(No Model.) 2 Sheets—Sheet 1.

R. HILL, Jr.

GAME APPARATUS.

No. 434,987. Patented Aug. 26, 1890.

FIG. 1.

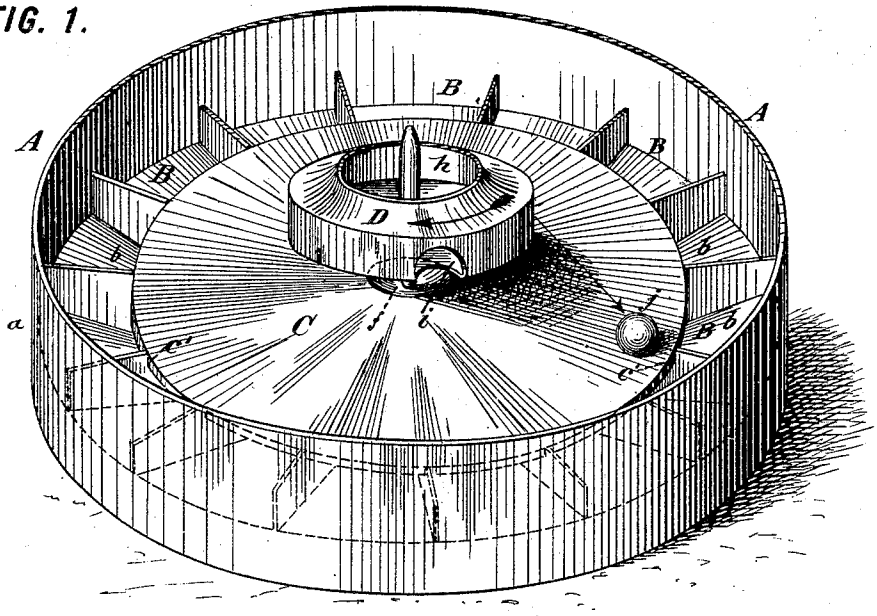


FIG. 2.

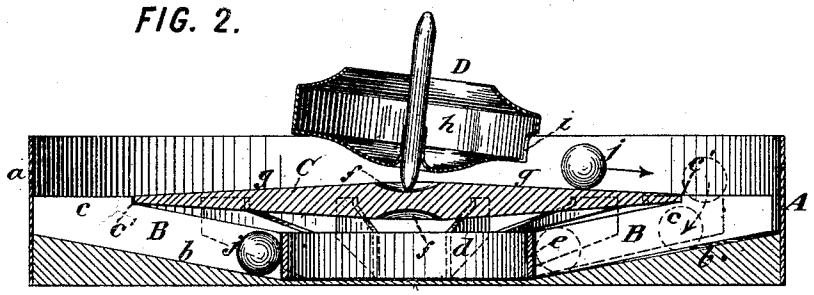


FIG. 3.

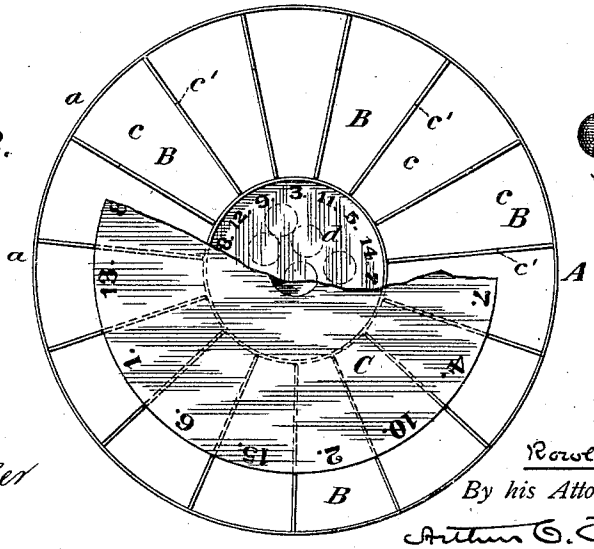
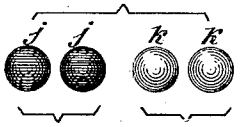


FIG. 4.



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(No Model.)

2 Sheets—Sheet 2.

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GAME APPARATUS.

No. 434,987. Patented Aug. 26, 1890.

FIG. 5.

