No. 726,021. PATENTED APR. 21, 1903.

T. A. BRYAN.

ARTIFICIAL FISH BAIT.

APPLICATION FILED MAY 15, 1902.

NO MODEL.

Fig. 1.

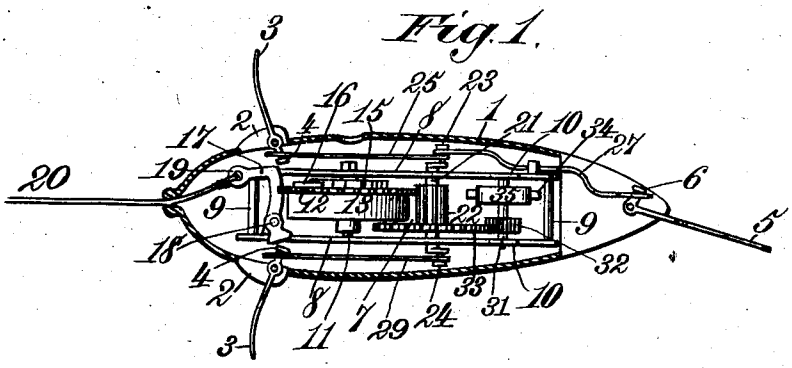


Fig. 2.

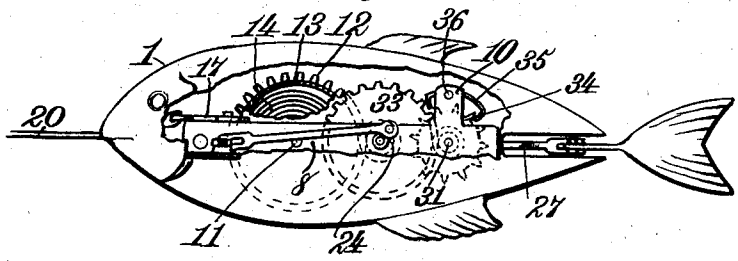
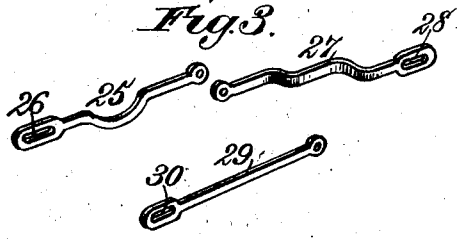


Fig. 3.



Witnesses.
Robt Everett,
H. B. Keeler

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

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THOMAS A. BRYAN, OF BALTIMORE, MARYLAND.

ARTIFICIAL FISH-BAIT.

SPECIFICATION forming part of Letters Patent No. 726,021, dated April 21, 1903.

Application filed May 15, 1902. Serial No. 107,434. (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 relates to artificial bait, the object of the same being to provide vibrating or oscillating fins and tail thereon and a spring-motor carried thereby for actuating said fins and tail.

Other objects of the invention will hereinafter appear, and the novel features thereof will be set forth in the claims.

In the drawings forming part of this specification, Figure 1 is a sectional plan view illustrative of my invention. Fig. 2 is a side elevation of the same, partly broken away; and Fig. 3 represents details of construction.

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

The body 1 of my improved device may be made in the shape of a minnow or other kind of fish-bait. The same is preferably constructed of rubber or metal and is made hollow for the reception of the operative parts. Pivotally mounted on laterally-extending lugs or ears 2 on the sides of the body adjacent to the forward end thereof are the fins 3, the same projecting outwardly from the body and made in the form of blades. The inner ends of said fins project inwardly within the body and are formed with heads or enlargements 4 for a purpose which will presently appear. Pivoted for lateral vibrating movement at the rear end of the body 1 is the tail 5, having a transversely-extending arm 6 on its inner end. Coöperating with these parts and adapted to actuate the same is a spring or mechanical motor 7, the same being mounted within the hollow body, as shown. The motor-frame is made up of longitudinally-extending parallel plates 8 8, secured to the body 1, the connecting spacing-bars 9 between said plates, and the uprights 10. Mounted in suitable bearings in the plates 8 8 and located between the same is the motor-shaft 11, having a gear 12 thereon, which has secured to it the casing 13, containing the motor-spring 14. These parts are all of any suitable or well-known construction, the outer end of the motor-shaft 11 being provided with polygonal faces for the application of a key or wrench for winding purposes. The motor-shaft 11 is further provided adjacent to the gear 12 with a ratchet-wheel 15, with which coöperates a spring-actuated pawl or dog 16. The gear-wheel 12 is adapted to be engaged by a pivotally-mounted detent 17, the same consisting of an arm or lever mounted to turn upon a pin 18, adapted to engage the teeth of the gear-wheel 12 and having an arm 19 thereon, to which the fishing-line 20 is attached. The detent 17 serves when in its normal position in engagement with the gear-wheel 12 to prevent the operation of the motor; but when released from such engagement by drawing upon the fishing-line said motor will be free to operate.

