No. 862,042. PATENTED JULY 30, 1907.

G. E. WILLIAMS.

AMUSEMENT DEVICE.

APPLICATION FILED OCT. 16, 1906.

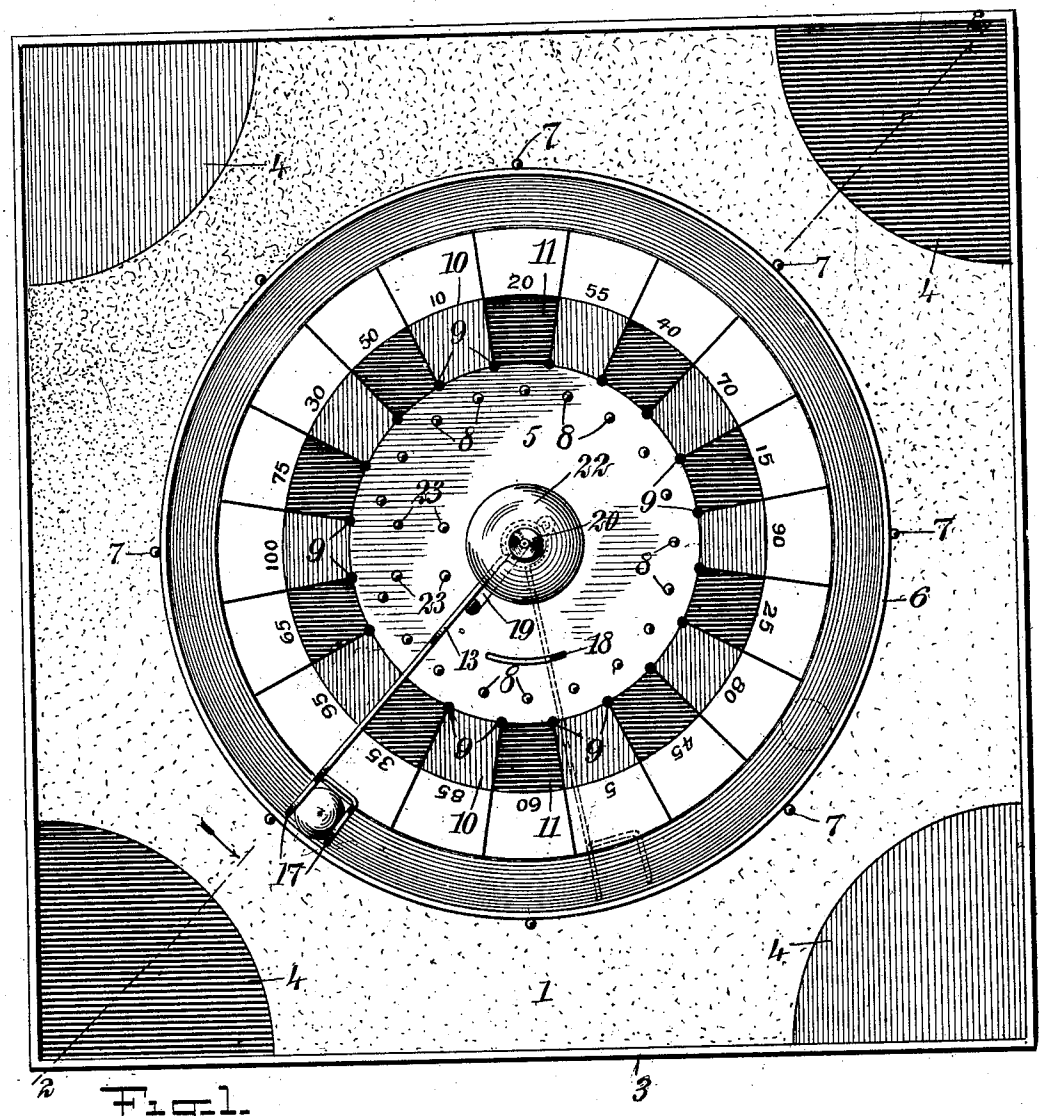


Fig. 1.

