Jan. 6, 1931. G. T. L. STAAR 1,788,210

SKILL PRACTICING GAME

Filed June 2, 1927 3 Sheets-Sheet 1

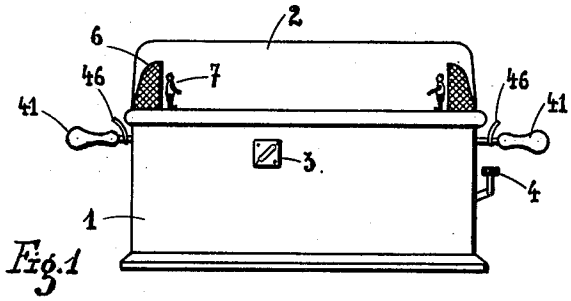


Fig. 1

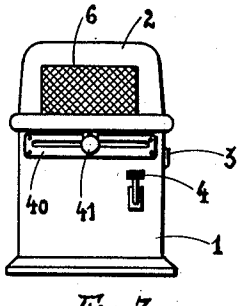


Fig. 3

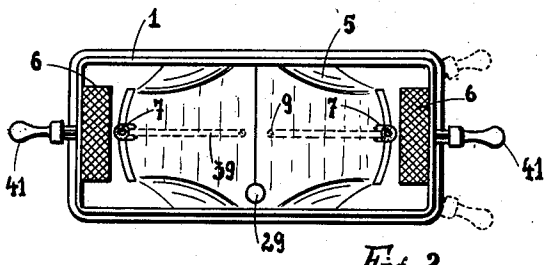


Fig. 2

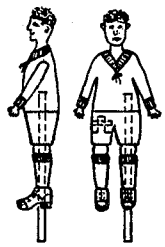


Fig. 10

Fig. 8

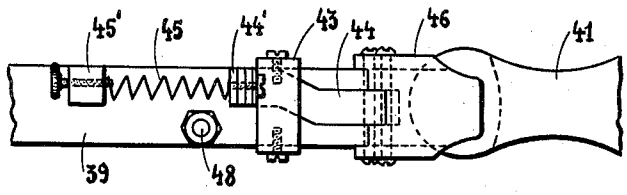


Fig. 9

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Jan. 6, 1931. G. T. L. STAAR 1,788,210

SKILL PRACTICING GAME

Filed June 2, 1927 3 Sheets-Sheet 2

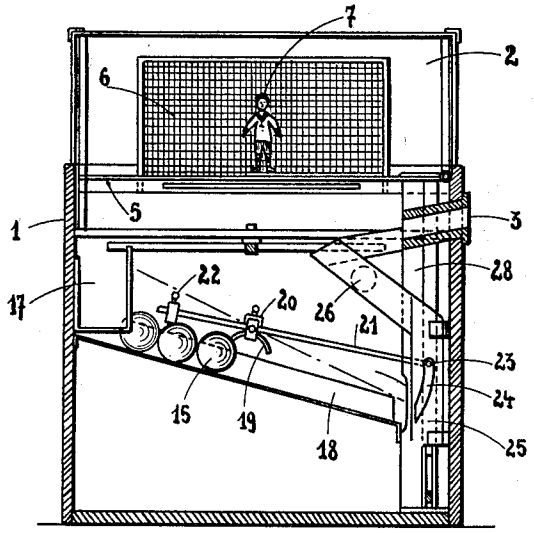
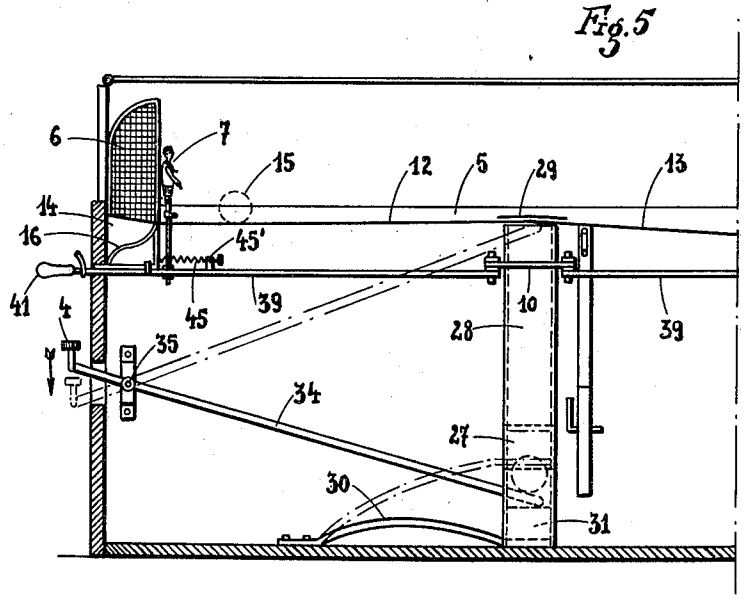


