

Jan. 16, 1940.

D. O. McLEAN

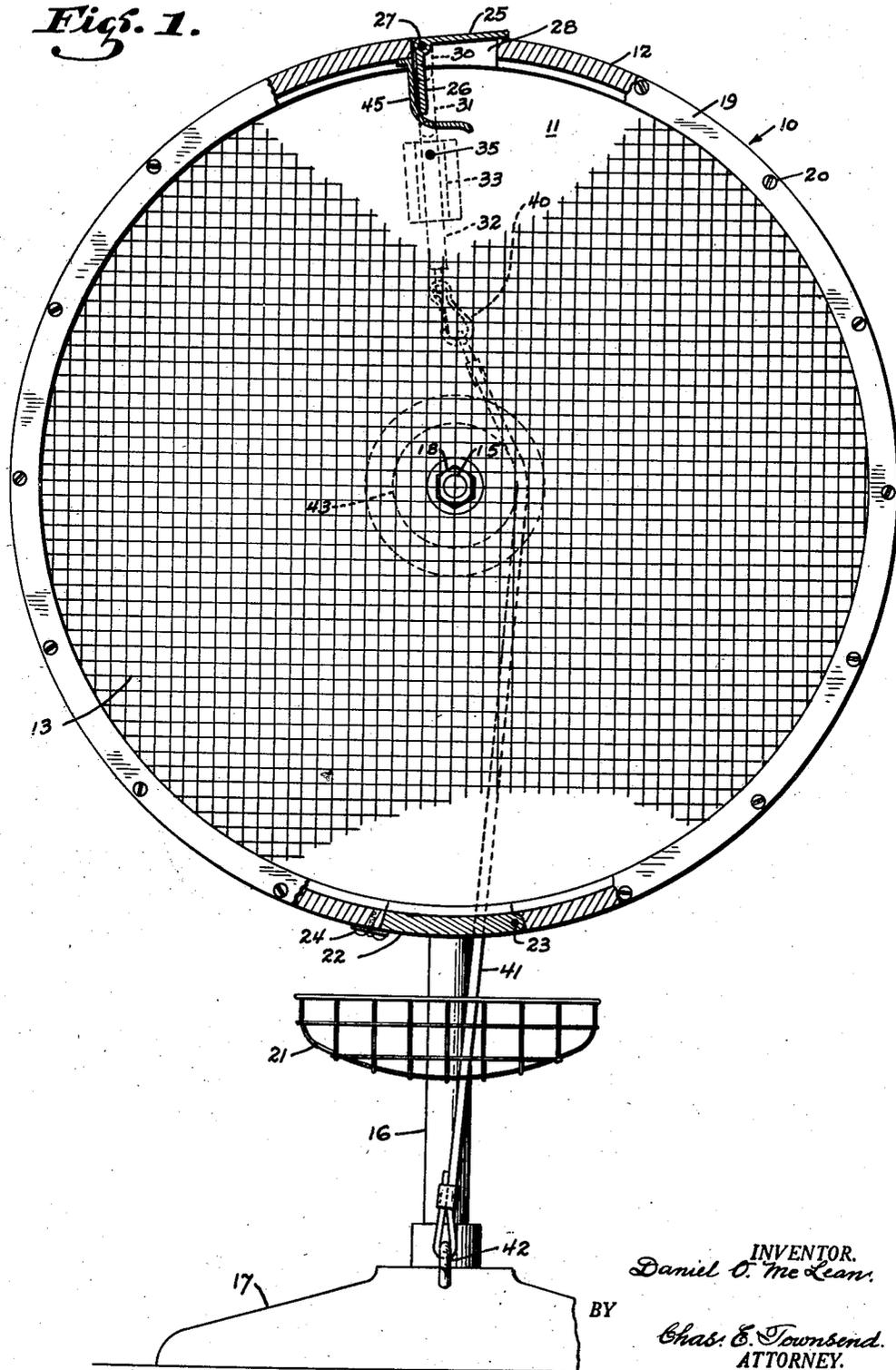
2,187,046

GAME WHEEL

Filed April 25, 1938

2 Sheets-Sheet 1

*Fig. 1.*



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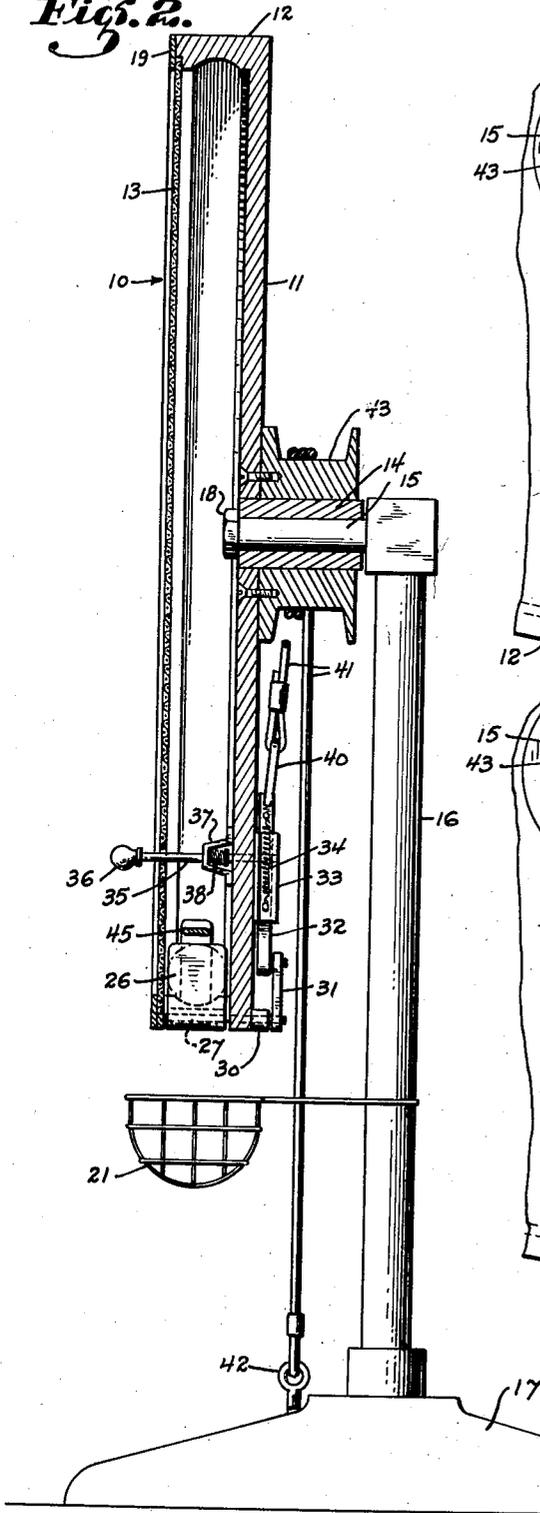
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GAME WHEEL

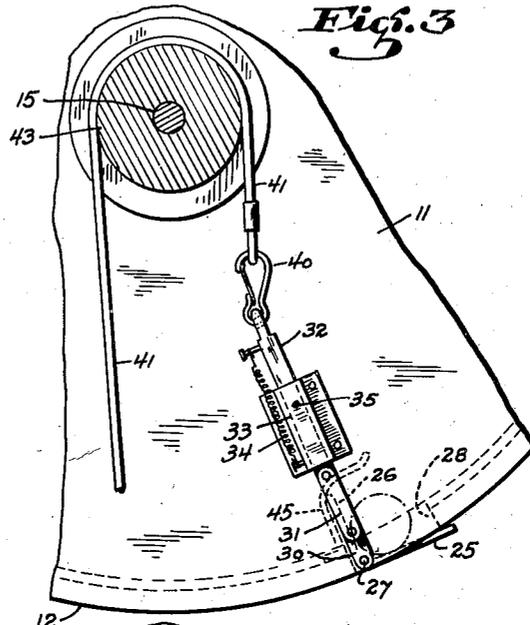
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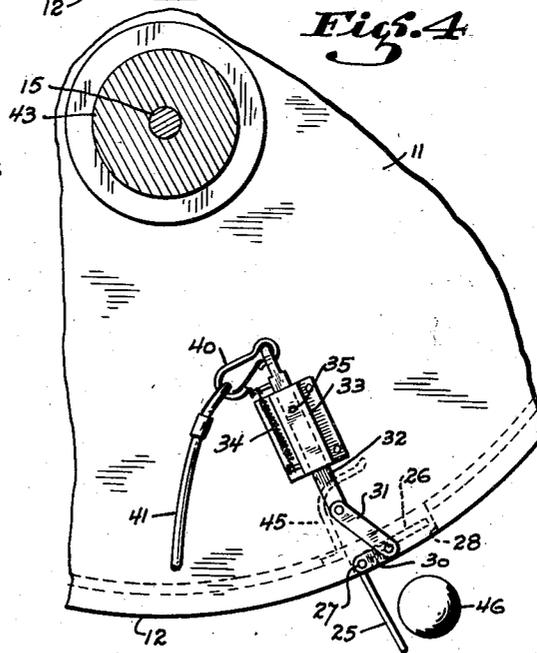
*Fig. 2.*



*Fig. 3*



*Fig. 4*



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## UNITED STATES PATENT OFFICE

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## GAME WHEEL

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Application April 25, 1938, Serial No. 204,121

4 Claims. (Cl. 273-144)

The present invention relates to game wheels, and particularly to a wheel to be used in making a selection in a game involving the element of chance.