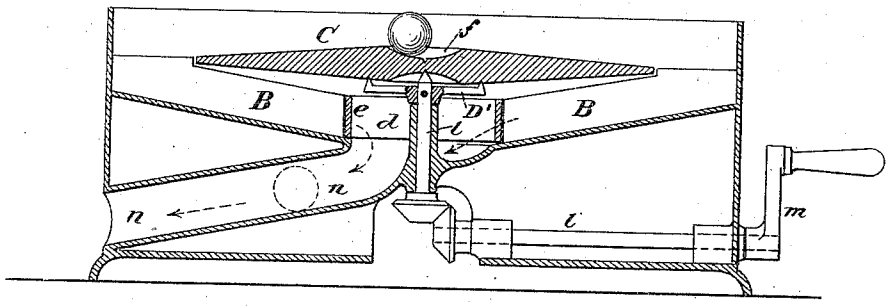
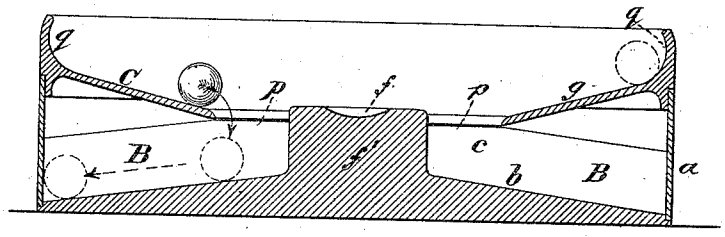


FIG. 6.



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UNITED STATES PATENT OFFICE.

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GAME APPARATUS.

SPECIFICATION forming part of Letters Patent No. 434,987, dated August 26, 1890.

Application filed September 17, 1889. Serial No. 324,239. (No model.)

To all whom it may concern:

Be it known that I, ROWLAND HILL, Jr., a citizen of the United States, residing in Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Game Apparatus, of which the following is a specification.

This invention relates to games or game apparatus, its object being to afford not merely amusement, but also a means of exercising or testing the memory and quickness of observation of the players.

The apparatus consists of a circularly-arranged series of pockets having openings through which a marble or other projectile may enter them, and provided with a cover or screen so arranged as to conceal the lower portion of each pocket, so that it is impossible to see in which ones the marbles have entered or how many marbles are contained in a pocket. The cover or screen is preferably made removable in order to gain access to the pockets for the counting and removal of the marbles.

In order to direct the marbles into the pockets in such manner that the player cannot determine into which pocket the marble will enter, a projector device is provided, by means of which the marbles are thrown, their entry into one or another of the pockets being determined by chance. This projector device consists in the preferred form of a spinning-top having a cavity in its body, into which the marble is dropped, and an opening in one side of said cavity, through which the marble emerges under the influence of centrifugal force, and rolls thence into whichever pocket lies in its path.

The game is designed to be played by employing, preferably, two sets of marbles, those of the first set being entered into the pockets by causing them to be thrown from the projector, so that they enter irregularly or as a matter of chance into the different pockets, while those of the other set are subsequently inserted by the player at will into the pockets, the aim and purpose of this feature of the game being that the player shall introduce the marbles of the second set into those pockets which are empty—that is, those pockets in which marbles have not been thrown by the projector. During the operation of the projector it requires a quick eye to see into which pockets the marbles fall, and subsequently the memory is tested to remember these pockets. The accuracy of observation and memory of the player is determined when he has completed the insertion of the marbles of the second set by removing the casing or screen and disclosing the pockets and their contents, when, if the marbles of the second set, which are readily distinguishable in appearance from those of the first set, occupy each a pocket to itself the player will be shown to have observed and remembered accurately, whereas if the marbles of the second set are found in pockets containing also marbles of the first set the player's observation or memory will be shown to have been at fault. The interest of the game is enhanced by assigning different values to the different pockets and by a system of counting by which the score is governed according to the arrangement of the marbles found deposited in the pockets.

By omitting the use of the second set of marbles the game becomes a simple but interesting game of chance, suitable to be played by young children.

Figure 1 of the accompanying drawings is a perspective view of the game apparatus in use. Fig. 2 is a vertical diametrical section thereof. Fig. 3 is a plan thereof on a smaller scale, the spinning-top being removed and the casing partly broken away. Fig. 4 shows some of the marbles employed. Figs. 5 and 6 are vertical diametrical sections illustrating two modified forms of my invention.

