Jan. 12, 1960 T. J. GIANNONE 2,920,419

TOY WHALE

Filed Nov. 26, 1957

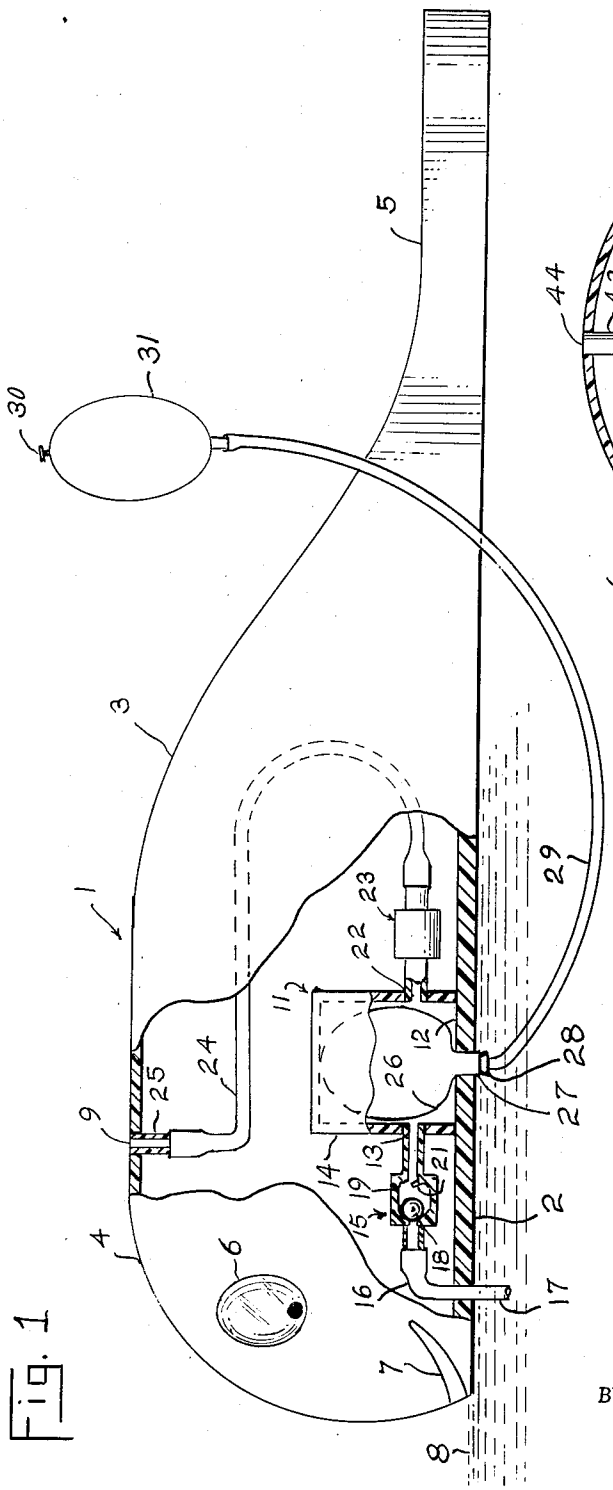


Fig. 1

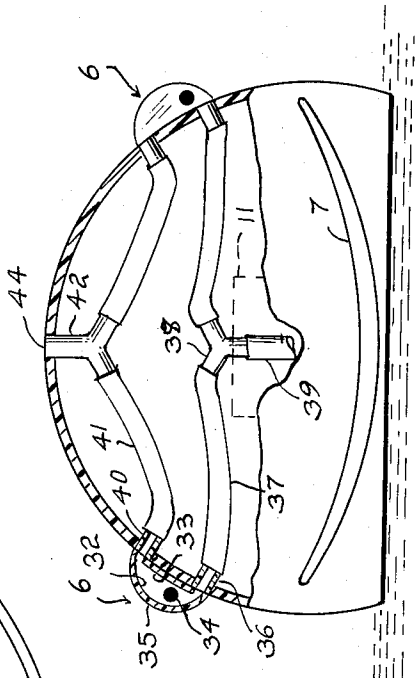


Fig. 2

INVENTOR.
THOMAS J. GIANNONE
BY Nicholas J. Garofalo
ATTORNEY

United States Patent Office 2,920,419
Patented Jan. 12, 1960

2,920,419

TOY WHALE

Thomas J. Giannone, Brooklyn, N.Y.

