July 5, 1938. K. R. LARSON ET AL 2,123,150

SPINNER

Filed Dec. 2, 1935

Fig. 1.

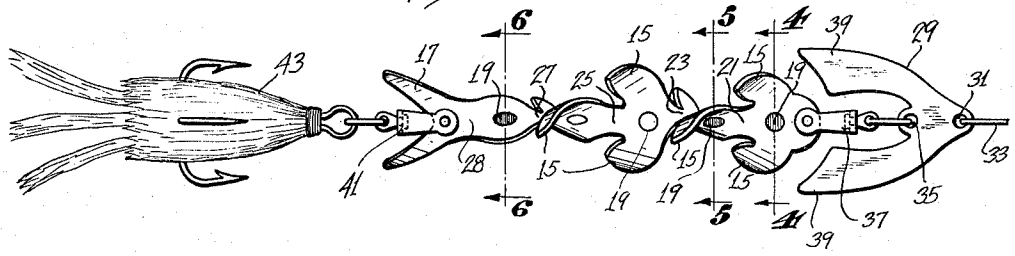


Fig. 2.

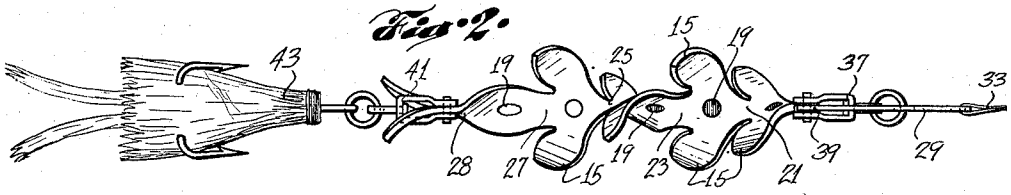


Fig. 4.

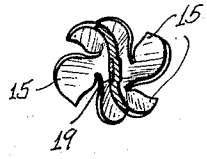


Fig. 3.

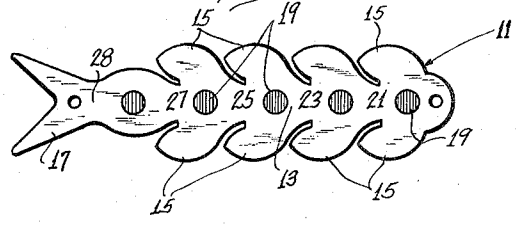


Fig. 5.

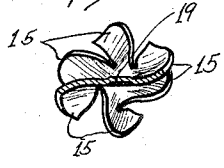


Fig. 7.

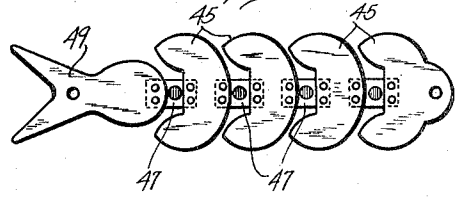
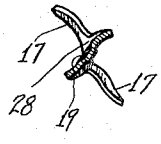


Fig. 6.



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SPINNER

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Application December 2, 1935, Serial No. 52,471

5 Claims. (Cl. 43—45)

Our invention relates to fishing tackle and particularly to spinners.

An object of our invention is to provide a spinner having a very efficient rotor.

Another object of our invention is to provide a rotor for a spinner, made in the shape of an extended screw propeller.

Another object of our invention is to provide a rotor comprising a flat central longitudinal rib and at least one pair of lateral initially flat lobes thereon, the lobes being bent into helical shape, and the rib being twisted through substantially a whole turn.

Another object of our invention is to provide an anti-fouling stabilizer to prevent twisting of the line.

Other objects of our invention will either be pointed out specifically in the course of a description of several forms of devices embodying our invention, or will be evident from such description.

In practicing our invention, we provide a head piece or stabilizer of flat V-shape, a swivel connected to the head piece between the legs thereof and to a rotor comprising a central rib and at least one pair of longitudinally-spaced lateral lobes, the rib and the lobes being bent or twisted into the shape of a helical screw propeller having at least one full turn. A second swivel connects the tail piece of the rotor with a suitable hook.

In the single sheet of drawings,

Fig. 1 is a view, in side elevation, of a spinner embodying our invention,

Fig. 2 is a view similar to Fig. 1 but taken at 90 degrees from the view shown in Fig. 1,

Fig. 3 is a plan view of a blank which we use in making our rotor,

Fig. 4 is a lateral section through the rotor, taken on the line 4—4 of Fig. 1,

Fig. 5 is a view, in lateral section through the rotor taken on the line 5—5 of Fig. 1,

Fig. 6 is a view, in lateral section through the rotor taken on the line 6—6 of Fig. 1, and,

Fig. 7 is a top plan view of a blank used in making a modified form of rotor,

Referring first to Fig. 3 of the drawing, we have there illustrated a rotor blank 11 which may be made of relatively thin sheet metal, and as shown in this figure of the drawing comprises a central longitudinal rib 13 having a plurality of pairs of lobes 15 longitudinally spaced from each other and the long central rib. We may use four such pairs of lobes, extending not only laterally from the central rib but also rearwardly of their place of attachment to the central rib and having outer rounded surfaces. The central rib is extended at the rear end into a rear end portion 17 which has the general shape of a fish tail.

We further provide a plurality of depressions 19 on one side of the initially flat central rib and locate therein small quantities of paint, preferably red, in order that an additional fish-attracting means may be provided.

