

PATENT SPECIFICATION

275,937

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COMPLETE SPECIFICATION.



Improvements in Coin-freed Apparatus for Playing a Game Simulating Football.

I, GUSTAVE THEOPHILE LOUIS STAAR, a subject of the King of the Belgians, formerly of 3, rue de l'Orphelinat, Scheut, now of 291, rue Van Soust, Brussels, Belgium, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to a coin-freed apparatus for playing a game simulating football, of the known type in which a ball is available to the persons using the game and circulates on a suitable playing surface, on which model players each with an articulated leg are movable before the goals, the positions of the model players being determined by the users of the game.

According to the invention each player is carried by a lever which is pivoted at one end at a fixed point, the other end, which carries means for operating the articulated leg of the player, being movable from side to side.

In carrying the invention into practice, the ground or playing surface on which the ball is circulating will be formed of a sheet iron plate or any other surface having two opposite inclines and at each end of which is arranged a goal, in front of which is displaced transversely by the actuation of the lever a mechanical footballer, 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 a handle on the lever controlling the displacement of the mechanical footballer. In order to cause each play to be limited to the use of a single ball, a ball will be available only upon the insertion of a coin into the box forming the base of the apparatus and such coin acts on a lever causing a stop retaining the balls in a conduit to be displaced so as to bring them one by one upon each insertion of coin above a lever, the actuation of which will cause the ball to be discharged and brought upon the ground.

In order to prevent the ball upon the insertion of a coin from entering the conduit from which it has been discharged

upon the ground unless the lever causing the ball to be discharged is in the desired position, said lever is combined with another stop lever, preventing the ball from passing through the discharge conduit if the operating lever is not in the desired working position.

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 footballer operating mechanism.

Fig. 9 is a plan view of said mechanism.

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

As shown in Figs. 1 to 3, the apparatus comprises a box or casing 1 of rectangular shape for instance, 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 forming the ground of the game.

At each end said ground is provided with a goal 6 for instance of wire-cloth, in front of which is placed a mechanical footballer 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 outside each 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 footballers 7 which, when placed in front of the ball, may be operated so as to shoot the same towards the opposite goal by means of its articulated leg. If the player controlling the position of the opposite mechanical footballer is not successful in arresting the ball by means of the mechanical footballer and shooting 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 footballers and shooting the same alternately from one end to the opposite end of the ground 5 by the operation of mechanical footballers 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 iron sheet 19 forming a stop (Fig. 4) and retaining the balls in a determinate 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 having 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.

The opening 27 in the vertical conduit 28 is normally closed by a plate 30 pivoted at 31 on a bracket 32. Said plate 30 has a lateral projection 33 (Fig. 5) on which acts a rod 34 pivotally connected at 35 to a bracket 36. Said rod 34 is

actuated by means of a link 37 and crank 38 from the knob 4 arranged outside the box for the control of the ball.

Pivotally arranged on the cross-bar 10 are the two levers 39 extending through openings 40 in the ends of the box 1. Each lever 39 is provided, as shown in Figs. 8 and 9, with a handle 41 attached by screw 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 adjacent the screw 42. The slides 44 form vertical projections 44¹ arranged behind the leg 47 of the mechanical footballer 7 carried by a rod 48 secured on the lever 39. As shown in Fig. 10 each mechanical footballer is mounted on the rod 48 with one leg, whilst the other leg 47, articulated at 50 to the footballer's body, is placed in front of the projection 44¹ which may end if desired into a rigid blade 51 or a yielding spring blade. The rods 48 carrying the mechanical footballers 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 in such a way 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 down 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 and so cause the ball to be thrown upwardly by the arm 34. The ball rising in the conduit 28 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 footballers 7 by the levers 39 so as to arrest the ball 15; at the moment one of the mechanical footballers is in front of the ball, the detent 46 of the corresponding lever 39 will be released by the player, so that by the action of the spring 45 the projection 51 of the slide 44 will impart an impulse to the leg 47 of the mechanical footballer.

Owing to this impulse the ball will be shot towards the opposite goal. The play will thus be continued until one of the

mechanical footballers 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.