Fig. 4

Fig. 5



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SKILL PRACTICING GAME

Filed June 2, 1927 3 Sheets-Sheet 3

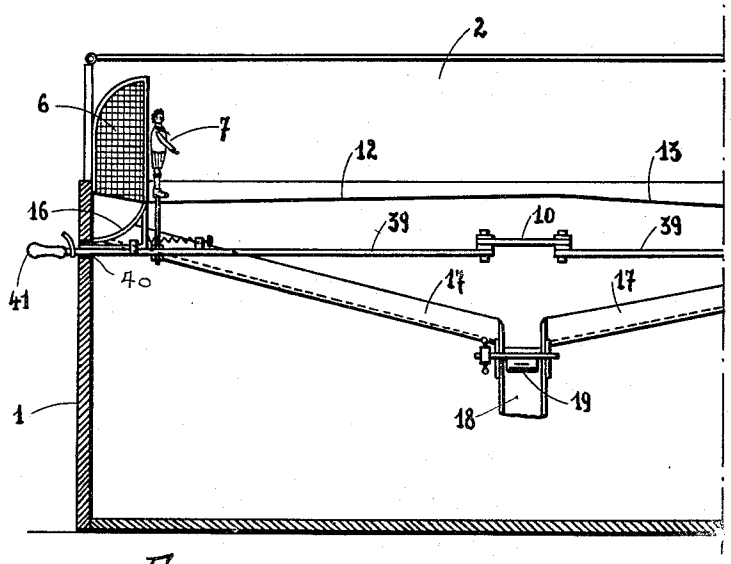
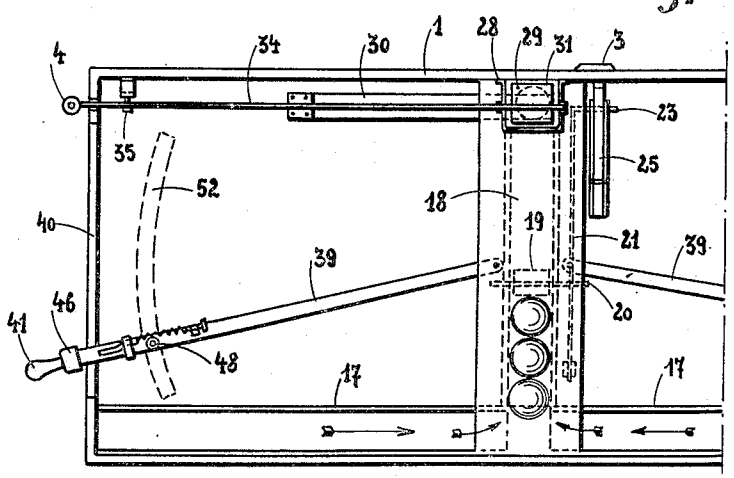


Fig. 6

Fig. 7



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UNITED STATES PATENT OFFICE

GUSTAVE THÉOPHILE LOUIS STAAR, OF BRUSSELS, BELGIUM

SKILL PRACTICING GAME

Application filed June 2, 1927, Serial No. 195,949, and in Belgium August 14, 1926.

This invention relates to a skill practicing game permitting a play similar to the football being practiced and in which by the insertion of a coin into a coin actuated mechanism in the casing a ball will become available to the persons using the game and will circulate on a suitable ground, on which mechanical football players are movable, the positions thereof being determined by the users of the game.

The invention has for its object to provide mechanical footballers each of which is displaced on the ground, and has a pivoted leg which upon the release of a handle or detent actuated by the user of the game, may kick the ball towards the opposite goal, in front of which another mechanical footballer will be similarly displaced to prevent the ball from reaching the goal.

In carrying the invention into practice, the playing field for the ball and players is formed of a sheet iron plate or any other surface having two opposite inclines and at each bend of which is arranged a goal, in front of which may be displaced transversely by the actuation of a lever, a mechanical gamester the pivoted or articulated leg of which is under the control of a shooting lever actuated by means of a handle or detent arranged adjacent the handle controlling the displacement of the mechanical gamester.

In the accompanying drawings I have illustrated one embodiment of the invention.

Fig. 1 is a side elevation of the complete apparatus.

Fig. 2 is a corresponding plan view and

Fig. 3 is an end elevation.

Fig. 4 is an enlarged cross section of the apparatus showing more particularly the device delivering the balls upon the insertion of a coin.

Fig. 5 is a fragmentary vertical longitudinal section showing more particularly the lever determining the discharge of a ball and its arrival upon the ground.

