

March 6, 1928.

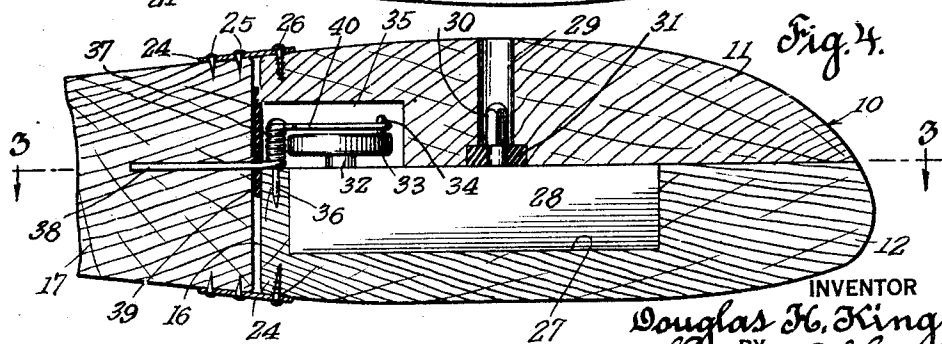
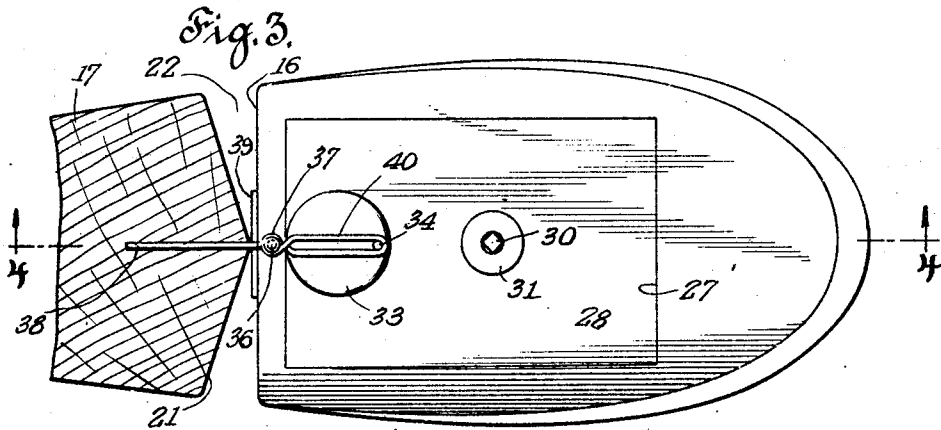
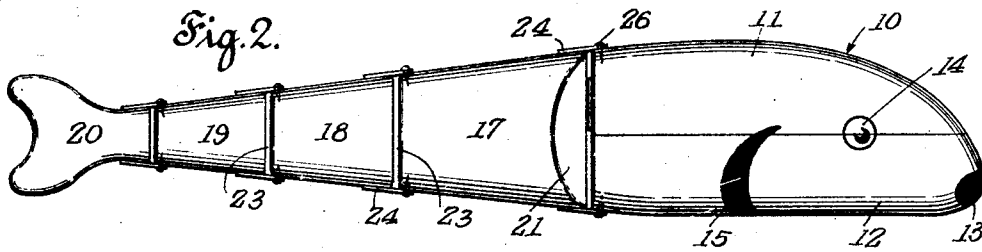
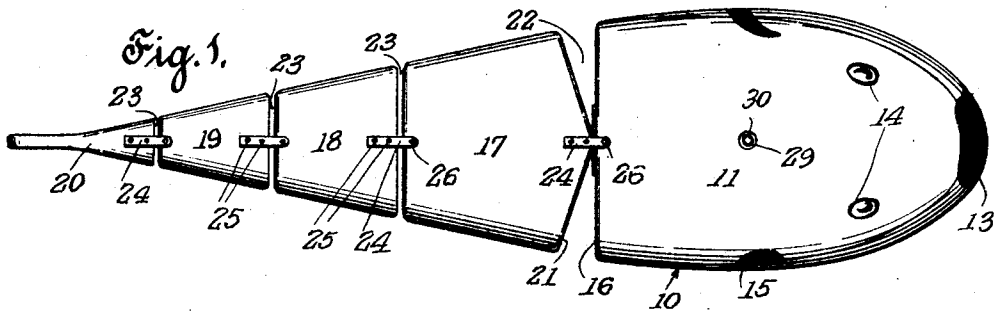
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D. H. KING

ANIMATED FISH TOY

Filed March 12, 1926

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

Fig. 5.

