April 29, 1969 LE ROY B. EDWARDS 3,441,278

AMUSEMENT DEVICE

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Fig. 3.

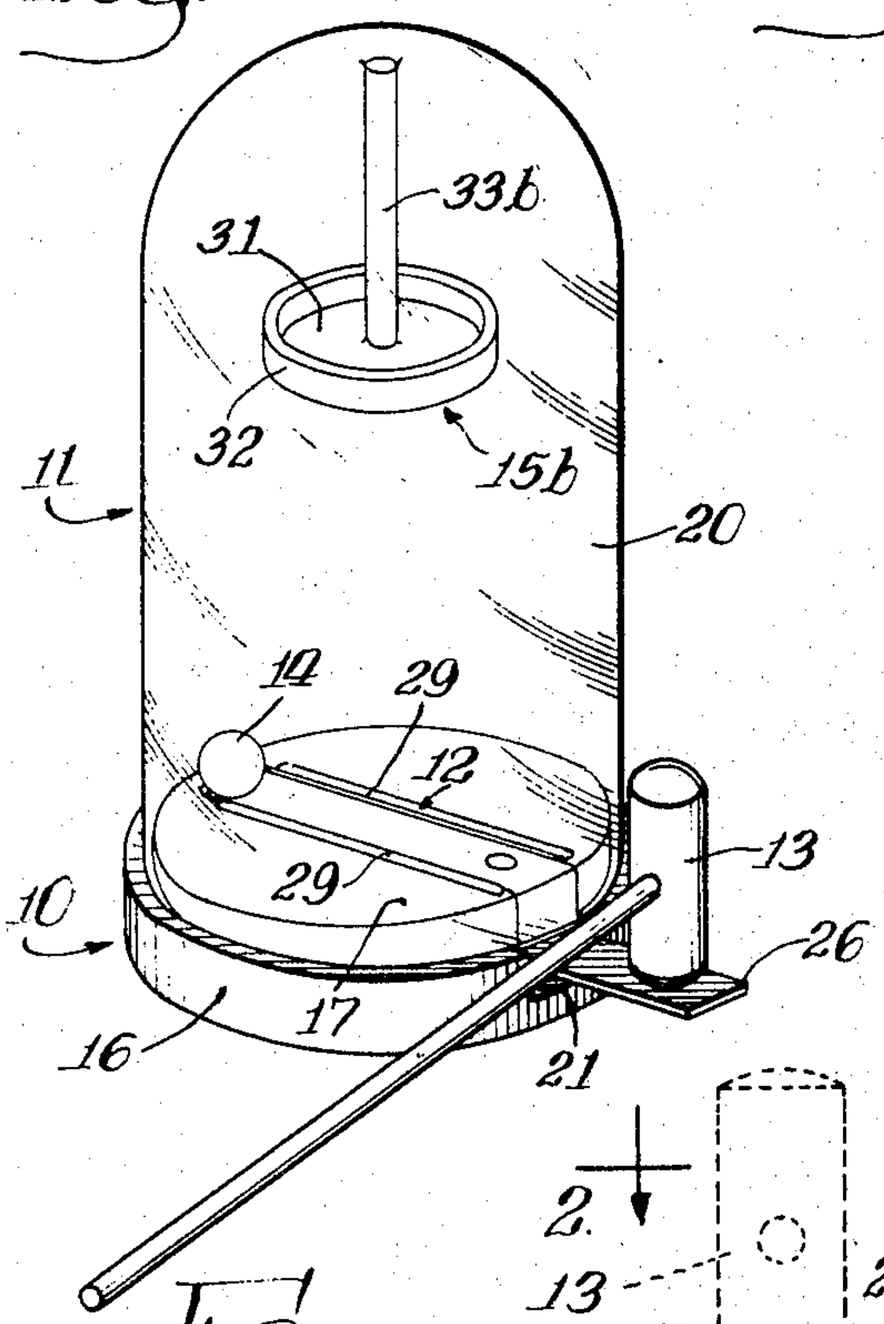


Fig. 1.

