April 21, 1942. F. BROOMFIELD 2,280,623

GAME OR TOY OF SKILL

Filed June 21, 1941 2 Sheets-Sheet 1

Fig. 1.

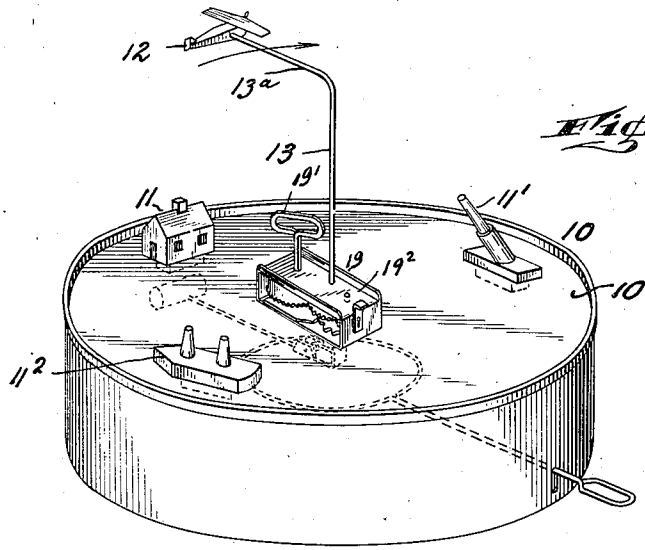


Fig. 3.

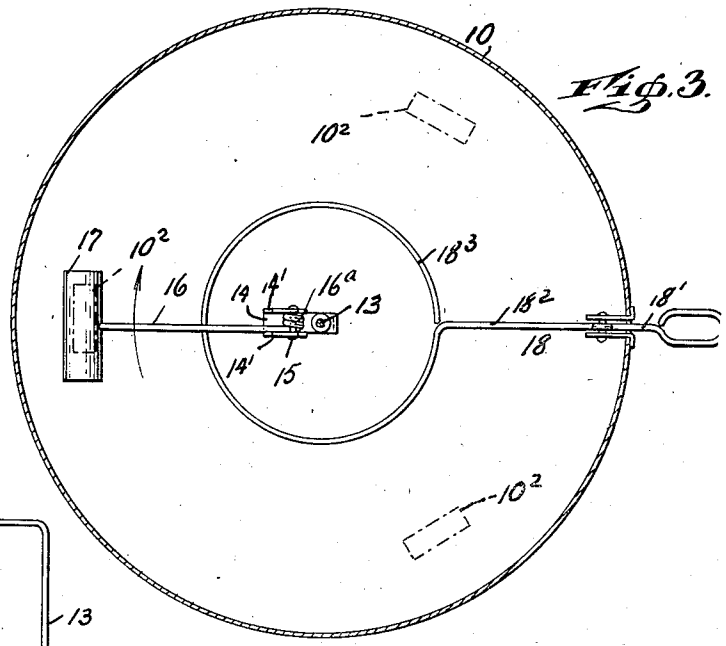
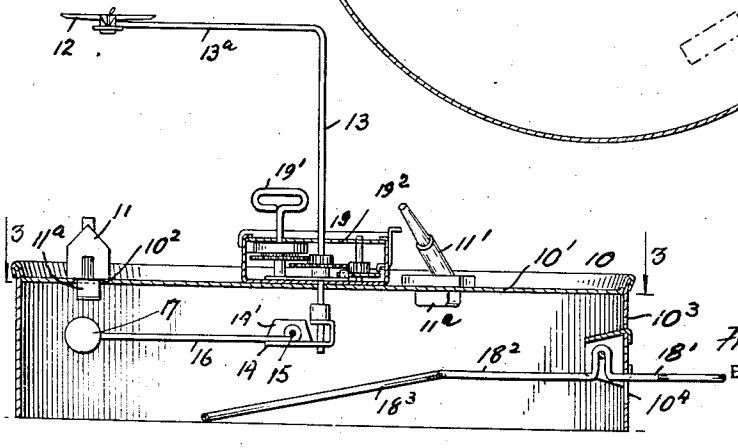


Fig. 2.



