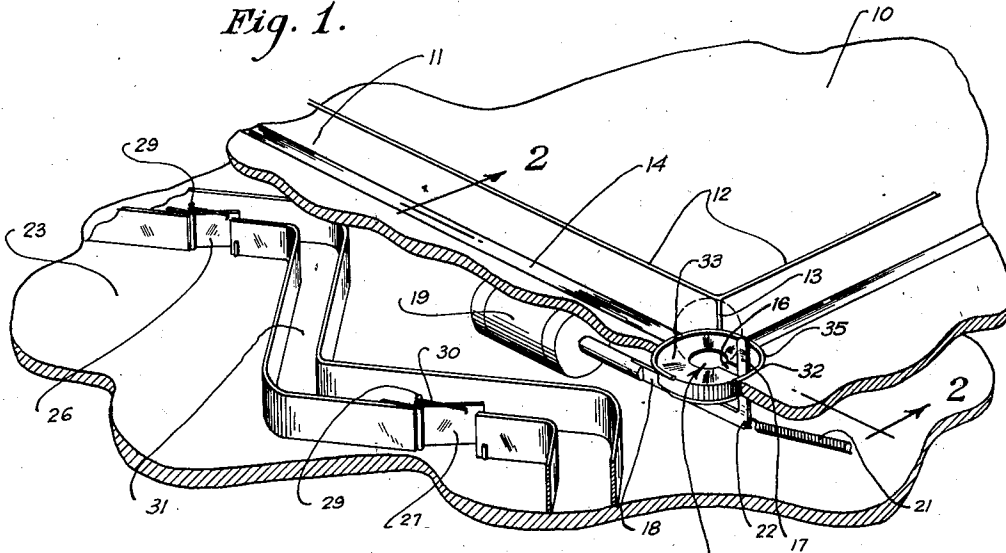
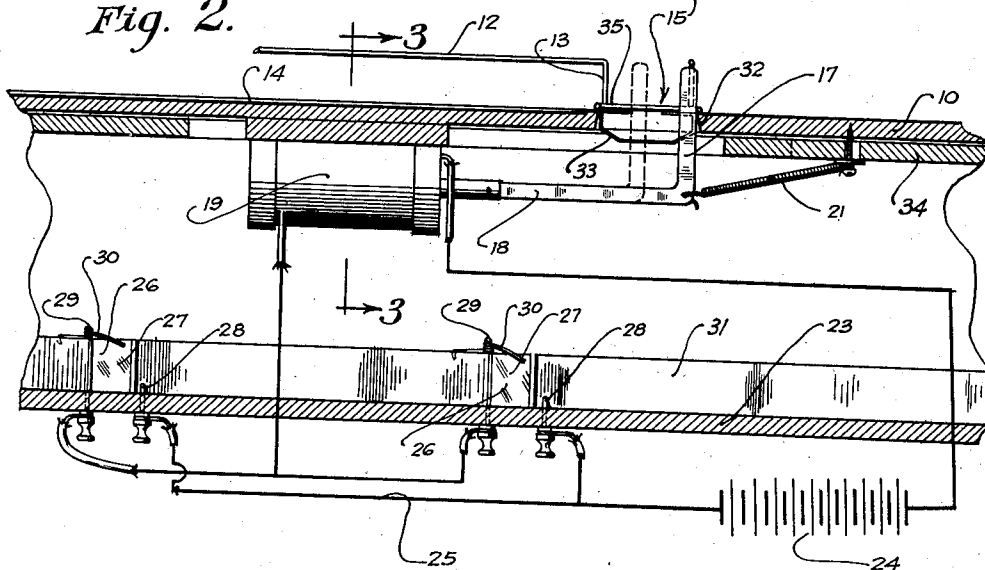
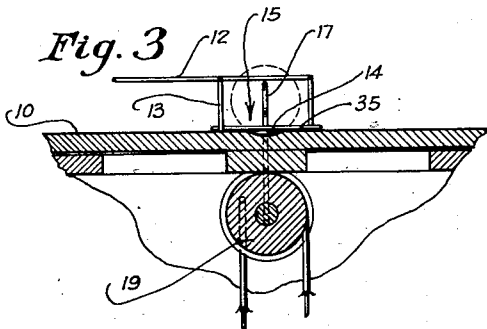


2,035,271

Original Filed June 28, 1934



Inventor
Bon MacDougall
By *Threedy and Sannon*
His Attorneys.

