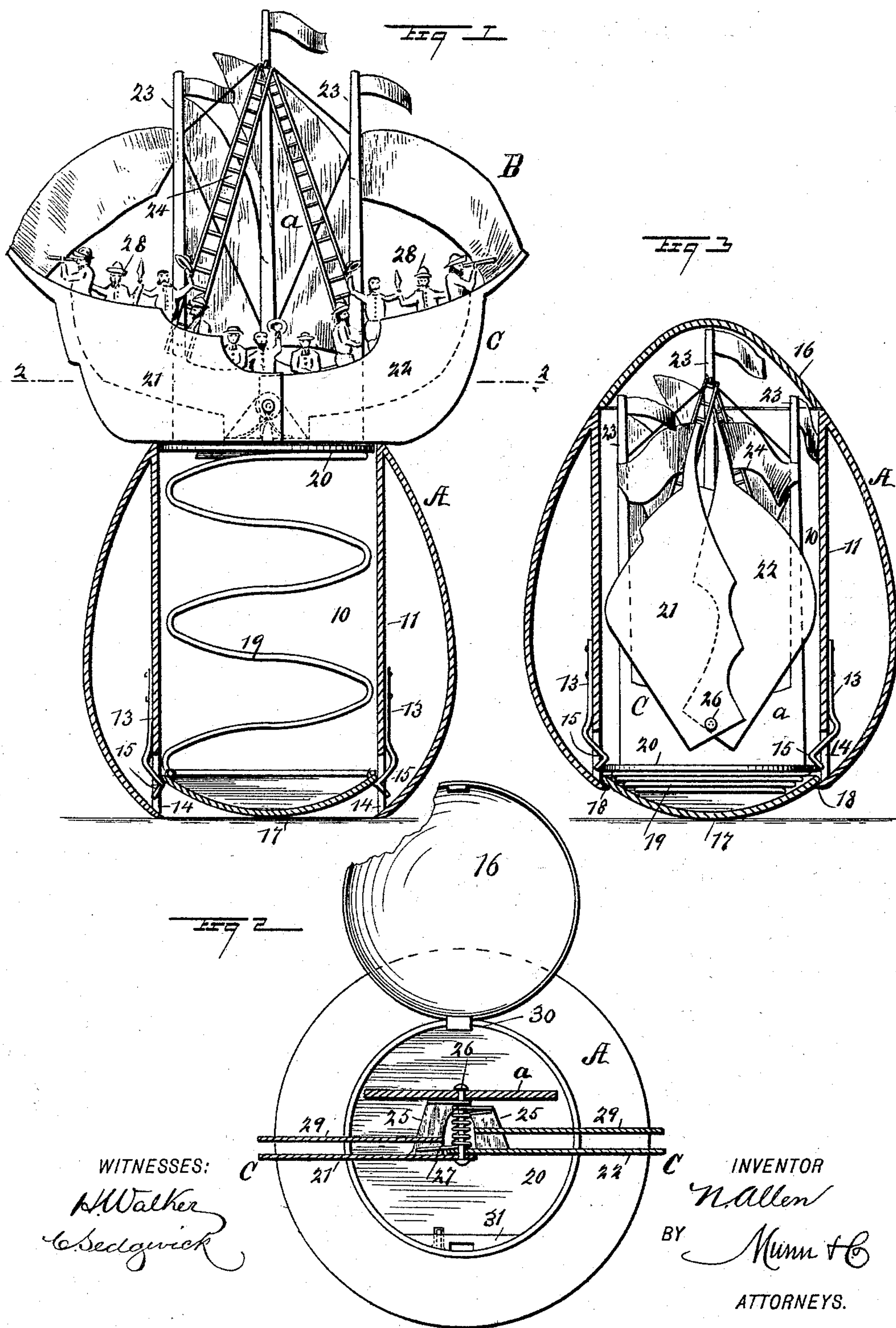


(No Model.)

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TOY.

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UNITED STATES PATENT OFFICE.

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TOY.

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To all whom it may concern:

Be it known that I, NORMAN ALLEN, of Rockaway Beach, in the county of Queens and State of New York, have invented a new and useful Improvement in Toys, of which the following is a full, clear, and exact description.

My invention relates to an improvement in toys, and has for its object to provide a toy the body of which will simulate the shape of an egg, and further to construct the toy in such manner that a follower capable of movement may be located in the body of the toy, the said follower carrying an object, as a ship for example, which object is capable of folding in such manner as to render it possible for the object to enter and to be concealed within the body of the egg, although the length of said object when unfolded may be much greater than the largest diameter of the egg.