INVENTOR
Frank Broomfield
BY
Wall & Ordway
ATTORNEY

April 21, 1942. F. BROOMFIELD 2,280,623

GAME OR TOY OF SKILL

Filed June 21, 1941 2 Sheets-Sheet 2

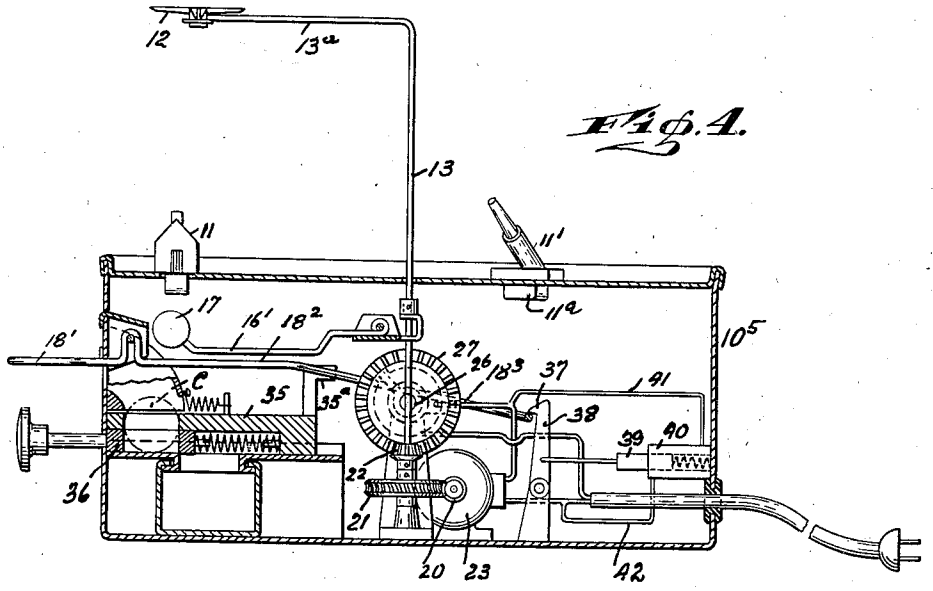


Fig. 4.

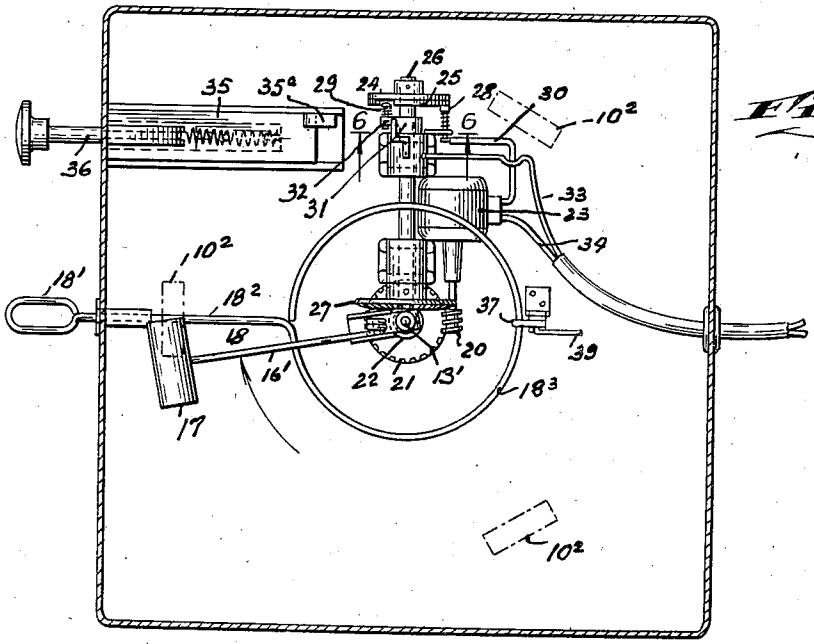


Fig. 5.

