No. 738,625. PATENTED SEPT. 8, 1903.

D. McRUER.

GAME APPARATUS.

APPLICATION FILED SEPT. 24, 1902.

NO MODEL. 3 SHEETS—SHEET 1.

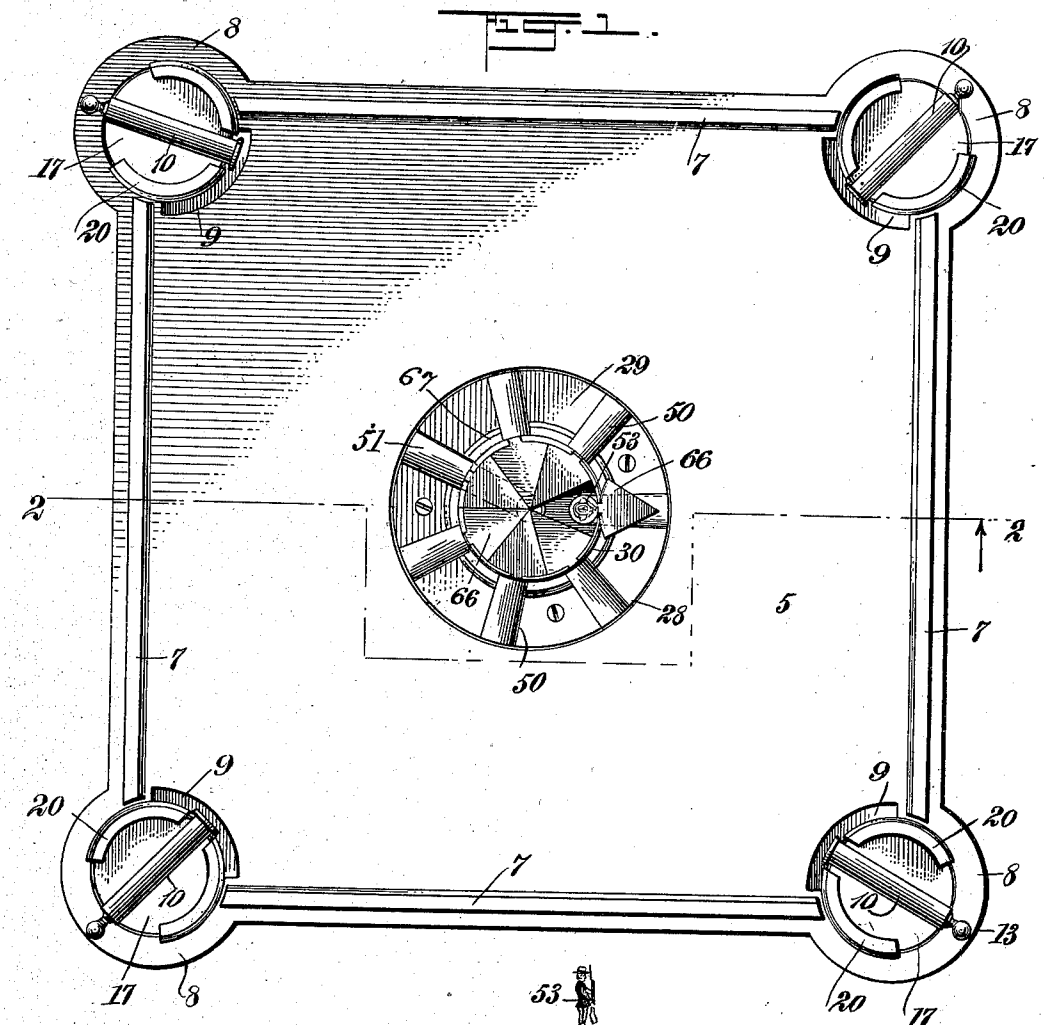


FIG. 1.