A further object of the invention is to provide a means whereby when the object has been folded and pressed into the egg-like form it will be maintained in that position until one end of the egg is brought into forcible contact with a convenient object, at which time the ship, or other object folded within the egg-like shell, will be forced outward therefrom, and will automatically unfold and assume its normal shape.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth and pointed out in the claims.

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

Figure 1 is a front elevation of the object to be displayed, and a vertical section through the shell in which the object is to be folded. Fig. 2 is a horizontal section taken practically on the line 2—2 of Fig. 1; and Fig. 3 is a vertical section through the shell, the display object being represented in its folded position within the shell.

The body of the shell A of the toy is made to simulate in contour that of an egg. The body may be made in any desired number of sections, or it may be made in but one piece

if desired; in any event the shell is provided with a central well or chamber 10, extending through from top to bottom. This chamber may be of any desired shape in cross section, but it is preferably made circular as illustrated. Both ends of the well are open, and both ends of the shell A, are flattened, and in the partition 11, forming the chamber or well 10, at opposite sides of the same, two springs 13, are secured. These springs are attached at their upper ends to the circular partition 11, and the lower ends of the springs are bent inwardly through apertures 14, made in the partition 11, as shown in Fig. 1, the apertures being produced in the lower portion of the partition, and preferably extend downward to the lower extremity thereof. The lower inner projecting ends of the springs are shaped in such a manner as to produce heads 15, as is shown in both Figs. 1 and 3.

One end of the egg-like shell A, is provided with a hinged cap 16, and this cap is so shaped that when it is in position to close an opening in the shell it forms one end contour of the egg-like shell, preferably the point thereof. The completion of the contour of the opposite end of the egg-like shell is produced by the introduction into the well or chamber 10, of a dished, circular plate 17, the convex surface of which plate faces outward and the concave surface inward; the marginal portions of the dished plate have bearing against edges of the shell-like body A which project within the well or chamber 10, as illustrated at 18 in Fig. 3. When the margins of the dished plate are in engagement with the inwardly-projecting portions of the body shell, as shown in Fig. 3, the exterior of the dished plate completes what may be termed the "butt" formation of the egg-like shell, imparting to the body, in connection with the cap 16, the contour of an egg.

A spring 19, preferably of the spiral or coiled type, is secured at its lower end to the inner surface of the dished plate 17, and the upper end of said spring is secured to a follower 20, which follower is capable of movement within the chamber or well 10 in direction of either end of the same. The follower 20, is adapted to have secured upon it the object to be concealed within the egg-like shell, to be thrown

up and out therefrom and be displayed at one end.

In the drawings the display object B partakes of the contour of a caravel, and is designed to represent the vessel in which Columbus sailed to America upon his voyage of discovery. The hull C of the vessel is divided into two parts 21 and 22, and these parts are pivotally connected, being adapted to fold inward in close engagement, in order that when the follower 20, is pressed downward the hull may readily enter the well or chamber 10; but I desire it to be distinctly understood that any other folding display object may be substituted for the ship, as for example, an eagle, a human figure, or the representation of any bird or scene of any historical or local character.

When a ship is selected as the display object, the masts 23 and standing rigging 24, are firmly made fast to the follower 20, and as shown in Fig. 1, the standing rigging and masts may be made from one piece of material, the material being designated as *a* in the said Fig. 2. Each section 21 and 22 of the hull is provided with an angular shoe 25, shown best in Fig. 2, and these shoes extend from the inner face of the hull sections to a practical engagement with the strip *a* from which the standing rigging and masts are made; and the pivot pin 26, which connects the hull sections, is fastened at one of its ends in the said strip *a*.

When the hull sections are in a horizontal position, the end of one opposite the end of the other, the shoes 25, rest upon the follower 20, and the downward movement of the hull sections is thereby limited. The hull sections are spring-controlled; that is to say, they are held in their normal or proper position by means of one or more springs 27, and when the hull sections are carried upward to an interlocking or folding position, as shown in Fig. 3, the tendency of the spring or springs 27 will be to restore the hull sections to their normal position as soon as they are released from any binding engagement.

In Fig. 2 a single spring is illustrated as being wound around the pivot pin 26, the ends having engagement with the shoes 25 of the hull sections; but I desire it to be distinctly understood that the character of the spring may be changed, and that more than one spring may be employed if found desirable.

