Nov. 13, 1928. 1,691,189

J. HALL

FLOATABLE TOY

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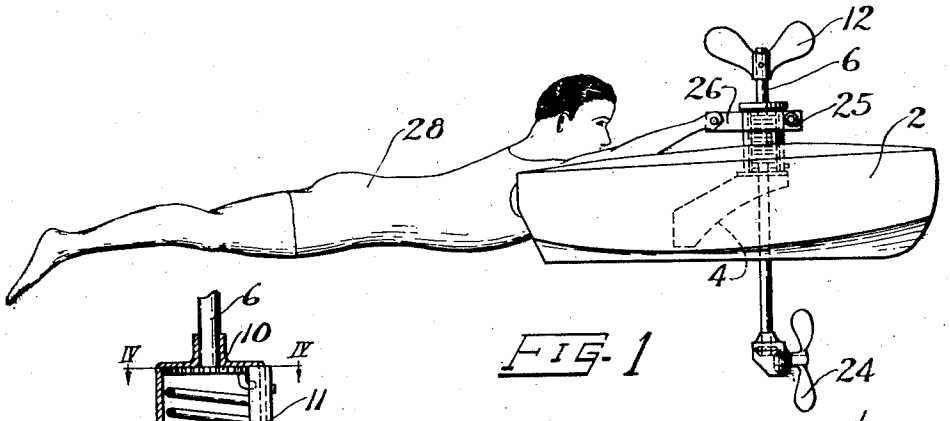


FIG. 1

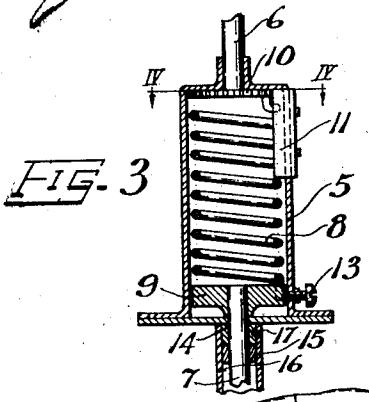


FIG. 3

FIG. 2

FIG. 4

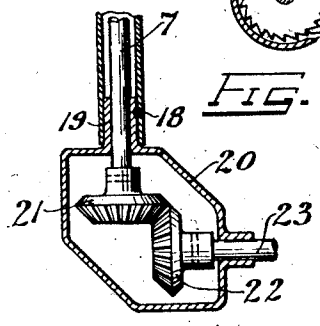


FIG. 5

INVENTOR

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UNITED STATES PATENT OFFICE.

JUDSON HALL, OF HARTLAND, WISCONSIN, ASSIGNOR OF ONE-FOURTH TO BENJAMIN F. BAYHA AND ONE-FOURTH TO HERBERT A. BELL, BOTH OF MILWAUKEE, WISCONSIN.

FLOATABLE TOY.

Application filed November 7, 1927. Serial No. 231,408.

This invention relates to improvements in a floatable toy, and more particularly to improvements in floatable toys of the type that are self-propulsive by the action of a spring motor.

The invention more particularly contemplates the provision of a novel water toy modeled somewhat after the design of the propelled bathing device disclosed and described in my copending application of even filing date herewith.

In the art of toy making it is highly desirable to provide devices that will be immediately attractive to children, and also, if possible, to embody some element within the device to make it slightly educational to a child. It is also desirable to provide a device which, while operating, requires no attention other than the rescuing of the device when the same ceases motion. It is well known, too, that children delight in toys of a realistic nature wherein a miniature model of a human figure is embodied.

Accordingly it is an important object of this invention to provide a new and novel animated floatable toy, self-propelled by a spring motor.

Another object of the present invention is to provide a toy of the class described wherein Figure 1 is a preferred form and embodies a model of the human figure.

A further object of the present invention is to provide an animated toy which may be adjusted so that it may be operated with no attention until it ceases motion.

Another and further important objects of this invention will be apparent from the disclosures in the drawings and specification.

This invention (in a preferred form) is illustrated in the drawings and hereinafter more fully described.

In the drawings:

Figure 1 shows a side view in elevation of a device embodying principles of the present invention.

Figure 2 is a top plan view of the device.

Figure 3 is a vertical sectional view through the driving element of the device.

Figure 4 is a sectional view taken substantially along line IV—IV of Figure 3.

Figure 5 is an enlarged fragmentary vertical sectional view, with parts in elevation, taken through the gear housing of the device.

As shown in the drawings:

In the illustrated embodiment of this invention there is shown a floatable unit comprising a pair of pontoons or boat shaped members 1 and 2, respectively, rigidly held in spaced relationship by a yoke or beam 3. The members 1 and 2, of course, are so shaped as to readily pass through the water or the like, and the beam 3 is provided with an arcuate forward surface 4 so that the beam will offer no undue resistance to the progress of the device.