If upon the operation of the lever 34 after the insertion of a coin said lever is not in its lowered or active position as shown in Fig. 5, the stop 30 will be lowered and therefore shut off the opening 27 to the conduit 28, with the result that the ball cannot be thrown out from the conduit 28 until the lever 34 has been returned to the position in which it is placed below the ball 15.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A coin-freed apparatus for playing a game simulating football and of the type first herein referred to, including a playing surface with a goal at each end, a model player before each goal, each player having an articulated leg and being adapted for lateral movement between the posts of the goal, in which each player is carried by a lever which is pivoted at one end at a fixed point, the other end being movable from side to side and carrying means for operating the articulated leg of the player.

2. An apparatus according to Claim 1, wherein the ground forms two inclines in

opposite directions and the model players are each carried by a lever pivoted on a central cross-bar, the articulated leg of each model player being operated by a spring actuated slide mounted on the lever.

3. An apparatus according to Claims 1 and 2, wherein the goals are at the ends of the inclines forming the ground and are in communication with a conduit leading the balls back into a box supporting the apparatus, characterised in that said conduit is connected to a transverse conduit in which the balls are retained by an arched wing, the position of which is controlled by the insertion of a coin into a conduit provided within the box.

4. An apparatus according to Claim 3, characterised in that the transverse conduit containing the balls opens into a vertical conduit, within which operates a pivoted lever operated by a knob placed outside the box, said lever co-operating with a blade closing the inlet of said vertical conduit if the lever serving to throw out the ball is not in its operating position.

5. Coin-freed apparatus of the football type constructed and operated substantially as herein described and illustrated by way of example in the accompanying drawings.

Dated this 25th day of May, 1927.

HY. FAIRBROTHER,
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Fig. 1

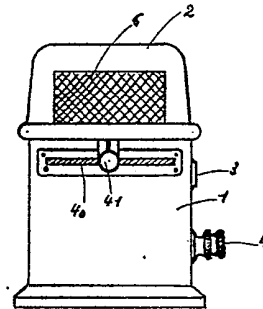
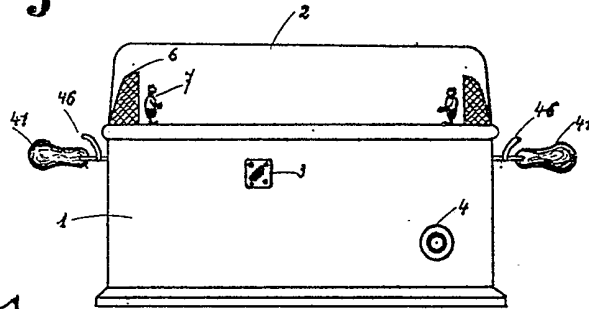


