

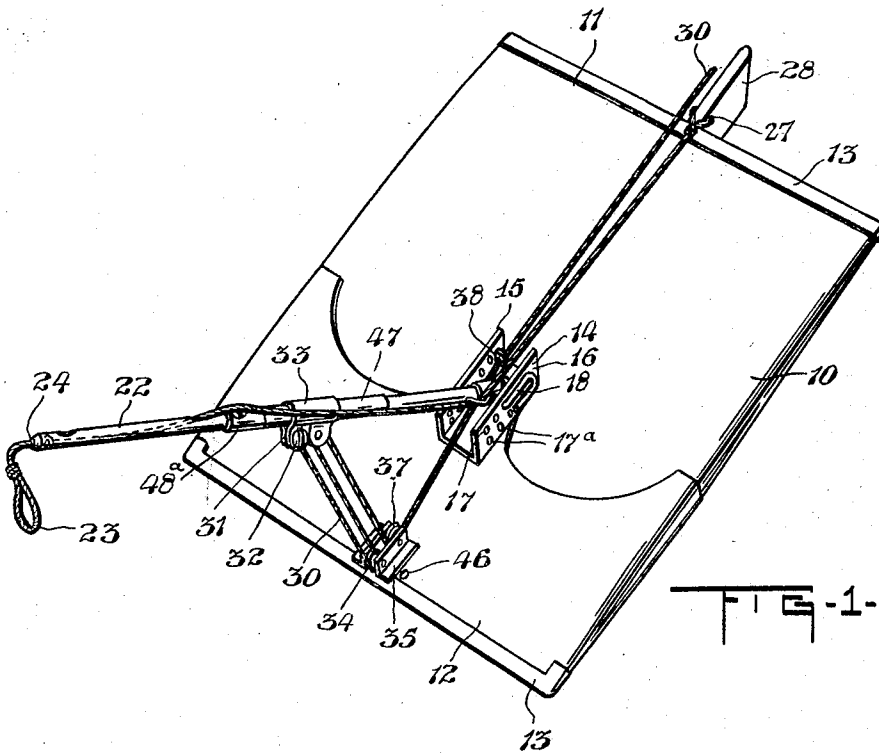
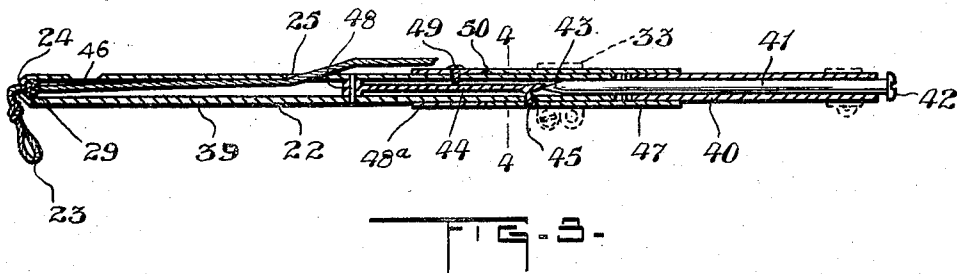
May 15, 1928.