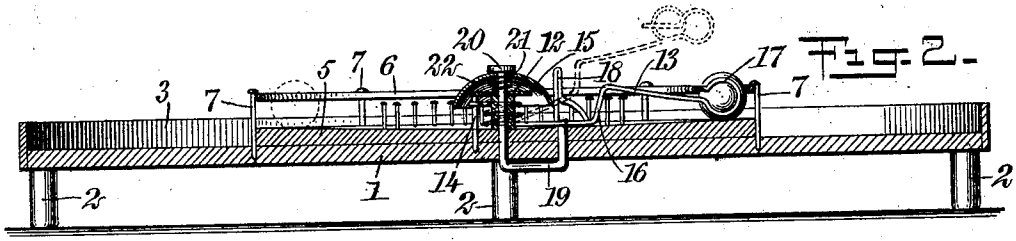


Fig. 2.

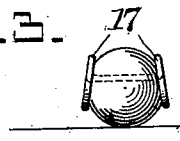


Fig. 3.

WITNESSES

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AMUSEMENT DEVICE.

No. 862,042. Specification of Letters Patent. Patented July 30, 1907.

Application filed October 16, 1906. Serial No. 339,178.

To all whom it may concern:

Be it known that I, GEORGE EMMIT WILLIAMS, a citizen of the United States, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Amusement Device, of which the following is a full, clear, and exact description.

This invention is an improved device designed as a parlor amusement, one embodiment of which consists of a square board having an upwardly-projecting border or flange at its outer edge, and a disk with a slightly concave upper face fixed at its center. The disk is provided at a suitable distance from its center with two concentric rows of pins, the pins of one row being in staggered relation to those of the other, and surrounded by a number of divisions preferably alternating in color and with different numerical values. The disk is further provided with a rail surrounding its circumference and a bell at its center, the latter having a path leading to it through the pins and adapted to be rung by a marble or other sphere discharged in a novel manner as hereinafter disclosed.

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

Figure 1 is a plan of the device complete; Fig. 2 is a central, vertical section on the line 2—2 of Fig. 1, looking in the direction of the arrow, and Fig. 3 is an end elevation of the receiving means for the marble or other sphere.

The invention embodies in its construction a square board 1 preferably supported at its four corners on suitable legs 2, and surrounded at its outer edge by an upwardly-projecting border or flange 3, each corner of the board being laid off in sectors 4 alternating in color.

Fixed at the center of the board is a disk 5 having its upper face slightly concave and surrounded at its circumference by a rail 6 supported by nails or other devices 7. A suitable distance from the center of the disk two concentric rows of upright pins 8 and 9 are arranged in staggered relation to each other, the pins composing the outer row 9 being placed at the corners of divisions 10 and 11, preferably of different colors alternating with each other. The dividing lines of these divisions are made up of radial lines and concentric circles as shown, and each is given a different numerical value; or if desired, these divisions might be provided with fortunes or other data.

The center of the disk has an apertured post 12 projecting therefrom, about which is spirally wound the inner end of a radial arm 13, providing it with a spring which is fixedly held at one end by means of a pin 14, said pin carrying at its upper end an apertured plate 15 registering with and seated upon the post 12. The arm 13 has an offset 16 at an intermediate point of its length and is bent at its outer end, which is adjacent to the rail 6, into two spaced eyes 17 for receiving a marble or other sphere therebetween. The arm 13 is preferably constructed of wire, as also a cam or wedge-shaped stop 18 fixed to the disk in its path. It is apparent from this construction on placing a sphere between the eyes 17 of the arm 13 and drawing the arm back against the tension of the spring and releasing it, the arm and sphere will be shot forward until the stop 18 is reached, which will act to withdraw the arm to the dotted position shown in Fig. 2, thereby releasing the sphere. The sphere will hug the rail 6 by reason of its centrifugal force, and will come to rest and settle in one of the divisions between two of the pins 9.

For automatically releasing the arm 13 from the center of the disk, is provided a trigger mechanism, consisting of a U-shaped member 19, one arm of which passes through the apertured post 12 and plate 15, where it is provided with a button 20, the other arm forming the trigger has a beveled extremity and passes through the disk a suitable distance from its center, where it is normally pressed to project thereabove, by a spring 21 interposed between the plate 15 and a bell 22 adjacent to the button 20. One of the divisions of the disk, preferably that one having the largest numerical value, has a path leading to the bell 22 which is outlined by pins 23. In the use of the trigger mechanism for automatically releasing the arm 13, said arm is drawn rearwardly until it is engaged behind the beveled extremity of the trigger. On now depressing the button 20, the sphere will be shot forward and released in the manner above stated.

