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LIQUID TIMER

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Fig. 1.

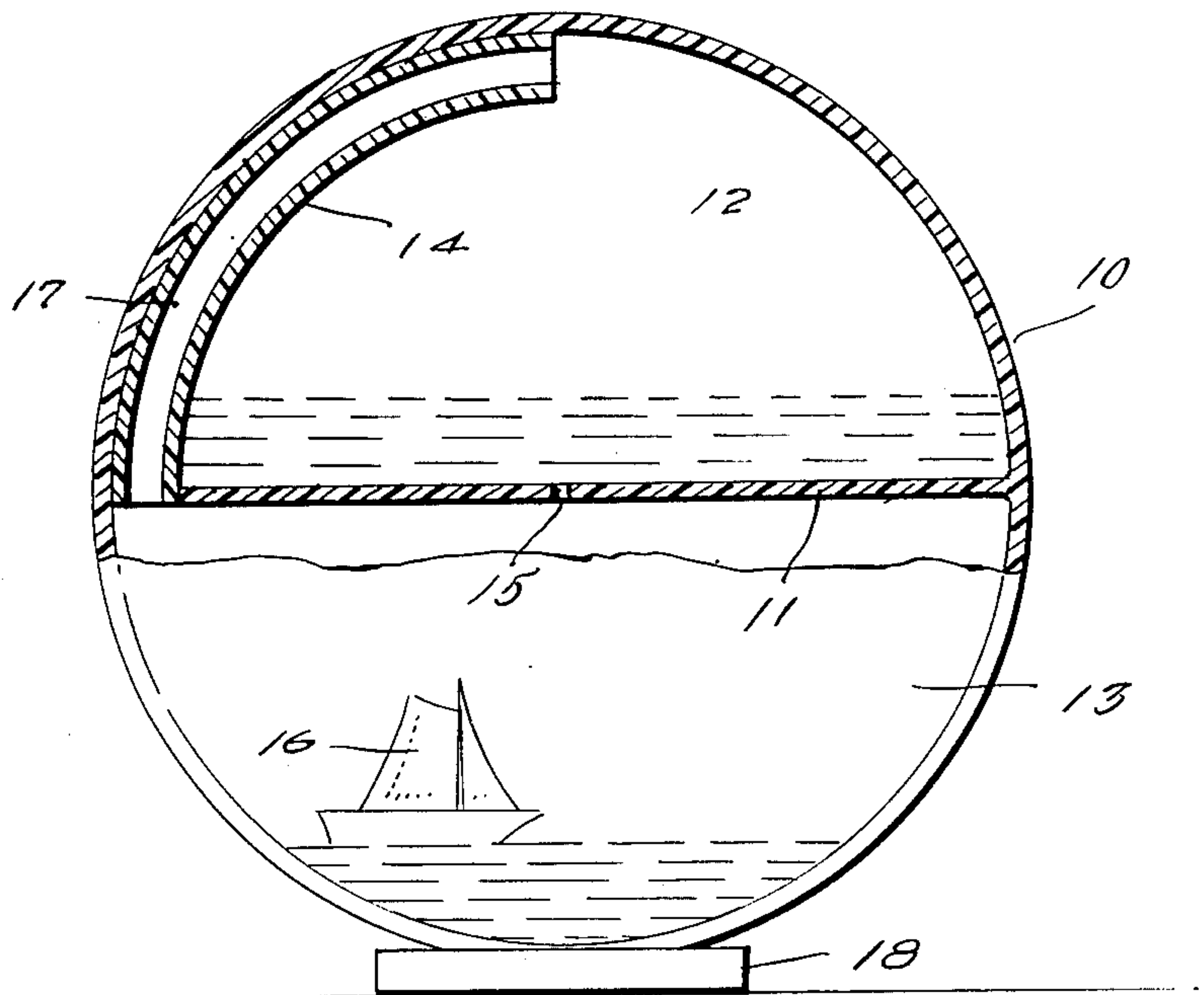
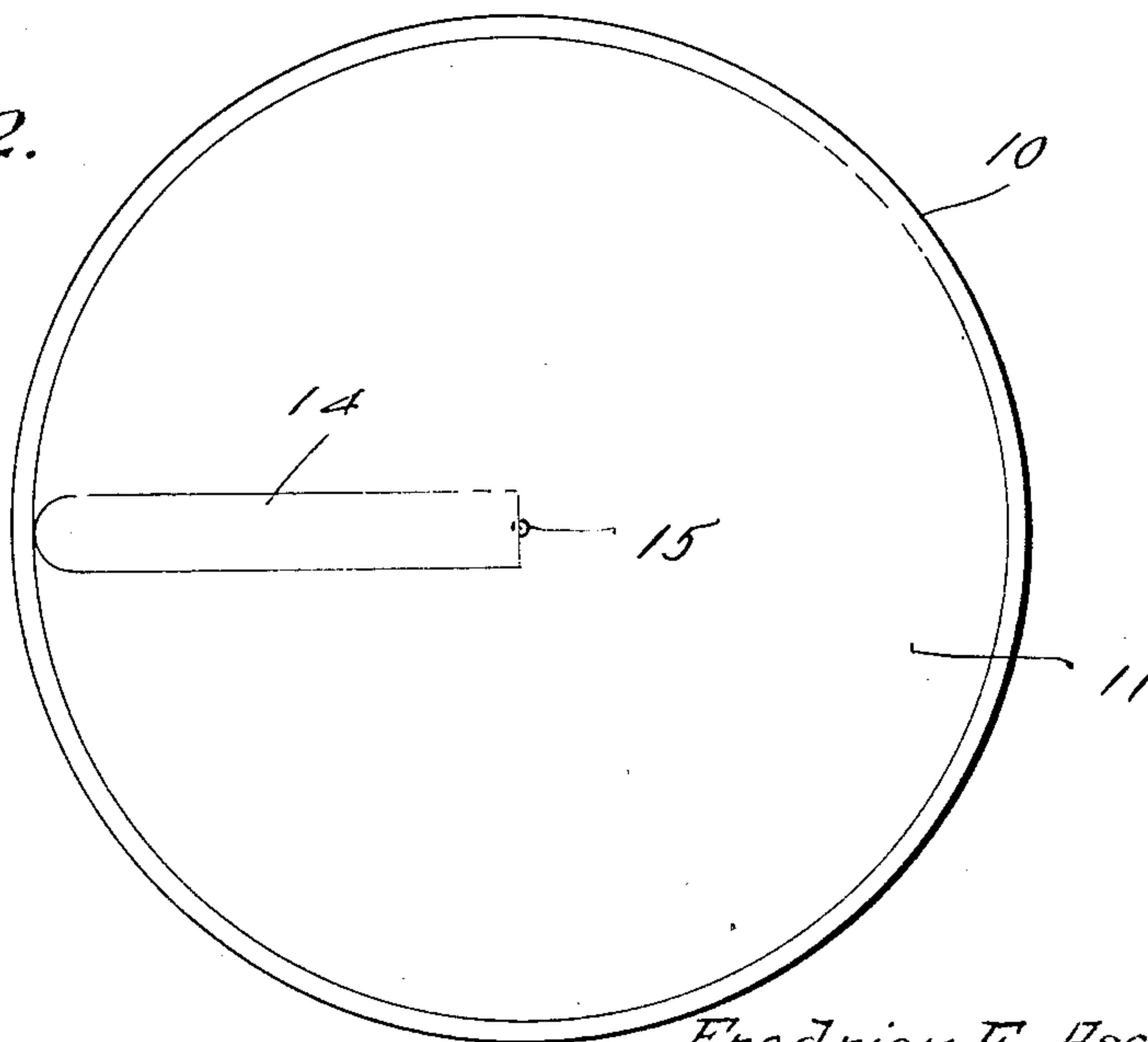


