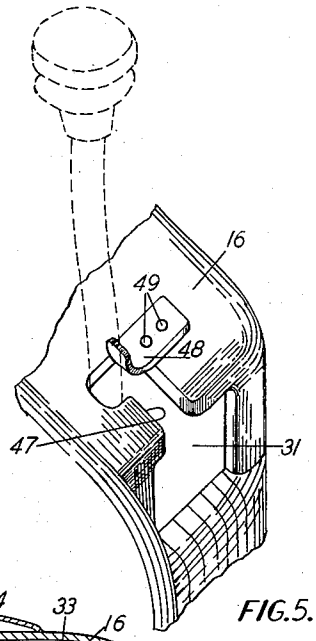


FIG. 5.

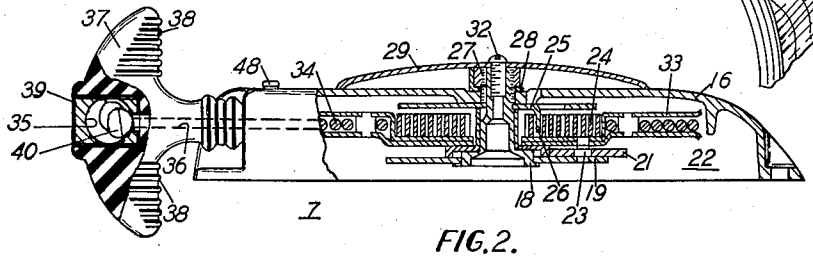


FIG. 2.

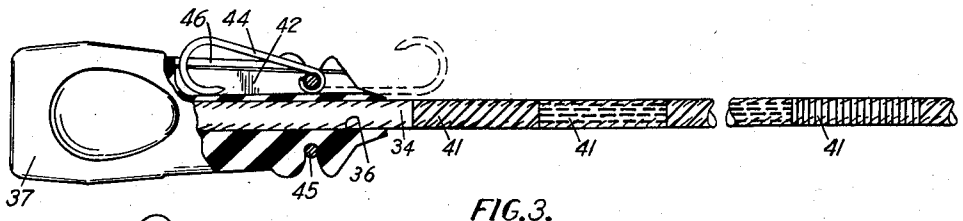


FIG. 3.

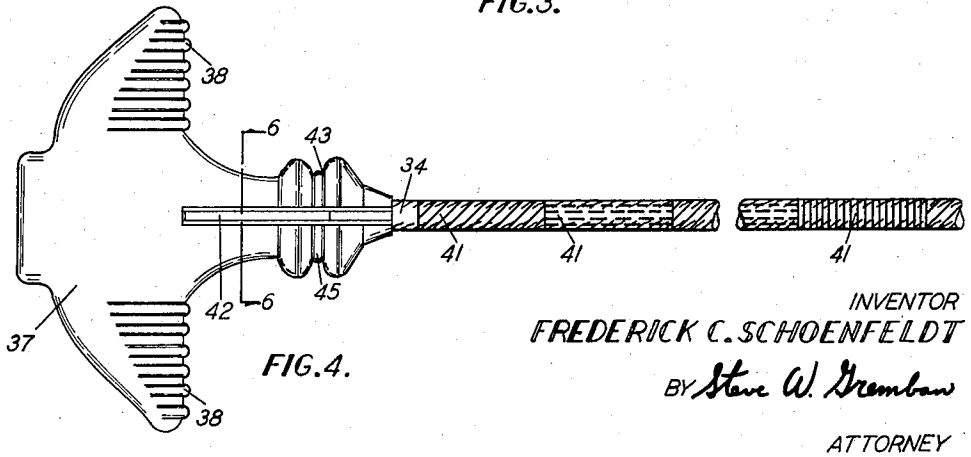


FIG. 4.

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OUTBOARD MOTOR MEASURING DEVICE

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1 Claim. (Cl. 33—138)

This invention relates generally to a measuring device and more specifically to a starter assembly for an outboard motor having a flexible member functioning as a measuring instrument.

It is not unusual for fishermen, particularly when operating from a boat, to find themselves in the predicament of having made a fine catch and being unable to accurately determine the length of the catch in order to legally retain same.

It is therefore an object of the present invention to provide distinguishing indicia upon the flexible starter member of a starter assembly of an outboard motor to afford means for determining the length of the catch.

Another object of the invention is to provide means on the flexible starter member of a starter assembly of an outboard motor for grasping the catch to facilitate measuring same.

Another object of the invention is the provision of locking means in an outboard motor for locking the flexible starter member in any extended position so that the flexible member is free of tension to facilitate measuring the catch.

Objects and advantages other than those set forth above will be apparent from the following description when read in connection with the accompanying drawing, in which:

Fig. 1 is an elevation view of an outboard motor embodying the invention;

Fig. 2 is an elevation view partially in section of a starter assembly of an otuboard motor in which the invention is embodied;

Fig. 3 is an enlarged segmental view in elevation of a starter cable and handle embodying features of the invention;

Fig. 4 is a front view in elevation of the starter cable and handle of Fig. 3;

Fig. 5 is a segmental perspective view of a portion of the starter assembly embodying another feature of the invention; and

Fig. 6 is a section view taken along line 6—6 of Fig. 4.

As shown in the drawing, a preferred embodiment of this invention is illustrated as applied to a starter assembly 7 of an outboard motor 8. The outboard motor 8 is shown as having a drive shaft housing 9 and a cowl 11 enclosing a power head, not shown, mounted on the drive shaft housing 9.

