July 3, 1923. 1,460,616

E. STARBUCK

FIGURE WHEELED TOY

Filed May 9, 1921

FIG. 1.

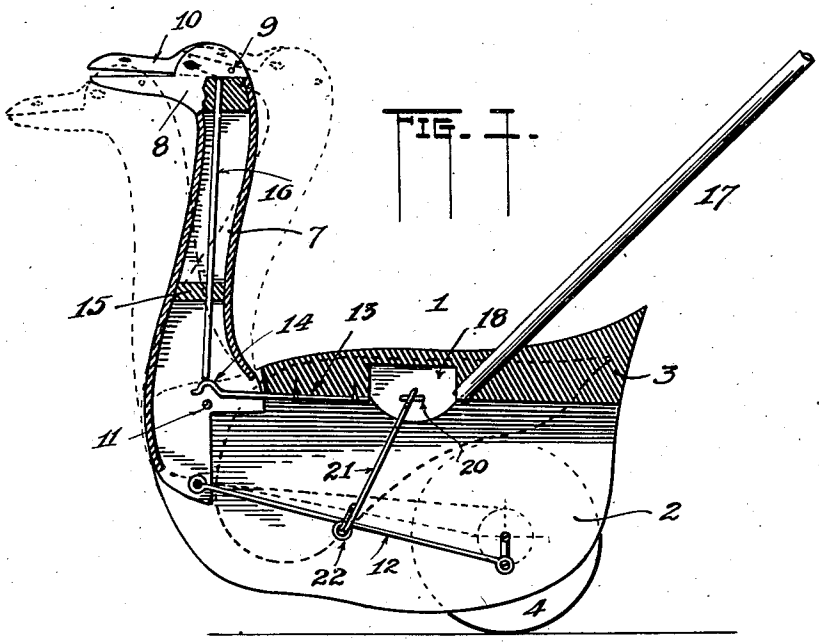


FIG. 3.

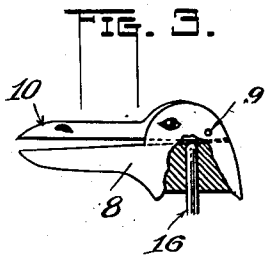


FIG. 2.

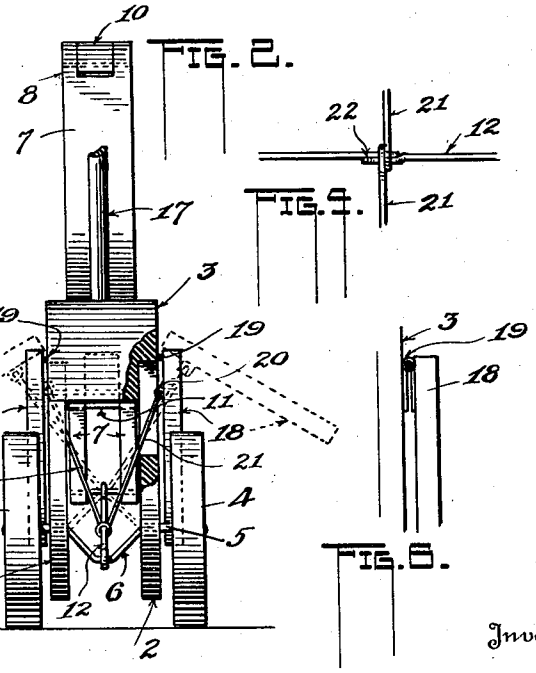


FIG. 4.

FIG. 5.

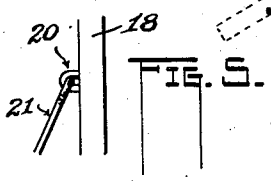


FIG. 6.

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Patented July 3, 1923. 1,460,616

UNITED STATES PATENT OFFICE.

ERNEST STARBUCK, OF PEORIA, ILLINOIS.

FIGURE WHEELED TOY.

Application filed May 9, 1921. Serial No. 468,104.

To all whom it may concern:

Be it known that I, ERNEST STARBUCK, a citizen of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Figure Wheeled Toys; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to toys. More specifically, said invention pertains to improvements in a wheeled toy simulating a fowl.

An object of the invention is to impart movement to the wings of the fowl as well as its head and neck, and to likewise cause the bill to open and close.

Another object is that of providing mechanism of a peculiar type by which to impart operation to all of the described parts automatically and, further, to furnish a novel means of moving the bill.

In the appended drawing,

Figure 1 is a longitudinal sectional elevation of the fowl.

Figure 2 is a rear elevation thereof showing part of the structure in section.

Figure 3 is a detail of the head construction.

Figure 4 is a plan of certain connections for operating parts of the toy.

Figure 5 is an elevation of a wing showing the manner of attaching an operating pitman thereto, and

Figure 6 is an elevation of part of the body structure showing a wing hinged thereto.

I am aware that it is not new to furnish a toy in the form of a fowl wherein the head and neck are made to move as a whole with respect to the body, but I am not aware of a fowl wherein these parts are moved in combination with the bill and with the wings whereby to produce a most lifelike result.