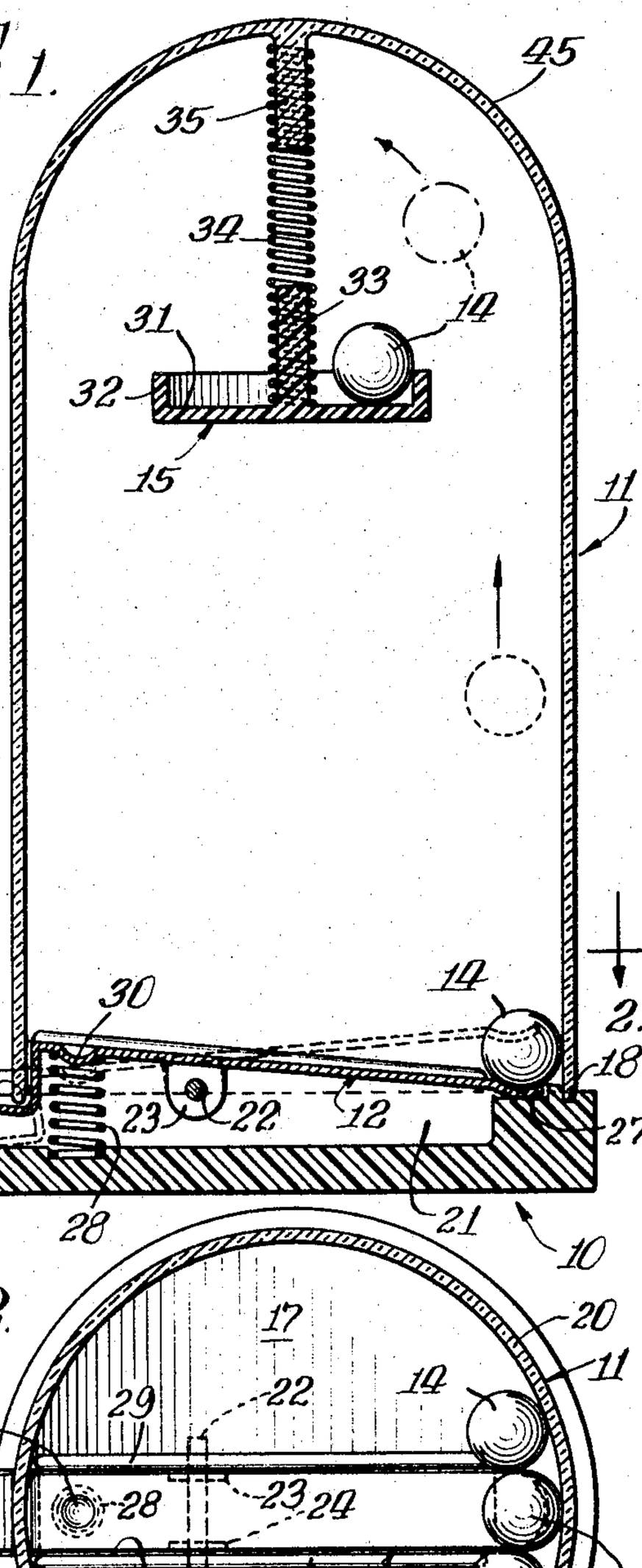


Fig. 4.

Fig. 5.

Fig. 2.