1,670,184

J. W. BOND
FLOATING SINKER

Filed June 6, 1927

2 Sheets-Sheet 1



INVENTOR.
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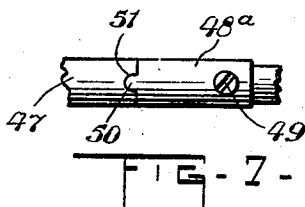
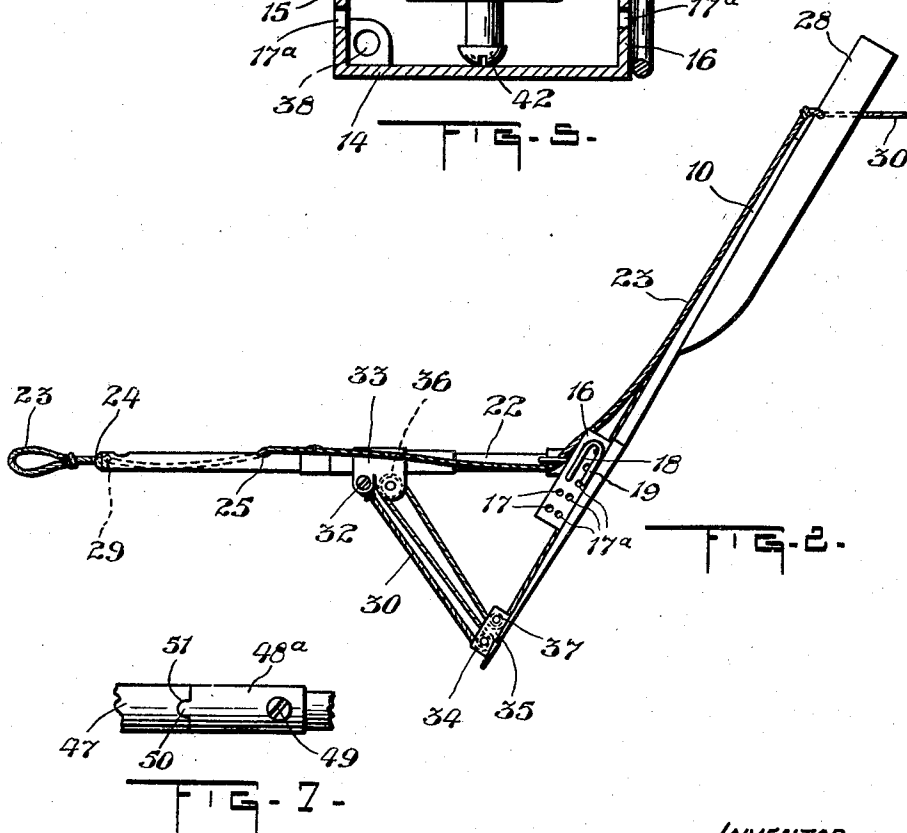
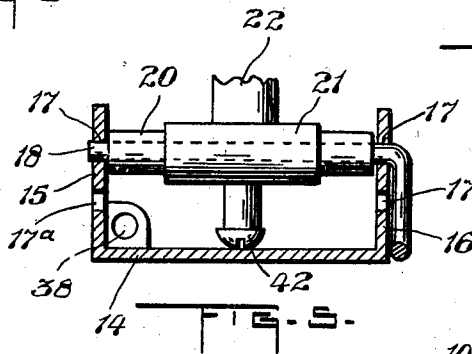
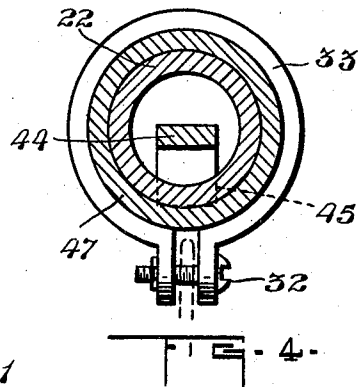
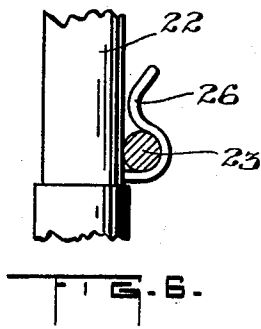
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J. W. BOND

FLOATING SINKER

Filed June 6, 1927

2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE.

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FLOATING SINKER.

Application filed June 6, 1927. Serial No. 196,926.

This invention relates to improvements in floating sinkers and the objects of the invention are to provide a simply and durably constructed sinker adapted for use in trolling.

A further object is to provide an improved floating sinker adapted to normally travel below the surface of the water and on being tensioned, through the hooking of a fish, to float to the top.

With the foregoing and other objects in view, the invention contemplates employing the principle of equipoise to operate the plane and comprises a plane member provided with a swingingly and adjustably mounted tubular shank member adapted at a predetermined point in its travel, under the influence of tension on a bait line, to collapse, transferring the tension direct to the plane member and causing it to rise automatically to the surface of the water.

Referring now to the drawings, in which like characters of reference indicate corresponding parts in each figure,

Figure 1 is a perspective view of my improved floating sinker.

Figure 2 is a side elevation of the device in operative position.

Figure 3 is a longitudinal section of the tubular shank.

Figure 4 is a section taken on the line 4-4 of Figure 3.

