

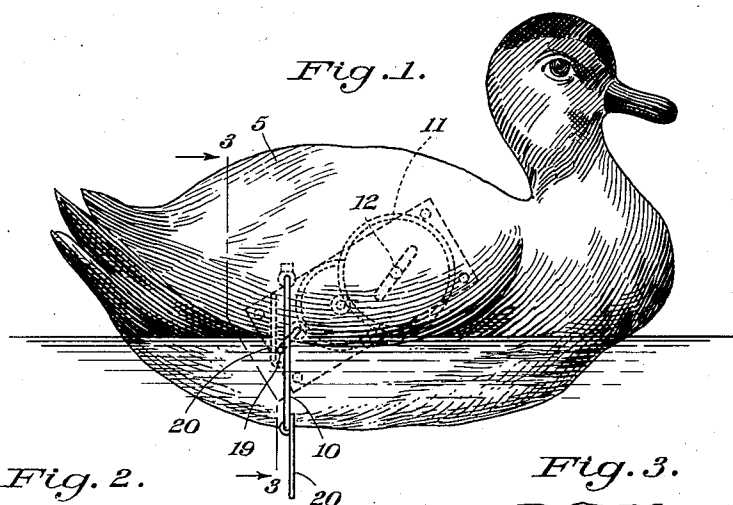
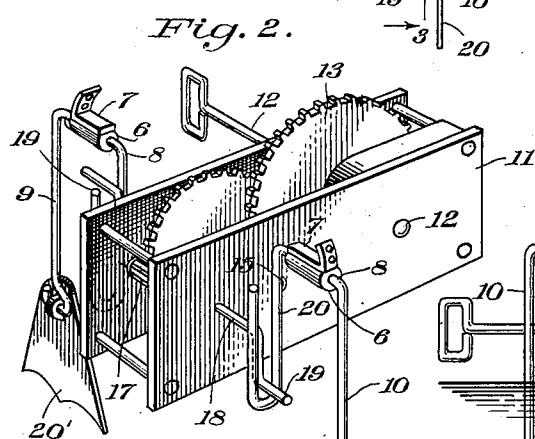
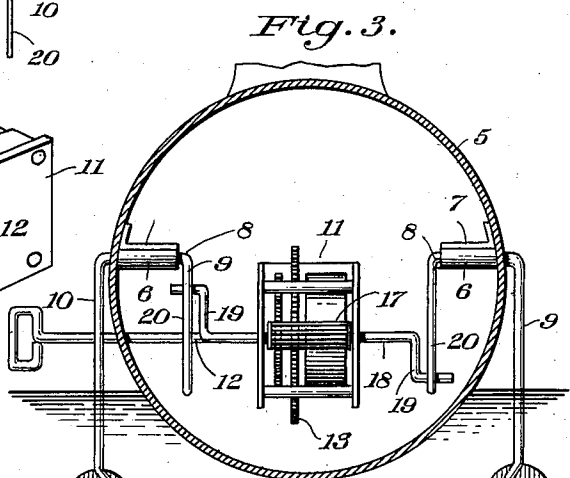
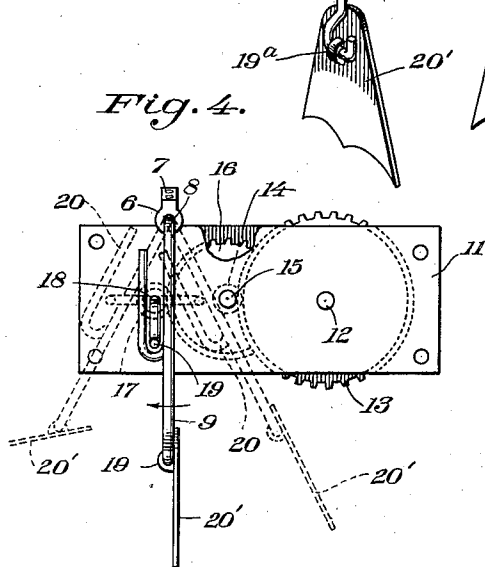
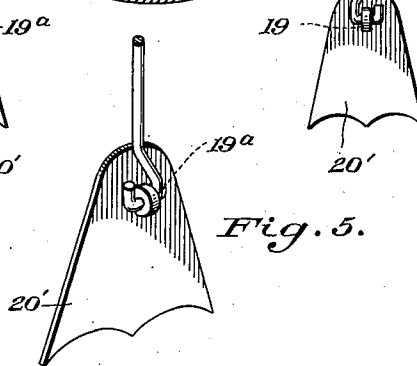
Jan. 21, 1941.