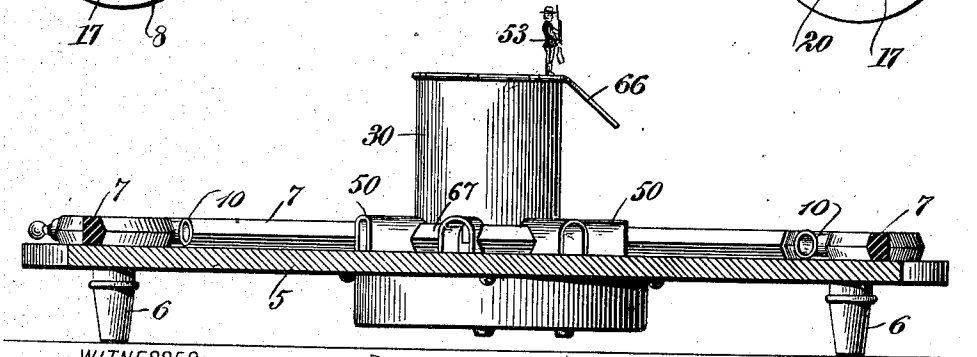


FIG. 2.

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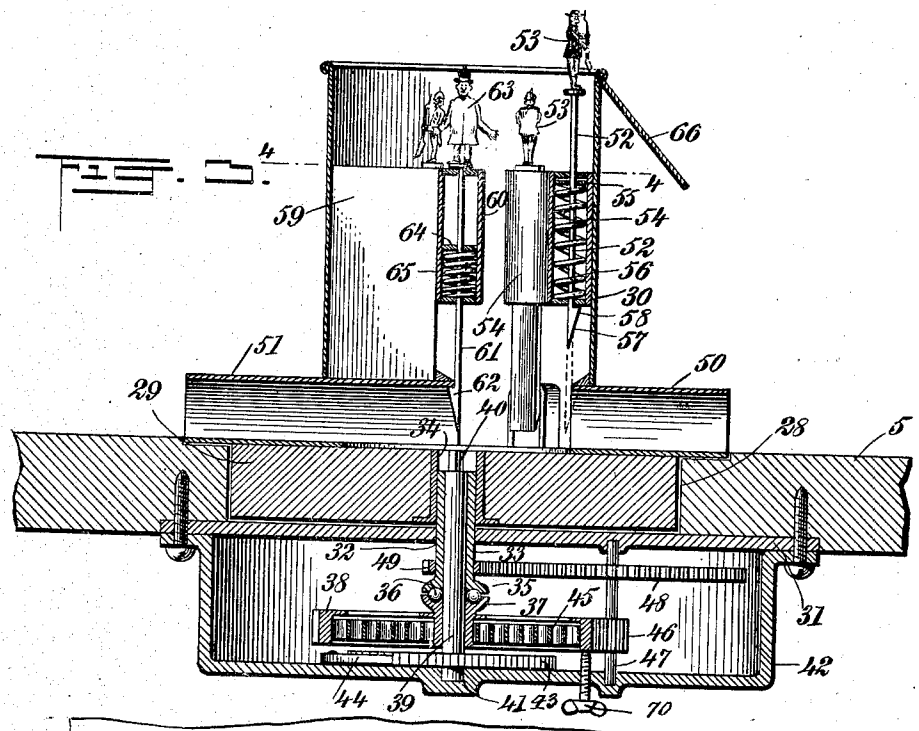
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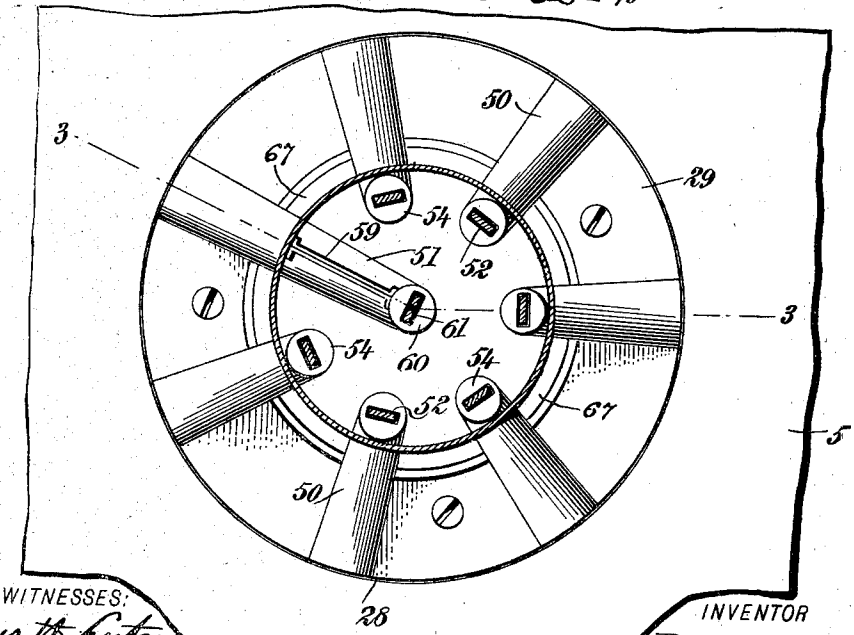
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GAME APPARATUS.

