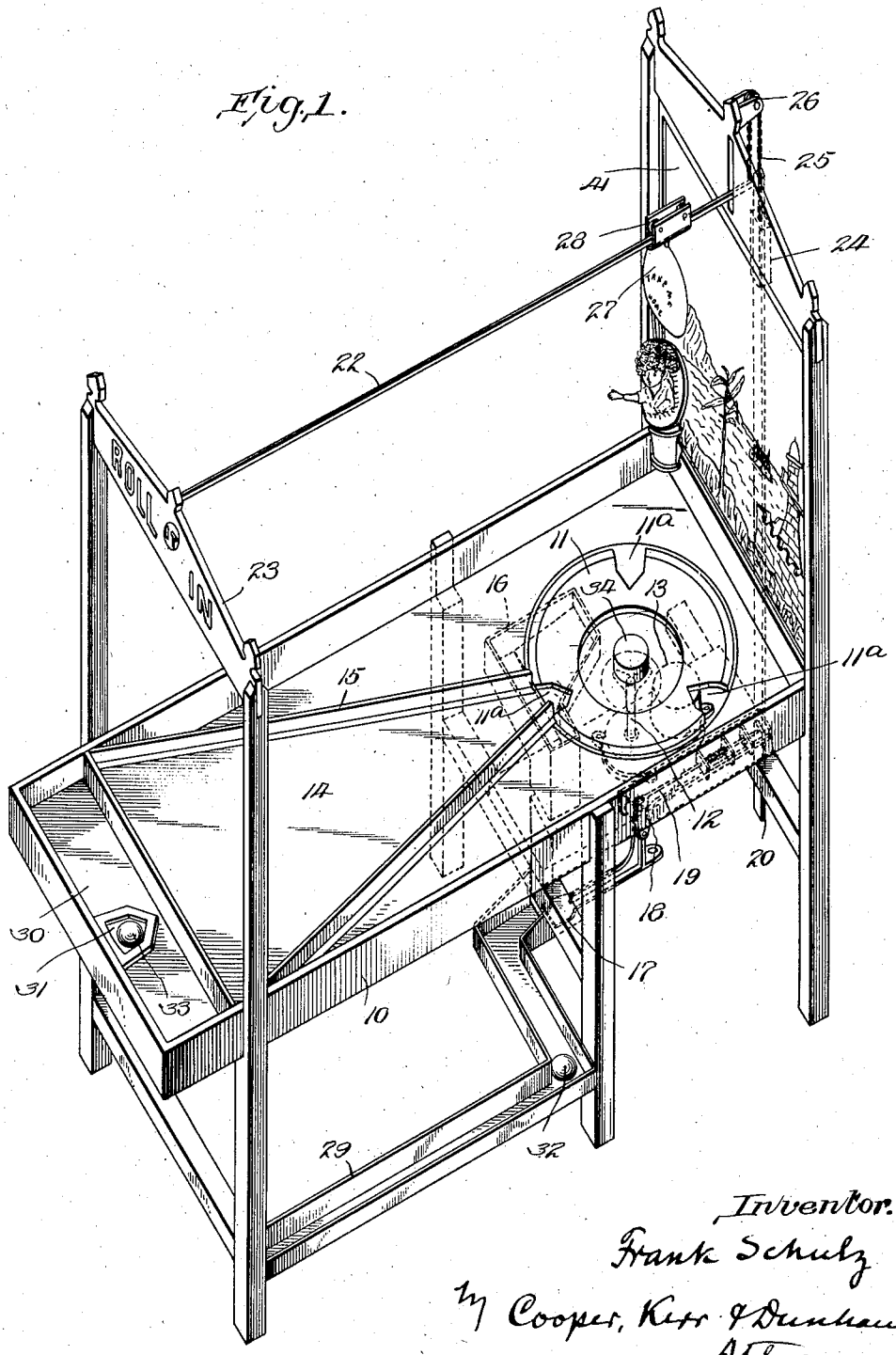
May 19, 1925. 1,538,449

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GAME APPARATUS

Filed Sept. 14, 1922 2 Sheets-Sheet 1

Fig. 1.



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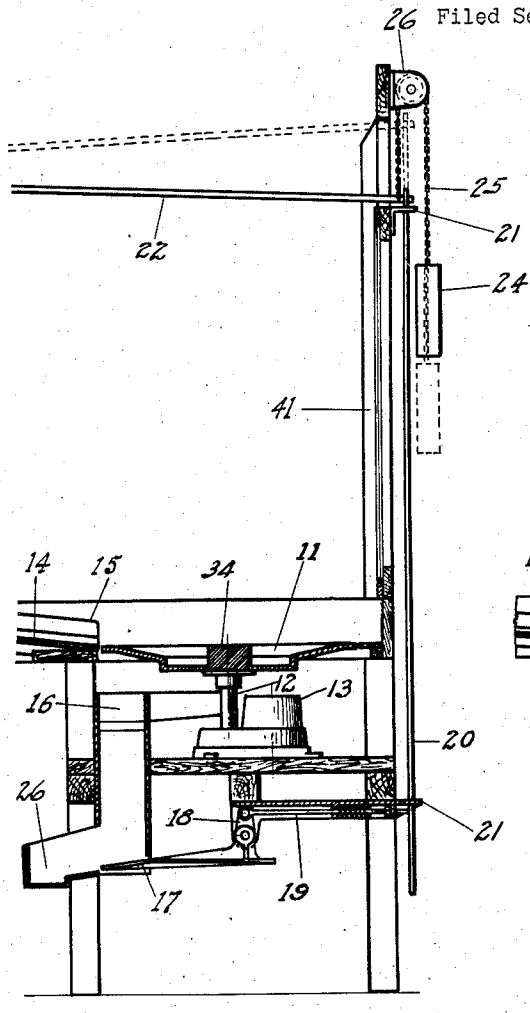