Mounted in suitable bearings in the plates 8 of the motor-frame is a counter-shaft 21, having a pinion 22 thereon in mesh with the gear-wheel 12 and receiving its motion therefrom. The outer ends of the counter-shaft 21 are provided with cranks 23 and 24. To the crank 23 is connected a link 25, having a slot 26 at its opposite end, through which projects the inner end of the fin 3 on one side of the body. Said fin is held in said slot by the head 4 thereon. The crank 23 has also connected with it and leading rearwardly therefrom a link or pitman 27, having a slot 28 at its rear end, through which projects the transversely-extending arm 6 on the tail 5. The other crank, 24, on the shaft 21 has connected with it a link or pitman 29, similar in all respects to the link 25, heretofore referred to, and having a slot 30 at its forward end, through which projects the inner end of the other fin 3. By this construction it will be seen that when the shaft 21 is rotated it will, through the cranks 23 and 24 and the links 25, 27, and 29 connected therewith, transmit its movement to the fins 3 and to the tail 5, causing a vibrating movement of the former in the direction of the length of the body 1 and an oscillating movement of the latter transversely of said body. This action of the fins 3 and the tail 5 is to simulate the corresponding actions of a natural fish in swimming.

Mounted in bearings in the plates 8 of the motor-frame is a third shaft 31, having a pinion 32 thereon in mesh with the gear 33 on the shaft 21 and also carrying an escapement-wheel 34. Coöperating with the escapement-wheel 34 is an escapement 35, secured to a pin or shaft 36, having bearings in the uprights 10 of the motor-frame. This escapement mechanism constitutes, as will be obvious, a regulator for controlling the speed of rotation of the shaft 31, and consequently controlling the operation of the motor and the speed or movement of the fins 3 and the tail 5.

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

1. An artificial bait, comprising a body, pivoted fins thereon, a mechanical motor capable of independent operation carried thereby, means for throwing said motor into operation from a distant point, and operative connections between said motor and said fins for vibrating the latter on their pivots.

2. An artificial bait, comprising a body, pivoted fins thereon, a mechanical motor mounted therein and capable of independent operation, means for throwing said motor into operation from a distant point, a crank-shaft driven by said motor, and operative connections between said crank-shaft and said fins for vibrating the latter on their pivots.

3. An artificial bait, comprising a body, pivoted fins thereon extending outwardly therefrom, a mechanical motor mounted on said body and capable of independent operation, means for throwing said motor into operation from a distant point, a crank-shaft actuated by said motor, and link connections between the cranks on said shaft and said fins for vibrating the latter on their pivots.

4. An artificial bait, comprising a hollow body, fins pivoted thereto and extending outwardly therefrom, a spring-motor mounted in said hollow body, means for throwing said motor into operation from a distant point, a crank-shaft actuated by said motor and links pivoted to the cranks on said shaft and having a slotted connection with said fins for vibrating the latter on their pivots.

5. An artificial bait, comprising a body, a tail pivoted to the rear end thereof and capable of lateral swinging movement, a mechanical motor mounted on said body and capable of independent operation, means for throwing said motor into operation from a distant point, and operative connections between said motor and said tail for vibrating the latter on its pivot.

6. An artificial bait, comprising a hollow body, a tail pivoted to the rear end thereof and capable of lateral vibration, a transversely-extending arm on said tail, a mechanical motor mounted in said body and capable of independent operation, means for throwing said motor into operation from a distant point, a crank-shaft actuated by said motor, and a link connection between said crank-shaft and said transversely-extending arm for vibrating said tail on its pivot.

7. An artificial bait, comprising a hollow body, fins pivoted thereto and extending outwardly therefrom, a tail pivoted to the rear end of said body and capable of lateral vibration, a mechanical motor mounted in said body and capable of independent operation, means for throwing said motor into operation from a distant point, and operative connections between said motor and said fins and tail for vibrating the same on their pivots.

8. An artificial bait, comprising a hollow body, fins pivoted thereto and extending outwardly therefrom, a tail pivoted to the rear end of said body and capable of lateral vibration, a mechanical motor mounted in said body and capable of independent operation, means for throwing said motor into operation from a distant point, a crank-shaft actuated by said motor, links connecting the cranks on said shaft with said fins, and a link connecting one of said cranks with said tail, whereby said fins and said tail are vibrated on their pivots.

9. An artificial bait, comprising a body, movable projections thereon simulating the moving parts of a natural bait, a mechanical motor carried by said body for actuating said movable projections and means under the control of the operator for throwing said motor into operation.

10. An artificial bait, comprising a body, movable projections thereon, simulating the moving parts of a natural bait, a mechanical motor for actuating said projections and a detent for said motor connected with the line, whereby said motor may be released at the will of the operator.

11. An artificial bait, comprising a body, movable projections thereon, simulating the movable parts of a natural bait, a spring-motor for actuating said projections, a toothed wheel connected therewith and a pivoted detent adapted to engage said wheel for locking said motor against movement, the said detent being provided with means for attaching the line thereto, whereby the same may be swung upon its pivot at the will of the operator for the purpose of releasing the same from its engagement with said wheel and throwing said motor into operation.

12. An artificial bait, comprising a body, movable projections thereon, simulating movable parts of a natural bait, a motor for actuating said projections, means for throwing said motor into operation from a distant point, and a regulator therefor.

13. An artificial bait, comprising a body, movable projections thereon simulating movable parts of a natural bait, a spring-motor for actuating said projections, means for

throwing said motor into operation from a distant point, and an escapement for controlling the movements of said motor.

14. An artificial bait, comprising a body, movable projections thereon simulating movable parts of a natural bait, a spring-motor, means for throwing said motor into operation from a distant point, operative connections between said motor and said projections, a rotary shaft actuated by said motor, an escapement-wheel connected therewith and an escapement coöperating with said wheel for controlling the movement of said motor.

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

THOMAS A. BRYAN.

Witnesses:
HENRIETTA WHITEHILL,
ALFRED PRINCE.