July 14, 1925. 1,546,209

T. B. CURTISS

AMUSEMENT APPARATUS

Original Filed Oct. 6, 1921 3 Sheets-Sheet 1

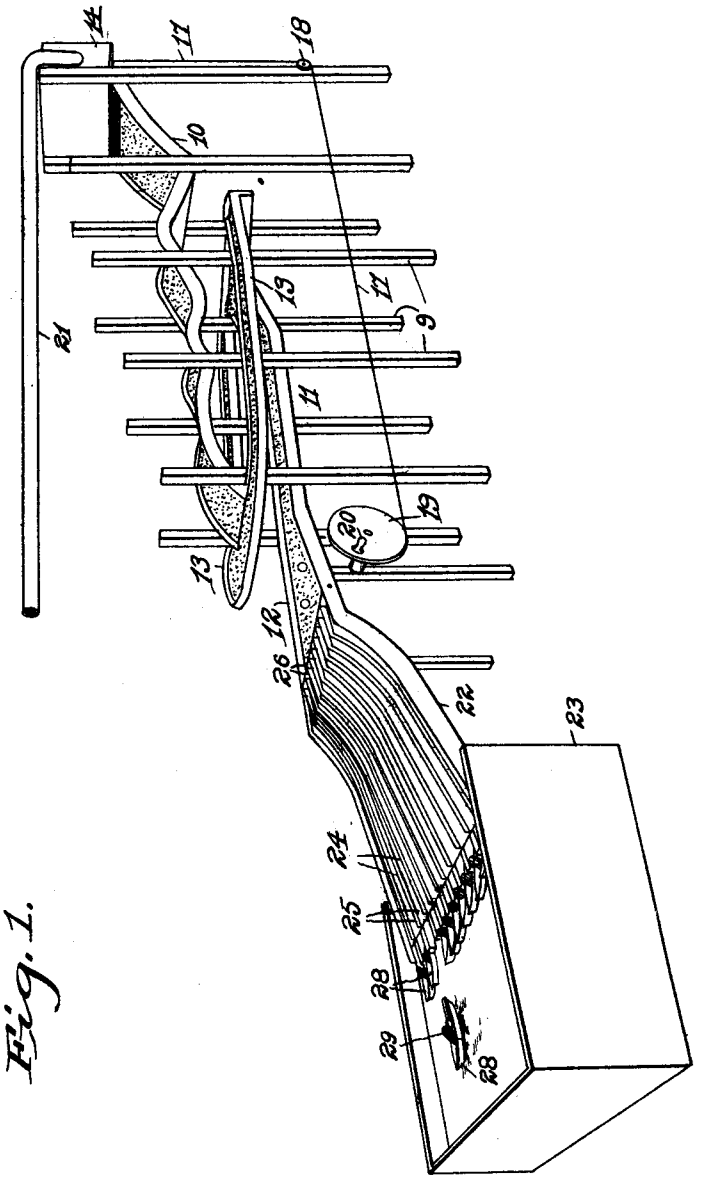



Fig. 1.

Inventor.

Theodore B. Curtiss,

By

Attorney

July 14, 1925. 1,546,209

T. B. CURTISS

AMUSEMENT APPARATUS

Original Filed Oct. 6, 1921 3 Sheets-Sheet 2

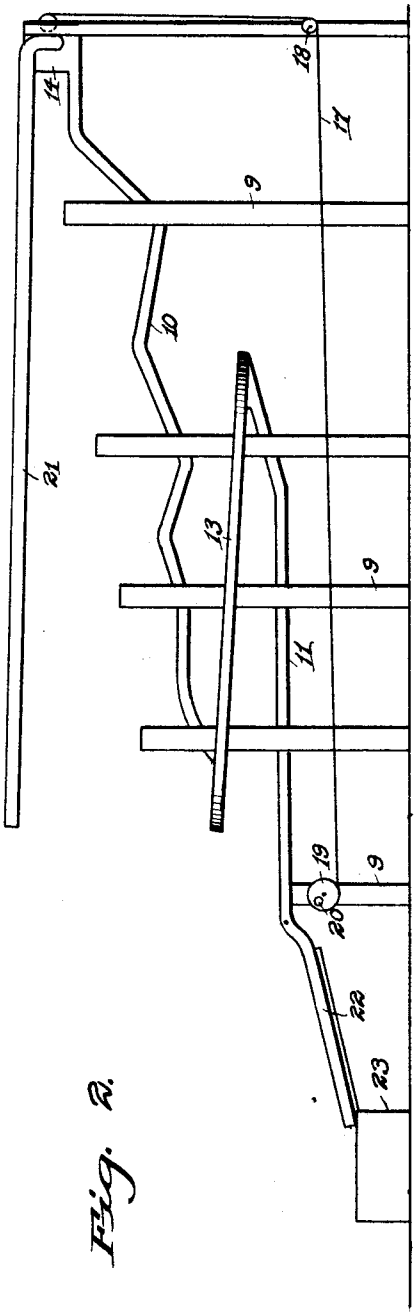



Fig. 2.