Fig. 2

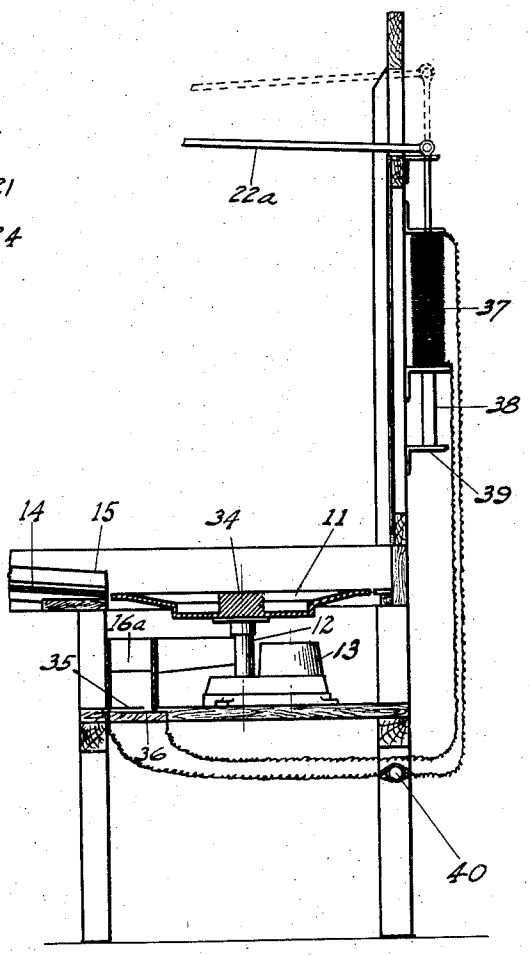


Fig. 3

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Patented May 19, 1925. 1,538,449

UNITED STATES PATENT OFFICE.

FRANK SCHULZ, OF NEW YORK, N. Y.

GAME APPARATUS.

Application filed September 14, 1922. Serial No. 588,101.

To all whom it may concern:

Be it known that I, FRANK SCHULZ, being a citizen of the United States, residing in the city of New York, county of Richmond and State of New York, have invented certain new and useful Improvements in Game Apparatus, of which the following is a full, clear, and exact description.

This invention relates to amusement devices affording a game of skill, and its chief object is to provide a device adapted to deliver a prize or reward automatically to the winning player. Another object is to provide for the purpose indicated a mechanism of simple and substantial character which can be constructed and operated at low cost. To these and other ends the invention consists in the novel features hereinafter described.

In its preferred form the device comprises a target which is kept moving at constant speed and is to be struck by a missile or other implement of play, as for example a ball rolled, thrown or otherwise projected by the player. Preferably the target is a rotating disk having one or more openings through which the ball can be caused to pass if the player exercises the requisite skill in gauging the speed of the disk and in projecting and directing the ball. Beyond the target is a trigger in position to be actuated by the ball passed through one of the target apertures, to release a prize-carrier which then moves automatically to a position where the player can grasp and remove from the carriage the prize which his skill has won.

The embodiment outlined above is illustrated in the accompanying drawings, in which—

Fig. 1 is a perspective view of the complete apparatus.

Fig. 2 is a detail central longitudinal section of the rear portion of the apparatus.

Fig. 3 is a similar detail view of a modification.

The table 10, substantially horizontal in position, is provided at its rear with a circular opening in which is a target in the form of a disk 11, mounted on a vertical shaft 12 which is rotated at constant speed by any suitable motor, indicated at 13. In front of the target is a downwardly and rearwardly sloping runway or acceleration board or table 14 having side rails 15 which converge rearwardly and present at the edge of the revolving target an escape opening large enough to permit the ball, rolling down the acceleration board, to escape and strike the target. The latter is provided at its edge with one or more openings, 11^a, each of which is, preferably, just large enough to allow the ball to drop freely through.

The ball is launched on the acceleration board by the player, and since the board is inclined the ball will be accelerated by gravity and will approach the target with increasing velocity. The object of the game is to cause the ball to pass through one of the target openings. This it will do if the player has properly directed the ball and has correctly gauged the acceleration of gravity so that the ball will escape from the board at the rear opening in time with the presentation of one of the target openings thereat. The player may release the ball from his hand with any desired initial velocity, but in any case its final velocity will be determined, in part at least, by the space through which it descends in reaching the target. Of course if the runway is arranged to slope downwardly away from the target the effect of gravity would be to "decelerate" the ball and the latter would therefore have to be launched with a correspondingly greater initial velocity.