APPLICATION FILED SEPT. 24, 1902.

NO MODEL. 3 SHEETS—SHEET 2.





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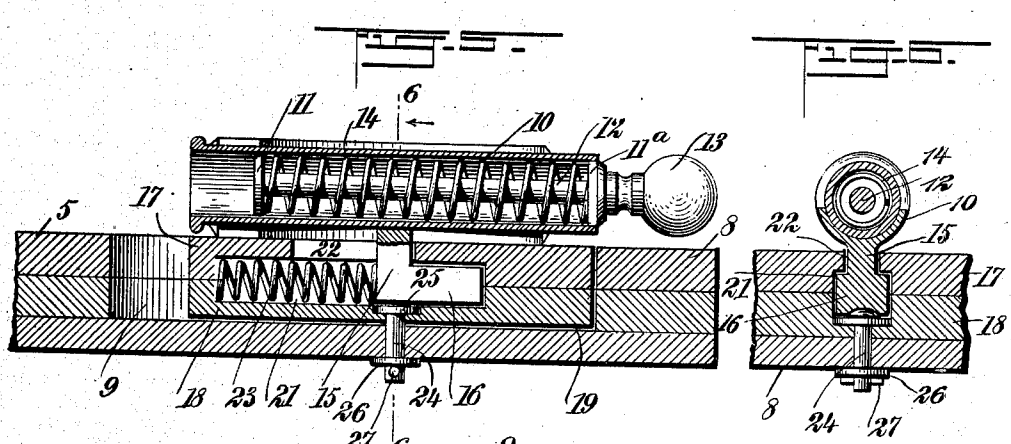
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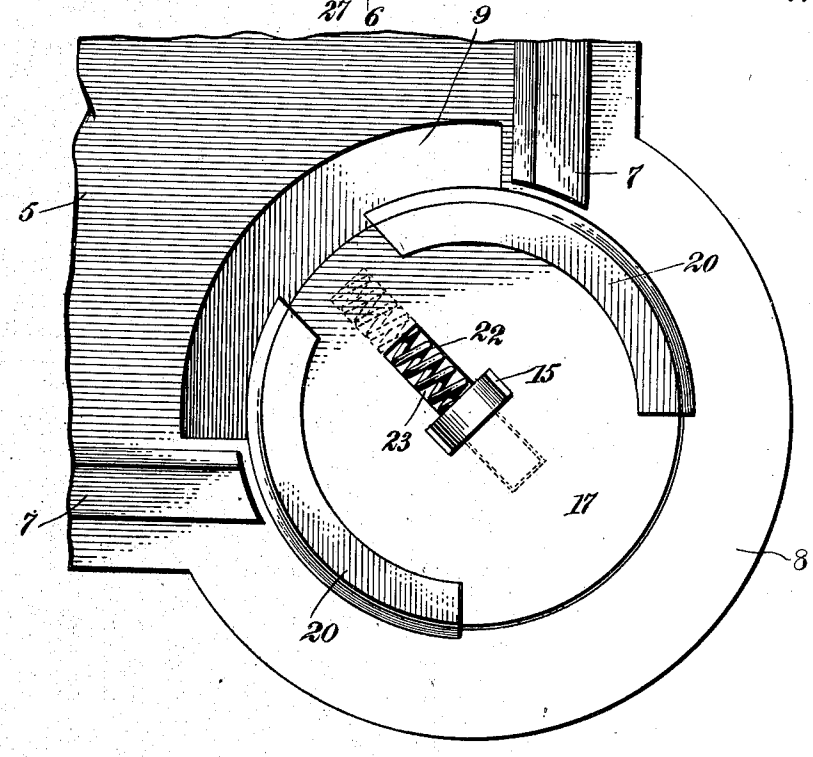
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GAME APPARATUS.

APPLICATION FILED SEPT. 24, 1902.

NO MODEL. 3 SHEETS—SHEET 3.





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No. 738,625. Patented September 8, 1903.

UNITED STATES PATENT OFFICE.

