No. 726,020. PATENTED APR. 21, 1903.

T. A. BRYAN.

ARTIFICIAL FISH BAIT.

APPLICATION FILED MAY 15, 1902.

NO MODEL.

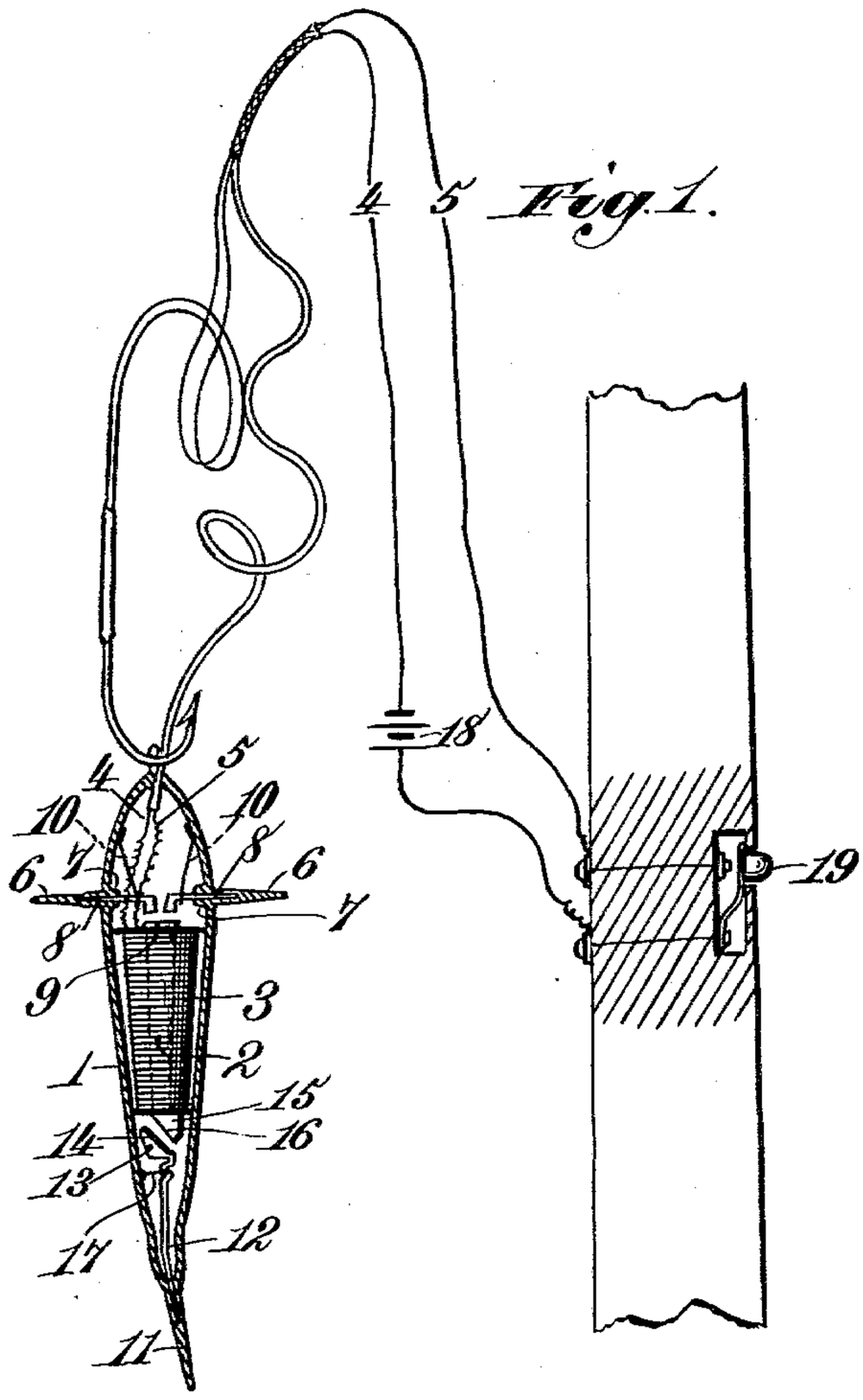
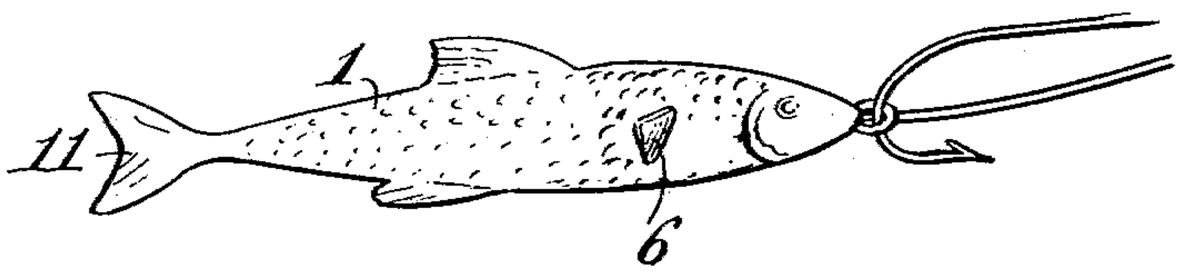