UNITED STATES PATENT OFFICE

2,035,271

GAME APPARATUS

Bon MacDougall, Los Angeles, Calif., assignor to
Fred C. McClellan, Chicago, Ill.

Original application June 28, 1934, Serial No.
732,754. Patent No. 1,973,820, dated September
18, 1934. Divided and this application July 14,
1934, Serial No. 735,106

3 Claims. (Cl. 273—121)

This invention relates to certain novel im-
provements in a game apparatus and particu-
larly has reference to an arrangement wherein
playing balls may be progressively advanced
from one point to another upon a playing surface
and has for its principal object the provision of
an improved structure of this character which
will be highly efficient in use and economical in
manufacture.

The present invention is a division of that de-
scribed and shown in my Patent No. 1,973,820
filed June 28, 1934, for Coin controlled game ap-
paratus.

In one preferred form, the present invention
contemplates the utilization of ball controlled
means for progressively advancing a ball around
a baseball diamond arranged upon a playing
surface.

With the foregoing and other objects in view
the ball progressing means preferably comprises
an electromagnetic circuit including a ball-ad-
vancing member in the form of a solenoid, the
said circuit being closed by a ball traveling along
a ball return runway from the playing surface
to the elevating means, or to a point adjacent
the latter.

Other objects will appear hereinafter.

The invention consists in the novel combina-
tion and arrangement of parts to be hereinafter
described and claimed.

The invention will be best understood by refer-
ence to the accompanying drawing, showing the
preferred form of construction and in which:

Fig. 1 is a fragmentary perspective view of a
preferred form of the invention;

Fig. 2 is a vertical sectional detail view of the
same taken substantially on line 2—2 of Fig. 1;
and

Fig. 3 is a fragmentary vertical sectional de-
tail view of the same taken substantially on line
3—3 of Fig. 2.

The game apparatus shown and described in
my co-pending application hereinbefore referred
to, and as shown and described fragmentarily in
the drawing of this, the present application,
comprises an inclined playing board 10 onto the
upper portion of which balls are propelled one at
a time (by means not shown) so as to gravitate
thereover toward the lower end thereof. Pro-
vided upon this play board 10 is an object 11
which, in the form of the invention shown simu-
lates the diamond of a baseball field. This dia-
mond is defined by side rails 12 which are sup-
ported from the play board 10 by means of posts

13 which are arranged at the corners of the
diamond.

While I have shown a fragment of a baseball
diamond upon the playing board 10 it is obvious
that the object 11 need not necessarily represent
or simulate a baseball diamond as the present
invention, which will now be more fully described,
may be utilized for progressively advancing a
ball along runways or guideways of various forms
and designs arranged upon a playing surface.

Between the rails 12 there are formed in the
play board 10 grooves or runways 14 which guide
the balls and are substantially parallel to the
rails 12.

Each corner 15 of the diamond is intended to
represent or simulate a base and at each corner
there is formed in the play board 10 an opening
32. Arranged in each of these openings 32 is a
ball-receiving seat or cup 33. These ball seats or
cups 33 are hinged to the play board 10 in a man-
ner shown and described in my above-identified
patent and are normally held in raised position
by means of a sliding panel 34 which is arranged
below the play board 10. However, when the
sliding panel is moved by the player, at the end
of a game, to discharge the played balls from the
playing surface for return to the elevating de-
vice (not shown) the ball seats or cups 33 drop
by gravity to discharge any balls held thereby
for return to the elevating means.

Formed in each ball seat or cup 33 is a slot 16
and projecting upwardly through each of these
slots 16 is a finger 17, each of these fingers 17
being formed as an integral part of a ball-ad-
vancing member or solenoid actuated slide bar
18. Each finger 17 is normally held at one end
of the corresponding slot 16 by means of a re-
setting spring 21, one end of the spring 21 being
secured to the ball-advancing member or arm
18 of the solenoid, as at 22; and the other end of
the spring 21 being connected to an inclined floor
23 which is disposed beneath the play board 10.

The solenoid 19 is connected, in an electro-
magnetic circuit, with a suitable source of electric
energy 24, by means of suitable conductor wires
25, and arranged in this circuit are suitable
switch structures 26 which may be of any ap-
proved design. Each of these switch structures
26 in the present instance includes a movable
contact member or contact gate 27 and each of
these movable contact members or gates 27 is
adapted to have contact under certain conditions
with a relatively stationary contact member or
post 28 to complete the circuit between the sole-
noid 19 and the source of electric energy 25.