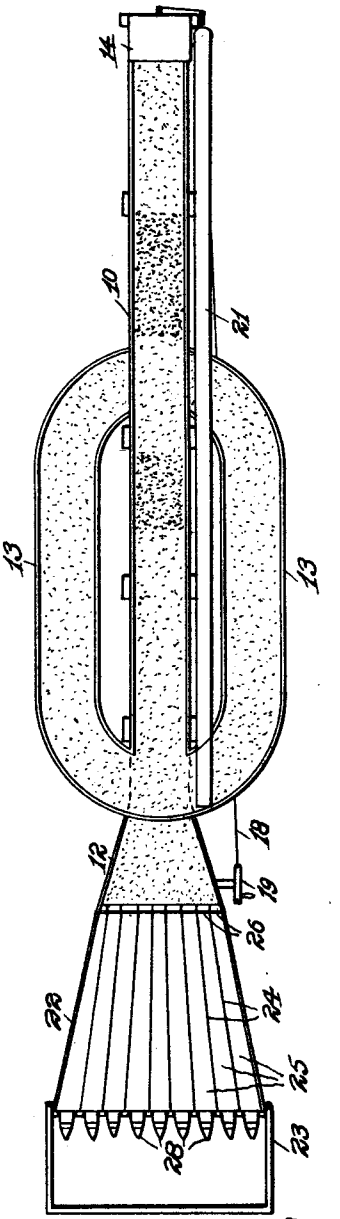



Fig. 3.

Inventor,
Theodore B. Curtiss,

By

Attorney

July 14, 1925. 1,546,209

T. B. CURTISS

AMUSEMENT APPARATUS

Original Filed Oct. 6, 1921 3 Sheets-Sheet 3

Fig. 4.

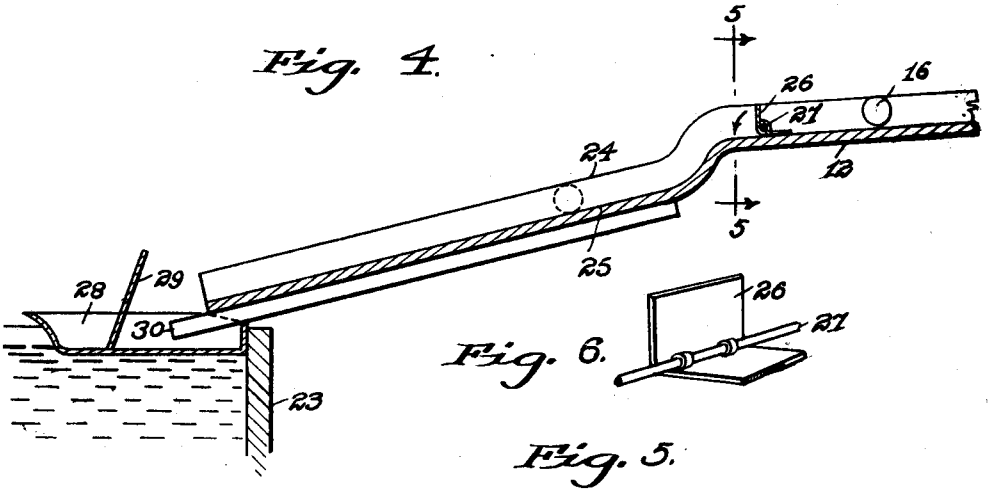



Fig. 6.




Fig. 5.

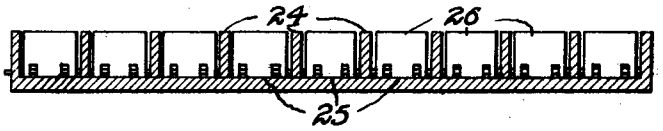



Fig. 8.