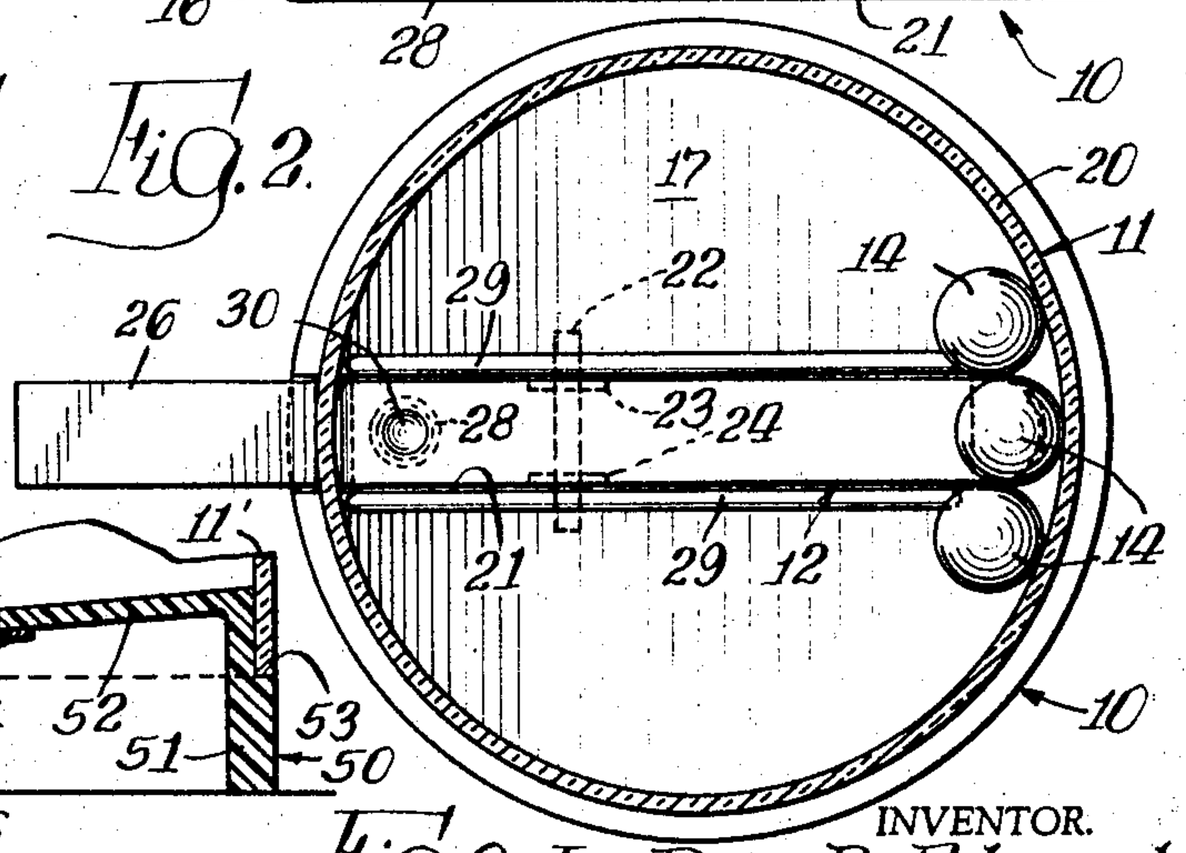


Fig. 6.

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AMUSEMENT DEVICE

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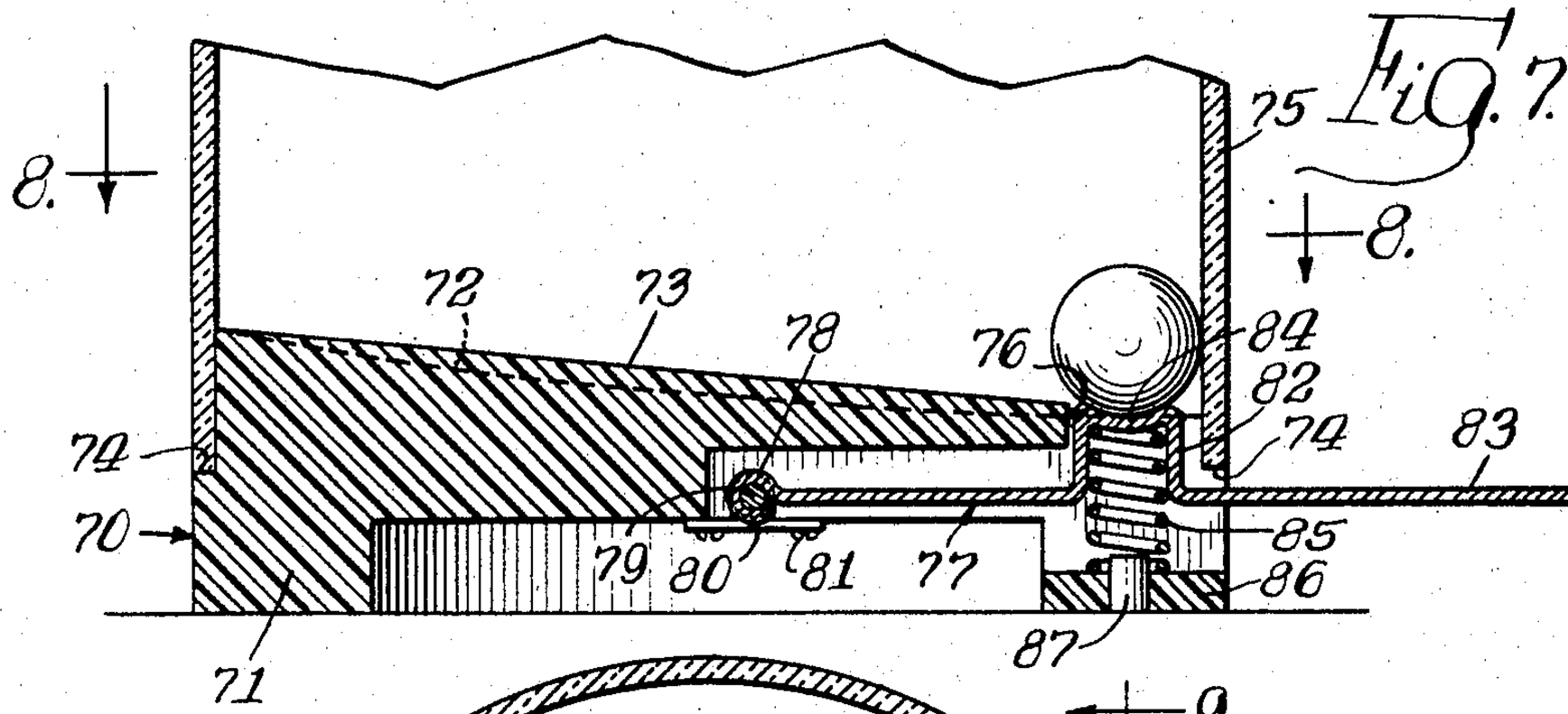


Fig. 7.

