May 15, 1934. H. T. BROOKER ET AL 1,958,563

APPARATUS FOR PLAYING A RACE OR SPORTS GAME

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Fig. 1.

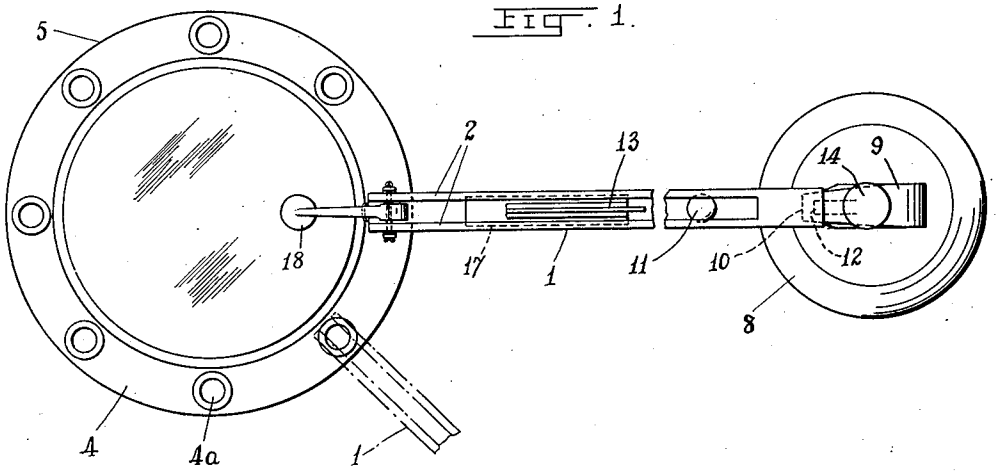
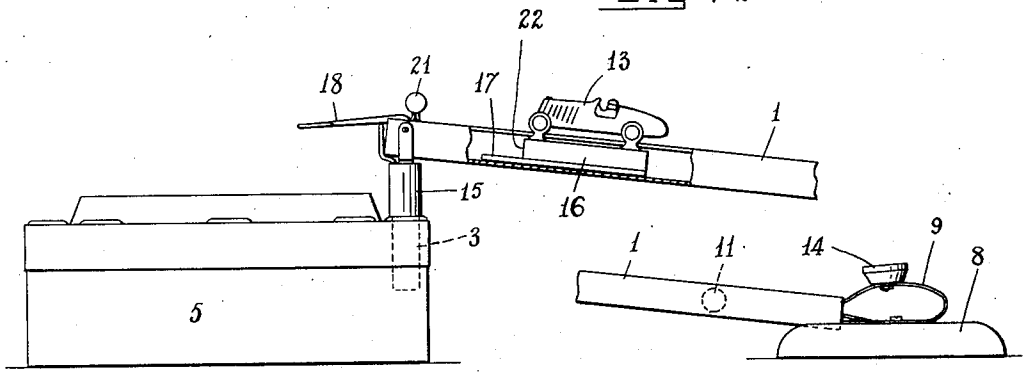


Fig. 2



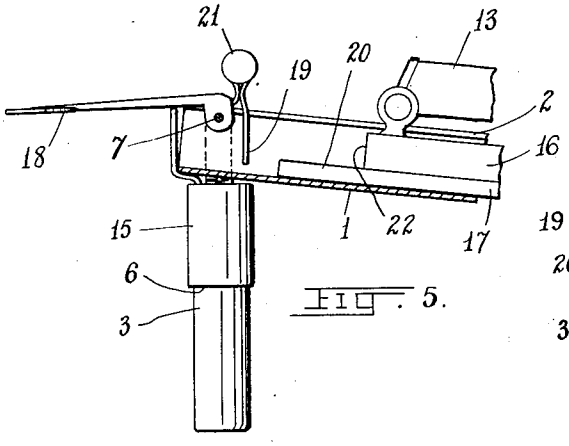
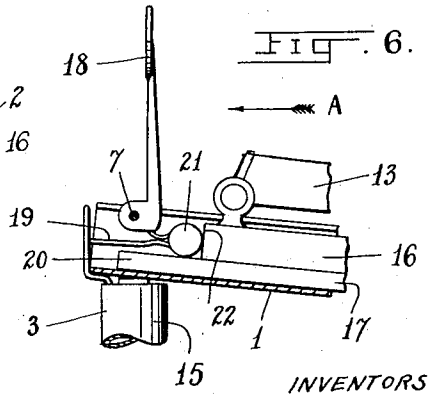


Fig. 5.

Fig. 6.