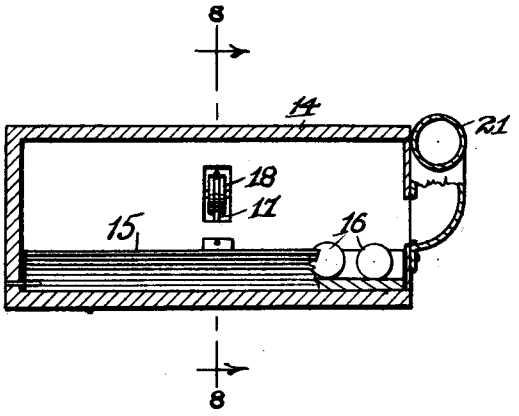
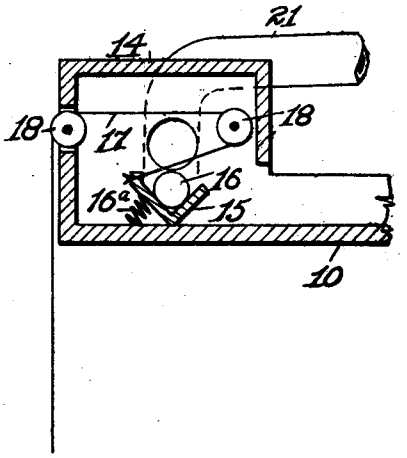



Fig. 7.




Inventor,

Theodore B. Curtiss,

By

Attorney

Patented July 14, 1925. 1,546,209

# UNITED STATES PATENT OFFICE.

THEODORE B. CURTISS, OF PITTSFIELD, MASSACHUSETTS, ASSIGNOR TO CONSTAN JOHNSON, OF PITTSFIELD, MASSACHUSETTS.

## AMUSEMENT APPARATUS.

Application filed October 6, 1921, Serial No. 505,879. Renewed May 25, 1925.

*To all whom it may concern:*

Be it known that I, THEODORE B. CURTISS, a citizen of the United States, residing at Pittsfield, in the county of Berkshire and State of Massachusetts, have invented certain new and useful Improvements in Amusement Apparatus, of which the following is a specification.

The present invention relates to amusement apparatus, and the object is to provide a novel structure having features of uncertainty of a unique character that will create and hold the interests of those engaged therewith, as well as those who may watch it.

The preferred embodiment of the invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a perspective view of the same,

Figure 2 is a side elevation,

Figure 3 is a top plan view,

Figure 4 is a detail longitudinal sectional view through the delivery end of the runway,

Figure 5 is a cross sectional view on the line 5—5 of Figure 4,

Figure 6 is a perspective view of one of the controlling gates,

Figure 7 is a cross sectional view through the upper or starting end of the runway,

Figure 8 is a cross sectional view on the line 8—8 of Figure 7.

In the disclosure a suitable frame work is employed, which includes standards 9 carrying a runway. This runway has an upper section 10 that extends in a generally downwardly inclined relation and preferably consists of a series of successive hills and dales. Under-lying the upper section 10 is a lower section 11 that also inclines downwardly and has its lower end portion flared as shown as 12. The lower end of the upper section 10 and the upper end of the lower section 11 are connected by reversely inclined branches 13 that divide at the discharge end of the upper section 10 and extend on opposite sides of the overlapped portions of the upper and lower sections, the lower ends of the branches 13 coming together at the upper end of the lower section 11.

At the upper end of the runway is a housing 14 in which is located a tilting trough 15 arranged transversely of the runway and preferably extending the entire width thereof. The trough is normally held in upright or receiving position, as shown in Figure 8 by means of a spring 16ª, and connected to this trough is an operating cable 17 that passes over suitable guide pulleys 18 and extends to a drum 19 journaled at one side of the flared portion 12 of the lower runway section 11. The drum has a suitable handle 20 and by turning the same it will be evident that the trough will be tilted. A tube 21, connected to one end of the housing 14, has its connected end directly above the trough 15, and said tube extends to a position convenient to the operator of the drum 19. It will therefore be evident that if balls or other rolling objects, as 16, are placed in the tube, they will pass into the trough and assume positions side by side therein.

The flared portion 12 of the lower section 11 has a steeply inclined terminal 22 that overhangs a liquid container in the form of an angular tank 23, and said inclined end 22 is subdivided by a plurality of longitudinal partitions 24 into a series of receiving and delivering mouths or channels 25. At the inlet end of said mouths or channels are located angle plates 26 journaled on a pivot rod 27, one plate being provided for each channel and being so constructed that they may turn, as indicated in Figure 4.

Located in the tank 23 are floating receivers, preferably in the form of boats 28 that are adapted to be placed side by side at the discharge ends of the mouths or channels 25, said boats having stop plates 29 mounted therein and being normally held in place by the projecting ends of bars 30 that hook over the sterns of the said boats, as illustrated in Figure 4.

