

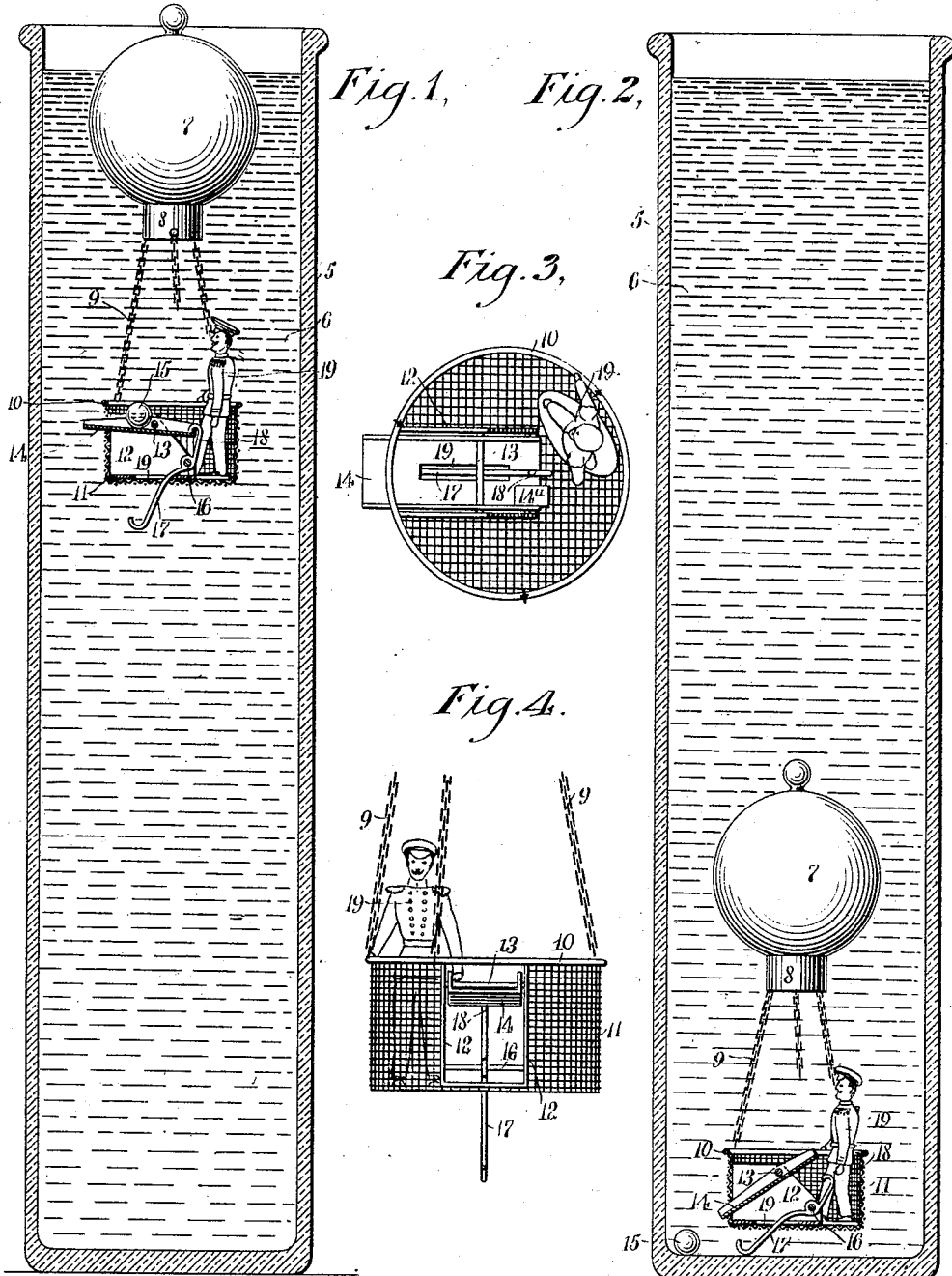
J. VANDERBILT.

TOY.

APPLICATION FILED MAY 5, 1910.

968,900.

Patented Aug. 30, 1910.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN VANDERBILT, OF NEW YORK, N. Y.

TOY.

968,900.

Specification of Letters Patent. Patented Aug. 30, 1910.

Application filed May 5, 1910. Serial No. 559,433.

*To all whom it may concern:*

Be it known that I, JOHN VANDERBILT, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Toy, of which the following is a full, clear, and exact description.

My invention relates to toys, my more particular purpose being to produce a diving toy the motions of which are controllable by aid of a weight, the motions being to some extent automatic.

More particularly stated, I seek to provide a floating body or balloon, and a medium in which it can float, together with a basket carried by the balloon and provided with means for receiving a small weight when the balloon is in its uppermost position and for causing the release of the weight when the balloon is in its lowermost position.