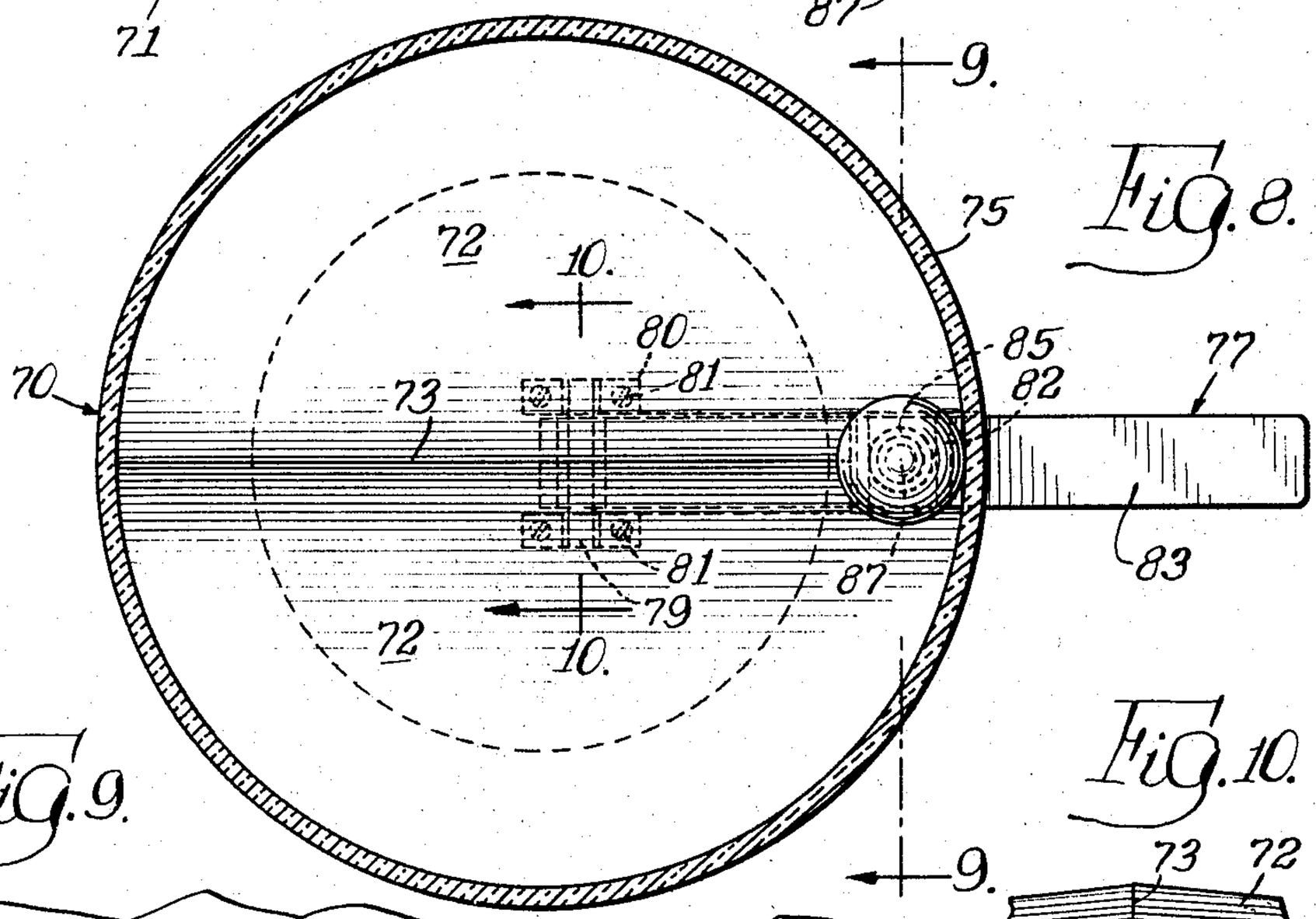


Fig. 8.

Fig. 9.

