(No Model.)

F. SANDERSON.

COIN ACTUATED GAMING DEVICE.

No. 496,211. Patented Apr. 25, 1893.

Fig. 1.

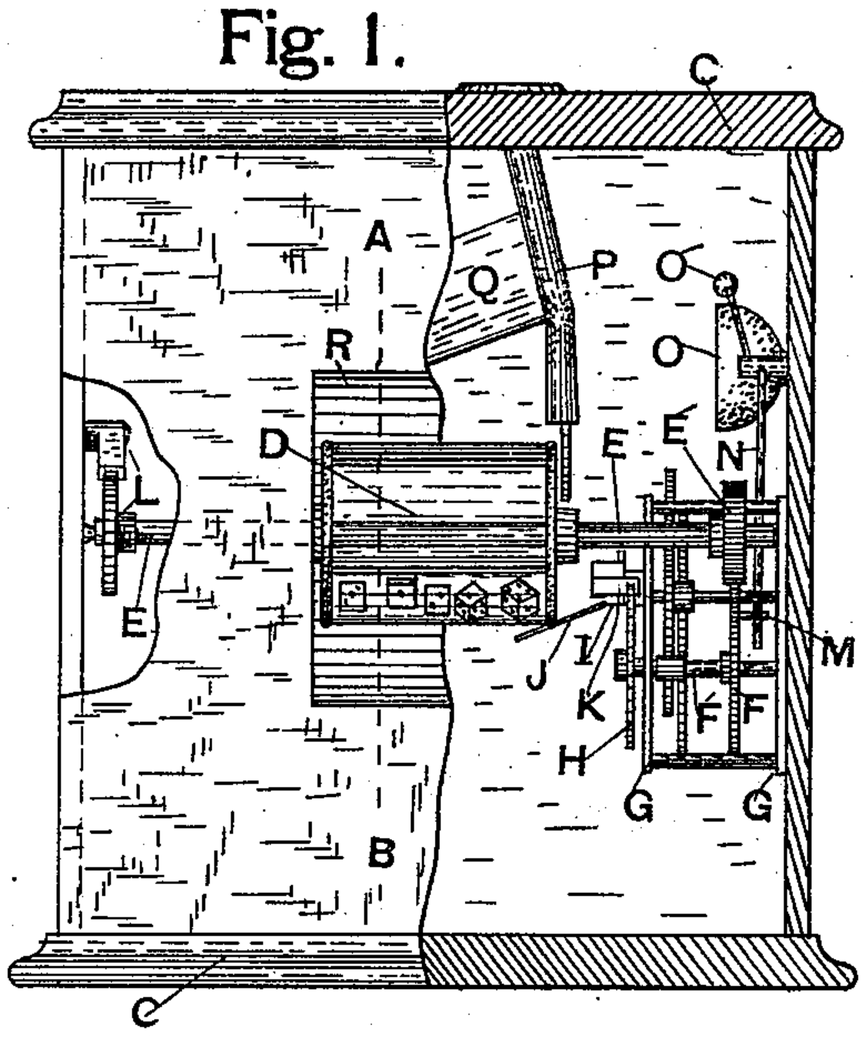


Fig. 2.