DUNCAN McRUER, OF PAULS VALLEY, INDIAN TERRITORY, ASSIGNOR OF ONE-HALF TO STEWART M. JONES, OF PAULS VALLEY, INDIAN TERRITORY.

GAME APPARATUS.

SPECIFICATION forming part of Letters Patent No. 738,625, dated September 8, 1903.

Application filed September 24, 1902. Serial No. 124,669. (No model.)

To all whom it may concern:

Be it known that I, DUNCAN McRUER, a citizen of the United States, and a resident of Pauls Valley, Chickasaw Nation, Indian Territory, have invented new and useful Improvements in Game Apparatus, of which the following is a full, clear, and exact description.

My invention relates to game apparatus, the same being more particularly designed as an improvement on the device disclosed in a prior United States patent, No. 681,570, granted to me on August 27, 1901.

Among other things my invention has for its object to provide means for automatically rotating a central object or turret, to provide an improved group of emblematical figures in the central rotary object or turret, to employ a movable or shiftable impelling device, and to provide means which enable the impelling device to be advanced in case a light shot is to be discharged.

Further objects and advantages of the invention will appear from the subjoined description and the novelty will be defined by the annexed claims.

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 view of a game apparatus constructed in accordance with my present invention. Fig. 2 is a transverse vertical sectional elevation on the line 2 2 of Fig. 1. Fig. 3 is an enlarged vertical sectional elevation through the central revoluble turret, the plane of the section being indicated by the dotted line 3 3 of Fig. 4. Fig. 4 is a sectional plan view through the turret on the dotted line 4 4 of Fig. 3. Fig. 5 is an enlarged vertical sectional view through one of the series of impelling devices. Fig. 6 is a cross-section on the line 6 6 of Fig. 5, and Fig. 7 is a plan view of the devices shown by Fig. 5.

5 designates a stationary table provided with suitable legs 6 to maintain the same at a proper elevation convenient for playing the game. This table is provided with a marginal or boundary flange 7 on its several sides, and this flange may be constructed of rubber or any other suitable elastic material, as indicated in Fig. 2, so as to constitute a cushion, the marginal flange representing a parapet. In the center of the table is arranged a suitable object toward which missiles from a series of corner propelling devices are adapted to be projected, and in the embodiment of the invention shown by the accompanying drawings this central object is made in the form of a turret adapted to be rotated by a suitable propelling mechanism, all as will be more fully described hereinafter. Each corner of the table is provided with an enlarged rounded portion 8, and on the inner side of this rounded portion is provided a recess 9, representing a trench.

Each impelling device is shiftably supported on one rounded corner 8 of the table, and this impelling device is shown in the form of a barrel 10, having its open end pointing toward the central object or turret. Within this barrel is arranged a plunger 11, attached to a suitable rod 12, having a knob or handle 13 for its convenient manipulation, and this plunger is normally impelled toward the open end of the barrel by a coiled spring 14, one end of which is seated against a fixed head or abutment 11^a, secured at the breech of the barrel, while the other end of said spring acts against the plunger 11. The barrel is secured at its middle to a slidable carrier 15, and this carrier is provided with an elongated foot 16, the latter being slidably confined in a rotary base or turn-table, as shown more clearly by Figs. 5, 6, and 7. This base or turn-table consists of the members 17 18, which are secured laterally together by any suitable means, so as to turn easily within a socket or recess 19, which is provided in the rounded corner 8 of the table, and this base is confined in place by suitable guides 20, said guides being of segmental form and secured to the corners 8 of the table. The members 17 18 of the turn-table are provided in their meeting faces with radial recesses 21, and the upper table member 17 is constructed with a slot 22, the latter opening into the guideway formed by the registering recesses 21. The foot 16 of the car-

rier is fitted loosely in the guideway 21, while the carrier itself passes through the slot 22, and this carrier is thus mounted in the turn-table to move radially therein. The carrier and the impelling device are normally pressed outwardly from the central object by a coiled spring 23, which is housed in the guideway 21 and acts against the front side of the carrier, said spring serving as a cushion to take up or absorb the shock due to the impact of the spring-pressed plunger when the latter is released.

The turn-table or base is pivoted centrally in the rounded corner 8 by means of a stem or arbor 24, the same being firmly fastened to the lower member 18 of the base and passing through a suitable opening in the rounded corner 8 of the table 5. As shown by Figs. 5 and 6, this stem is provided with a head 25, that is secured firmly to the lower member 18 of the turn-table, and on the lower end of said stem is fitted a washer 26, which is held in place by a pin or key 27.