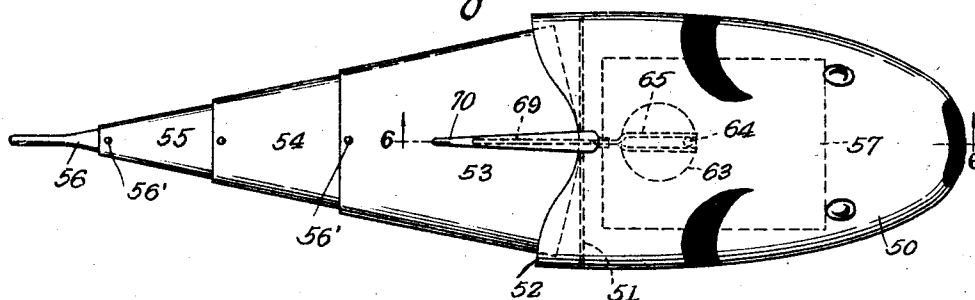


Fig. 6.

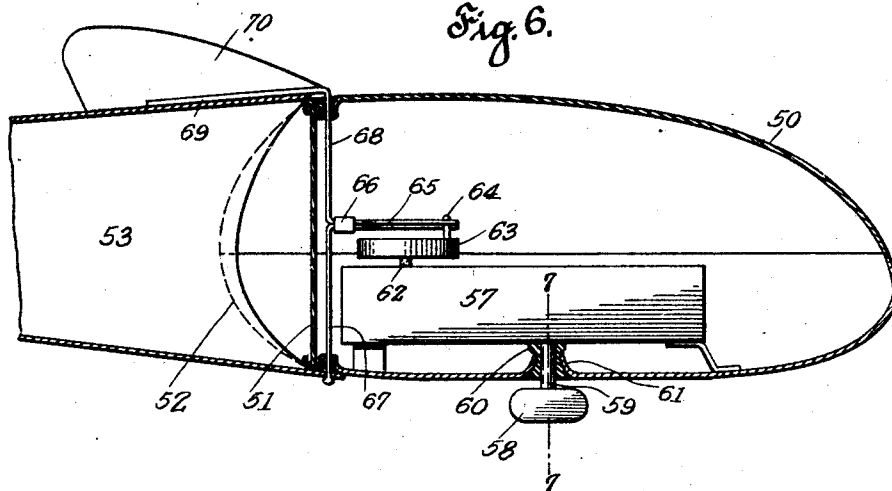
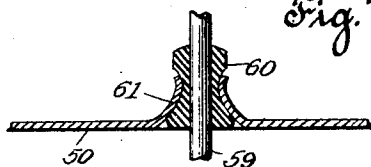


Fig. 7.



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ANIMATED FISH TOY.

Application filed March 12, 1926. Serial No. 94,155.

This invention relates to toys, particularly those simulative of live objects and with special reference to those of an aquatic nature, namely fish.

One of the objects of the invention is to provide an articulated, sinuous body capable of floating in water, colored and shaped in the semblance of a conventional fish.

A further feature is in the provision of means for causing alternate lateral fluctuations in the body elements, one with respect to another, whereby an advance movement of the whole is effected in a life-like manner.

Another aim is to produce a simple inexpensive toy, capable of affording entertainment and being illustrative of certain natural laws.

These objects are accomplished by the novel construction, combination and arrangement of parts hereinafter described and illustrated in the accompanying drawings, forming a material part of this disclosure, and in which:—

Figure 1 is a top plan view of a preferred form of the toy.

Figure 2 is a side elevational view of the same.

Figure 3 is partial longitudinal sectional view, taken on line 3—3 of Fig. 4 and drawn to an enlarged scale.

Figure 4 is a sectional view taken in a plane at a right angle thereto on line 4—4 of Fig. 3.

Figure 5 is a top plan view of a modified form of the toy.

Figure 6 is an enlarged longitudinal sectional view taken on line 6—6 of Fig. 5.

Figure 7 is a further enlarged fragmentary transverse sectional view taken on line 7—7 of Fig. 6.

The toy as shown in Figs. 1 to 4 inclusive comprises a head portion 10 composed of upper and lower sections 11 and 12 respectively, having colored portions to represent a mouth 13, eyes 14 and gills 15 appropriately positioned, the sections being firmly united by a water-proof cement, as indicated on line 3—3 of Fig. 4.

The rear end 16 of the head portion 10 is straight, at a right angle with the central plane thereof and adjacent to it are body portions 17, 18, 19 and a tail 20 arranged in sequence as shown.