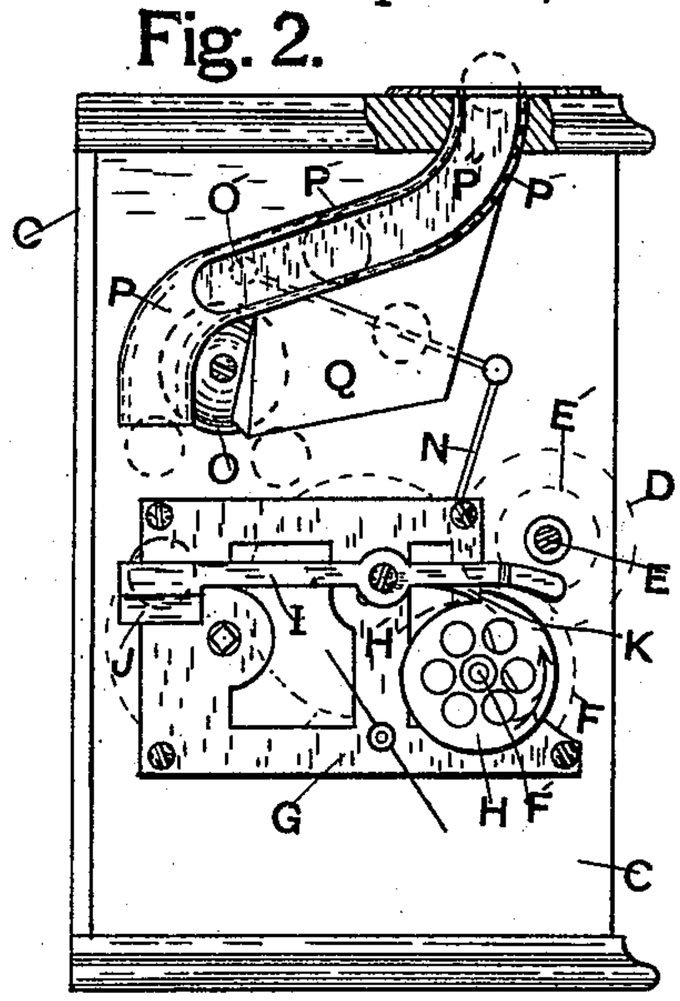


Fig. 3.

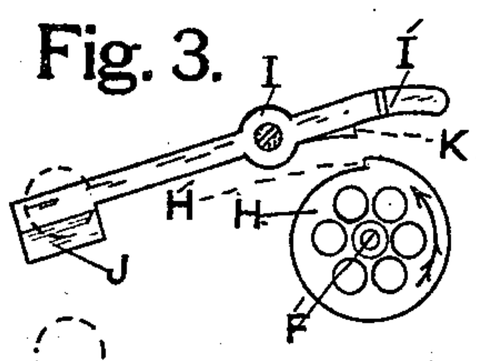


Fig. 4.

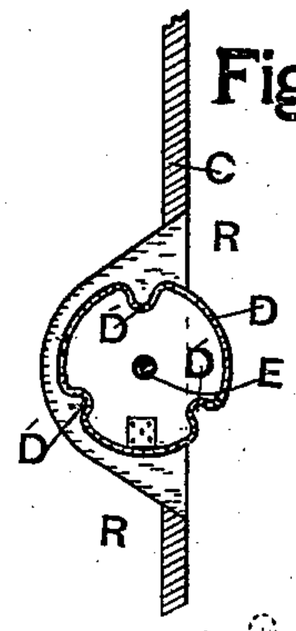


Fig. 6.

Fig. 5.

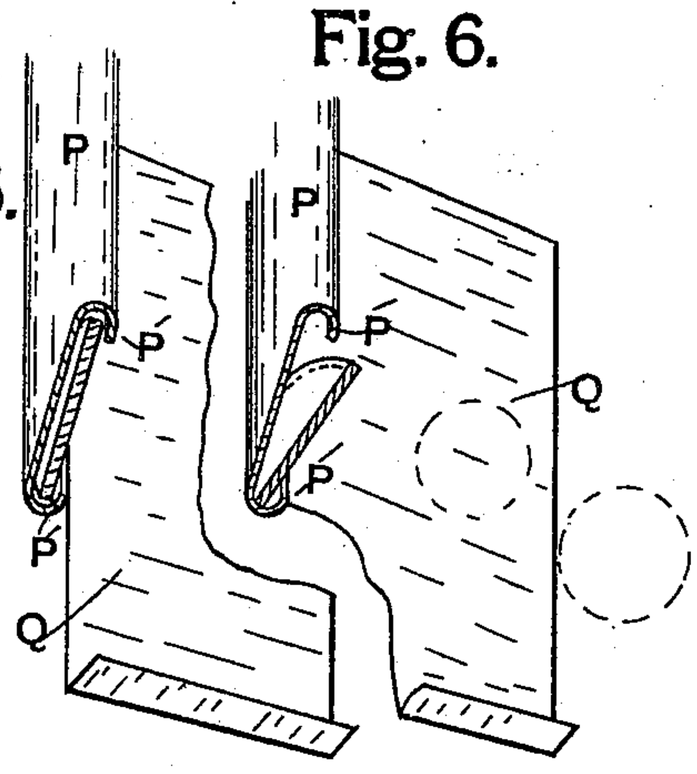
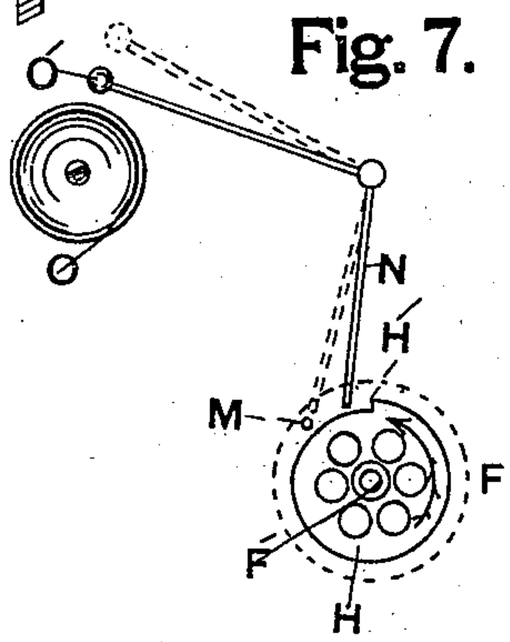


Fig. 7.