Fig. 6 is a similar longitudinal section but showing the return conduit through which the balls will run back into the apparatus.

Fig. 7 is a plan view with the part forming the ground removed.

Fig. 8 is an enlarged detail view of the mechanical gamester operating mechanism.

Fig. 9 is a plan view of said mechanism.

Fig. 10 is a separate front elevation of one of the mechanical gamesters.

As shown in Figs. 1 to 3, the apparatus comprises a box or casing 1 of rectangular shape, tightly closed by means of a glass cover 2. The box 1 has a slot 3 for the insertion of a coin and a knob 4 serving to operate the lever causing a ball contained in the box to be discharged therefrom upon the surface 5 forming the ground of the game.

At each end the ground is provided with a goal 6 of wire-cloth, in front of which is placed a mechanical gamester 7 mounted on a lever 39 pivotally connected at 9 to the central cross-bar 10 of the box 1. The two opposite levers 39 are operated from the outside by means of a handle 41. The play consists, upon the discharge of a ball from the box 1 upon the ground 5 in arresting said ball (which rolls towards one of the goals 6) by means of one of the mechanical gamesters 7 which, when placed in front of the ball, may be operated so as to kick the same towards the opposite goal by means of its articulated leg. If the player controlling the position of the opposite mechanical gamester is not successful in arresting the ball by means of the mechanical gamester and in kicking the same towards the opposite goal, the ball will run towards the slightly lowered side part of the goal, whence it will enter the box 1 again through a suitably arranged conduit.

Therefore the play consists in arresting the ball by means of one of the mechanical gamesters and in kicking the same alternately from one end to the opposite end of the ground 5 by the operation of mechanical gamesters until the moment where the ball, having not been arrested, will again disappear into the box 1.

To this end the apparatus is more particularly constructed as shown in Figs. 4 to 10.

Referring to Figs. 5 and 6, it will be seen that the surface or ground 5 is formed of two parts 12, 13 inclined in opposite directions

from the central cross-bar 10. At the ends of the parts 12, 13 forming the ground are arranged goals 6, in which the side part 14 of the ground is slightly inclined to one side so as to cause the ball 15 (Fig. 5) running on the surface 5 to be brought in the curved part 16 arranged laterally with relation to the goal and the bottom of which opens into a conduit 17 (Figs. 4 and 7) ending, in the central part of the box 1, in a transverse conduit 18. Arranged within the latter is a curved sheet iron 19 forming a stop (Fig. 4) and retaining the balls in a predetermined position. Said stop 19 is mounted on an axle 20 carrying, outside the conduit 18, an arm 21 provided with a balance-weight 22 and a curved portion 23 extending into a slot 24 (Fig. 4) in the narrow conduit 25 into which drops the coin 26 inserted into the box 1 through the slot 3.

The ball containing conduit 18 has its bottom end connected to an opening 27 provided in a vertical conduit 28, the top end of which is closed by means of a flap-valve 29 arranged flush with the surface of the ground 5.

Extending into the conduit 28 is a lever 34 pivoted at 35 and carrying outside the box or casing of the apparatus an operating knob 4. In the position shown in full lines in Fig. 5, said lever is lowered and supports a ball below the opening 27. Said lever rests on a block 31 carried by the end of a spring blade 30 secured on the bottom of the box 1 and tensioned by the weight of said lever.

Pivotally arranged on the cross-bar 10 are two levers 39 extending through openings 40 in the ends of the box 1. Each lever 39 is provided, as shown in Figures 8 and 9, with a handle 41 (corresponding to the handle 11 shown in Fig. 1) articulated at 42, and carries in a guide-way 43 a slide 44, urged by a spring 45 towards the interior of the box 1. Acting on the slide 44 is a detent 46 which in its lowered position bears on the end portion of the handle 41. The slides 44 form vertical projections 44^1 arranged behind the leg 47 of the mechanical gamester 7 which is carried by a rod 48 secured on the lever 39. As shown in Fig. 10 each mechanical gamester is mounted on a rod 48 with one leg, whilst the other leg 49, articulated at 50 to the gamester's body, is placed in front of the projection 44^1 which may end if desired into a rigid blade 51 or a yielding spring blade. The rods 48 carrying the mechanical gamesters will be displaced by the operation of the levers 39 in curved slots 52 provided in the sheet iron forming the ground 5.

The operation of the apparatus is as follows:

Upon the insertion of a coin through the slot 3 into the conduit 25, such coin on its way engages the curved portion 23 of the rod 21 so that said rod will be tilted under the weight of the coin, whereby the arched member 19 will free a ball 15.