In the figures, 1 indicates the body of a duck as a whole, which as shown in Figure 2 includes two spaced portions 2, for convenience, connected by a top bridging portion 3.

4 designates a pair of wheels for supporting the bridge by means of a shaft 5 journaled in the portions 2 and having a crank 6 between the said portions.

7 is the neck of the duck surmounted by a rigid head portion 8 to which is pivoted at 9 an upper bill portion 10. Said neck is pivoted between the forward ends of the portions 2 at 11, for example. At the lower end of the neck beneath the pivoting member 11, is connected one end of a pitman 12 whose other end engages around the crank 6 of the shaft 5, the rotation of which crank imparts a swinging movement to the said neck.

Affixed to the body 1 at any convenient point and in any desired manner is a member 13 which may be a strip of flat metal, for example, having an extended end provided with a raised portion 14, Figure 1, positioned just above the pivot point 11 of said neck.

Slidable in a suitable guide 15 in the neck is a rod 16 one end of which extends through the head 8 adapted to engage the bill portion 10 just forward of the pivot 9, Figure 3, while its other end rests upon the raised portion 14.

17 is a push-rod secured in the body 1 by which the toy may be operated. It is clear that when the wheels are rotated by moving the toy over the floor, the crank 6 will impart a reciprocating motion to the pitman 12 and move the neck backward and forward as indicated in broken lines. The highest point of the raised portion 14 of the member 13 is a greater distance from the pivoting point 11 than are the other portions thereof so that in the position shown in full lines the rod 16 is raised to its highest position at which time the upper end has engaged and lifted the bill portion 10, as shown in Figures 1 and 3.

Now, as the neck moves toward the extremes of its position, the rod 16 will pass down one or the other of the inclined sides of the portion 14 and thus in either case approaching the pivoting point letting the bill 10 close by gravity as the said rod follows down said inclined sides.

By this arrangement, it will be noted that the bill thus closes at each extreme of movement but opens at the intermediate position shown. This produces a very lifelike action in that as the bill moves forward from the rearmost position where it is

closed, it will open and then again close at or approaching the forward extreme of movement giving the fowl the appearance, as it moves bodily forward, of catching something in the air.

18 indicates a pair of wings hinged at 19 to the body 1 as clearly shown in Figure 2, said wings being shown in two positions. Secured to the inner side of each wing is an eye 20 to which is loosely connected one end of a pitman 21, the other end of each of which is loosely connected with the pitman 12, as by being looped through an eye 22 of the same, or in any other manner found most suitable.

The arrangement is so organized, at any rate, that as the pitman 12 reciprocates, the pitmen 21 will be alternately pushed outward and drawn inward by reason of the elliptical path described by their ends where connected to the pitman 12, resulting in raising and lowering the wings. These movements occurring together with the neck and bill movement results in a very interesting and natural action.

It is to be understood, of course, that the means described and shown for accomplishing the desired results may be replaced by other mechanism producing the same advantages without departing from the scope of the appended claims.

I claim:

1. The combination, in a toy, of a body simulating a fowl and including supporting wheels, a neck portion pivoted to the body including a head portion, a bill portion pivoted to the head portion, a pitman operatively connected at one end with the wheels and at its other end attached to the neck for imparting movement to the latter, a member disposed within the neck portion and adapted to have endwise movement therein and at one end adapted to engage the pivoted bill portion, and a member secured to the body having a curved surface disposed adjacent the pivot of the neck portion, the other end of the first named member engaging the said curved surface.

2. The combination, in a toy, of a body simulating a fowl and including supporting wheels, a neck portion pivoted to the body including a head portion, a bill portion pivoted to the head portion, a pitman operatively engaging the wheels at one end and attached at its other end to the neck portion for oscillating it, a member secured to the body having a curved surface arranged eccentrically of the pivot of the neck, and a rod disposed between the pivoted bill portion and the said curved surface adapted to be operated by the latter in the movement of the neck portion to move said bill portion a plurality of times in each movement of the neck portion in one direction.

3. The combination, in a toy, of a body simulating a living organism, including supporting wheels, a one piece mouth and head portion pivoted to said body, means to impart movement to the same from the wheels, a mouth portion pivoted to the head, a part having a curved surface adjacent to the pivot of the head portion and disposed eccentrically to the same, and a member disposed between and engaging the last named mouth portion and the said part and movable with the said head portion adapted to impart movement to the last named mouth portion in the movement of said head portion, by following said curved surface.

4. The combination, in a toy, of a body simulating a fowl and including supporting wheels, a neck portion pivoted to the body including an integral head portion, means to oscillate the neck portion from the wheels, wings pivoted to the body also operated by said means, a bill portion pivoted to the head, a part having a surface disposed adjacent to the pivot of the neck portion, said surface being a curved one and arranged eccentrically to said pivot, and a member disposed between the pivoted bill portion and the said part, the latter being constructed whereby to cause the operation of the said bill portion a plurality of times during movement of the neck portion in one direction.

In testimony whereof I affix my signature in presence of two witnesses.

ERNEST STARBUCK.

Witnesses:
OLIVER N. HOWERTON,
J. H. KINGSBURY.