

1,320,804.

J. C. SQUAREBRIGGS.  
TROLLING LINE SINKER.  
APPLICATION FILED MAR, 31, 1919.

Patented Nov. 4, 1919.

Fig. 1.

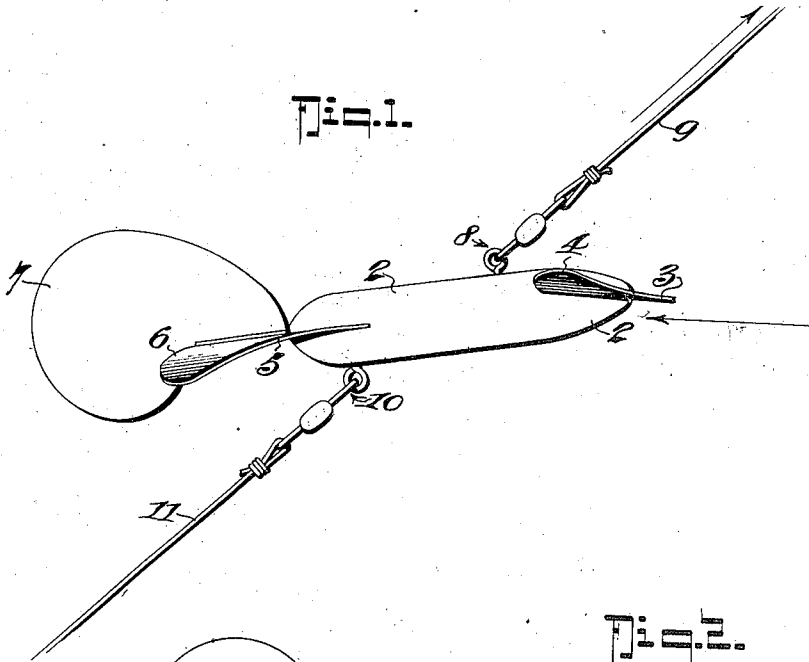
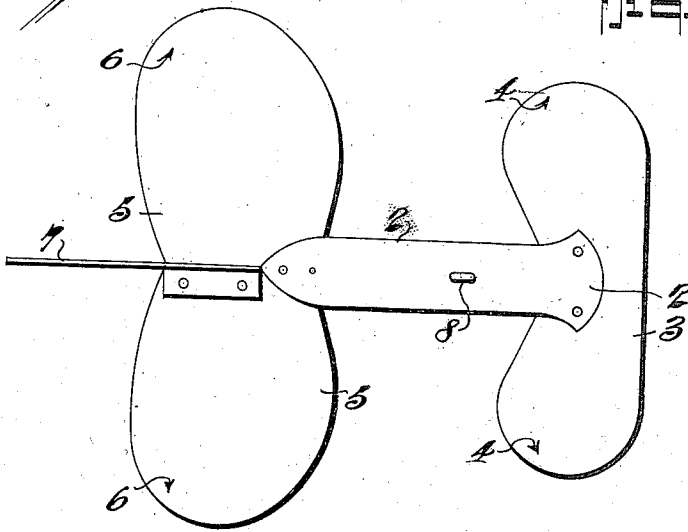


Fig. 2.



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# UNITED STATES PATENT OFFICE.

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## TROLLING-LINE SINKER.

1,320,804.

Specification of Letters Patent.

Patented Nov. 4, 1919.

Application filed March 31, 1919. Serial No. 286,246.

*To all whom it may concern:*

Be it known that I, JAMES C. SQUAREBRIGGS, a citizen of the Dominion of Canada, residing at North Vancouver, in the Province of British Columbia, Canada, have invented certain new and useful Improvements in Trolling-Line Sinkers, of which the following is a specification.

This invention relates to a means for taking down a fishing line to the required depth for deep water fishing, and is designed to supersede the heavy sinkers at present used for this purpose.

In deep water trolling a heavy sinker is commonly required to counteract the lifting tendency of the water against the upwardly inclined line as the same is drawn through the water. These sinkers are so heavy as to be awkward to lift over the side of the boat, and if the movement of the boat is stopped they rapidly carry the line to the bottom where the hooks get caught on the rocks and marine weeds.

It is to avoid these conditions that the sinker, which is the subject of this application, has been devised. In it the weight is only sufficient to insure that it is fully immersed and it is carried down by the reaction of the water on inclined vanes or fins projecting from each side.