Referring to Figs. 1 to 3, the game is constructed of a circular box A, having an upright cylindrical outer wall *a*, and a conical sloping bottom *b* inclined toward the center. Radial partitions *c c* are arranged to project part way from this sloping bottom to the top of the outer wall. These partitions extend from the outer wall inwardly toward the center, and are interrupted at a suitable distance from the center to form a circular chamber or space *d*. A circular partition *e*, constructed as a removable ring, is arranged against the in-

ner ends of the radial partitions and forms the wall of this chamber *d*. The spaces or chambers bounded by the radial partitions *c c*, the outer wall *a*, and the inner wall or ring *d* constitute the pockets, which are lettered B B. These pockets are thus arranged in a circular series and they slope toward the center. They are partially covered over by a cover or screen C, which is preferably constructed in the form of a disk and is placed within the wall *a*, resting upon the partitions *c c*, which latter are formed with shoulders *c'* to hold the cover in a concentric position. The cover is of such diameter as to extend over the greater part of the length of the pockets, leaving, however, a sufficient portion of each pocket exposed to constitute an opening large enough to freely admit the marbles with which the game is played. The cover is preferably constructed with a concaved center *f* and a gently-inclined outer surface *g*, and is preferably made of like shape on both sides, so that it may be turned either side up.

The projector D consists, preferably, of a top to be spun upon the cover C, its stem or peg resting in the concave surface *f*, by which the top is kept in position while spinning. The body of the top may be of any usual form, provided that it be constructed to form a chamber *h*, into which a marble may be dropped, this chamber having an outlet-opening *i* at one side through which the marble may roll out. The top being set to spinning, a marble is dropped into the chamber *h*, and, having a rapid rotary motion imparted to it by the top, it is quickly thrown out through the opening *i* and rolls down the inclined surface *g* of the cover C, thus falling into whichever one of the pockets *b b* happens to lie in its path. The marble drops into the pocket and rolls down the sloping bottom thereof to the lower or inner end, where it is fully concealed by the cover C.

The pockets B B are numbered, lettered, or otherwise marked with distinguishing marks, preferably by giving each a separate number and by distributing the numbers among them irregularly. The numbers are preferably marked in the chamber *d* at the foot of each pocket, as shown in Fig. 3, and also upon one side of the cover C, as shown in Fig. 3, the other side of the cover C being preferably blank or unprovided with these distinguishing marks, as shown in Fig. 1.

The game is played, preferably, with two sets of marbles, such as shown in Fig. 4, where *j j* indicate marbles of the first set and *k k* indicate marbles of the second set. The two sets of marbles are distinguished from each other by their color or size or material, or in some other suitable manner. In this description I will assume that black marbles are used for those of the first set and white marbles for those of the second set. Preferably the number of marbles should equal the number of pockets, so that, for example, if there be fifteen pockets there should be altogether fifteen marbles, of which the greater number should be of the first set—say, for example, ten of the first set and five of the second set.

The game is played, preferably, as follows: The cover C being in place, the top D is set spinning rapidly, and one of the players drops the black marbles into the top, one after another, noting carefully and endeavoring to remember into which pockets they are thrown. When all ten of the black marbles have been thus deposited, he removes the top and inserts by hand the five remaining white marbles into the pockets, endeavoring to place them in those which are empty, or into which none of the black marbles have been thrown. Having deposited them all, he then lifts off the cover C and the score is counted up from the positions of the marbles. This done, the marbles are gathered out of the pockets, the cover is replaced, and the next player takes his turn. To facilitate the gathering of the marbles is the purpose of the removable ring *e*. By simply lifting up this ring all the marbles run at once into the chamber *d*, whence they can be easily lifted out; or, if desired, some special means may be provided for taking them out from this chamber. The ring *e* is to be immediately replaced. The score may be counted in various ways, of which the following will serve as a good example: Every black marble counts as many points as the number of the pocket into which it is entered. Every white marble occupying a pocket alone counts double the number of points marked on that pocket. Every white marble dropped into a pocket along with one or more black marbles counts off or subtracts as many points as the number of the pocket multiplied by twice the number of black marbles therein.

To adapt the game to different classes of players and render it more or less difficult according to their capacities or desires, the cover C is made reversible and is marked on one side with the numbers of the pockets, while on the other side it is devoid of such numbers. When the numbered side is uppermost, it is much easier for a player to remember the pockets into which the black marbles fall, because he can identify them by their numbers. With those, however, who prefer a more difficult game, the cover is turned with the blank side uppermost, so that the player has no guide except the positions of the pockets.