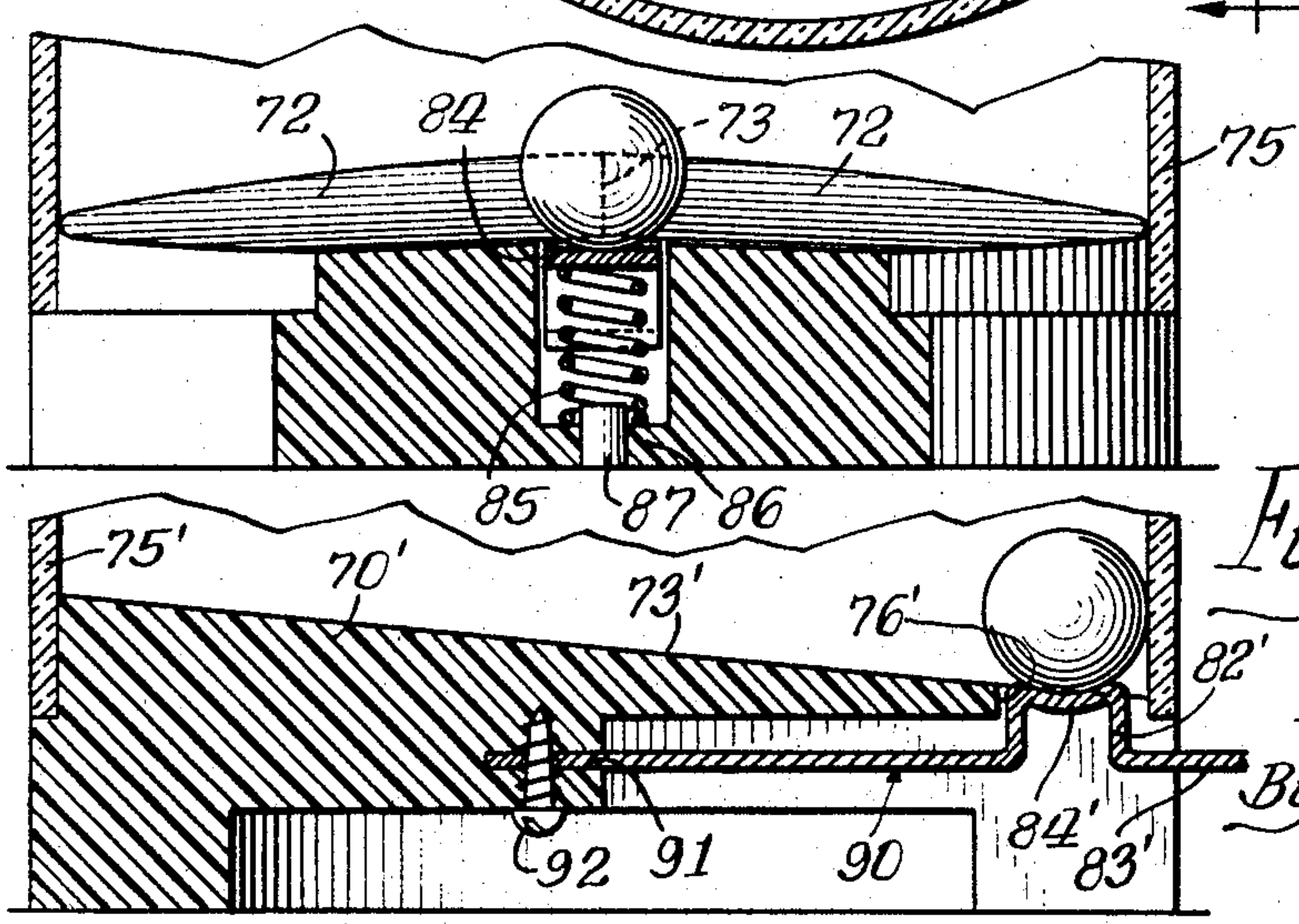


Fig. 10.

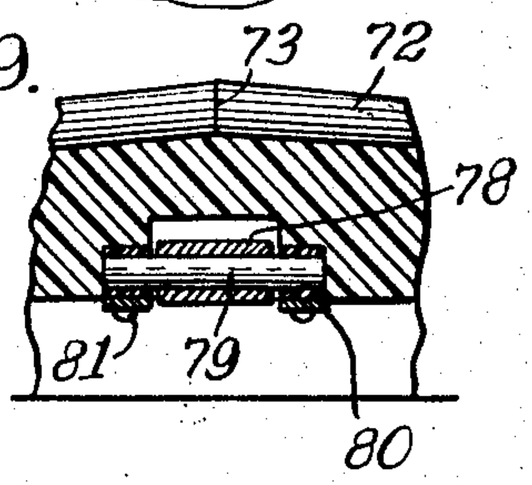


Fig. 11.

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AMUSEMENT DEVICE

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U.S. Cl. 273—101

7 Claims

ABSTRACT OF THE DISCLOSURE

A target, such as a bucket-like receptacle, is suspended from a transparent cover member which surrounds the target. The cover member is mounted on an inclined base which pivotally supports a projectile elevating lever. A projectile receiving seat is provided at one end of the lever which is disposed in a recess in the top surface of the base. Guide ridges on the base adjacent the lever divert projectiles from the lever except at the end which has the seat. The lever extends outward from the cover member and may be actuated by hand or by a mallet to throw projectiles toward the target.

This invention relates, in general, to amusement devices and, in particular, to a new and improved game of skill for the enjoyment of both young and old.

A general object of this invention is an improvement over prior type games of skill utilizing projectiles, such as marbles or the like, whereby people of all ages may be amused.

Briefly, my invention comprises a base having a transparent elongated cover means forming an enclosure with a springboard enclosed therein and having a target, such as a bucket-like or cup-like receptacle suspended from the top of the cover. The springboard extends outward of the enclosure and is adapted to be actuated by hand or by a mallet to catapult or throw marbles or the like upwardly off the springboard and to affect the target, if the operator is sufficiently skilled. The object is to utilize the receptacle as a target and to try and catapult as many marbles or the like as possible into the receptacle. Suitable penalties and the like for missing the target or rewards for being able to catapult the marble into the receptacle, all add to the enjoyment of the game.

