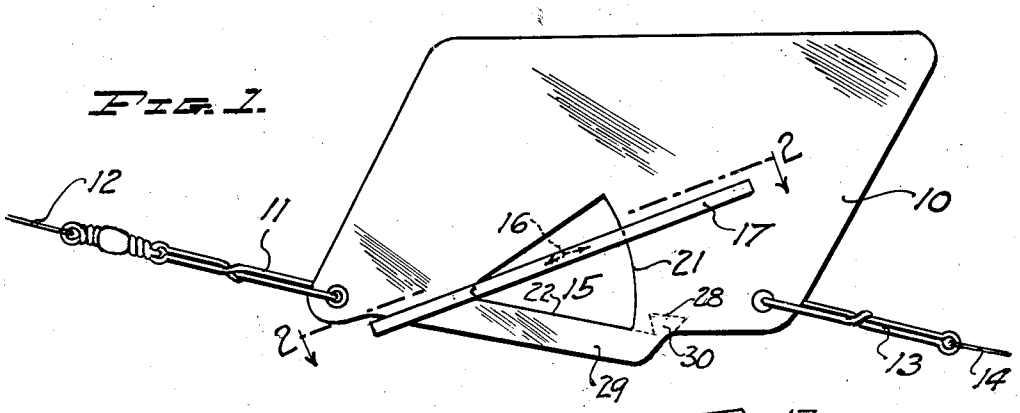
Dec. 23, 1952 H. C. JENSEN 2,622,362

DEPTH CONTROLLED TROLLING RUDDER

Filed Oct. 15, 1948

FIG. 1.



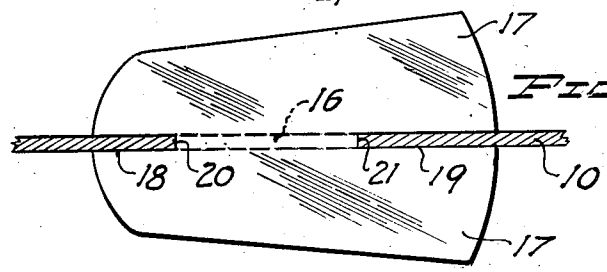


FIG. 2.

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DEPTH CONTROLLED TROLLING RUDDER

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5 Claims. (Cl. 43—43.13)

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This invention relates to a depth controlled trolling rudder.

The principal object of the invention is to control with a high degree of accuracy the relative depths at which a rudder rides during a trolling operation.

Trolling is common practice in the art of fishing. It consists in attaching lures or bait behind a boat and pulling the lures or bait through the water of a lake or stream. Rudders attached to fishing lines for the purpose of keeping the latter from turning or twisting when the lures or bait are attached behind the rudders, are in general well known. In order to hold the lures or bait at a certain depth, it has heretofore been the practice to attach sinkers, usually made of lead, to a line. Since it is desirable to frequently change the depth of sinking, that method of attaining the desired result becomes extremely cumbersome.

According to the invention, a transverse fin is provided for the rudder, the position of the fin being conveniently changed according to the depth of sinking desired. In this way it is possible to sink heavy lures deeper, light lures less deep, or to bring heavy lures near the surface or further to sink light lures to the proper depth, all without the aid of the usual sinkers.

In the accompanying drawing, which illustrates embodiments of the invention,

Fig. 1 represents a side elevation of one embodiment;

Fig. 2, a longitudinal section taken on the line 2—2 in Fig. 1.

Referring to the drawing, the numeral 10 indicates a rudder suited to the present purpose, this rudder being provided with a link 11 for attaching a trolling line 12; and a link 13 to which bait of various kinds, including live bait or suitable lures (none of which are shown) are attached, for example, by means of a short line 14.

In the present instance both the rudder and the fin are assumed to be made of transparent plastic sheet material of suitable thickness. Other material, such as metal, can be used.

An opening 15 formed in the rudder has preferably the shape of a sector of a circle. The fin is movably fitted into the opening 15 by means of a neck 16 that connects the two symmetrical fin wings 17 together and leaves the two slotted portions 18 and 19. One end of neck 16 hinges or rocks in the angular niche 20 of opening 15, while the other end of the neck is in engaging frictional or other resistant contact with the arcuate boundary 21 of opening sector 15. Thus by simply overcoming the resistance manually, the fin can

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be conveniently shifted into various other positions where its plane forms the desired angle with respect to the tensioned pulling line 12.

It is readily understood that when the fin is in the operative position of Fig. 1, the lures or bait will tend to sink, while positions where the fin is closer to the side 22 of opening 15 will produce a rising tendency.

Snug fitting of the slotted portions 18 and 19 increases the resistance to accidental displacement of the fin along the rudder.

As a facility in manufacturing, assembling of fin 17, Fig. 1, with rudder 10, so the fin wings defined by slotted portions 18 and 19 transversely of the plane of the rudder, shall straddle that plane, is accomplished as follows: A dovetail incision is made somewhat as indicated at 28, the portion 29 is then bent away from opening 15; next, the neck 16 is inserted in opening 15 and finally the portion 30 is returned to its original position. The parts can then be reunited by heating if the material is a plastic, or by brazing in the instance of a metal.

Obviously, the fin of the invention is used also in controlling the depth when casting and retrieving.

Both the rudder and the fin of the invention as hereinbefore described, are preferably made of sheet material which may be referred to as defined largely by two surfaces lying substantially in planes spaced apart from each other. Such material in the various mechanical arts is conveniently spoken of as being substantially "plane." The fact that two planes are involved is commonly implied. Therefore, in the present instance, the term "plane" in connection with such words as "rudder," "fin," "blade" and so on, defines the general characteristic of those parts.

While certain specific features are herein shown and described, the following claims define the desired scope of the invention.

What is claimed is:

1. A depth controlled rudder, comprising a plane rudder having a sector-like recess having two intersecting sides defining an angle and a third side defining an arc connecting the angle-defining sides, and a fin having a neck, one end of which neck is disposed to rock in said angle and the other end of which neck is disposed to engage the side defining the arc.

2. A depth controlled trolling rudder according to claim 1, wherein said fin includes wing portions joined together by the said neck and is disposed in said sector-like recess so as to oscillate in the plane of said rudder; and wherein said

wing portions include slotted portions straddling the rudder.

3. A trolling rudder comprising two, intersecting, substantially plane blades, one blade being slotted along the line of intersection so as to define a neck which divides that blade into two connected parts lying in the plane thereof; the other blade having an angularly apertured portion in which said neck is angularly movable in the plane of said other blade.

4. A trolling rudder comprising two substantially plane blades assembled along a common line of intersection; one of said blades having an apertured portion lying in the plane thereof; the other blade having a neck extending along the line of intersection so as to be movable angularly in the plane of the first-mentioned blade.

5. A trolling rudder according to claim 4, wherein said apertured portion has the configuration of the sector of a circle; and wherein the said neck has its movement centered in the angular portion of said sector.

HENRY C. JENSEN.

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