Fig. 2

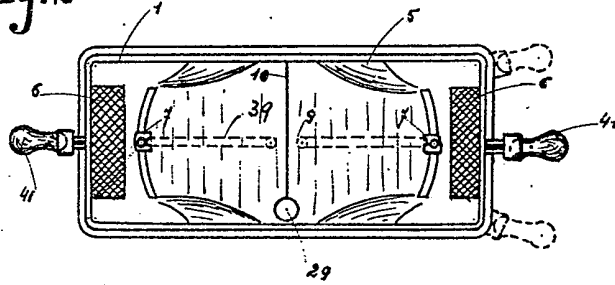


Fig. 3

Fig. 10

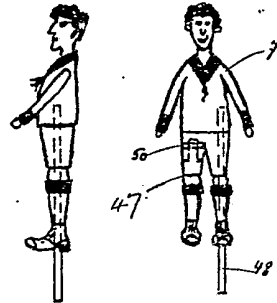


Fig. 8

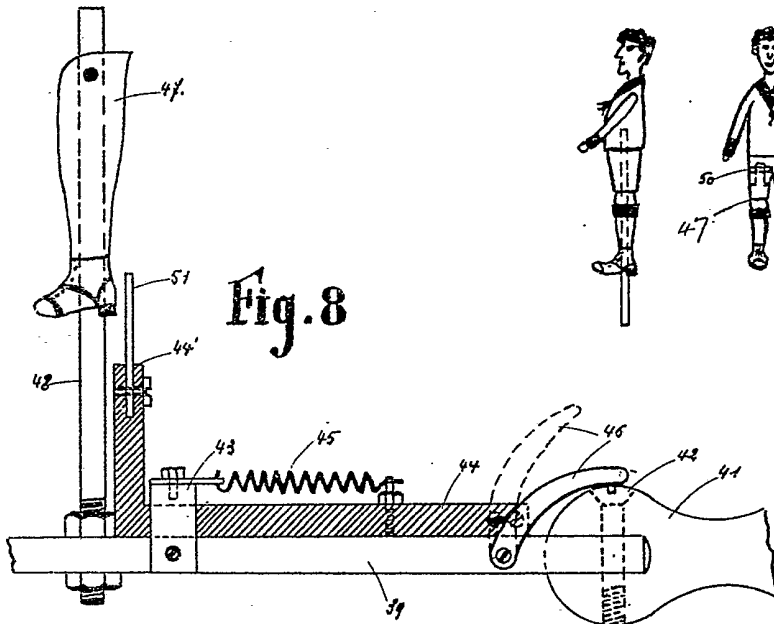
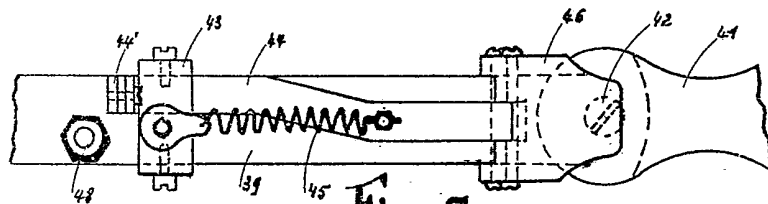