Referring now to Figs. 1 and 2 of the drawing it will be noted that the rotor comprising the initially flat laterally lobed member 11 has been twisted, the central or longitudinal rib having been twisted through one quarter turn at the points 21, 23, 25, 27 and 28, as shown in Fig. 3 of the drawing, these points 21, 23, 25 and 27 being those where the lobes have been undercut and where it is therefore relatively easy to twist the central rib through the desired angle of about ninety degrees and the point 28 being near to the rear end 17. The lateral lobes 15 have also been bent or twisted in reverse directions, and to such an extent that the lobes will lie in a helical path, or will have a shape substantially like that of an extended helical screw propeller. Since at least four points 21, 23, 25 and 27 inclusive are provided on the central rib where it can be turned through one quarter turn, the twisted rotor will include at least one whole helical turn.

We provide further a head piece or stabilizer 29, which as shown particularly in Fig. 1 of the drawing, is of substantially V-shape and is provided at its forward end with an eye or opening 31 to which a fishing line 33 may be attached. The stabilizer 29 is further provided with an inner opening 35 to which one portion of a swivel 37 may be connected, the length of the legs 39 of the stabilizer being such as to extend over substantially the entire length of the swivel 37, thereby providing an efficient anti-fouling means to protect the swivel against engagement with grass or other weeds during use.

A second swivel 41 is connected to the tail piece 17 between the legs thereof and has attached thereto a suitable hook 43, which may be of any suitable or desired type and constitutes no part of our present invention.

Referring now to Fig. 7 of the drawing, we have there illustrated a slightly modified form of rotor blank, which includes a plurality of elements 45 here shown as four in number, which elements are of substantially the same shape as the lobes 15 and the central rib portion lo-

cated therebetween. A plurality of flat connecting strips 47 are used to connect the elements 45 together and to a tail piece 49. The connecting members 47 are twisted in substantially the same manner as was hereinbefore set forth for the portions 21 to 27 of Fig. 3 of the drawing and the outer or lateral portions of the members 45 are bent to helical shape, as was hereinbefore set forth for the lobes 15 shown in Figs. 1, 2 and 3 of the drawing.

After the elements 45 and the connecting members 47 have been twisted into substantially the shape shown for the rotor in Figs. 1 and 2 of the drawing, a stabilizer 29 may be connected thereto as also a hook, as was hereinbefore described. The members 47 may be provided with depressions in one side thereof to receive a small quantity of paint, preferably red.

The device embodying our invention may be used not only in trolling but also in casting and we have found it to be an efficiently operative device. The head piece or stabilizer 29 maintains its position in the water while being drawn therethrough, without twisting or turning, thereby preventing twisting of the line. The rearward extensions 39 provide efficient swivel-protecting and anti-fouling means so that little or no trouble is experienced with the stabilizer or swivel being caught or tangled in occasional weeds.

The fact that our improved rotor comprises at least a full helical turn makes it an efficient means for causing rotation of that part of the spinner. The small patches of red paint, initially located on one side of the central rib are distributed one in each quarter turn of the rotor thereby to present at least one painted surface in each direction at any one time.

We do not desire to be limited to any specific number of lobes. At present we prefer to make the rotor from a single piece of proper sheet metal, such as is shown in Fig. 3 of the drawing, but we may also use the construction shown in Fig. 7 of the drawing so long as the final shape of the rotor is that shown in Figs. 1 and 2 of the drawing.

Various modifications may be made in the device embodying our invention without departing from the spirit and scope thereof, and we desire that only such limitations shall be placed thereon as are imposed by the prior art or are set forth in the appended claims.

We claim as our invention:

1. A spinner assembly of relatively thin sheet material comprising a rotor having a plurality of connected longitudinally-alined spaced elements, each element including a relatively narrow central rib-portion and a pair of laterally-spaced lobes, each rib-portion having a twist of substantially 90° therein, the twists in successive rib-portions being in the same direction, the lobes having bends therein cooperating to form an extended helical screw propeller and successive pairs of lobes being displaced laterally by substantially 90° from each other.

2. A spinner rotor of relatively thin sheet material comprising a plurality of longitudinally-spaced elements, each element including a substantially flat mid-portion, two lateral lobes and a relatively short, narrow longitudinally-extending central rib-portion connecting adjacent elements and having a lateral twist of substantially 90°, the twists in successive rib portions being in the same direction, the lobes of each element having complementary bends therein to cause the longitudinally alined and spaced pairs of lobes to constitute an extended helical screw propeller.

3. A spinner rotor of relatively thin sheet material comprising a rear end portion of substantially fish-tail shape and a plurality of longitudinally-spaced similar elements, each element including a substantially flat mid-portion, a pair of rearwardly-extending lobes, one at each side of the mid-portion and a relatively narrow central rib-portion connecting adjacent mid-portions and located between the lobes of its element, each rib portion having a lateral twist of substantially 90° in its length and the twists in successive rib portions being in the same direction and the lobes of each element having bends therein complementary to each other and to the twists in the connecting rib portions to constitute an extended helical screw propeller of large pitch.

4. A spinner rotor of relatively thin sheet material, comprising a plurality of longitudinally alined elements, each element having a substantially flat mid-portion, lateral rearwardly-extending lobes and a relatively narrow central portion connecting successive mid-portions, the central portions each having a twist of substantially 90° therein, the twists in successive central portions being in the same direction, the respective outer parts of each pair of lobes having a complementary laterally-extending bend therein, the bends and twists cooperating to cause the elements to constitute an extended helical screw propeller.

5. A spinner as set forth in claim 2 and including a swivel at its forward end and a swivel protecting member of substantially flat V-shape, the rearwardly projecting legs of which are positioned in the same plane and extend alongside of the swivel over substantially its entire length.

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