Figure 5 is a sectional elevation of the trip and supporting bracket.

Figure 6 is a detail of the troll line engaging member on the shank member.

Figure 7 is a fragmentary plan view of shank registering member.

Referring more particularly to the drawings, in which a preferred example of the invention is illustrated and in which the improved sinker comprises a plane 10 formed of any suitable material, and here shown as of wood, preferably bevelled towards the head, sides and foot to provide the greatest strength at the point of greatest strain, the head 11 and the foot 12 being reinforced with metal strips as at 13 to give strength and protection to the margin.

On the member 10 is rigidly mounted a channel plate 14, the sides 15 and 16 of which are provided with a plurality of spaced orifices 17 registering with one another, as hereinafter more fully referred to.

These plate orifices 17 are adapted to support a pin 18 extending therethrough and

protruding therebeyond and formed with an offset 19 whereby it is spring held in position. On this pin is mounted a sleeve 20 formed with a collar 21 in which is rigidly mounted the hollow shank member 22, thereby ensuring, according to the placing of the pin 18 in the orifices 17, the plane working at its maximum angle, this being accomplished by placing the pin in the top apertures, it naturally following that as it is changed to the other apertures 17^a in rotation downward the angle will be reduced successively, thereby permitting trolling to be carried on at varying depths down to the maximum.

The main trolling line from a boat or the like is attached to a looped line 23 passing back through the opening 24 in the point of the tubular shank 22 and down and out through the aperture 25 therein, from whence it extends through the clip 26 along the plane 10 to be anchored at 27 to the rudder 28 in any well known manner.

A knot 29 is preferably made on the line 23 within the tubular shank to prevent it from being tensioned beyond that point when the device is in use.

The rudder 28 is of special simplified construction and is adapted in the event of the trolling line parting to cause the sinker to be easily identified floating on the water, as the head of the sinker will stand well above the water.

The tail line 30, which carries the bait, (see Figure 1), is anchored or otherwise secured as at 31 to a bolt or adjusting screw 32 in a sleeve 33 mounted on the tubular shank member 22. From thence it passes around a pulley 34 mounted in a bracket 35 on the member 10 and thence back over a pulley 36 carried by the collar member 33 on the shank 22 and then under the pulley 37 mounted in the bracket member 35, thence up through the eye member 38 in the channel plate 14, designed to act as a guide at that point, after which the line will maintain its correct direction when trolling spoon and additional line is attached to the free end of the line 30.

For automatically putting the sinker out of operative action, I provide an automatic trip release. This comprises a top section 39 and a lower section 40 (see Figure 3), designed to fit one within the other. Within the lower section and protruding therebeyond is a slidably mounted pin 41 provided at its

protruding end with a screw head 42 and tapered to a point at its inner end 43 to engage with a resilient catch member 44 carried by the top section provided with a dog
 5 which is normally in engagement with a slot 45 in the lower section of the shank member, so that when the tubular shank is forced inwardly beyond a certain point the protruding head 42 of the pin 41 will come in
 10 contact with the bottom of the channel plate 14 (see Figure 5), causing the pin 41 to move inwardly and lift the resilient member 44 out of engagement with the slot 45, raising this sufficiently to allow the top portion or
 15 section 39 of the tubular shank to disconnect, immediately transferring the pull of the trolling line 23 direct to its point of anchorage at the tail of the plane, thus putting the sinker out of action, when it will at once
 20 commence to rise to the surface. This release mechanism just described is caused to operate when the foot of the plane strikes an obstruction under water, such as by contacting with the ocean bottom or projecting
 25 rocks or the like.

In the event of it being desirable to shorten the member 41, one or more washers may be used in conjunction with the head 42.

It will thus be seen that on sufficient tension being exerted on the tail line 30 the plane 10 will be pulled into a position parallel to the member 22, thus putting the sinker out of action.

By disconnecting the trolling line 23 from the rudder and passing its end through the opening 46 and securing it there on the reverse side, the sinker may be operated in this way if circumstances require.

A collar 47 is provided on the lower section of the shank member to hold the pin 41 while the resilient member 44 is secured to the member 22 by a pin or the like 48, while the screw 49 mounted on the collar 48^a is adapted to tension the resilient member 44.