Fig. 9



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Fig. 4

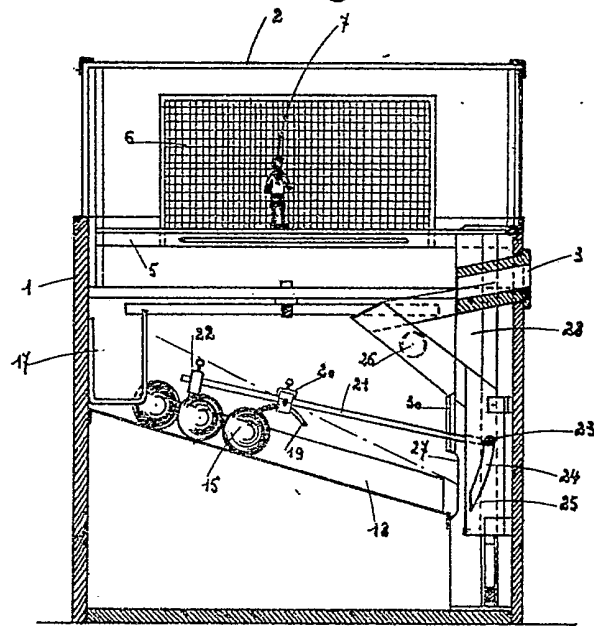


Fig. 5

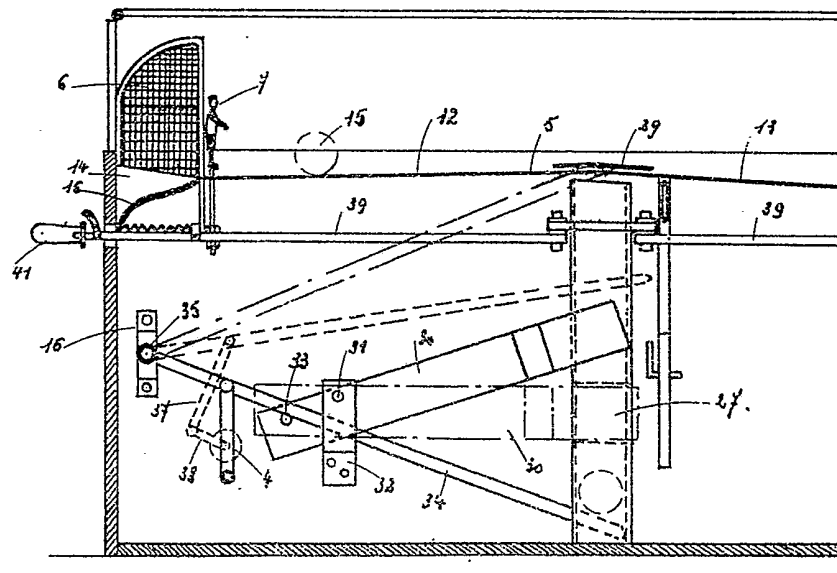


Fig. 1

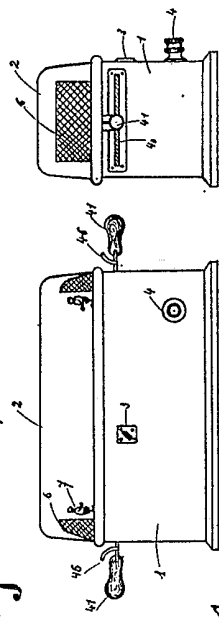


Fig. 2

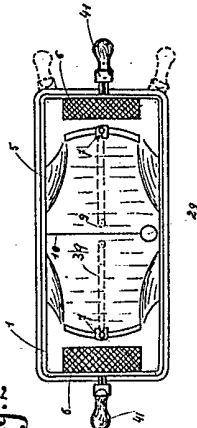


Fig. 3

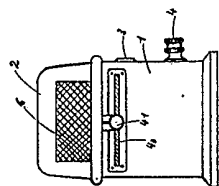


Fig. 10

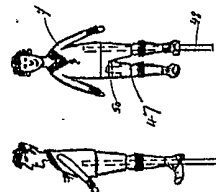


Fig. 8

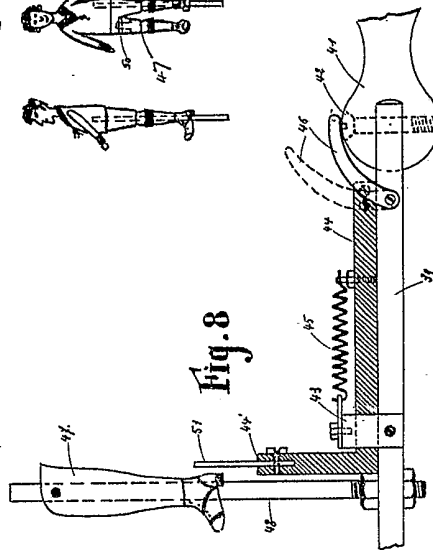


Fig. 9

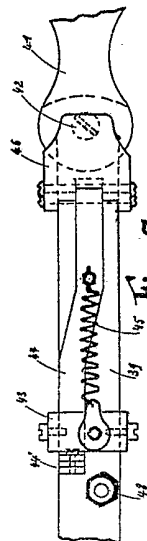


Fig. 4

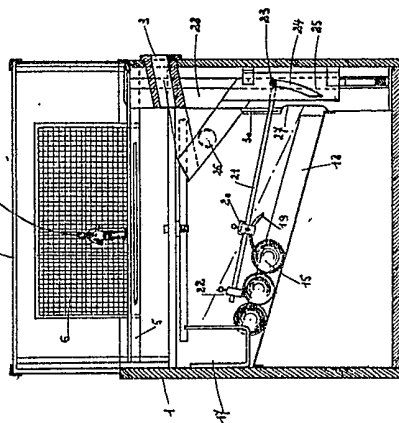
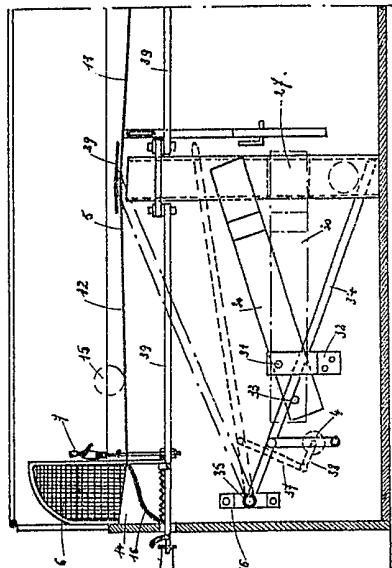


Fig. 5



[This Drawing is a reproduction of the Original on a reduced scale]