Said ball rolling into the inclined conduit 18 will through the opening 27 enter the vertical conduit 28 if at this moment the arm 34 is in the position indicated in full lines in Fig. 5. It will be sufficient to turn the knob 4 in the direction of the arrow (Fig. 5) for causing the ball to be thrown upwardly by the arm 34. The ball rising in the conduit 22 will open the flap-valve 29 and roll on the ground 5 towards one of the goals 6 according to the power with which it has been thrown upon the inclined faces of the ground. The players using the apparatus will then operate the handles 41 (in Figs. 1 to 3) and displace the mechanical gamesters 7 by the levers 39 so as to arrest the ball 15; at the moment one of the mechanical gamesters is in front of the ball, the detent 46 being held down by the fingers against the handle 41 of the corresponding lever 39 will be released, so that by the action of the spring 45 the projection 51 of the slide 44 will impart an impact to the leg 47 of the mechanical gamester.

Owing to this impact the ball will be shot towards the opposite goal. The play will thus be continued until one of the mechanical gamesters fails to arrest the ball which will then roll over the incline 16 (Figs. 5 and 6) into the conduit 17, bringing same back into the central conduit 18 where it will be placed behind other balls already contained in said conduit.

For the apparatus described having a mechanism controlled by the insertion of a coin or the like and more generally designed to be placed on public places, and the like, my invention provides the application of a counting mechanism whereby any fraudulent attempt may be easily ascertaind upon the removal of the coins from the apparatus. Said mechanism may be of any desired type and controlled either by the knob 4 or preferably by the coin itself acting on a suitable lever upon its movement through the conduit 25.

The invention has been described with a single mechanical gamester in front of each goal, but it will be obvious that the apparatus may have two or more gamesters in front of each goal, controlled by a common lever or different levers, adapted to swing or slide in any direction.

Again the apparatus may be constructed without coin controlled mechanism, whereby the same will be converted to a saloon game. In this case the ball will be brought upon the ground either by the mechanism already described or its equivalent, or more simply by leaving the apparatus open above the ground. The balls, instead of being caused to reenter the apparatus each time a mechan-

ical gamester fails to arrest the same, will then remain behind the gamester in the goal and leave the apparatus laterally, and such balls will be placed by hand upon the ground.

If a ball is placed by hand upon the ground, the whole inner mechanism will be dispensed with and the apparatus has only mechanical gamesters and their operating levers as movable parts.

On the other hand a tension adjusting device may be provided at 45¹ for adjusting the tension of the spring 45 according to the individual strength of the operators acting on the levers 39 and detents 46.

I may also provide a resistance acting on the flap-valve 29, so that the ball shot by the operation of the lever 34, cannot be thrown against the glass cover and break the same.

The invention also contemplates a particular construction of the side walls around the ground adjacent the goals. In fact it has been found that in playing the ball will often be wedged between the moving mechanical gamester and one of said walls, whereby the same will remain immovable against said wall after the gamester has been displaced. In order to avoid this objection, said walls will be formed of yielding spring blades, adapted to yield under the pressure of the mechanical gamester acting laterally on the ball to arrest the same, and to push the ball back towards the ground when expanding as soon as the mechanical gamester will be spaced therefrom.

Having now fully described my said invention, what I claim and desire to secure by Letters Patent, is:

1. In a game of the football type, the combination of a suitable surface forming the ground, a goal at each end of said ground, two oppositely disposed levers pivoted by one end under said ground, a gamester on the other end of each lever and movable in front of each goal through an arcuate slot in said ground, a handle at the end of each lever, a ball for rolling on said ground, and means carried by each lever for striking said ball substantially as set forth.

2. In a game of the foot-ball type, the combination of a suitable surface forming the ground, a goal at each end of said ground, two oppositely disposed levers pivoted by one end under said ground, a gamester on the other end of each lever and movable in front of each goal through an acuate slot in said ground, a handle at the end of each lever, a ball for rolling on said ground, an articulated leg for each gamester, a finger operated detent on each lever, a spring actuated slide for bringing said detent into striking position against the articulated leg of the gamester, substantially as set forth.

3. In a game of the foot-ball type, the combination of two opposite inclines forming the ground, goals at opposite ends of said ground, a fencing around said ground, a central cross-bar below said ground, two oppositely disposed levers pivoted by one end on said cross-bar, a gamester carried on the other end of each lever and movable in front of his goal through an arcuate slot in said ground, a handle at the last mentioned end of each lever, an articulated leg for each gamester, a finger operated detent on each lever, a spring actuated slide for bringing said detent into striking position against the articulated leg of the gamester, and a ball for rolling on said ground, substantially as set forth.

In testimony whereof I have hereunto set my hand.

GUSTAVE THÉOPHILE LOUIS STAAR.