Fig. 2.



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LIQUID TIMER

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1 Claim. (Cl. 58—1)

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My invention relates to timing devices and more particularly to timing devices to indicate or measure the passing of a predetermined time by the passage of water in the form of drops through a small hole from one compartment into another.

The object of my invention is to provide a timer of the character indicated above, which is made from a transparent material, and divided in an upper and a lower compartment, the upper compartment containing water and having a small hole in its bottom, through which the water will drip into the lower compartment, the amount of water being such that all of it will pass into the lower compartment in a predetermined time.

Another object of my invention is to provide a timer of the character defined above, which contains a boat or the like in its lower compartment, adapted to float on top or in the water accumulating in said compartment and thereby attracting the attention of a child to the passage of the time allotted to the performance of a certain task, such as washing, dressing or the like.

Other objects of my invention may appear in the following specification describing it with reference to the accompanying drawing illustrating a preferred embodiment of my invention.

It is however to be understood, that my invention is not to be limited or restricted to the exact construction and combination of parts described in the specification and shown in the drawing, but that such changes and modifications can be made, which fall within the scope of the claim appended hereto.

In the drawing:

Figure 1 is a side elevational view of the timer according to my invention, partly shown in section, and

Figure 2 is a top view of the timer shown in Figure 1.

The timer forming the subject matter of my invention has a spherical body or housing 10 preferably made of glass and in the shape of a hollow ball. It is however to be understood, that the body 10 can be made from any other suitable translucent material such as diaphanous plastic, Lucite or the like, and that it can be given any other suitable and desired shape.

A horizontally and diametrically extending wall 11 is formed integrally with the outside wall of the glass ball 10 and extends across the inside of the body 10. This horizontal wall forms the bottom of the upper compartment 12 and the

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ceiling of the lower compartment 13 of the body 10. It has a small opening therein adjacent the wall of the body 10, and a curved glass tube 14 is secured at one end in this opening, the tube 14 extending along the inner surface of the body or housing 10 substantially to a location at which the diameter of said housing perpendicular to said wall or partition 11 intersects the wall of said housing in the compartment 12.

In the bottom 11 one or more small holes 15 are arranged and the upper compartment 12 contains an amount of water or other suitable fluid, adapted to pass through the small hole 15 in the form of drops into the lower compartment 13. The amount of water is such, that the passage thereof from the upper into the lower compartment will consume a predetermined time, such as 5, 10 or 15 minutes or any other desired length of time. The tube 14 constitutes a passage for returning the water from the normally lower to the normally upper compartment when the position of said housing is inverted. In the lower compartment a small replica of a boat 16 is arranged of a material and construction to float in upright position on the water accumulating in this compartment. While a replica of a boat has been shown in the drawing and described in this specification, a replica of any other suitable object, which is adapted to float or swim, may be used. The intention of this arrangement is to attract the attention of a child to the passage of the time indicated by the dripping of the water into the lower compartment. Obviously, the floating toy 16 may also be used as an indicator to indicate intermediate divisions of the period of time required for all of the liquid to pass from the upper to the lower compartment. For instance, the time it takes for enough water to enter the lower compartment to actually float the boat or toy 16 could represent a time subdivision.

When all the water is in the lower compartment 13, and the timer is to be used again, the body is turned so that the water flows through the passage 17 in the tube 14 into the upper compartment 12. The air in the upper compartment is forced through the hole or holes 15 in the bottom 11. When the upper compartment is filled and the body is turned back into its upright position, the outlet opening of the tube 14 is located above the water, so that the water can not flow back through said tube, but that the air from the lower compartment can escape therethrough.

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A base 18 is provided on the body 10 to support it in such a position, that the bottom 11 of the upper compartment 12 extends horizontally.

Having described my invention I claim as new and desire to secure by Letters Patent:

A timing device comprising a hollow spherical housing of transparent material, a diametrical partition in said housing dividing the housing into two substantially equal compartments, said partition having therein one aperture located adjacent the wall of said housing and a second aperture smaller than said first aperture and spaced therefrom, a curved tube secured at one end in said one aperture and extending along the interior surface of the wall of said housing substantially to a location at which a diameter of said housing perpendicular to said partition intersects the wall of said housing in one of said compartments, a liquid level indicator in the other of said compartments, a body of liquid in said housing, and a base on said housing arranged to support said housing on a substantially horizontal surface with said partition substantially horizontal and with said one com-

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partment above and said other compartment below said partition, the quantity of liquid in said housing being such as to require a predetermined time to pass through said second aperture from the upper to the lower compartment and being quickly returnable through said tube from said other to said one compartment when said housing is inverted.

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