Reference is to be had to the accompanying drawings forming a part of this specification in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a substantially central vertical section through the apparatus complete, showing the balloon and its car in their uppermost positions, the car being loaded by a weight; Fig. 2 is a view similar to Fig. 1, but showing the balloon and its car in their lowermost positions, the weight having just been discharged; Fig. 3 is a detail showing in plan the car and its contents; and Fig. 4 is an elevation likewise showing the car and its contents.

A tall vessel 5 contains a body of water 6. A floating body 7 having the semblance of a balloon is provided with an annular portion 8 and connected with the latter are chains 9 which support a car 11 by aid of a circular railing 10. The car 11 is provided with a box frame 12 across which extends a pintle 13. A hopper 14 is mounted upon the pintle 13 and is adapted to rock within certain limits, as will be understood by contrasting Figs. 1 and 2. The hopper is provided with a counterweight 14<sup>a</sup> (see Fig. 3) whereby it normally tends to maintain the position indicated in Figs. 1, 3 and 4.

At 15 is a small spherical weight, preferably a bullet, any number of which may be provided. A pintle 16 extends across the box frame 12 and is disposed a little lower

than the pintle 13, to the right thereof according to Fig. 1. Mounted upon the pintle 16 is a trigger 17 provided with a hook 18 which is adapted to overlap the adjacent end of the hopper 14 and hold the same in the position indicated in Fig. 1.

At 19 is a figure, which in this instance represents a naval officer having charge of the balloon and its paraphernalia.

The operation of my device is as follows: I will suppose at the start that the balloon and its car are in their uppermost positions and that the hook 18 is in engagement with the adjacent end of the hopper 14. The weight 15 is now dropped by hand into the hopper 14. The bottom of this hopper is slightly inclined when in normal position, so that the bullet rolls back toward the pintle 13, as indicated in Fig. 1. The addition of this weight causes the balloon and its car to sink slowly through the liquid so that the trigger 17 strikes against the bottom of the vessel. This causes the trigger to turn upon the pintle 16 and to disengage the hook 18 from the hopper 14 which, under control of the weight 15, now turns into the position indicated at the bottom of Fig. 2, the weight rolling off and lodging upon the bottom of the vessel. The car being rid of the weight, the balloon ascends carrying the car with it. In dropping the weight the hopper 14 is left free to resume its normal position and under control of the counterweight 14<sup>a</sup> (see Fig. 3) it does so immediately, and as the balloon begins to rise the weight of the trigger 17 causes the hook 18 to extend slightly over the adjacent end of the hopper so as to hold the same as indicated in Fig. 1. When the balloon arrives at the top, the operator drops another weight into the hopper, the net result being a complete descent of the balloon and car, the unloading of the bullet at the bottom of the vessel, and the ascent of the balloon and car. Each successive bullet dropped in causes a repetition of the complete cycle of movements.

I do not limit myself to the precise mechanism shown nor to the exact arrangement of the various parts. Neither do I limit the application of the principle altogether to toys, for the reason that my device may be varied to some extent without departing from the spirit of my invention.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent:

1. The combination of a vertical vessel containing a liquid, a floating body within said liquid, means carried by said floating body for momentarily supporting a weight, and mechanism controllable by the descent of said floating body for discharging said weight.
2. The combination of a vessel containing a liquid, a floating body free within said liquid, a car carried by said floating body, a hopper mounted upon said car and adapted to rock, and mechanism carried by said car and controllable by motions thereof for turning said hopper when said car approaches an obstacle below it.
3. The combination of a vessel for containing a floating medium, a balloon-like floating body within said liquid, a car suspended from said floating body, a hopper mounted upon said car and free to rock relatively to the same, a trigger mounted upon said car and provided with a hook for engaging said hopper in order to hold the same in a predetermined normal position, and a weight to be dropped upon said hopper for the purpose of turning the same whenever said hopper is afterward released from said hook.
4. The combination of a vessel for containing a liquid, a floating body disposed within said liquid, a car carried by said floating body, a hopper mounted within said car and adapted to rock, a trigger carried

by said car and free to move relatively to the same when, during the descent of said car, said trigger strikes an obstacle below it, said trigger being provided with a hook for engaging said hopper and normally preventing the same from rocking, and a weight to be carried by said hopper for the purpose of turning the latter when said hook is released from said hopper.

5. The combination of a vessel for containing a liquid, a floating body disposed within said liquid, a car carried by said floating body and provided with a slot, a trigger journaled upon said car and extending through said slot for the purpose of enabling said trigger to be dropped when said car descends approximately to the bottom of said vessel, a hook carried by said trigger, a hopper journaled upon said car and adapted to rock, said hopper being normally engaged by said hook and thereby restrained from rocking, and a weight to be carried by said hopper for the purpose of causing the descent of said floating body and said car, said weight being free to leave said hopper when said hopper, after its release by said hook, is rocked by said weight.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN VANDERBILT.

Witnesses:

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PHILIP D. ROLLHAUS.