These contact members or gates 27 are pivotally mounted upon posts 29 which project upwardly from the sub-floor 23 and are normally held, in the position illustrated in Fig. 1, by means of springs 30, so as to be successively engaged by balls traveling along the runways 31 from the playing board 10 to a point adjacent the elevating means.

Arranged around each ball seat or cup 33 is a circular wire ball retaining ring or hoop 35.

The operation of the apparatus is as follows:

When a ball enters one of the inclined return runways 31 from the play board 10 it travels by gravity down the runway 31 and successively engages the movable contact members or contact gates 27 and as it engages these movable contact members or gates 27 it pivots them against the action of their resetting springs 30 into contact with the corresponding stationary contacts 28, thereby closing the electromagnetic circuit (Fig. 2) and energizing the solenoid 19. Upon energization of the solenoid 19 the ball-advancing member 18 and finger 17 are quickly moved in the slot 16 of the ball seat or cup 33, against the action of the resetting spring 21, and thereby propel the ball with which the finger 17 contacts, from the said ball seat 33, over the wire retaining ring 35, and along the groove or channel 14 to the next succeeding corner of the diamond or to the next station or post arranged in the guideway or track grooves 14 if the grooves 14 are arranged in some other pattern or design than as a baseball diamond.

It is apparent that the structure hereinbefore described and shown is capable of universal application in connection with amusement games wherein a ball or balls are projected upon a playing surface for movement thereover and the invention is not limited to the specific form and design shown.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification, without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having thus described my invention what I claim as new and desire to protect by Letters Patent is:

1. In a game apparatus, the combination of:
A member providing a playing surface; a guideway or track on said playing surface for guiding a ball thereover; an annular ball seat arranged in said guideway or track; said ball seat having a slot or opening formed therein; an inclined ball return runway below said playing surface and having communication therewith; means for progressively advancing a ball along said guideway or track from point to point thereon; said means comprising an electromagnetic circuit including an electromagnetically operated ball advancing member having a portion mov-

able in said slot and arranged in the path of movement of a ball traveling along said guideway or track; and means arranged in said runway and engageable by balls traveling therealong to close said circuit and operate said ball advancing member so as to move the said portion thereof in said slot and propel a ball off from said ball seat along said guideway or track.

2. In a game apparatus: A cabinet including a member providing a play surface; a ball runway or track on said playing surface for guiding a ball thereover; said member having an opening formed therein; the said opening being arranged in said ball runway or track; an annular cup or ball seat disposed in the said opening; said cup or ball seat being hingedly mounted upon said member and having a slot formed therein; a ball return runway below said playing surface and having communication therewith; means for moving a ball off from said ball seat or cup along said first-named runway or track including an electromagnetically operated ball-advancing member having an upwardly extending portion movable in said slot; means arranged in said ball return runway and engageable by balls traveling thereby to close said circuit and operate said ball-advancing member so as to move the said portion thereof in said slot and project a ball off from said ball seat along said first-named runway or track; and a member slidably mounted in said cabinet below said playing surface for retaining said ball seat or cup in raised position against the action of gravity.

3. In a game apparatus: A cabinet including a member providing a playing surface; a ball runway or track on said playing surface for guiding a ball thereover; said member having an opening formed therein; the said opening being arranged in said ball runway or track; an annular cup or ball seat disposed in the said opening; said cup or ball seat being hingedly mounted upon said member and having a slot formed therein; a ball return runway below said playing surface and having communication therewith; means for moving a ball off from said ball seat or cup along said first-named runway or track including an electromagnetically operated ball-advancing member having an upwardly extending portion movable in said slot; means arranged in said ball return runway and engageable by balls traveling thereby to close said circuit and operate said ball-advancing member so as to move the said portion thereof in said slot and project a ball off from said ball seat along said first-named runway or track; a member slidably mounted in said cabinet below said playing surface for retaining said ball seat or cup in raised position against the action of gravity; and a flexible wire retaining ring arranged around the said ball seat or cup and over which a ball may be projected, by the said upwardly extending portion of the said ball-advancing member, from the said ball seat into the said runway.

BON MacDOUGALL.