In the preferred form of my invention, the target includes a bucket-like receptacle suspended by springs or by string or the like so as to swing within the enclosure. The displaceable target makes it more difficult to catapult the projectiles into the target receptacle and thus adds to the skill required and amusement to the operator and others.

Accordingly, a more particular object of my invention is a new and improved game of skill comprising means defining an enclosure with a bucket-like target receptacle into which is catapulted marbles or the like to amuse the operator and others.

Other and more particular objects of my invention will be apparent to those skilled in the art from the following description and drawings forming a part hereof and wherein:

FIGURE 1 is a sectional view of an embodiment of my invention showing its operation by a small mallet or the like;

FIGURE 2 is a sectional view taken along line **2—2** of FIGURE 1;

FIGURE 3 is a perspective view of my invention and including another embodiment of the target receptacle;

FIGURE 4 is a partial sectional view, on reduced scale, of another embodiment of the target receptacle of my invention;

FIGURE 5 is a partial vertical sectional view of another embodiment of the springboard of my invention;

FIGURE 6 is a partial bottom plan view of the springboard of FIGURE 5;

FIGURE 7 is a partial sectional view, on a larger scale, of another embodiment of the base and springboard of my invention;

FIGURE 8 is a sectional view of the embodiment of FIGURE 7 taken on the line **8—8** of FIGURE 7;

FIGURE 9 is a sectional view taken along line **9—9** of FIGURE 8;

FIGURE 10 is a partial sectional view taken along line **10—10** of FIGURE 8; and

FIGURE 11 is a sectional view of still another embodiment of the springboard of my invention.

Turning now to the drawings wherein like reference numerals refer to similar parts in the various views and in particular to FIGS. 1 and 3 thereof, it can be seen that my invention comprises a base of any suitable material, indicated by its entirety as **10**, having a transparent hollow substantially cylindrical cover means **11** of plastic material or the like, with a projectile elevating member, or lever, indicated in its entirety as **12**, affixed to the base **10** and extending outwardly of the cover so as to be actuated by a mallet **13** to catapult, elevate, or throw projectiles, such as marbles or the like, **14** into a target such as cup-like receptacle **15** disposed above and centrally inwardly of the cover member. A dome or hemispherical portion **45** integrally formed of the cover **11** gives a variety of paths to the mables **14** which strike it, depending on the angle of incidence. Preferably the target is suspended from the top of the hemispherical portion **45**.

As can be seen, if the lever **12** is hit by the mallet **13** or by hand, the marble **14** will be elevated or catapulted upwardly and if the operator is sufficiently skilled, it will land within the cup-like receptacle **15**.

Turning now to FIGURES 2 and 3 wherein one embodiment of my invention is shown in more detail, it can be seen that the base **10** comprises a relatively flat circular member **16** of any suitable material with an inclined surface **17** formed centrally and on the top side thereof for a purpose hereinafter to be described. The base **10** is further formed around the periphery of the top of the base, surrounding the inclined surface **17**, with a groove **18** to receive the cover **11**, to form enclosure **20**. A groove **21** is formed diametrically of the base and extends transversely of the highest part and the lowest part of inclined plane **17**. Embedded or otherwise received in the sidewalls of groove **21** is a pin-like member **22** which forms a pivot for the lever **12**.

Lever **12** is of slightly less width than the groove **21** and has tabs or extensions **23** and **24** extending downwardly therefrom with suitable apertures to receive the pin **22** and further has a downwardly extending portion **25** adjacent the groove **18** and an outwardly extending arm **26** extending beyond the cover **11** which may be actuated by the mallet **13** or by hand. As can be seen in FIG. 1 of the drawings, when the lever is hit sufficiently hard by the mallet or by hand, it will take a position as shown in the dotted lines, the groove **21** being of sufficient depth to permit the rotation of the lever about the pivot point **22**.

The other end of the lever, opposite the outwardly extending portion **26**, is formed with a cup-like portion or projectile receiving seat **27** complementary to the periphery of any one or more of the projectiles in the enclosure, as shown in FIG. 2. A spring **28**, resting on the base **16**, and against the underside of the lever between the portion **26** and the pin member **22**, is suitably biased to return the lever **12** to its original position after having been hit by the mallet. A downwardly extending dimple

30 is suitably formed in the lever so as to assure the positioning of the spring against lateral movement.

As hereinbefore explained, the hand or the mallet 13 will cause the springboard to catapult one of the marbles 14 into the air within the enclosure, the object being to attempt to have the marble fall into the target or bucket-like receptacle 15. The inclined surface 17 is so arranged to collect the marbles or the like in the cup-like portion 27.