J. W. JOHNSON

2,229,175

AQUATIC TOY

Filed Sept. 25, 1939



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UNITED STATES PATENT OFFICE

2,229,175

AQUATIC TOY

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Application September 25, 1939, Serial No. 296,489

2 Claims. (Cl. 46—92)

My invention relates to aquatic toys and is designed with the object of producing an automatic swimming bird, for instance, a duck.

One of the principal objects of this invention is to provide a toy of the above described character which is simple in construction, attractive in appearance, durable in use, efficient in operation and economical in manufacture.

Another object of my invention is to provide a toy of the above described character so constructed and arranged whereby the same will simulate the appearance of a duck and the motions thereof during swimming.

Other objects and advantages will be apparent from the following description, appended claims and annexed drawing.

Referring to the drawing wherein like reference characters designate like parts throughout the several views:

Figure 1 is a side elevation of a body constructed in the form of a duck and having my novel form of propelling mechanism incorporated therein.

Figure 2 is a perspective view of the mechanism of propelling the device.

Figure 3 is a sectional view taken on the line 3—3 of Figure 1.

Figure 4 is a side elevation of the propelling mechanism.

Figure 5 is a detail perspective view of one of the paddles and its connection with the propelling mechanism.

In practicing my invention as illustrated in the drawing, I provide a body 5 constructed to simulate the appearance of a duck and said body is of a hollow construction as clearly illustrated in Figure 3. Secured within the body is a pair of oppositely disposed spaced aligned bearings 6 the latter being connected to the sides of the body by means of brackets 7 and rotatably mounted within the bearings are a pair of shafts 8, each of the latter being formed with arms 20 and 9 or 20 and 10.

Also mounted within the body is a motor 11 of the spring-actuated type having a main drive shaft 12 to which its spring is connected and on which is fixed a drive gear 13 meshing with a pinion 14 fixed on a transverse shaft 15. Fixed on the transverse shaft 15 is a gear 16 meshing with a pinion 17 mounted on a driven shaft 18 the ends of which are formed with oppositely extending cranks 19 operable within looped sections 20 formed on the arms 9 as clearly illustrated in Figures 2 and 4 of the drawing. Obviously, operation of the motor 11 imparts a

rocking movement to the shafts 8 through the medium of the crank arms 19 and sections 20. Movement of the shafts 8 in turn imparts an oscillating movement to the outer arms 10.

The lower ends of the outer arms 10 are pivotally connected to bearings 19a and 19 formed on the upper ends of a pair of paddles 20'. The upper ends of said paddles 20' extend an appreciable distance above the bearings 19a and for engagement with the forward face of the arms 10 whereby to maintain said paddles in perpendicular relation with the arms 10 when the latter are moved in a direction toward the rear of the duck and permit the paddles to pivot with respect to the arms 10 when the latter are moved in a direction toward the front of the duck as illustrated in dotted lines in Figure 4. The crank arms being disposed on opposite sides of the axis of the shaft 18, affect alternate operation of the arms 10 in opposite directions and thereby propel the body 5 through the water in a manner to simulate the motions of a duck swimming.

From the foregoing it will be apparent that I have provided a simple and efficient toy in the form of a duck wherein the same simulates both the appearance and motions of a duck during swimming.

It is also obvious that the invention is not confined to the herein described use therefor as it may be utilized for any purpose to which it is adaptable. It is therefore to be distinctly understood that the invention is not limited to the specific construction as illustrated and described, as the same is only illustrative of the principles of operation, which are capable of extended application in advance forms, and that the invention comprehends all construction within the scope of the appended claims.

What is claimed is:

1. A device of the character described, comprising a body portion adapted to float, a spring operated motor mounted in said body portion and provided with a driven shaft formed with oppositely disposed crank arms on the ends thereof, a pair of propelling shafts mounted in the side walls of the body portion above the water line opposite the crank arms, said propelling shafts having downwardly extending inner arms provided with slots, and downwardly extending arms carried by the outer ends of the shafts and extending below the water line, and feathering paddles carried by the lower ends of the outer arms.

2. A device of the character described, com-

prising a body portion adapted to float, a spring
operated motor mounted in said body and pro-
vided with a driven shaft formed with oppositely
disposed crank arms on the ends thereof, a pair
5 of propelling shafts mounted in the side walls of
the body portion above the water line opposite
the crank arm, said propelling shafts formed of a
U-shaped bar having their inner ends looped to
form slots to receive the crank arms, the outer

arms extending downwardly below the water line
and provided with looped ends, and paddles hav-
ing ears on their rear faces below the upper ends
thereof and provided with eyes through which
the looped ends of the outer arms pass, whereby 5
the paddles may swing out of the vertical line
on the forward movement of the outer arm.

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