Application November 26, 1957, Serial No. 698,993

3 Claims. (Cl. 46—92)

This invention pertains to a water toy. More particularly it is concerned with a toy having a novel construction simulating the appearance of, and capable of simulating the antics of a live whale, whereby the toy provides advantages of fun and amusement for a small child.

A feature of the invention is an arrangement of elements and structure whereby the toy may be actuated at will to spout water from its head in simulation of the spouting of a live whale.

A further feature of the invention is an arrangement of elements and structure whereby the toy may be actuated at will to roll its eyes and simultaneously spout water from the top of its head.

Another feature of the invention lies in manually operable control means whereby the foregoing antics of the toy are subject to the control of the operator, and the height of the spout may be varied as desired.

A still further feature of the invention lies in its structure and in the general organization of its component parts, whereby the toy is enabled to rock up and down in the water in which it floats while at the same time roll its eyes and spout water from its head.

A general object of the invention is, therefore, to provide a toy which amusingly and realistically is able to simulate the antics of a live whale.

A still further object of the invention is to provide a toy whale having all of the foregoing features.

The invention further lies in the particular construction and general organization of its component parts, and also in their cooperative association with one another to effect the results ntended herein.

The foregoing, as well as further features, objects, and advantages of the invention will appear more fully hereinafter from a consideration of the detailed description which follows, taken together with the accompanying drawings wherein an embodiment of the invention is illustrated. It is to be expressly understood, however, that the drawings are for purposes of illustration and description, and they are not to be construed as defining the limits of the invention.

In the drawings:

Fig. 1 is a side elevational view with parts cut away of a toy whale embodying the invention; and

Fig. 2 is a front view of a toy whale illustrating a modification of the invention.

For a more detailed description of the invention reference is directed to the several drawings, and now especially to Fig. 1 wherein there is shown a hollow toy body **1** simulating the form and appearance of a whale. Here it is shown as having a flat broad bottom **2**, and an upper dorsal structure **3** forming a head section **4** and a tail section **5**. A pair of eye members **6** are mounted to the exterior or face area of the head section, and the form of a mouth **7** is provided; here, it is painted in an appropriate location below the eye members. The body **1** is of lighter-than-water construction and, accordingly, floats in water. While the body could be made in various

sizes, it is preferably of small size, inasmuch as it is a child's toy. It is intended to be floated and played with in a small reservoir of water, such as a bathtub, a sink, or a dishpan. The wall structure of the body **1** is stiff and is formed by a suitable process, such as molding, from plastics material. Plastics material is desired as it is inexpensive, light in weight, can be readily molded in manufacturing the toy, and comes in a wide range of colors which are inherent in the material. One method of forming the body **1** would be to mold the bottom wall **2** and the dorsal upper shell structure **3** as separate components, and then sealing, as by welding or cement, the one to the other. Other methods conventional in forming hollow or shell articles of plastics material could also be employed.

Means is provided to spout water from the head of the toy so as to amusingly simulate the antics of a real whale. To this end, mechanism is provided which is operable to draw water **8** from the reservoir in which the toy is floating, and to issue the water forcefully in the form of a spout from the head of the toy through a discharge port.

This mechanism includes a box **11** located within the interior of the body of the toy. The box is closed over on all sides by a top, a bottom wall, and by side walls, so as to provide an interior fluid tight chamber **12**. Here, the top and side walls of the box are integral with one another, and represent a molded plastic unit. The bottom wall of the box, while it could be a separate wall, is here defined by an area of the upper surface of the bottom wall **2** of the body **1**. The bottom edges of the side walls of the box are sealed fluid tight, as by welding or cement, to this upper surface of the bottom wall **2**.

A hole **13** through a side wall **14** of the box is fitted with an intake fitting **15** the outer end of which connects with a flexible intake tube or line **16**. The free end of the latter passes with a water tight fit through the bottom wall **2**, and depends, as at **17** for a short distance below the latter. This depending portion is adapted to dip down into the water **8** of the reservoir. The intake fitting **15** has incorporated therein a ball type check valve **18** which is effective to allow fluid flow through the fitting into the chamber **12** of the box, and to block fluid flow in the opposite direction. The check valve is a plastic ball which is freely movable in an elongated enlargement **19** of the passage through the fitting. When the valve is seated in a concavity at the left of the enlargement, it blocks fluid flow from the chamber of the box. A radial prong **21** fronting the opposite end of the enlargement **19** prevents the valve from closing off this end of the passage through the fitting **15**.