This device contemplates the playing of a plurality of projectiles in sequence. Thus it is desirable that the projectiles feed one at a time to the cup-like portion 27 and be so positioned relative to each other that when one is shot another will readily take its place. For this purpose guide ridges 29 are formed on the inclined surface 17, one each on either side, adjacent the groove 21, except near the loading end of the lever. That is, the ends of the ridges are so disposed that they will permit the extra balls to be fed in laterally from either side toward the shooting position at the end of the lever. The height and width of the ridges 29 prevents spare balls from overhanging the lever. Thus the ridges 29 paralleling the lever on the surface 17 and the inclination of the surface 17, cooperate to feed the marbles individually into the cup-like portion 27. In a modified embodiment, the guide ridges could be formed on the lever.

It is also desirable that when one projectile is shot, the adjacent projectiles do not interfere with the lever's movement. Preferably, the marbles are slightly wider than the lever, thus a marble which is contained in the cup-like portion 27 will hold other marbles, waiting to be catapulted, sufficiently to either side so as not to let the rising lever strike them. The throw or upward movement of the lever is limited so as to prevent another ball from getting underneath it before it reaches its lowered position and is located to receive another marble into means 27.

Bucket-like receptacle or target 15 in the preferred form of my invention is swingably suspended from the top of the hemispherical portion 45 of the enclosure as shown in FIGS. 1 and 4. One form of target (FIG. 1) comprises a flat base 31 having an upwardly extending cylindrical flange 32 and a centrally located integral, upwardly extending arm 33. A spring 34, encompassing the arm 33, is suspended from the inner side of the hemispherical portion 45 of the cover 11 by a downwardly extending bar 35 suitably affixed to the top of the enclosure and arranged to receive the spring 34 about its periphery. In the embodiment shown, bar 35 is integral with the inner side of the hemispherical portion 45. In this manner, the bucket-like receptacle 15 can swing about in the enclosure; the spring 34 being selected to permit this swinging action. The target 15 is further adapted to being unbalanced when partially loaded; thus more skill is required to deposit a projectile in the target.

Turning now to FIG. 4, the receptacle 15*a* is substantially the same as described in connection with FIG. 1 except that the upwardly extending arm 33 of FIG. 1 is omitted and the cylindrical flange 32*a* is apertured as at 36*a* in at least three places so as to receive strings or wires 37*a* (two shown) to suspend the receptacle 15*a*, yet permitting a swinging action. The other end of strings 37*a* are received in an eyelet 38*a* suitably affixed to the top of the enclosure as by the integral bolt 39*a* and the nut 40*a*. Thus target 15*a* is swingable and displaceable, and subject to being unbalanced when partially loaded. The wires 37*a* are adapted to block a projectile, thus requiring added skill to deposit a projectile in the target.

In the embodiment shown in FIG. 3, the arm 33*b* is similar to that shown in FIG. 1 but is elongated and attached directly to the inside of the enclosure so as to rigidly suspend the receptacle 15*b* within the enclosure. In this disclosure, the arm 33*b* is shown integral with the cover 11.

Turning now to the embodiment in FIG. 5, a base 50 comprises a circular flange member 51 supporting an integral inclined surface 52 on the top side thereof. The base 50 is further formed around the periphery at the top of the base and surrounding the inclined surface 52 with a reduced diameter and shoulder 53 to receive the cover 11′ and to form the enclosure.

The inclined surface 52 has an aperture 54 formed in the lowest part thereof. A projectile elevating member, such as springboard 55 is attached diametrically inwardly from the aperture 54 to the bottom surface of the inclined surface 52 by fasteners 56. The springboard 55 is preferably formed of resilient material and the fasteners 56 form a pivot for the springboard 55. The springboard 55 has an upwardly extending portion 57 adapted to extend upwardly through the aperture 54. The springboard 55 has an outwardly extending arm 58 extending beyond the cover 11′ and integrally attached to the upwardly extending portion 57. The outwardly extending arm 58 may be actuated by a mallet or by hand, as previously explained. A cup-like portion 59 is formed in the upwardly extending portion 57 complementary to the periphery of the marbles or the like.

A pad 61 is formed integrally of the base 50 in a spaced apart relationship relatively below the aperture 54. A spring 60 rests in a seat 62 formed in the pad 61 and against the underside of the upwardly extending portion 57. The spring 60 is suitably biased to return the spring board 55 to its original position after being sprung by the user's finger or a mallet. The inclined surface 52 is arranged to collect the projectiles adjacent the aperture 54 for seating in the cup-like portion 59. From here the projectiles are catapulted toward the target as aforesaid.

In the embodiment shown in FIG. 7, the base 70 comprises a relatively flat annular ring 71 of any suitable material, with a slanting, outwardly-tapering surface 72. From a ridge line 73 which extends transversely of the highest part to the lowest part of the surface 72, the surface 72 tapers outwardly and downwardly as shown in FIGS. 9 and 10.

The base 70 is further formed with a reduced diameter and a shoulder 74 around the periphery thereof and surrounding the surface 72 to receive a cover 75 to form an enclosure. The surface 72 has an aperture 76 formed therein adjacent the lowest part of the ridge line 73.