Patent No. 2,077,124, issued April 13, 1937, to Arthur M. Miller and Daniel O. McLean for "Game apparatus" discloses a device designed for selecting winners of so-called "door prizes". The said device includes a plurality of rotatable disks or the like which, upon being rotated and coming to rest, effect a random selection from a great number of potential winning chances. The game wheel of the present invention is intended for use either in combination with such a device or by itself. When used in such a combination, the wheel may be mounted coaxially with the rotatable disks and may be employed to increase the number of prospective winners from which the selection is being made. This is a valuable asset in cases where prizes are being awarded by theaters, and particularly in cases where a group or chain of theaters are combined in the issuance of common prizes, and the number of chances to be selected from runs into thousands.

When used by itself, the gaming wheel of this invention may be mounted for rotation on an individual support. The invention will be described herein in the latter form, although it is not intended that it be limited to the particular form in which it is described.

It is the object of the present invention to provide a device for making a random selection from a large number of chances in a novel and interesting manner.

A further object of the invention is to provide a device in which the number to be selected from may be readily varied.

A further object of the invention is the provision of a device having means for containing a plurality of balls or like articles representing chances, the device being operable to eject at random one of said balls, the balls being suitably marked so that the ejected ball will represent the winning chance.

One form of the invention is illustrated in the accompanying drawings and described in detail in the following specification wherein further objects and advantages thereof are made apparent.

In the drawings—

Fig. 1 is a front elevation with parts shown in section of a game wheel embodying the present invention;

Fig. 2 is a vertical transverse section of the wheel illustrated in Fig. 1, but disposed in a different position;

Fig. 3 is a fragmentary view showing a portion of the wheel in rear elevation; and

Fig. 4 is a view similar to Fig. 3, illustrating a different position of the operating mechanism disclosed.

Referring to the drawings in detail, the game wheel of the present invention is illustrated as comprising a rotatable wheel or cage generally indicated at 10. The cage 10 consists principally of a disk-shaped back 11, preferably of wood or other solid material supporting a forwardly extending peripheral flange 12 to which is secured a transparent front 13, preferably in the form of wire mesh. The cage 10 is provided with a rearwardly extending bearing 14 to support the cage in a vertical position for rotation on a horizontally extending axle 15, which axle may in turn be suitably supported by a vertical post 16 rising from a base member 17. A nut 18 retains the cage against endwise displacement on the axle 15, and a ring 19 secured to the forward edge of the flange 12 by means of screws 20 retains the mesh 13 in place, but permits its removal for access to the nut 18.

The cage 10, as described above, is adapted to contain a plurality of small light balls. Hollow Celluloid balls such as ordinarily used in the game of "ping pong" have been found satisfactory for this purpose, and the size and type of ball used may be varied according to the size of the cage and the particular use to which the same is to be put. A door is provided for admitting the balls to the interior of the cage, and a trap is provided for singling out one of the balls contained thereby and ejecting it into suitable means for catching the ball, such, for example, as a net positioned below the cage, as illustrated at 21.

A door for admitting balls to the interior of the cage is illustrated at 22 in Fig. 1, and is preferably in the form of a section of the peripheral flange 12, hinged as at 23 so that it may be swung to an open position and normally retained in its closed position by a latch which may be in the form of a turn-button 24. When it is desired to load the cage with the proper number and kind of balls for a particular drawing or selection of a winner, it is rotated until the door 22 is disposed at the top, the door being then opened and the balls dropped through it. The trap for selecting and ejecting a single ball comprises an L-shaped door consisting of an outer panel 25 and an inner panel 26 fixed to a pin 27. This pin is pivotally mounted in a manner to permit the panels to swing from the closed position shown in Fig. 3 where the outer panel 25 closes an opening 28

in the periphery of the cage to the open position illustrated in Fig. 4 where the inner panel 26 closes said opening.

A crank 30 is fixed to the rear end of the pin 27 and is connected by a link 31 to a slide bolt 32. The slide bolt 32 is reciprocally mounted in a guide 33 fixed to the back of the cage and is normally urged to its advanced position illustrated in Fig. 4 by a spring 34. The slide bolt 32 is latched in its advanced position by a pin 35 (see Fig. 2) which projects through the mesh front and terminates in a knob 36 provided for manual actuation thereof. The pin 35 is supported in a bracket 37 secured to the forward face of the back 11 and a spring 38 interposed between the bracket, and a suitable collar on the pin 35 normally urges the pin rearwardly or toward the slide bolt 32. When the slide bolt is in its advanced position, the pin 35 registers with and projects into a suitable hole provided in the slide bolt for the purpose of latching it in its advanced position. The slide bolt 32 may be retracted by pulling upon its inner end, and in order to provide for its retraction and automatic release at a proper time, it is fitted with a snap 40 or other suitable means for connecting it to an elastic band 41, the other end of which is secured to a ring 42 on the base 17. Surrounding the bearing 14 and concentric with the rotatable cage 10 is a spool 43, the function of which will presently be described.