Preferably adjacent the center of the beam 3, a driving element is mounted thereon. The driving element, in this instance, comprises a casing 5 which is apertured to permit a key shaft 6 to extend through the top thereof, and a drive shaft 7 to extend through the bottom thereof, which drive shaft also passes through the beam 3. Within the casing 5 a coiled spring 8 is provided which is connected at its lower end to a circular plate 9 secured to the shaft 7, and at its upper end to a ratchet gear 10 secured to the shaft 6. The ratchet gear 10 together with the shaft 6 is movable longitudinally as well as rotatably within the casing. The ratchet wheel is engaged by an elongated spring pawl 11 which is secured to the outer wall of the casing. It will be apparent, therefore, that when the spring is wound up the shaft 6 and ratchet 10 will be projected within the casing to a point adjacent the lower extremity of the pawl 11. When the spring is permitted to relax it will turn the plate 9 together with the shaft 7 and gradually slide the ratchet wheel along the pawl to its initial position, as shown in Figure 3. The pawl, of course, prevents the ratchet wheel from rotating in a reverse direction. To enable the spring to be wound up properly a key 12 is provided on the externally projecting end of the shaft 6.

A set screw 13 projects through the casing 5 and engages the disc 9 to act as a brake thereagainst, thereby preventing the spring from returning to its normal non-tensed position too rapidly.

Externally of the casing on the under side thereof the shaft 7 is provided with a loose collar 14. Adjacent the collar 14 is a collar 15 fixedly secured to the shaft 7 and rotatable therewith. The collar 15 maintains the plate 9 adjacent the lower portion of the casing 5 as shown in Figure 3. A hollow shaft or pipe 16 encloses the shaft 7 and is pinned as at

17 to the collar 14. At its lower end this pipe 16 is pinned as at 18 to a boss 19 integral with the gear housing 20, whereby the pipe is prevented from rotatable movement and fixedly supports the housing 20 in its desired position.

Within the housing 20 on the lower end of the shaft 7 is a bevel gear 21 which meshes with a transversely disposed bevel gear 22 secured to propeller shaft 23. The propeller shaft 23 extends through the housing 20 and is provided on its outer end with a propeller 24 which is driven by the shaft 7 in the manner described hereinabove.

Around the casing 5 of the driving element is an adjustable clamp 25 having an extended apertured lug 26 thereon. A handle 27 is fixedly or pivotally engaged by the lug 26. To the handle 27 a body 28 is secured, an arm of the body preferably engaging the handle on either side of the lug 26. It has been found desirable to make the handle 27 of fibrous material and to fixedly engage the same in the lug 26, thereby providing resilient play for the body 28 relative to the remainder of the device.

The body 28 is preferably doll-like in character and, in this instance, is shown as a miniature model of a human figure, but, of course, it may be made in any desired shape. This body, besides presenting an attractive appearance to children, acts as a rudder to properly steer the device in any desired direction. For instance, if it is desired to have the device proceed in a straight, forward direction, the clamp 25 is tightened in the position shown in Figure 2, the body 28 extending substantially perpendicular to the beam 3. If, however, it is desired that the device operate within a circle, the clamp 25 is released, the body swung to the left or right, and the clamp tightened. The device will then operate in a circular direction, the body being always inclined toward the center of the circle. Obviously, by suitably adjusting the body 28 by means of the clamp 25 the device is enabled to operate through circles in either direction and of various diameters. It is also readily apparent that while the device is operating in a circular line no attention is necessitated. Moreover, if the handle 27 is made of fibrous material, the body 28 will have a desired bobbing motion relative to the anterior portion of the device.

The device hereinabove described may, of course, be covered with attractive colors if desired. Also, if for any reason it is not desirable to operate the device by means of the driving element thereon, the device may be towed without detracting from its novel appearance and action.

From the foregoing it is apparent that I have provided a new and novel floating toy, which is highly attractive to children, simple in its operation, and which necessitates minimum attention. The device disclosed herein is constructed of few and simple parts and may be economically manufactured.

I am aware that many changes may be made and numerous details of construction may be varied through a wide range without departing from the principles of this invention and I, therefore, do not purpose limiting the patent granted hereon otherwise than necessitated by the prior art.

I claim as my invention:

1. In a toy, a pair of buoyant members, a yoke connecting said members, means for propelling said toy, and a doll-like body secured to one of said elements.

2. In a toy, a rigid unit comprising a pair of floatable members, a yoke connecting said members, and an artificial doll-like body adjustably associated with said unit.

3. A floatable toy comprising a plurality of floatable members, means connecting said members, driving means associated with said connecting means, and a doll-like body adjustably associated with said driving means.

4. In a toy, a buoyant unit, driving means for said unit, and a doll-like body secured to said unit.

5. In a floatable toy, a pair of spaced pontoons, a yoke connecting said pontoons, a spring motor associated with said yoke, a handle adjustably mounted on said motor, and a body secured to said handle.

6. In a toy, a floatable unit, driving means for said unit, and a doll-like body adjustably secured to said unit, said body adapted to act as a rudder for said toy.

7. In a toy, a pair of floatable members, a yoke rigidly secured to said members to maintain the same in spaced relationship, a spring motor for driving said toy, a handle secured to said motor, and an artificial body adapted to function as a rudder attached to said handle.

8. In a toy, a pair of boat-shaped members, a yoke connecting said members, driving means mounted on said yoke, a flexible handle carried by said driving means, and a doll-like body secured to said handle.

9. In a self-propulsive toy, a pair of buoyant members, a yoke connecting said members, driving means carried by said yoke, said means including a propeller, a spring to actuate said propeller, and manually operable means for tightening said spring.

10. In a toy, a floatable unit, means carried by said unit, and a doll-like body secured to said means and extending rearwardly of said unit.

In testimony whereof I have hereunto subscribed my name at Hartland, Waukesha County, Wisconsin.

JUDSON HALL.