A springboard 77 is attached to the under surface of the base 70 directly below the ridge line 73 and in a spaced apart relationship therefrom. The springboard 77 has a hinge portion 78 adapted to receive a pin-like member 79 which is journaled through the hinge portion 78 and a hinge means 80. The hinge means 80 is secured to the base 70 by fasteners 81. The hinge means 80, portion 78, and member 79 form a pivot for the springboard 77. The springboard 77 has an upwardly extending portion 82 adapted to extend upwardly through the aperture 76. An outwardly extending arm 83 is formed of the springboard 77 to extend outwardly beyond the cover 75. The arm 83 is attached integrally to the upwardly extending portion 82. The springboard 77 may be actuated by mallet or by hand striking of the extended arm 83.

A cup-like portion 84 is formed in the upper surface of upwardly extending portion 82, which cup-like portion is complementary to the periphery of the marbles or the like which are catapulted at the target.

A spring 85, resting on a mount 86, formed integrally of the base 70, and against the underside of the springboard below the cup-like portion 84, is suitably biased to return the springboard 77 to its original pivotal position after having been hit. A post 87 extending upwardly from the mount 86 assures the positioning of the spring 85 against lateral movement.

Similarly, as before, the hand or the mallet causes the springboard to catapult one of the marbles into the air within the enclosure. The slanting, outwardly-tapering surface 72 is arranged to collect the marbles or the like at the lowest portion thereof so that one such marble

may rest upon the cup-like portion **84** to be projected to attempt to have the marble fall into the target.

In FIG. 11, a resilient springboard **90** pivotally mounts to a base **70'** having an aperture **91** formed therein and adapted to receive one end of the board **90** and provide a pivot therefor. A fastener **92** prevents outward radial movement of the springboard **90** from the aperture **91**, by extending through a suitable hole in the board **90**. An upwardly extending portion **82'** of the sprinbroad **90** extends upwardly through an aperture **76'** formed adjacent the lowest point of the the base at the surface of the ridge line **73'**. The resilient springboard **90** has an outwardly extending arm **83'** extending beyond the cover **75'** which may be actuated by mallet or by hand. The arm **83'** extends outwardly and is integrally attached to the upwardly extending portion **82'**. The resilience of the springboard **90**, which pivots about the aperture **91**, returns the board **90** to its original position after being hit. A cup-like portion **84'** is formed in the upper surface of the upwardly extending portion and is complementary to the periphery of the marbles or the like.

In operation of my device, any number of projectiles, such as marbles or the like, may be contained within the enclosure and as hereinbefore explained, the base is so constructed and arranged as to allow the marbles to be collected near the cup-like portion of the springboard. After each operation of the springboard, whereby a marble is catapulted upwardly, another marble will be received into the cup-like portion, unless, of course, all are contained within the target or receptacle. As can be understood, the game can be played by any number of people of any age, at any one time.

While my invention has been described with respect to certain specific embodiments thereof, it is to be understood that this is by way of illustration and not by way of limitation and the scope of my invention is defined solely by the appended claims which should be construed as broadly as the prior art will permit.

I claim:

1. In an amusement device having a target, a cover member surrounding the target, and means below the cover member for elevating at least one projectile upwardly toward the target, the improvement comprising means suspending the target from the cover member generally centrally thereof and in spaced relation to the top of the cover member, said projectile elevating means comprising a projectile elevating lever having a projectile receiving seat adjacent one end and a base having an inclined upper surface which is adapted to direct a projectile to the seat of the projectile elevating lever, said lever being pivotally supported by the base and disposed in a recess in the top surface of the base but with its upper surface substantially conforming to the upper surface of the base, together with guide means carried by the base adjacent the lever and adapted to divert projectiles from said lever except at the end which has the seat.

2. The amusement device of claim **1** wherein the means

for suspending the target is movable whereby the target is movable.

3. The amusement device of claim **2** wherein the target is suspended by a spring which is adapted to permit displacement of the target laterally and vertically.

4. The amusement device of claim **1** wherein the target is generally cup-like and opens upwardly and the cover member is generally dome shaped.

5. The amusement device of claim **1** wherein the projectiles are spherical and have a diameter greater than the width of the lever at the end having the seat.

6. The amusement device of claim **1** wherein the guide means are ridges paralleling the lever and of such dimensions relative to the diameter of the projectiles that the projectiles cannot overhang the lever.

7. In an amusement device having an upwardly facing target, a cover member having an upwardly converging continuous surface surrounding the target, and means below the cover member for elevating at least one projectile upwardly toward the target, the improvement comprising means swingably suspending the target from the cover member generally centrally thereof and in spaced relation to the top of the cover member whereby the target is equally movable laterally in all directions, said projectile elevating means comprising a projectile elevating lever having a projectile receiving seat adjacent one end and a base having an inclined upper surface and an opening thereon, said lever being pivotally supported by the base with its projectile receiving seat substantially level with the upper surface of said base, and said inclined upper surface being adapted to divert projectiles from said lever except at the end which has the seat.

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U.S. Cl. X.R.

124—7; 273—105