Prior to operation of the game wheel, its normal position is that illustrated in Fig. 1, it being assumed that it has been loaded with the proper number of balls. In this position the trap is disposed upwardly and is retained in its closed position by the elastic band which is under tension by reason of its connection with the ring 42 on the base, and which passes to one side of the spool 43. At this point the pin 35 has been withdrawn to permit closing of the trap by the tension of the elastic band. The cage is then rotated in a counter-clockwise direction, as viewed in Fig. 1, with the result that the elastic band is wound around the spool 43 as illustrated in Fig. 2, so that the tension of this band retains the trap in its closed position through the medium of the slide bolt 32, link 31 and crank 30. This rotation is preferably effected by an operator who gives the cage a spin by gripping it with his hand, at its edge, and pulling upon it, and the rotation should be sufficiently forceful to cause the elastic band to be wound from one to three times around the spool 43.

An angular plate 45 secured to the inner periphery of the cage is disposed behind and around the inner end of the plate 26 which forms a part of the trap, and upon rotation of the cage in a counter-clockwise direction, this plate, together with the general friction caused by rotation of the wheel, will agitate the balls contained therein, causing them to tumble and fall within the cage in a manner that insures a random selection and in a manner which demands attention, particularly where balls of various colors are used.

When the wheel has thus rotated to the limit permitted by the elasticity of the band, it comes to rest and then, due to the tension of the band, rotates in the opposite direction until the band is completely unwound from the spool 43. Until the band is unwound from the spool, a tension is retained on the slide bolt 32 sufficient to maintain the trap in closed position. During the unwinding movement which, as before stated, is clockwise, one of the balls contained in the

cage is caught in the trap and retained therein by the plate 45. The plate 45 is desirable, but not necessary to insure a single ball's being retained and ejected by the trap. When the clockwise movement results in the complete unwinding of the elastic band 41, the band leaves the spool 43 and becomes slack as the trap approaches the bottom of the wheel. Upon slacking of the tension of this band, the spring 34 advances the slide bolt 32 to the position illustrated in Fig. 4 so that a ball, such as illustrated at 46 in Fig. 4, which has been selected by the trap, is ejected and falls into the net 21 from which it may be picked up and identified. It is to be understood that the balls may be of various colors and may be suitably numbered or named to correspond to chances or groups of chances, or that they may bear any other desired indicia.

The space between the front and back walls of the cage, as illustrated herein, is slightly larger than the diameter of a ball, and as the device will operate successfully when more than half full of balls, a large number of balls may be accommodated. However, where an even greater number of balls is desired, this space may be enlarged to the diameter of two or more balls so that the capacity of the cage is practically unlimited.

The operation of the device as above described presents an interesting and attention-demanding spectacle. The rapid movement of the balls during rotation of the cage produces an arresting sound and a kaleidoscopic cascade visible to all spectators. The color and other identifying means applied to the balls is capable of almost unlimited variation, and the number of balls used may also be varied to accommodate different conditions.

The invention is not intended to be limited to the specific form shown herein and it is adapted to be used in many ways and for many different types of games involving the selection of one or more of a large number of chances or the like.

Having thus described my invention, what I claim and desire to secure by Letters Patent is—  
1. In a game wheel, a rotatable container for balls representing chances, means for selecting and ejecting a ball therefrom, means resiliently resisting rotation of the container in one direction whereby upon being rotated in that direction it will come to rest and then rotate in the opposite direction, and means for operating the selecting and ejecting mechanism during operation in said opposite direction.

2. A game wheel comprising a cylindrical container for balls representing chances, means supporting said container for rotation, a trap door arranged in the periphery of said container and adapted in its closed position to trap a ball within the container and upon being opened to eject said ball, means normally urging the trap door to its open position, an elastic band interposed between the trap door and the container-supporting means and retaining the trap door closed when it is under tension, and means rotatable with the container to engage and tension the said elastic band upon rotation of the container in one direction and to release said tension and permit opening of the door upon rotation in the opposite direction.

3. In a game wheel, a rotatable container for ball-like members, means for resiliently resisting rotation of said container in one direction for stopping such rotation and for causing it to rotate in the opposite direction, and means to eject one of said ball-like members from said

container during rotation in said opposite direction.

4. In a game wheel, a rotatable container for ball-like members, means on said container for selecting and ejecting a ball therefrom, resilient  
5 means preventing operation of the ejecting means and engaging the container to resist rotation

thereof, and means whereby rotation of the container in one direction will tension said resilient means to stop the container and rotate it in the opposite direction, and means whereby the tension will be reduced upon such opposite rotation  
5 and the ejecting means will operate.

DANIEL O. McLEAN.