WITNESSES:
M. A. Taylor.
L. F. White.

INVENTOR:
Frederick Sanderson
By his atty. Oscar Snell

UNITED STATES PATENT OFFICE.

FREDERICK SANDERSON, OF CHICAGO, ILLINOIS.

COIN-ACTUATED GAMING DEVICE.

SPECIFICATION forming part of Letters Patent No. 496,211, dated April 25, 1893.

Application filed November 30, 1892. Serial No. 453,624. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK SANDERSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Coin-Actuated Gaming Device, of which the following is a specification.

My invention relates to means for shaking or changing the positions of dice but relates more particularly to means of this character which is first actuated by a coin and slot mechanism whereby the apparatus will serve the purpose of a savings bank as well as for playing games.

My object is to provide a substantially cylindrically shaped transparent drum to contain the dice, which drum is mounted upon a revoluble shaft, and the interior surface of the drum being provided with obstructions, which move with the drum, serve to tumble the dice around and thus effectually prevent any regular repetition of any certain side of the dice being turned upward.

Still another object is to provide a coin chute which is so arranged that round disks or coins below a certain diameter will fail to actuate the propelling mechanism of the apparatus which will be described hereinafter and is illustrated by the accompanying drawings, in which—

Figure 1 is a front elevation of the case of the apparatus with portions of the front thereof broken away to show the interior mechanism. Fig. 2 is a side elevation of the left hand side of Fig. 1 with the side of the case removed, also the dice shaking wheel and shaft thereof removed to show the arrangement of the starting and stopping mechanism. Fig. 3 is a detached view of the starting and stopping lever and the wheel upon which it contacts. Fig. 4 is a cross section on line A, B, Fig. 1, of the drum for shuffling the dice, the front of the case and the pocket in which the drum operates being shown in vertical section. Figs. 5 and 6 are, respectively perspective views of a portion of the coin slot, track and table for rejected coins. Fig. 7 is a detached elevation of a portion of the mechanism for ringing an alarm bell at the proper time.

Similar letters indicate like parts throughout the several views.

C is the case which incloses all the operative mechanism with the exception of the drum D in which the dice are shuffled.

E is a shaft upon which the drum D is mounted, this shaft being provided with bearings at each end which bearings are secured to the sides of the case.

At E′ is a cog wheel which is firmly secured to shaft E which cog wheel is geared to a cog wheel F which is connected to a train of gearing mounted in frame G which is to represent a spring motor of any ordinary construction. Cog wheel F of the spring motor is mounted upon a shaft F′, which shaft has bearings at each end in the frame of the spring motor. Shaft F projects at one end and firmly secured to it, at this point, is a ratchet wheel H, which has but one tooth or notch, which is plainly shown in Fig. 3, at H′.

Pivotally hung upon the side of the spring motor frame G is a lever I which has the end I′ made heavier than the end upon which is attached a sloping shelf J, which shelf projects outward from the lever as is shown in Fig. 1. Lever I is also provided with a pawl projection K which contacts with ratchet wheel H, the pawl projection engaging the notch H′, as will be shown. The drum D is cylindrical in shape and is held in position and caused to rotate in unison with shaft E by means of flanges at each end, which flanges are secured to the shaft in such a manner as to clamp the drum endwise. Drum D is usually made of glass or some similar transparent substance and this drum is provided with longitudinal ridges or protuberances D′ which have a place at the inside surface of the drum as is shown in the section, Fig. 4.

The position of the dice within the drum is shown by Figs. 1 and 4.

At L is a notched wheel and pawl, which prevents shaft E with drum D from revolving but in one direction.

In Fig. 1 is shown a pin M which is secured to the side of cog wheel F, and this pin is for the purpose of striking against the arm N of the alarm apparatus causing the hammer O′ to strike bell O when the cog wheel F and ratchet wheel H are revolving in the direction of the arrow on ratchet wheel H. It will be noticed that pin M is set a short distance ahead of notch H′ of ratchet H which is for

the purpose of causing the ratchet wheel to slow down by the increased duty of lifting the bell hammer imposed upon cog wheel F and thus avoid an injurious shock to the mechanism when pawl projection K contacts the face of notch H′ of ratchet wheel H in stopping the motion of the mechanism.