A series of figures 28, each series being preferably integral with a plate 29, is arranged back of each section of the hull, one plate carrying a series of figures being placed at the rear of each hull section; and the plates 29, are preferably secured to the shoes 25 of the hull sections, as shown in Fig. 2; the figures are so produced that a portion of them, or the entire figure, is visible above the upper edge of the hull; but the plates 29, carrying the figures, are so placed that when the hull sections are folded up one figure plate will pass behind the other, thereby not interfering in

the slightest degree with the proper folding action of the hull.

In the operation of the device, the ship having been displayed as shown in Fig. 1, by pressing downward upon the masts of the ship the follower 20 is forced downward into the well or chamber 10, and the hull sections and parts connected with them, will fold up in a manner to enable the entire hull to enter the chamber or well 10, as shown in Fig. 3. By a continued downward pressure upon the masts, the follower is forced to the bottom of the well or chamber, and the dished plate 17, is in its turn forced outward to complete one end formation of the egg, while the spring 19, is compressed, and the follower 20, will engage with the latch heads 15 of the spring latches 13, as is likewise shown in Fig. 3. The ship will thus be held within the well or chamber 10 in the folded position, and the cap 16 may then be closed, entirely concealing the inner structure of the egg and completing its exterior contour.

The cap 16, may be provided with any suitable form of latch readily releasable under pressure that may be found most desirable in practice to employ.

The ship having been folded within the egg and the exterior of the egg completed as to form, when it is desired to display the ship the egg is stood upon its end, and in so doing, in imitation of Columbus, the egg at the end containing the dished plate is forced violently in contact with the surface of any convenient object, whereby the said dished plate will be forced upward and will release the follower 20 from engagement with the spring latches, and the spring 19, will expand and force the follower upward, the force of the spring compelling the mast of the vessel as the vessel is forced upward out of the chamber or well 10, to throw open the cap 16, whereupon the follower will quickly reach the top of the well, and the ship's hull will unfold and assume the natural or normal position, as shown in Fig. 1. The converging edges of the shell at the upper portion of the well will prevent the follower from passing entirely outward therefrom, and as an additional safe-guard in this direction, the hinge 30 of the cap and the keeper 31 for the latch of the cap, serve as stops for the follower in its upward or outward travel.

This toy is exceedingly interesting,—it is simple, durable and economic in its construction, and it is likewise instructive.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A toy consisting of an egg-like shell provided with a well extending through from top to bottom, a cap forming one end of the shell and adapted to cover one end of the well, a plate having a convexed outer face located within the well at the end opposite to the cap and capable of movement in said well, a sectional or folding object, a follower to which

the object is attached, said follower having sliding movement within the well, and a spring connecting the movable plate and the follower, as and for the purpose set forth.

5 2. The combination, with a casing provided with a central chamber extending through from end to end, the said casing being substantially oval in contour, a removable cap covering one end of the well or chamber, and
10 a plate having a convexed outer face closing the opposite end of the said chamber or well, the cap, cover and casing combinedly having substantially the shape of an egg, of a follower having sliding movement in the well or
15 chamber, a folding object, attached to the follower, and a locking device contained within the shell and adapted for engagement with the follower, as and for the purpose set forth.

3. In a toy, the combination, with a shell
20 adapted to simulate the shape of an egg, said shell comprising a body containing an inner well or chamber extending through the body from end to end, a cap removably closing one end of the body chamber, and a trip plate located in the opposite end of the said chamber,
25 the trip plate being capable of movement in the chamber, of a sectional object, capable of folding and entering the chamber or well, a follower to which the object is attached, a
30 spring connecting the follower with the trip

plate, and spring latches extending within the well or chamber and adapted for engagement with the follower, as and for the purpose set forth.

4. In a toy, the combination, with a body 35 portion shaped substantially as an egg and comprising a body provided with a chamber or well extending through from end to end, a removable cap covering one end of the chamber or well, and a trip plate normally closing 40 the opposite end of the well or chamber and having movement therein, the cap constituting one end of the shell and the trip plate the opposite end, of a follower, a spring connecting the follower and the trip plate, spring 45 latches located within the shell and adapted for engagement with the follower to hold it in close conjunction with the trip plate, a ship, the hull of which is in two pivotally connected sections, the sections being spring-con- 50 trolled, and masts and standing rigging independent of the sections and attached directly to the follower, the masts and standing rigging being of a width and height capable of entering the well or chamber, as and for the 55 purpose specified.

NORMAN ALLEN.

Witnesses:

JAMES MCM. EAGAR,
JOSEPHINE E. LADD.