Fig. 1.

Fig. 2.



Witnesses.
Robt Ewell.
W. B. Keelon

Inventor:
Thomas A. Bryan.
By James L. Norris.
Atty.

UNITED STATES PATENT OFFICE.

THOMAS A. BRYAN, OF BALTIMORE, MARYLAND.

ARTIFICIAL FISH-BAIT.

SPECIFICATION forming part of Letters Patent No. 726,020, dated April 21, 1903.

Application filed May 15, 1902. Serial No. 107,433. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. BRYAN, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented new and useful Improvements in Artificial Fish-Bait, of which the following is a specification.

My invention is designed for the production of an artificial fish-bait, the object of the same being to provide a fish-bait with movable parts, such as a tail and fins, and electrically-controlled mechanism for actuating the same.

The invention consists of an artificial bait in the form of a minnow, frog, fly, crawfish, or the like comprising a body, an electromagnet mounted therein, and movable parts, such as a tail and fins, having armatures for the electromagnet connected therewith, an electric circuit through said magnet for energizing the same, and means for intermittently making and breaking said circuit.

The invention also consists in certain features and details of construction and combinations of parts, which will be hereinafter more fully described and claimed.

In the drawings forming part of this specification, Figure 1 is a horizontal sectional view of an artificial bait constructed in accordance with my invention, and Fig. 2 is a side elevation of the same.

Like reference-numerals indicate like parts in the different views.

The embodiment of my invention herein illustrated is in the form of a minnow or small fish; but it is obvious that the same may be made in the form of a frog, fly, crawfish, hellgrammite, or the like. The same consists of a body 1, preferably constructed of rubber, although the same may be made of metal having the inner surface coated with insulating material. The said body is hollow and has mounted therein and extending preferably longitudinally thereof an electromagnet 2 of any suitable form and construction. The said magnet has been shown with the coil 3 thereof connected with the leading-in wire 4 and with the leading-out wire 5, the said wires 4 and 5 extending through the head end of the body 1 and covered with insulating material.

Preferably formed integral with the body 1 of the bait are the projections 6, which extend outwardly from the body 1 and constitute the fins of the fish. These fins also project inwardly beyond the side walls of the body 1, as shown at 7, and have secured thereto and extending partially therethrough the metallic arms 8, constituting the armatures for the pole 9 of the magnet 2. The armatures 8 are normally maintained out of contact with the pole 9 of the magnet by means of elastic rubber strips 10 or other suitable device.