Passing through one of the target openings the ball falls through a chute 16 and strikes a pivoted trigger 17 which is thereby depressed and through the instrumentality of an arm 18 and link 19 releases a vertical rod 20 mounted to rise and fall in guides 21 and pivotally connected at its upper end to a track or rail 22. The latter is loosely mounted at its forward end in a

support 23 and at its rear end is connected to a weight 24 by a chain 25 running over a pulley 26. Hence release of the rod 20 allows the weight to descend and raise the rear end of the track so that the track now slopes downwardly toward the front of the apparatus; whereupon the receptacle 27, Fig. 1, suspended from the wheeled carriage 28 on the track, travels by gravity to the playing position at the front of the apparatus, where the player may grasp and remove from the receptacle the prize or reward which his skill has won for him. In the present instance a dressed doll is shown as the prize. When the prize has been removed the attendant depresses the rod 20 until it is again engaged and held by the spring-actuated link 19. This operation lowers the rear end of the track 22 so that the latter now slopes rearwardly, thus causing the carriage 28 and receptacle 27 to return by gravity to initial position, where another prize may be placed in the receptacle.

As the ball actuates the trigger 17 it rolls into the inclined trough 29 and descends therein toward the front of the machine where it may be removed by the attendant and placed in the receptacle 30 or in the smaller enclosure 31, ready for the next player. A ball in the trough 29 is shown at 32 and another is shown at 33 in the enclosure 31.

The revolving target 11 is dished, as indicated, and has a deeper depression at its center, so that a ball which misses the target opening will be trapped on the target and can be readily removed by the attendant. The center depression also insures against the ball being thrown off the target by centrifugal force. A central boss 34 is provided to prevent the ball from being rolled across the target and possibly dropping into an opening which is not over the chute 16.

In the modification illustrated in Fig. 3 the ball falling into the chute 16^a presses spring contact 35 against the fixed contact 36, which closes the circuit of solenoid 37. The core 38 is thereby raised, which lifts the rear end of track 22^a to the dotted line position so that the carriage (not shown in Fig. 3) can roll by gravity to the front of the machine. The chute 16^a may be provided at one side with a gate (not shown) which the attendant can open for convenient removal of the ball as soon as the player has removed the prize. The spring contact 35 then opens the circuit and the core 38 descends by gravity to its normal position on the stop 39, whereupon the carriage rolls back to the rear of the machine for refilling. Current to energize the solenoid can be taken from an ordinary lighting circuit by plugging into a socket 40.

It is to be understood that the invention is not limited to the constructions herein specifically illustrated and described but can be embodied in other forms without departure from its spirit.

I claim:

1. In a game apparatus, in combination, a target having an aperture to permit the passage of a missile launched from a playing position, a support on which the target is movably mounted whereby the aperture therein may be carried through a predetermined path, a movable prize-carrier, a support therefor, and means associated with the prize-carrier and located beyond a predetermined point in the path of said aperture in the target and controlled by the missile after passing through said aperture when the same is in said predetermined point in its path to cause the prize-carrier to move toward the playing position.

2. In a game apparatus, in combination, a rotating target having an aperture to permit the passage of a missile, a support for the target, a movable prize-carrier, a support therefor, and means associated with the prize-carrier and located beyond a predetermined point in the path of said aperture in the target and controlled by the missile after passing through said aperture when the same is in said predetermined point in its path to cause the prize-carrier to move toward a predetermined position.

3. In a game apparatus, in combination, a table for a rolling missile, having an escape opening for the missile, a moving target adjacent to said opening, having a missile aperture which is carried past the escape opening as the target moves, a support for the target, prize-delivering mechanism, and means in the path of the missile after passing through said aperture in the target and connected with the prize-delivering mechanism for causing said mechanism to operate when the missile comes in contact with said means.

4. In a game apparatus, in combination, a table for a rolling missile, having an escape opening for the missile, a target adjacent to said escape opening, a support on which the target is mounted to revolve on a vertical axis, said target having in its edge portion a missile-aperture arranged to be carried past the said escape opening to register therewith, the target also having in its central portion a recess to trap missiles failing to pass through the missile-aperture, and prize-mechanism having controlling means in the path of missiles which pass through said missile-aperture.

5. In a game apparatus, a table for a rolling missile, having an escape opening, the table being inclined with respect to the escape opening, a target disk mounted to revolve on a vertical axis adjacent to said escape opening and having a missile-aperture to receive the missile issuing from the escape

opening, prize-delivering mechanism, and means controlled by the missile after passing through said aperture to actuate the prize-delivering mechanism.

6. In a game apparatus, a downwardly inclined table for a rolling missile, having an escape opening at its lower end, a revolving target having a missile-aperture, arranged to carry the missile-aperture past the escape opening periodically, a chute to receive the missile after the same has passed through the aperture in the target, prize-delivering mechanism, and means in said chute, for actuation by the missile, to control the prize-delivering mechanism.

In testimony whereof I hereto affix my signature.

FRANK SCHULZ.