In operating this apparatus the players each select an individual ball 16. These balls may be differently numbered or colored, so that each may be readily identified. The operator introduces the balls through the tube 21 and they will gravitate as already explained into the trough 15. Then when the drum 19 is turned the trough is tilted and the balls are simultaneously discharged into the upper end of the runway. They will pass down the upper section, thence around and down either of the branches 13, and after passing over the

lower section 11 each will pass into one of the individual troughs or mouths 25. They will thence be delivered into the boats and the force of the impact will cause said boats to be driven from their moorings and float out into the tank. The boat that is farthest propelled may be considered the winner. When a ball enters the channel, the gate 26 which is in the position illustrated in Figure 4 will be turned over by the passage of such ball and the opposite blade thus elevated, consequently prohibiting the entrance of another ball into that particular channel.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art, without further description and it will be understood that various changes in the size, shape, proportion and minor details of construction, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. In amusement apparatus, the combination with a plurality of freely and bodily and independently movable receiving devices, of means for confining said devices within a predetermined area, a plurality of independent actuating bodies, and means for causing the actuating bodies to be separately delivered to the receiving devices and by their impact thereagainst to effect the independent bodily movement of the latter over the area in which they are confined.

2. In amusement apparatus, the combination with an area having a goal, of a plurality of receiving devices freely and independently movable over said areas, a plurality of independent actuating bodies, directing means for said bodies, and means for positioning the receiving devices in position to receive the bodies and by the impact thereof cause their movements towards the goal.

3. In amusement apparatus, the combination with an area having a goal, of a plurality of receiving devices freely and independently movable over said area, a plurality of downwardly inclined runways, balls that gravitate down the runways, and means for positioning the receiving devices at the discharge ends of the runways to receive the impact of the balls and be thereby driven toward the goal.

4. In amusement apparatus, the combination with a water tank, and buoyant devices that float in the water in said tank, of means for directing objects into said devices and by the impact thereof cause the objects to travel in the tank.

5. In amusement apparatus, the combination with a water tank having a goal and buoyant devices that float in the water in said tank, of means for positioning the devices at a starting point with respect to the goal, and means for projecting objects into the devices and thereby causing them to move toward the goal.

6. In amusement apparatus, the combination with a water tank having a goal and buoyant devices that float in the water in said tank, of means for positioning the devices at a starting point with respect to the goal, and runways for rolling objects having delivery ends that direct such objects into the buoyant devices and by their impact thereagainst cause such buoyant devices to traverse the tank towards the goal.

7. In amusement apparatus, the combination with a runway having a plurality of individual outlet mouths for the reception of bodies passing over the runway, means for automatically stopping the entrance of a second body into a mouth after a body has already entered the same, a series of bodily movable devices that receive the bodies passing through the mouths and being moved by the impact thereof, and means for positioning the devices to respectively receive the bodies from the mouths.

8. In amusement apparatus, the combination with a runway having a plurality of individual mouths for the reception of bodies passing over the runway, means at the entrance of each mouth and operated by the entrance of a body thereinto for barring a succeeding body from such mouth, a series of bodily movable devices that receive the bodies passing through the mouths and being moved by the impact thereof, and means for positioning the devices to respectively receive the bodies from the mouths.

9. Amusement apparatus comprising a downwardly extending runway, means at the upper end thereof for simultaneously releasing a plurality of rolling elements, individual discharge mouths at the lower end of the runway, automatic means for barring an element from the runway after the entrance of an element thereto, a liquid container at the discharge ends of the mouths, and floating receivers in the container into which the rolling elements pass from the said mouths.

10. In amusement apparatus, the combination with a runway comprising downwardly inclined sections located at different elevations, and intermediate sections each connected to the lower end of the upper section and the upper end of the lower section and extending at opposite sides of the same, of means for delivering rolling bodies to the upper section, and freely and bodily movable means for receiving the bodies from the lower section and being moved by the impact of said bodies received thereby.

11. In amusement apparatus, the combi-

nation with a common runway for a plurality of balls, of a plurality of outlet mouths for the runway for receiving individual balls, a container at the discharge ends of the mouths, a plurality of freely and bodily movable devices in said containers adapted to receive and be moved by the impact of the balls, and means for positioning said devices respectively at the mouths of the runway.

In testimony whereof I affix my signature in the presence of two witnesses.

THEODORE B. CURTISS.

Witnesses:

BEATRICE S. MACDONALD,

JOSEPH WARD LEWIS.