The invention is fully described in the following specification, reference being made to the drawings by which it is accompanied, in which,

Figure 1 is a side elevation showing the sinker in the position of balance at the required depth, and

Fig. 2 is a plan of the same.

In these drawings 2 represents the body of the sinker which may be of any suitable material, preferably cast iron or lead, to the upper side of which the trolling line 9 is connected adjacent the front end at 8. To the underside of the body 2 and adjacent the rear end the bait line 11 is connected at 10.

Secured across the front end of the body 2 to project symmetrically from each side of it at a slight upward incline backward is the leading vane 3.

Similarly across the rear end of the body 2 is secured the after vane 5 which is of relatively larger area. Secured to this after vane 5 to project vertically above and a short distance below it is an upright fin 7, the plane of which may be in the plane of

the axis of the body, as shown in Fig. 2, or may be angled to one side or the other from that axis as required.

The rear edges of the leading vanes 3 are upwardly turned near their tips, as at 4, and the corresponding part of the rear vanes 5 are downwardly turned, as at 6.

As this vaned body is drawn through the water by its trolling line 9 its weight will initially carry it below the surface, and the reaction of the water on the incline of the front vane 3 will tend to tilt the front end of the body 2 downward, while the downwardly turned angle of the rear vane 5 will tend to tilt the after end upward. The sinker is thus drawn down deeper in the water against the upward pull of the line 9, and this downward movement will continue until the tension of the trolling line 9 and the drag of the bait line 11, balance the water pressures reacting on the vanes 3 and 5.

The vertical vane 7 preserves the flight of the sinker against lateral deviation and cooperates with the other vane to prevent the sinker spinning about the axis of the line connections.

If the fisherman is trolling a number of lines from his boat the vertical vane 7 of the sinker on the outer lines may be bent to right and left respectively to carry these lines away from the middle one, and thereby not only prevent fouling of the lines but enable them to spread over a larger area in trolling.

Having now particularly described my invention, I hereby declare that what I claim as new and desire to be protected in by Letters Patent, is:

1. A trolling line sinker, comprising the combination with an elongated body having provision adjacent one end for connecting it to the trolling line and adjacent the other end for connecting the bait line to it, vanes secured to the body to project from each side and angled in relation to a horizontal plane through the axis of the body to direct the leading end of the body downward by the pressure of the water on the vanes.

2. A trolling line sinker, comprising the combination with an elongated body having provision adjacent one end for connecting it to the trolling line and adjacent the other end for connecting the bait line to it, of a vane secured to each end of the body to symmetrically project from each side, the

forward vane being inclined upward and the after vane downward from the forward edges backward.

3. A trolling line sinker, comprising the  
 5 combination with an elongated body having provision adjacent one end for connecting it to the trolling line and adjacent the other end for connecting the bait line to it, of a vane secured to each end of the body to sym-  
 10 metrically project from each side, the forward vane being inclined upward and the after vane downward from the forward edges backward, and a vertically disposed vane adjacent the after end.
4. A trolling line sinker, comprising the  
 15 combination with an elongated body having provision adjacent one end for connection of it to the trolling line and adjacent the opposite end for connection of the bait  
 20 line to it, vanes projecting from each side and angled to direct the leading end of the body downward with the reaction of the water, and a vertically disposed vane for maintaining it against lateral deviation.
5. A trolling line sinker, comprising the  
 25 combination with an elongated body having provision adjacent one end for connection of it to the trolling line and adjacent the opposite end for connection of the bait line  
 30 to it, a vane secured across the leading end to project symmetrically from each side, the

leading edge of the vane being in a straight horizontal line and the surface of the vane angled upward and backward therefrom, a similar vane of relatively larger area secured  
 35 to and projecting across the after end, the surface of which is inclined downward backward and a vertical vane secured to and projecting upward and backward from the rear vane.

6. A trolling line sinker, comprising the  
 40 combination with an elongated body having provision adjacent one end for connection of it to the trolling line and adjacent the opposite end for connection of the bait line to it,  
 45 a vane secured across the leading end to project symmetrically from each side, the leading edge of the vane being in a straight horizontal line and the surface of the vane angled upward and backward therefrom, a  
 50 similar vane of relatively larger area secured to and projecting across the after end, the surface of which is inclined downward backward, and a vertical vane secured to and projecting upward and backward from  
 55 the rear vane, the after edge of the tips of the leading vane being turned upward and the same parts of the after vane being turned downward.

In testimony whereof I affix my signature. 60

JAMES C. SQUAREBRIGGS.