The white marbles or marbles of the second set need not, essentially, be marbles at all, any other object small enough to be inserted into the pockets being suitable—such, for example, as dice, or disks such as checkermen. The marbles *j j*, however, must be of such shape as to be capable of rolling when projected from the top D.

The projector D, instead of being a top, may be any other suitable device by means of which the marbles will be thrown off tangentially into one pocket or another indiffer-

ently. Such a centrifugal projector might be mounted on a vertical spindle, to be turned by a crank or any other source of power. It might be constructed as a revolving disk, in which case this disk might be identical with the cover C. This modification is shown in Fig. 5, wherein the cover C is mounted on a rotary wheel D′, carried on a spindle *l*, which is driven through frictional bevel-gears from a shaft *l′* turned by a crank *m*. When by turning this crank the disk or cover C has been set into sufficiently rapid rotation, the dropping of a marble into the hollow *f* thereof will result in its being thrown centrifugally outward and over the surface of the disk into one or another of the pockets. This figure also shows how, by the lifting up of the ring *e*, the marbles will be made to run out through a chute *n*, which leads out from the chamber *d* to one side of the box.

Fig. 6 shows a modification in which the bottoms of the pockets B B, instead of sloping toward the center, slope away from it, their lowest portions being at their outer ends. This construction requires that the cover C shall be made in the form of a washer or ring with an open center *p*, through which the marbles may fall into the pockets. The outer portion of the cover should be turned up, as shown at *q*, to prevent the marbles being thrown outwardly, and the cover should be sufficiently sloped at *g* to direct the marbles toward the central opening. This form of apparatus may be operated by the use of the top D as a projector, spun with its stem in the hollow *f*, which in this case is formed on a post or boss *f′*, projecting up in the middle of the apparatus; or, in lieu thereof, the marbles may be thrown by hand tangentially onto the cover C, so that they shall roll around the latter until they lose their momentum sufficiently to run down the incline *g* and fall into one or other of the pockets; or this tagential projection of the marbles may be effected by the use of any of the known spring-guns or devices for shooting marbles.

In case the game is to be played solely as a game of chance and without utilizing the features involving the exercise of quick observation and accurate memory, as may be desirable for little children, the lowermost portions of the pockets B B may be omitted, so that the marbles will not be concealed as they roll into the pockets.

I claim as my invention the following defined novel features and combinations, substantially as hereinbefore set forth, namely:

1. A game apparatus consisting of a circularly-arranged series of independent pockets with a cover for concealing the contents thereof, arranged to leave a separate opening into each pocket through which a marble or other projectile may enter.

2. A game apparatus consisting of a circularly-arranged series of independent pockets having inclined bottoms with a cover for concealing the lower portions of all of the pockets, whereby a marble dropped into any pocket will roll under said cover out of sight.

3. A game apparatus consisting of a circularly-arranged series of independent pockets having inclined bottoms with a cover for concealing the lower portions of all of the pockets and arranged to leave a separate opening into the upper part of each pocket through which a marble or other projectile may pass and roll down into the concealed lower portion of the pocket.

4. A game apparatus consisting of a circularly-arranged series of independent pockets with a cover for concealing the contents thereof, arranged to leave a separate opening into each pocket, and a projector for throwing a marble or other projectile, constructed to cause the projectile thrown thereby to enter one or another of said pockets.

5. A game apparatus consisting of a circularly-arranged series of pockets having inclined bottoms sloping toward the center, and a disk-shaped cover arranged concentrically to said pockets and covering the inner and lower portions thereof, leaving their outer portions open for the admission of a marble or other projectile, whereby the latter in entering any pocket rolls toward the center and is concealed by said cover.

6. A game apparatus consisting of a circularly-arranged series of pockets having inclined bottoms and provided with distinguishing-marks, with a removable and reversible cover for concealing the lower portions of the pockets, provided on one side with distinguishing-marks corresponding to those of the pockets and its other side blank or unprovided with such marks.

7. In a game apparatus, the combination of a circularly-arranged series of pockets having inclined bottoms sloping toward the center, a central chamber, and a removable ring separating said chamber from the lower and inner ends of said pockets, whereby on removing said ring any marbles or other similar objects in said pockets roll together into said chamber.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

ROWLAND HILL, JR.

Witnesses:
GEORGE H. FRASER,
JNO. E. GAVIN.