Projecting rearwardly from the rear end of the body 1 of my improved bait and preferably formed integral with said body is the tail 11, the same being capable of lateral swinging movement and having a metallic rod 12 secured to its inner end and projecting inwardly into the interior of the body. The extreme inner end of the rod 12 is formed with a head 13, having an inclined face 14, constituting the armature for the pole 15 of the electromagnet 2. Said pole 15 is itself formed with an inclined face 16, which lies opposite to and coöperates with the inclined wall 14 of the armature 13. The result of the construction just described is that when the magnet 2 is energized the armature 13 thereof will be moved laterally toward the pole 15 and serve to impart to the tail 11 a lateral vibrating movement. The armature 13 is normally maintained out of contact with the pole 13 by means of a flexible rubber strap 17, which surrounds the rod 12 and is connected to the inner surface of the body 1. For this strap 17, however, any other suitable or equivalent mechanism may be substituted.

The circuit-wires 4 and 5 are connected with the opposite poles of a battery 18 or other suitable source of electric energy mounted upon a pole or at any other suitable point within convenient reach of the operator. In one of said wires is located a switch 19, preferably of the push-button type, by means of which the circuit may be alternately closed and broken through the magnet 2. When said magnet is energized by the closing of the circuit through the wires 4 and 5 from the battery 18, the armatures 8 and 13 will be drawn toward the poles 9 and 15 of said magnet, with the result that the fins 7 will be vibrated and a lateral movement will be im-

parted to the tail 11. As soon as the magnet 2 is deënergized the rubber strip 10 and the strap 17 will serve to move the armatures 8 and 13, respectively, away from the poles of the magnet with which they coöperate. By alternately making and breaking the circuit from the battery 18 to the magnet 2, therefore, by means of the switch 19 a continuous vibratory movement may be imparted to the fins 6 and to the tail 11 to simulate the movements of the corresponding parts of a live fish.

The outer surface of the body 1 of my improved bait may be painted, silvered, or otherwise colored to simulate the appearance of a natural fish, and, as above stated, the bait may be made in other forms than in the form of a fish. The only change necessary will be in the shape of the body 1 and the coloring of the exterior surface thereof and in the location of the movable parts 6 and 11, which are to be actuated by the electromagnet 2.

The bait, which will of course be connected to the line in any suitable or preferred manner, will have attached thereto a hook 20 of suitable form.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An artificial bait, comprising a body, movable parts thereon, and electrically-controlled means for actuating said movable parts independently of said body.

2. An artificial bait, comprising a body, movable parts thereon and an electromagnet for actuating said movable parts.

3. An artificial bait, comprising a body, an electromagnet thereon, movable parts on said body, armatures for said magnet connected with said movable parts and means under the control of the operator for energizing and deënergizing said magnet.

4. An artificial bait, comprising a hollow body, movable parts connected therewith, an electromagnet mounted in said hollow body, metallic rods connected with said movable parts and constituting the armatures of said magnet, an electric circuit including said magnet, and an electric switch in said circuit within reach of and under the control of the operator for making and breaking said circuit.

5. An artificial bait, comprising a hollow body, a longitudinally-extending, laterally-movable projection thereon, an electromagnet mounted in said body having one of the poles thereof formed with an inclined wall, a metallic block connected with said projection constituting an armature of said magnet and having an inclined wall located adjacent to the inclined wall of said magnet-pole, and means under the control of the operator for energizing and deënergizing said magnet.

6. An artificial bait, comprising a hollow body of flexible rubber, lateral projections thereon integral therewith, a rearwardly-extending projection thereon integral therewith, an electromagnet mounted in said hollow body, metallic rods connected respectively with said lateral projections and with said rearward projection, the same constituting armatures for the opposite poles respectively of said magnet, and means under the control of the operator for energizing and deënergizing said magnet, and thereby imparting a vibratory movement to said lateral projection and a lateral movement to said rearwardly-extending projection.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

THOMAS A. BRYAN.

Witnesses:
ALFRED PRINCE,
HENRIETTA WHITEHILL.