The forward portion 17 has its front end bevelled, as at 21, presenting angular spaces 22 on each side between it, and the head and

each of the body elements and tail have spaces 23 therebetween.

Connections between the upper and lower surfaces of the tail, intermediate and head elements are made by strap links 24 held rigidly at their rear ends by nails or like fastening 25, the front ends of these links engaging the next adjacent member by screws 26, acting as pivots, permitting each element to swing laterally, with respect to the next adjacent, a distance controlled by the width of the spaces 23, the motion between the head 10 and body element 17 being greater due to the wedge shaped spaces 22.

A recess 27 in the lower section 12 has set in it a rectangular casing 28, the motor being wound by a key inserted into an opening 29 in the upper section 11 to engage a stem 30 projecting up from the casing 28 and passing through a water tight packing 31 on the casing.

The motor drives a spindle 32, having fixed on its upper end a disc 33 and set in the upper face of the disc is a pin 34, these elements extending into a recess 35 in the upper section 11.

Fixed in the lower section 12, adjacent the rear end of the motor, is a headed pin 36 encircled by a coil 37 formed from a wire 38, extending into the body element 17 and passing outwardly from the recess 35 through a tight fitting opening in a rubber plate 39 cemented on the surface 16 of the head to cover the open end of the recess 35.

The opposite end of the coil 37 enters the recess 35 and is formed into a flattened loop 40 in which the pin 34 operates in the manner of a crank when actuated by the motor, causing the head 10 and body element 17 to move laterally, one with respect to the other, first to one side and then to the other, the other body elements being given a sinuous movement which is transmitted to the tail 20, as will be readily understood, simulating the natural action of a fish.

In the modification, shown in Figs. 5 to 7, the several sections are made of sheet metal in place of wood as in the foregoing.

The head 50 is hollow and shaped to simulate that of a fish, having elements representing a mouth, eyes and gills, and is provided with a water-tight bulkhead or plate 51 beyond which are rearwardly extending side elements 52.

Adjoining the head 50 are body elements

53, 54, 55 and a tail 56, these elements being essentially conical and fitting loosely together at their ends which are held from separation by pivot pins 56' extending vertically through the engaged sections.

5 A motor 57 is mounted in the lower portion of the head and provided with a winding key 58, its stem 59 extending through the shell at its bottom and passing through a packing element 60 held in an inturnd gripping thimble 61 formed from the shell material.

10 The motor spindle 62 drives a disc 63 carrying a crank pin 64, operating between the arms of a fork 65 coupled by a clip 66.

15 One of the fork arms is bent at a right angle downwardly to constitute a pivot rod 67, uniting the head and adjacent body section at the bottom and the other arm is bent 20 oppositely to constitute an alined pivot rod 68 connecting the same elements at their upper portions.

The rod 68 is thereafter bent rearwardly as at 69, and fixed on the upper surface of 25 the adjacent section 53, to convey motion to it when the motor is actuated, and a fin 70 is raised thereabove.

From the foregoing it will be seen that a similar sinuous movement of the articulated elements of the fish is obtained as in 30 the type first described.

Obviously, if made of suitable material and properly proportioned, both will float in a partially submerged position and, due 35 to the wiggling action transmitted by their motors, will advance when disposed in water.

While certain preferred embodiments of

this device have been shown and described, it will be understood that changes in the 40 form, arrangements, proportions, sizes and details thereof may be made without departing from the scope of the invention as defined in the appended claims.

Having thus described my invention, what 45 I claim as new and desire to secure by Letters Patent, is:—

1. A toy fish comprising a floating head, a plurality of spaced body members and a tail 50 pivoted in a vertical plane, one to the next adjacent and to said head to permit limited relative lateral movement of each member, a spring motor in said head, means for winding said motor, a crank driven by said 55 motor, a lever actuated by said crank, said lever being pivoted in said head, an arm on said lever engaging the member next adjacent the head to communicate motion thereto and to the members rearward thereof, and means to prevent entrance of water 60 to said motor.

2. A toy fish comprising a floating head, a plurality of spaced body members and a tail, pivoted in a vertical plane one to the 65 next adjacent and to said head to permit limited relative lateral movement of each member, a motor in said head, a lever pivoted in said head, means driven by the motor to actuate the lever, and an arm on 70 said lever engaging the member next adjacent to the head to communicate motion thereto.

This specification signed and witnessed this 8th day of March, 1926.

DOUGLAS H. KING