From the foregoing description it will be seen that each impelling device is adapted to be shifted to different radial positions by turning the rotary base in the rounded corner. The shock on the barrel and turn-table due to the operation of the plunger is cushioned by the spring 23; but this spring permits the operator to shove the impelling device over the trench 9 in case of a light shot, the slidable movement of the carrier 15 in the turn-table permitting the advancement of the impelling device to the desired position.

I have modified the construction of the central turret shown by my prior patent in material respects, and one modification consists in a novel grouping of the emblematical figures, while another feature is the provision of a motor mechanism for automatically rotating the turret.

In the middle of the table 5 is provided a large circular opening 28, adapted to receive the circular base 29 of the rotary turret 30, said turret consisting of a vertical cylindrical shell or casing that is secured in any suitable way to said base 29. To the under side of the table is firmly secured a plate 31, which is provided with a central opening 32 to permit the passage of a vertical sleeve 33, and the upper end of this sleeve projects into a metallic bushing 34, fixed in the base 29 of the turret. The sleeve 33 is provided with an enlarged lower extremity or foot 35, adapted to ride on the bearing-balls 36, which are confined in the flared upper part of a hub 37, which forms a part of a master drive-gear 38, the latter forming one element of the motor for driving the turret. The hub of this master-gear 38 is made fast with a vertical shaft 39, which passes loosely through the sleeve 33 and is provided with a square or polygonal end 40, which terminates in the bushing 34 of the turret-base 29. The lower end of this vertical shaft is stepped in a bearing 41, which is provided in a suitable casing 42, that is firmly fastened to the under side of the table 5 and to the base-plate 31, said casing inclosing the motor mechanism. This shaft 39 is provided with a ratchet-wheel 43, with which engages a pawl 44, attached to the bottom of the casing 42, and around the hub 37 of the master-gear is a coiled impelling-spring 45, adapted to rotate said master-gear, the pawl and ratchet preventing the unwinding of the spring in one direction. The master-gear 38 meshes with a pinion 46, secured on the counter-shaft 47, having bearings in the base-plate 31 and the bottom of the casing 42, and said counter-shaft is provided with a gear-wheel 48, which meshes with a gear-pinion 49, secured on the sleeve 33, which is fastened to the turret-base, whereby the gearing transmits the motion of the spring to the base for the purpose of turning the turret.

The turret 30 is provided with a group or series of short tubes 50 of any suitable number, said tubes being secured firmly to the turret, which is above the base, and disposed radially with respect thereto. The inner ends of these short tubes 50 terminate just within the shell or wall of the turret, and in addition to the group of short tubes I employ a long tube 51, the inner end of which extends into the turret 30 to a point near the center thereof, said long tube 51 extending a considerable distance beyond the turret. With the group of short tubes 50 is associated a series of vertically-movable rods 52, each provided at its upper end with a suitable figure, as 53, and said rods 52 of the group are slidably and individually mounted in guide-tubes 54, the latter being secured on the inside of the turret in any suitable way, so as to be housed therein. Each vertically-movable rod is provided within the guide-tube with a cross-piece 55, against which acts an impelling-spring 56, the latter being housed in the tube 54 and bearing against the lower end thereof. The vertically-slidable rods 52 are adapted to have interlocking engagement with the short tubes 50, and these rods are each provided with a beveled foot 57, having a shoulder 58. Each rod may be lowered against the tension of the spring 56 for its foot 57 to lie across the passage of the tube 50 and for its shoulder 58 to engage with the upper edge of said tube, thus disposing the foot in the path of a missile adapted to enter the short tube. The rod 52 is of spring metal and capable of being deflected laterally with respect to the tube for its shoulder 58 to engage therewith. I also employ a central guide-tube 60, arranged in vertical position within the turret and within the circular series of tubes 54, and this central tube is attached to the turret by a plate 59 or other suitable means. The guide-tube 60 is disposed directly over the inner end of the long tube 51, and in this guide-tube is arranged a