Although I have described the construction as preferred in my improved device, in detail, it is evident that various immaterial changes may be made in the same; and I consider that I am entitled to such modifications as fall within the scope of the annexed claims.

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

1. An amusement device comprising a disk, two concentric rows of pins arranged in staggered relation projecting from the upper face of the disk, divisions alternating in color surrounding said pins, the pins composing said outer row of pins being at corners of the divisions, a radial arm having a spring at its inner end fixed at the center of the disk, and means carried by the opposite and outer end of the arm for receiving a sphere, for the purpose described.

2. An amusement device comprising a disk, an arm having means for receiving a sphere near the periphery of the disk, two rows of pins arranged in staggered relation projecting upwardly from the face of the disk, a bell carried

at the center of the disk, a path leading through said rows of pins to the bell, and means for causing said arm and sphere to be forcibly projected forward, for the purpose described.

3. An amusement device comprising a disk, a radial arm projecting from the center of the disk, means at the outer end of the arm, consisting of two spaced eyes, for receiving a sphere, means for causing the arm to forcibly project the sphere, and means for releasing the sphere from the eyes.

4. An amusement device comprising a square board having the corners thereof divided into sectors alternating in color, an upwardly-projecting flange surrounding the edges of the board, a disk fixed at the center of the board having a concave upper face and surrounded by a rail, two concentric rows of pins projecting from the upper face of the disk in staggered relation, and means for forcibly projecting a sphere at the circumference of the disk.

5. An amusement device comprising a disk, a post projecting from the center of the disk, and an arm having its inner end spirally wound about the post and fixed to the disk, the outer end of said arm having means for receiving a sphere whereby when the sphere and arm are drawn rearwardly against the tension of the spiral end of the latter and released, the sphere is forcibly projected.

6. An amusement device comprising a disk having an apertured post at its center, a radial arm having its inner end spirally wound about the post and fixed to the disk, forming a spring, the outer end of said arm having means for receiving a sphere, means for holding the arm against the tension of the spring, and means passing through the disk and apertured post operable to release said holding means.

7. An amusement device comprising a disk, an arm having means for receiving a sphere near the circumference of the disk, means for causing the arm to forcibly project the sphere, and a wedge-shaped stop for arresting the arm and releasing it from the sphere.

8. An amusement device comprising a disk having its upper face slightly concave, a rail surrounding the circumference of the disk, a row of pins arranged concentrically with the disk and projecting from its upper face, a radial arm having a spring at its inner end fixed to the disk, means at its outer end adjacent to the rail for receiving a sphere, means operable at the center of the disk for releasing the arm, whereby the sphere is forcibly projected, and means in the path of the arm for arresting it and releasing the sphere therefrom.

9. An amusement device comprising a disk, an apertured post fixed at the center of the disk, an arm having means for receiving a sphere at its outer end, the inner end of said arm being spirally wound about the post, forming a spring fixed to the disk, a U-shaped member comprising two arms, one of which passes through the center of the disk and the apertured post, a button fixed to the outer end of the central arm, a bell adjacent to the button, the opposite arm of said U-shaped member also passing through the disk, a spring interposed between the bell and post for normally forcing the extremity of said opposite arm above the surface of the disk, whereby said radial arm may be drawn rearwardly against the tension of its spiral inner end and held in this position, and means in the path of said arm for disengaging it from the sphere after said button is depressed.

10. An amusement device comprising a disk, an arm adapted to project a sphere or the like passing from the center of the disk, a spring, means for holding the arm against the tension of the spring, and a device operable at the center of the disk for releasing said arm.

11. An amusement device comprising a disk, an arm adapted to project a sphere or the like fixed at the center of the disk, a spring, means for holding the arm against the tension of the spring, and a depressible button at the center of the disk operable to release said arm.

12. An amusement device comprising a disk, a post fixed at the center of the disk, an arm having its inner end spirally wound about the post, forming a spring which is fixed to the disk, and means at the outer end of the arm for holding a sphere or the like, for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE EMMIT WILLIAMS.

Witnesses:
WILLIAM F. KEIPER,
P. W. LEVERING.