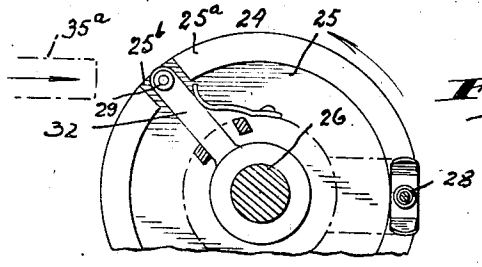


Fig. 6.

INVENTOR
Frank Broomfield
BY
Mark H. Drahmann
ATTORNEY

Patented Apr. 21, 1942

2,280,623

UNITED STATES PATENT OFFICE

2,280,623

GAME OR TOY OF SKILL

Frank Broomfield, Ridgewood, N. J., assignor of one-half to Cecil L. Wahl, New York, N. Y.

Application June 21, 1941, Serial No. 399,105

1 Claim. (Cl. 273—1)

This invention relates to a game of skill or toy and has for its object to provide a game with which a player can attempt to knock off and project a stationary object from a platform the instant another object moveable overhead comes into vertical range with it.

Another object is to provide a construction that will be simple to manufacture and relatively inexpensive.

With these and other objects in view my new game comprises a hollow platform whose surface may be made to represent a landscape, seascape or both, with stationary objects that may simulate houses, guns, boats or the like to serve as targets, loosely supported thereon in a regular row and having extensions projecting into the hollow of said platform. A moveable object that may simulate a bombing plane is supported on and at an elevation from said platform and is adapted to move in a path vertically coinciding with the row of stationary objects. Connected with said moveable object and concealed within the hollow of the platform is a striker which while the moveable object is in motion and reaches a point just above the target aimed at can be operated to knock off and project the target from said platform.

My invention also consists in the provision of time and coin controlled means for operating said game.

In the accompanying drawing which constitutes part of this specification and in which similar reference characters denote corresponding parts,

Figure 1 is a perspective view of my game or toy;

Figure 2 is a vertical section thereof;

Figure 3 is a cross section on lines 3—3 of Figure 2;

Figure 4 is a vertical section of a modified construction;

Figure 5 is a sectional plan view thereof; and

Figure 6 is an enlarged cross section on line 6—6 of Figure 5.

Referring to the drawings more in detail, and first to the construction shown in Figures 1 to 3, 10 denotes a hollow platform of any suitable material and shape the upper face of the top 10′ of which may be painted or otherwise made to represent a landscape, seascape or both (not shown).

Adapted to be removeably supported on the top 10′ of said platform are objects which may simulate a house #11, gun 11′, battleship 11^2 or the like, each object being provided at its bottom with a projection 11^a loosely engaging a recess 10^2 in said top and extending into the hollow of said platform (Figure 2).

These recesses are arranged in a regular row. Thus if the plaform is cylindrical or in form of a drum as shown, the recesses 10^2 are arranged in a circular manner concentric with the peripheral edge of said platform.

Suitably supported on the platform to move above and in line with the row of objects 11, 11′, 11^2 is an object 12 that may simulate an aeroplane or bomber. In the example shown the object 12 is carried by a horizontal arm 13^a formed on the upper end of a rotary spindle 13 centrally mounted in a suitable manner on the platform. To the lower end of said spindle 13 is fixed a plate 14 formed with upstanding side flanges 14′ in which is borne a pin 15. Rotatively mounted on said pin 15 at its inner end and extending toward the circumferential wall 10^3 of said platform is a striker arm 16 adapted to revolve in synchronism with said spindle 13. The free end of said arm 16 carries a mallet or hammer 17. This mallet or striker is adapted to vertically coincide with the row of objects 11, 11′ and 11^2, so that, when acted upon, as will be presently described, and when brought into the range of any of said objects, it may strike against the projection 11^a thereof and knock said object off the platform. The arm 16 is adapted to normally extend in horizontal position and be held in that position on the plate 14 by a spring 16^a or the like.