In Figure 7, a small projection 50 on the detachable upper section 39 of the tubular shank is provided and adapted to fit into a slot 51 in the lower section to ensure bringing the resilient member 44 correctly
 50 into position.

From the foregoing the operation of my device, which has been disclosed concurrently with the description, will be apparent, and is as follows: The trolling line is attached to the looped line 23 and the spoon
 55 bait or the like connected to the bait line 30, the hollow shank member being duly adjusted in the channel plate 14 to ensure the plane 10 working at its most efficient angle. The sinker will then be in "set" position, as disclosed in Figure 2. On a fish being struck or an object in the bottom, tension will be immediately exerted on the bait line, drawing the member 22 to a position approximately parallel with the plate, thus

permitting the float to immediately ascend to the surface.

Should the fish in its initial struggle break away, the sinker will again go into action, this being effected by the equipoise
 70 principle.

As many changes could be made in the above construction, and many apparently widely different embodiments of my invention, within the scope of the claims, constructed without departing from the spirit or scope thereof, it is intended that all matter contained in the accompanying specification and drawings shall be interpreted as illustrative and not in a limiting sense.
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What I claim as my invention is:

1. A floating sinker comprising a plane, a channel plate provided with a series of apertures, rigidly mounted on the plane, a tubular shank pivotally mounted in the channel member and formed in two sections adapted to fit into one another, a resilient catch member in one of the sections, and means associated with the other section adapted to automatically engage with said catch to lock the sections.
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2. A floating sinker comprising a plane, a supporting plate rigidly mounted on the plane, a tubular shank pivotally connected to the plate and formed in two sections adapted to engage with one another, a resilient catch in one of the sections, and means associated with the other section adapted to automatically engage with said catch, a protruding pin slidably in the shank, adapted, on the shank swinging to a predetermined angle, to automatically engage with the plate to operate the catch and release one of the shank sections.
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3. In a device of the character described, the combination with a plane provided with a rudder on one side and an apertured channel plate on the other side, a pin adjustable in the said plate, a sleeve rotatably mounted on the pin, a shank formed in two sections and rigidly mounted on said sleeve, a protruding pin in one of the shank sections, adapted, on contact, to move inwardly, a resilient spring catch associated with both sections and adapted normally to retain the sections together and on being engaged by said pin to permit the sections to separate.
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4. In a device of the character described, the combination with a plane, of a shank formed in two sections and swingingly and adjustably mounted on the plane, a protruding pin slidably in the shank, adapted, on the shank being swung beyond a predetermined point, to engage with the plane to move inwardly, a resilient catch in the shank, adapted normally to retain both sections in engagement and on being engaged by the pin to automatically release the catch and permit the sections to separate.
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5. A floating sinker comprising a plane, a
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tubular shank formed in two sections pivotally and adjustably connected to the plane, means associated with the shank for causing the sections to automatically separate on the plane encountering an object.

5 6. A floating sinker comprising a plane, a rudder for the plane, a swingingly mounted shank member formed in two sections on the opposite side of the plane to the rudder,
10 a bait-carrying line anchored to the plane, and rollers associated with the plane and the shank adapted to engage with said line whereby, on the line being tensioned, the shank assumes a substantially horizontal position in alignment with the plane, a trolling
15 line anchored to the rudder, and means in the plane permitting the travel of the line therethrough, and a knot on the line within the shank, adapted to limit the travel
20 of the line through the shank.

7. A floating sinker comprising a plane, a rudder for the plane, a swingingly mount-

ed shank member formed in two sections on the opposite side of the plane to the rudder, a bait-carrying line anchored to the plane,
25 and rollers associated with the plane and the shank adapted to engage with said line whereby, on the line being tensioned, the shank assumes a substantially horizontal position in alignment with the plane, a trolling
30 line anchored to the rudder, and means in the plane permitting the travel of the line therethrough, and a knot on the line within the shank, adapted to limit the travel of the line through the shank, a resilient
35 catch for the shank sections, and means carried by the shank and automatically operable on the shank being swung beyond the fulcrum with the plane for operating said catch to separate the sections.

40 In witness whereof I have hereunto set my hand.

JOHN WILLIAM BOND.