Attachment means comprising a clamp bracket 12 and a swivel bracket 13 is provided for attaching the outboard motor 8 pendantly to the transom 14 of a boat, not shown. The clamp bracket 12 is shown as an inverted U-shaped clamp, adapted to engage over the upper edge of the transom 14. The clamp bracket 12 carries a clamping screw 15 at the lower end adapted to engage on the inside of the transom 14 to clamp the transom between the end of the screw 15 and a portion of the clamp bracket 12.

The swivel bracket 13 of the attachment means is pivotably connected to the clamp bracket 12. The swivel bracket 13 is further pivotably mounted to the housing

9 by means of a longitudinal rod passing through a suitable opening, not shown, in the housing 9.

The cowl 11 has a downwardly dished casing 16 for housing the starter assembly 7. The starter assembly 7 which may be any known type is shown in Fig. 2 as having a shaft 18 upon which a starter pawl retainer plate 19 is mounted for rotational movement therearound. Starter pawls 21 are placed on the retainer plate 19 and a sheave assembly 22 having a plurality of pegs 23 is rotatably disposed on the shaft 18 with the pegs 23 passing through suitable openings in the starter pawls 21 and retainer plate 19. A spring 24 for urging the sheave assembly 22 to its original position is placed thereon. A spring retainer 25 is placed over the spring 24 and keyed to the shaft 18, and is provided with a lip 26 for holding one end of the spring 24. The shaft 18 is secured to the cowl 11 by means of nut 27 and washer 28 which is covered by a plate 29 fastened to the shaft 18 by means of a screw 32.

The sheave assembly 22 comprises a sheave 33 and a flexible starter member 34 shown as a cord or cable having one end secured to the sheave 33. The cord 34 is wound around the sheave 33 with the other end extending through an opening 31 formed by the cowl 11. A handle 37 preferably constructed of a resilient material such as rubber is formed to define a tubular opening 36 through which the starter cord 34 is inserted. The handle 37 is shown as having projecting ribs 38 adapted to fit the fingers of the operator's hand to provide a comfortably gripped handle. An end cap 39 shown in Fig. 2 as a cylindrical member has an axial opening through which the cord may be inserted and a larger opening 35 transverse thereto. A knot 40 is tied in the other end of the cord 34 and fits within the larger opening 35 to firmly secure the handle 37 to the other end of the cord 34.

The starter cord 34 is provided with a series of sections 41 or areas of equal length such as one inch, although any preferred uniform length may be used. The sections 41 may be defined by selected colors arranged in series. A fisherman with a knowledge of the length of the color sections may readily determine or estimate the length of the catch. Instead of having a series of sections of different colors for indicating length, any other means for marking off predetermined uniform lengths may be used.

The handle 37 is further shown as having an elongated groove or slot 42 therein extending axially from one end of the handle 37. The one end of the handle 37 is further provided with an annular groove 43 shown in Fig. 4. A hook 44 having the general shape of a fish hook is pivotably mounted within the slot 42 on a retainer spring 45 or ferrule which passes through an eyelet in the hook 44 and is disposed around the handle within the groove 43. The hook 44 is shown in a non-operative position in Fig. 3 with a portion of the hook 44 passing through lips 46 of the groove 43 shown in Fig. 6 to retain the hook 44 in the non-operative position so as not to injure the hand of the operator. When it is desired to measure a fish, the hook 44 is pivotably moved to the dotted position shown in Fig. 3 where it is easily accessible. A portion of the handle 37 may be recessed, not shown, to facilitate grasping the hook 44 to move it from the non-operative to the operative position.

Ordinarily, it is difficult to attempt to measure a fish while the starter cord 34 is under spring tension. In order to eliminate the spring tension of the cord 34 in an extended position, the casing of the cowl 11 is provided with an L shaped slot 47. A flexible spring member 48 is mounted on the cowl 11 having one end secured to the cowl by any suitable means such as rivets 49 and the other end freely extending over a portion of the slot 47. The starter cord 34 is extended and moved into the furthermost portion of the slot 47 whereupon it is re-

leased. The spring 24 in urging the starter cord 34 to rewind about the sheave 33 causes the spring member 48 to move in the direction of the cord 34 pinching the cord between the spring member 48 and the edge of the slot 47 thereby not allowing the cord 34 to rewind about the sheave 33, and permitting the extended portion of the cord 34 to hang loosely completely free of any spring tension.

In operation, after having landed a fine catch, the fisherman grasps the handle 37 of the starter cord 34 and extends same a sufficient distance for measuring the catch. The cord 34 is slipped into the slot 47 and released whereupon the extended portion of the cord 34 hangs limp. The hook 44 on the handle 37 is pivotably moved so that the pointed portion thereof extends outwardly from the cord 34. The catch is firmly secured to the hook 44 and the handle 37 lifted vertically whereupon the fisherman can determine or estimate the length of the catch.

Although only one embodiment of the invention has been illustrated and described, it will be apparent to those skilled in the art that various changes and modifications of the invention may be made without departing from the spirit of the invention or from the scope of the appended claim.

It is claimed and desired to secure by Letters Patent:

In a measuring device, the combination of: a support member, a pulley rotatably carried by said support member, a flexible member having indicia means thereon for indicating uniform predetermined distances and having one end attached to said pulley with the flexible member wound around said pulley and having the other end free, spring means interposed between said support member

and said pulley for biasing said pulley in a direction tending to keep said flexible member wound around said pulley, a handle secured to the free end of said flexible member whereby said flexible member may be unwound and extended from said pulley against the pressure of said spring means, said handle being provided with a longitudinally extending groove, a hook member pivotally mounted adjacent one end of said groove and being pivotable about an axis transversely of the handle and groove between an operative position for receiving and holding the object to be measured and an inoperative position wherein the hook member is disposed in said groove, and means to retain the hook member in said groove.

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