A hole **22** through a second side wall of the box is fitted with an outlet fitting **23**. The latter is identical with the fitting **15**, except that the check valve incorporated therein is adapted to allow fluid flow from the box and to block fluid flow in the opposite direction. The outer end of the outlet fitting is connected by a flexible tube or line **24** to an internal end of a stub, plastic, discharge pipe **25** which is fixed in a hole passing through the top wall of the head area of the body **1** of the toy. The external end of this discharge pipe opens to atmosphere, and defines a discharge or spout port **9**.

Pneumatically powered means is provided to draw water **8** from the reservoir through the intake line **16** into the box, and to subsequently force it from the latter and through the outlet line to the discharge port **9**. To this end, a rubber toy ballon **26** is employed. The body of the balloon is entered while collapsed through a hole **27** of the bottom wall **2** into the chamber **12** of the box. A plug or cork **28**, which may be of plastic, is fitted into the neck end of the balloon. After the body of the balloon has been entered into the box, the corked end is plugged tightly into the hole **27** so as to close the latter

with a fluid tight fit. The cork has an axial through hole which is fitted with one end of an elongated flexible tube 29. The opposite end of the latter is connected to an air filled rubber squeeze bulb 31. The rubber bulb 31 is manually collapsible, and it is used to inflate and deflate the balloon. It has an air capacity which is sufficient to inflate the balloon to a size substantially filling the chamber 12 of the box. As the bulb is collapsed the balloon inflates; and as the bulb is relaxed or restored to normal, the balloon defiates. As the balloon is inflated it progressively fills the chamber of the box, and drives air from the box through the outlet line as it does so. For this purpose the box is preferably cubical in form, and the balloon is desirably of a type which becomes spherical upon inflation so as to fill the box to the greatest extent possible. As the balloon is inflated by manually collapsing the bulb 31, air initially in the box is displaced and vented over the outlet line 24 and port 9 to atmosphere. When the balloon is next deflated by relaxing manual pressure from the collapsed bulb 31 and allowing it to restore to normal, a consequent vacuum created in the chamber 12 of the box causes water 8 to be drawn into the box over the intake line 16. Subsequent reinflation of the ballons discharges the water from the box through the outlet line and discharge port. Successive inflation and deflation of the ballon causes water to be drawn into and discharged from the box.

It can be seen that, after the box is substantially filled with water, the height of the water spout issuing from the port 9 can be varied as desired by the operator. A sudden slight pressure exerted on the squeeze bulb will cause slight spouting of water from the discharge port; and a sudden stronger pressure will cause proportionately higher spouting of the water.

A pin 30 in the squeeze bulb may be removed when desired, so as to admit into the bulb air when needed.

It is to be noted that the bottom wall 2 of the body of the toy is flat throughout. This is desirable as it increases the floating stability of the toy. Further, the flat bottom provides a desirable additional effect. For, as the squeeze bulb is actuated, a slight reactive force occurs in the area of the box. This reactive force tends to causee the toy to rock slightly up and down in the water, thereby further simulating the antics of a live whale.

The bottom wall 2 of the body of the toy may be made relatively thick, as indicated. This has a desirable advantage in that it adds a uniform weight across the bottom area of the toy, and lowers it a little into the water, thereby lending further realism to the toy.

Fig. 2 is a front end elevational view of a toy whale which is identical to the structure shown in Fig. 1, except in that it is modified with respect to the route the outlet line takes to the discharge port, as will be indicated by the description that follows. And, when in this description mention is made of parts not shown in Fig. 2, reference is directed to Fig. 1 for an illustration of such parts. After the water passes through the outlet fitting of the box 11, it flows through chambers 32 in the eye members 6, driving a simulated eye-ball 34 in each erratically about. After leaving the eye members the water flows through a discharge port 44 in the head of the toy.

Each eye member is provided with a fluid tight chamber or compartment 32. The latter is defined by a plastic base section 33 over the surface of which is sealed a transparent plastic hemispherical shell 35. Freely movable within the chamber is a colored plastic pellet simulating the eyeball 34. An inlet to the eyeball chamber is provided by a stub tube 36 which projects from the underside of the base section 33 through a hole in the body of the toy, and connects at its internal end with a flexible tube or line 37. The other end of the latter connects to an arm of a distributing Y fitting 38. The stem of the latter connects to a flexible tube or line 39, a fragmentary portion of which is shown, the other end of which connects with the outlet fitting of the box 11. An outlet from the chamber 32 is provided by a second and diametrically located upper stub tube 40 which projects through a further hole in the body of the toy. The internal end of the latter stub tube connects by a flexible tube or line 41 to a branch of a discharge Y fitting 42. The stem of the latter is fixed in a hole through the head area of the body of the toy, and defines the discharge port 44. Cement applied to the base section 33 of each eye member secures the latter to the body of the toy.