Figs. 5 and 6 show means for rejecting coins, for starting the machine, which coins are of smaller diameter than the ones intended to be used, should this be desired. The coin chute is shown by P″ and its top end reaches the top of the case, while the lower end has a position within the case most convenient for depositing the coins. Coin chute piece P, shown in Fig. 2, is substantially an **S** shape, and instead of being placed vertical is attached to the machine at an angle to a vertical line, so that a portion of the chute piece at the center of length leans over, as shown in Figs. 5 and 6, and a portion of one side of the chute piece is cut away, as shown, leaving a short flange P′ along the upper and lower margins thereof, as is plainly shown in Figs. 1, 5 and 6. It is obvious that should a coin of a diameter sufficient to fill almost the entire inside width of the slot be inserted, the coin would roll down the chute and be deposited within the case of the machine below the lower end of the chute, but should a coin of a size be introduced into the chute which coin is of too small a diameter to reach the top flange P′ of the chute the small coin would fall laterally out of the chute because of the inclination thereof, Fig. 6, and then slide down upon the downwardly inclined shelf Q, as shown in the dotted lines, Figs. 2 and 6, the coin falling into another portion of the bottom of the case from where the coins are delivered from the lower end of coin chute piece P.

In Fig. 1 is shown a portion of the left hand end of a pocket R which is formed around the rear and a greater portion of the ends of drum D, this pocket being shown in vertical section in Fig. 4, and is intended to serve as a protection for the drum, and at the same time not materially obstruct the view of the positions taken by the dice within the drum, after the dice have been shuffled. The concave portion as well as the ends of pocket R have a bright surface to reflect light upon the dice so that they will show plainly. By means of this pocket the drum D can be placed within the plane of the level of the front portion of the apparatus, if desired, without preventing a clear view of the dice.

The operation is very simple; a coin being slipped into the chute at the top of the case, if the coin is of the proper size, it will roll down through the chute and out at the lower end thereof, falling upon the inclined table J of lever I the impact of the coin tilting that end of the lever downward and lifting pawl projection K from notch H′ of ratchet wheel H, which wheel then being free will be revolved by the power of the spring motor together with the drum D, the drum D making several revolutions while wheel H revolves once, for the impact of the coin upon projecting shelf J is of such short duration that pawl K is only just lifted sufficient from notch H′ to permit wheel H to revolve but once, when it is again arrested in its movement by engagement with the pawl, the pawl being actuated to, and held in engagement with notch H′ by the weighted end I′ of lever I, but just before the engagement of this pawl in the notch pin M lifts the hammer O′ the pin slipping off of the end of lever N causes the hammer to fall by gravity and sound an alarm on bell O at about the same instant that drum D stops revolving.

Although the power required to lift hammer O′ has a tendency to slow down the speed of revolution of ratchet wheel H, just before the pawl projection K arrests its movement, still, drum D has its motion arrested sufficiently sudden to effectually prevent the dice within the drum being cocked after being shaken.

The special use of the ratchet wheel and pawl L, Fig. 1, is to prevent the drum D from being turned backward by means of the fingers applied to the drum. Pawl and ratchet L thus serve to prevent ratchet wheel H from being turned in the opposite direction to that indicated by the arrow by power being applied to drum D.

For use as a savings bank the side of chute P″ can be closed and the chute made of sufficient size to take in coins of any denomination, any of which will serve to start the mechanism.

Any form of dice may be used so marked as to spell out words or when marked like ordinary dice be used for playing the ordinary dice games.

I claim as my invention—

1. In a coin actuated gaming device comprising a case with a pocket R, said pocket open at the front, substantially as shown, said pocket serving in combination with a drum having transparent side walls, said drum mounted upon a shaft and capable of revolving intermittently within said pocket, ordinary playing dice within said drum and means for intermittently revolving and for stopping the motion of said drum for the purpose stated.

2. In a coin actuated gaming device comprising an open mouthed pocket R, formed in the casing of said device, and a revoluble hollow transparent drum containing playing dice, said drum mounted on a shaft and capable of revolving intermittently within said pocket, the walls of said pocket next to said drum having a mirrored surface which serves to reflect light upon the dice within said transparent drum, substantially as stated.

3. In a coin actuated gaming device comprising a case with an open mouthed pocket R therein, as shown and described, the inside walls of said pocket having a mirrored surface for the purpose described, said pocket

serving in combination with a hollow transparent drum containing dice, said drum mounted to revolve within said pocket, and the sides of said drum bent inward at substantially regular peripheral intervals for the purpose, and serving in combination with the other parts as described.

In testimony that I claim the foregoing I have hereunto set my hand, this 28th day of November, 1892, in the presence of witnesses.

FREDERICK SANDERSON.

Witnesses:

H. S. THOMPSON,

A. ERNEST KNIGHT.