slidable rod 61, having the shouldered and beveled foot 62 to engage the inner end of said tube 51. This slidable rod 61 carries a suitable figure, such as 63, and it is provided with the cross-piece 64, against which acts a spring 65. The upper end of the turret 30 is closed by means of the triangular doors or flaps 66, which are hinged to the turret and arranged to register or meet one another in order to close the upper end of said turret. The doors lie directly over the figures 53 on the rods 52, so that the doors will be opened individually by the upward movement of any one rod; but the figure 63 on the central rod 61 is arranged directly below the meeting inner ends of the doors, whereby the upward movement of the rod 61 and the figure 63 will open a series of the doors or flaps. Suitable numbers or counters may be provided on the flaps or doors of the turret, and when a missile from one of the impelling devices enters a tube, so as to release a rod, the movement of the rod will release one or more doors, thereby entitling the player to count as many points in his score as are indicated on the door or flap, which is thrown by the movement of the released rod.

Any suitable rules may be adopted to regulate the playing of the game; but as these are minor matters within the province of the manufacturer I do not consider it necessary to herein recite the special rules which may be employed.

The turret 30 is provided at its lower part with an elastic cushion or buffer 67. This buffer is arranged in the path of the missiles thrown from the impelling devices, and it is arranged in sections, which are secured to the outside of the turret and alternate with the series of tubes 50 51.

Any suitable means may be adopted to arrest the motion of the driving mechanism or motor; but in the drawings I have shown a stop-screw 70, adapted to bear against one of the wheels of said driving mechanism.

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

1. A game apparatus comprising a table, a central object thereon, a series of revoluble turn-tables at the corners of said table, and impelling devices slidably mounted on said turn-tables to be shiftable on a vertical axis therewith and each capable of an independent radial movement with respect to the central object.

2. A game apparatus comprising a suitable table having a central object, a series of turn-tables grouped around said central object, and impelling devices slidably mounted individually on the turn-tables and shiftable to different angular positions with respect to said central object, each impelling device being also movable independently on the turn-table in a direction radially to the central object.

3. A game apparatus comprising a table having a central object and a series of trenches or depressions at the corners of said table, slidable carriers mounted on the table for movement radially with respect to the central object and each adapted to be projected across one of the trenches or depressions in the table, impelling devices supported individually by said carriers, and means to cushion the recoil of each impelling device and its carrier.

4. A game apparatus comprising a suitable table having a central object, shiftable turn-tables at the corners of the table, depressions or trenches adjacent to the turn-tables, and an impelling device mounted on each turn-table, said impelling device being shiftable with the turn-table and capable of a limited slidable movement thereon with respect to the trench and the central object.

5. A game apparatus having a suitable table, a central object thereon, a series of turn-tables fitted to said table and each having a radial guideway, slidable carriers housed in the guideways of the turn-tables and each mounted on one turn-table to be shiftable therewith and to slide radially thereon, means carried by each turn-table to cushion the carrier thereon, and an impelling device mounted on each carrier.

6. A game apparatus having a table, a revoluble turret having a base fitted in said table and removable bodily therefrom, a bushing fixed in the base of said turret, a motor-shaft extended into said bushing, a spring-driven sleeve fixed to the shaft and having a ball-race, another sleeve fitted loosely on the shaft and fitted tightly in the bushing and having a ball-race opposing that of the spring-driven sleeve, bearing-balls in the races of said sleeves, and an intermediate shaft geared to the spring-driven and loose sleeves, whereby the turret may be positively driven and it may be removed bodily from the table.

7. A game apparatus comprising a table, a group of impelling devices thereon, a revoluble turret mounted on said table and provided with a series of hinged flaps, a series of tubes attached to said turret, a series of spring-actuated rods carrying suitable figures and having interlocking engagement with said tubes, said rods being adapted to individually open the flaps of the series, another tube extended into the turret beyond the tubes of the series, and a central rod having engagement with said extended tube and carrying a central figure, said central rod being releasable independently of the other rods and arranged on its upward movement to open a series of flaps on the turret.

8. In a game apparatus, a rotary turret provided with a group of doors or flaps arranged to close the upper end thereof, a series of radial tubes movable with said turret, vertical guide-tubes supported within said turret, slidable rods fitted in said guide-tubes and provided with beveled and shouldered feet and with figures adapted to be projected

against the doors or flaps individually, springs acting against the separate slidable rods, and a central rod releasable independently of the series of rods and carrying a central figure, said central rod being arranged on its upward movement to open the series of flaps on the turret.

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

DUNCAN McRUER.

Witnesses:
C. R. WALTERHOUSE,
A. M. BURBRIDGE.