It can now be seen that as the squeeze bulb associated with the box 11 is manually actuated, water will flow through the chambers of the eye members, and then through the discharge port. As the water flows through the chambers of the eye members, the eyeballs 34 are caused to roll and move erratically about. After water has issued from the discharge port 44 then, because of the check valve in the outlet fitting of the box 11, the distribution lines 37, the eye chambers 32, the discharge lines 41, and the discharge fitting 42 are constantly filled with water. Cosequently, thereafter only a slight pressure is required on the squeeze bulb to cause a flow of water to roll the eyeballs 34 and to simultaneously spout from the discharge port.

While an embodiment of the invention has been illustrated and described in detail, it is to be expressly understood that the invention is not limited thereto. Various changes may be made in the design and arrangement of the parts without departing from the spirit and scope of the invention as the same will now be understood by those skilled in the art; and it is my intent, therefore, to claim the invention not only as shown and described, but also in all such forms and modifications thereof as may be reasonably construed to fall within the spirit of the invention and the scope of the appended claims.

I claim:

1. In a toy having a hollow body adapted to float in water and having an external appearance simulating that of a whale, an air and water tight structure within the interior of the body forming a fluid tight chamber therein, a fluid intake line connected at one end with the chamber and having its other end projecting through the bottom of the body and adapted to dip in the water in which the toy may then be floating, a one way check valve in the intake line allowing fluid flow into the chamber, a fluid outlet line connected at one end with the chamber and connected at the other end with a discharge port in the head area of the body, a one way check valve in the outlet line allowing fluid flow from the chamber through the discharge port, and a pneumatically inflatable and deflatable balloon within the chamber adapted upon inflation to displace fluid from the chamber through the outlet line and adapted upon subsequent deflation to cause fluid flow into the chamber over the intake line, and control means externally of the chamber and the body connected to the balloon for inflating and deflating the latter, wherein the control means comprises a rubber air filled squeeze bulb connected by an elongated flexible tube to the balloon, and wherein an eye member is fixed to the exterior of the body of the toy, the eye member comprising a transparent structure having a fluid tight compartment connected intermediately of the outlet line and having a pellet simulating an eyeball freely movable within the compartment in response to fluid flow through the outlet line and the compartment.

2. In a toy as defined in claim 1, wherein a second similar eye member is fixed to the exterior of the body of the toy in spaced relation to the first mentioned eye member and is also connected intermediately of the outlet line.

3. In a toy having a hollow body adapted to float on a water surface and having an appearance simulating that of a whale; a box within the hollow of the body having a fluid tight interior; a fluid intake line connected at one end with the interior of the box and having its opposite

end depending externally through the bottom of the body and adapted to dip into the water; a one way check valve in the intake line adapted to allow fluid flow into the box; a fluid outlet line connected at one end with the interior of the box; a one way check valve in the outlet line adapted to allow fluid flow from the box; a pair of eye members fixed in spaced relation to each other on the exterior of the body; each eye member having a fluid tight chamber, a transparent outer shell covering over the chamber, a light weight pellet simulating an eyeball freely movable within the chamber, an inlet port and an outlet port from the chamber; a Y fitting having its stem end defining a discharge port through the top area of the body and having each of its branches connected to a separate one of the outlet ports of the eye members; and a second Y fitting having its stem end connected to the free end of the outlet line from the box and having each of its branches connected to a separate one of the inlet ports of the eye members; a pneumatically

inflatable and deflatable balloon within the interior of the box adapted upon inflation to substantially fill the interior of the box; and pneumatic means located externally of the box and body connected to the balloon for inflating and deflating the latter.

References Cited in the file of this patent

UNITED STATES PATENTS

641,839	Clay	Jan. 23, 1900
1,292,618	Lazelle	Jan. 28, 1919
1,585,340	Fitzgerald	May 18, 1926
1,893,507	Ranney	Jan. 10, 1933
1,903,805	Buckley	Apr. 18, 1933
2,526,619	Gamache	Oct. 24, 1950
2,748,528	Wolf	June 5, 1956
2,801,850	Yount	Aug. 6, 1957

FOREIGN PATENTS

64–553	Germany	Sept. 24, 1892