Pivotally supported in a suitable manner on the inner face of the circumferential wall 10^3 of the platform is a double armed lever 18 one arm 18′ of which projects outwardly through a vertical slot 10^4 of said wall and serves as a handle and the other arm 18^2 of which extends inwardly and is formed with a circular loop 18^3. This double armed lever 18 serves for the operation of the striker arm 16. In the present example the spindle 13 is adapted to be impelled by a clock mechanism 19 of any well known construction having a winding key 19′ and which mechanism is provided in a casing 19^2 mounted centrally on the platform.

In playing the game, after having wound up the clock mechanism, the spindle 13 is set into rotation whereby the object 12 will move in a circular path above the row of objects 11, 11′ and 11^2. When the object 12 in its course comes into the range of any of the said objects the player will rapidly depress the handle 18′ of the operating lever 18 thereby forcing the loop shaped

end 18^3 of the inner arm 18^2 thereof against the striker arm 16 which in its turn will strike again the projection 11^a of the particular object selected knocking it off the platform.

In the modification shown in Figures 4 to 6 the platform 10^5 is in form of a rectangular casing.

Here the spindle 13' which carries the object 12 is impelled through suitable gears 20, 21 from an electric motor 23 provided with a time controlled coin actuated switch 24. This switch comprises a rotary disk 25 mounted on a rotary cross shaft 26, and adapted to be driven from the motor 23 with reduced speed through the gear 22 meshing with a gear 27. This disk is provided with a split circular contact shoe 25^a which cooperates with two resilient contact members or brushes 28 29. One of said contact members 28 is stationary and is electrically connected by wire 30 with one terminal of the electric motor 23 and the other member 29 is carried by an insulated sleeve 31, rotatively mounted on the spindle 26. The sleeve 31 has an arm like projection 32 electrically connected by wire 33 to one pole of the electric source, whose other pole is connected by wire 34 to the other terminal of the motor. The contact member 29 normally extends through the split or gap 25^b of said contact shoe 25^a and thereby breaks the circuit through the motor, but when the sleeve 31 is slightly turned on its axis through the actuation of its arm 32 said member 29 is shoved on to the contact shoe closing the electric circuit whereby the spindle 13' is set into rotation. This rotation will continue until the contact member 29 rides off the shoe 25^a and enters the gap 25^b, the brush or contact member 28 being wide enough during the rotation of the disk 24 to overlap the gap 25^b.

The actuation of the sleeve 31 is effected manually through a coin controlled slide 35 formed at its inner end with a finger 35^a which when the slide is pushed inwardly, as will be presently described, engages the arm 32 of the sleeve.

The slide 35 is slotted and capable of being coupled to a manually operable slotted push member 36 through a coin C in well known manner.

The manually operable looped lever 18 serving to operate the striker 16' in the same manner as in the first modification is adapted to be normally locked in inoperative position and can be released only after the insertion of a coin.

To this end I provide a catch 37 on the free end of a rocking lever 38 which is adapted to normally engage the loop 18^3 of the arm or lever 18. The rocking lever is connected to a spring actuated plunger 39 acting as armature of a solenoid 40 included in the electric circuit of the motor through wires 41, 42, so that the instant said circuit is closed the solenoid will be energized causing the plunger 39 and catch lever 38 to move away from the looped arm 18^3 thereby releasing the operating lever 18.

Various other modifications may be made in the construction of my game. I therefore do not wish to restrict myself to the details described and shown.

What I claim is:

A game or toy of skill, comprising a cylindrical hollow platform formed with a circular series of recesses, targets loosely borne in said recesses and extended into the hollow of said platform, a rotary spindle centrally mounted in said platform and projecting vertically to a relatively high elevation from said platform and also into the hollow thereof, a horizontal arm rigidly connected to the upper end, and a vertically swinging arm borne by the lower end of said spindle, both said arms being equal in length to the radial distance of a target from said spindle, said upper arm carrying at its free end a plane simulating an indicator and said lower arm carrying at its free end a striking element, and a vertically swinging loop-shaped lever mounted in the hollow of said platform and formed with an externally operable handle, said loop-shaped lever being adapted to strike against said lower arm when its said striking element is in register with any one of said targets and to thereby knock the latter off said platform.

FRANK BROOMFIELD.