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APPARATUS FOR PLAYING A RACE OR SPORTS GAME

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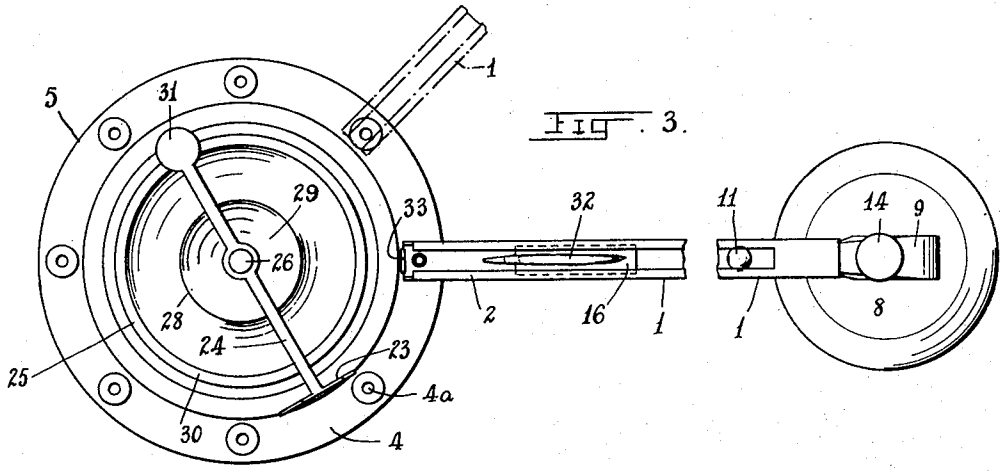


Fig. 3.

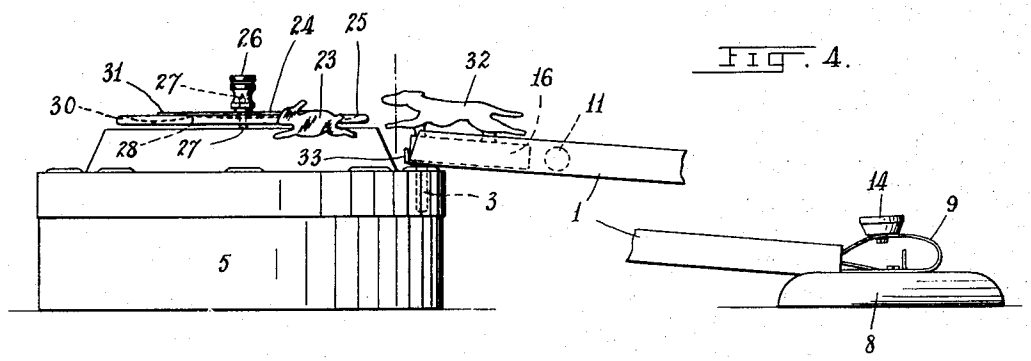


Fig. 4.

Fig. 7.

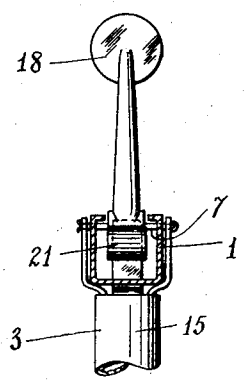


Fig. 8.

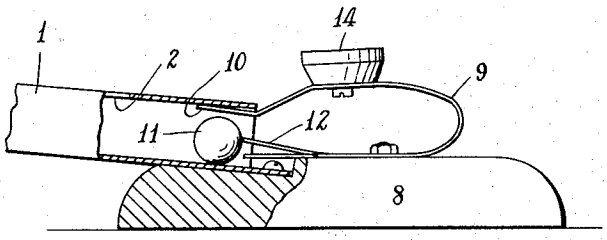
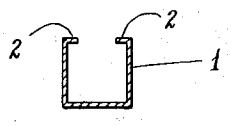


Fig. 9.



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APPARATUS FOR PLAYING A RACE OR SPORTS GAME

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Application January 13, 1933, Serial No. 651,548
In Great Britain January 20, 1932

9 Claims. (Cl. 273—86)

The present invention relates to an improved apparatus for playing a race or sports game, particularly suited for parlour, table, amusement park, fair, or like use.

The apparatus is of the kind in which a series of travellers, each in or on a track or guideway and free for movement thereon, are advanced along the tracks towards an appertaining target or indicator by a series of intermittent thrusts imparted by an actuating device.

Hitherto the intermittent thrusts have been imparted by an actuating device through the mediation of a freely moving propelling unit.

According to the present invention the intermittent thrusts are imparted to each propelling unit by an independent actuating device, whereby, for example, two or more players may oppose each other, and each have independent control over the magnitude and period of the series of intermittent thrusts to be imparted to the propelling unit alloted to the player.

In this connection the actuating means may be of such a character that the propelling unit suffers a rebound on its return to the playing position and one or more strokes may be lost or only weakly made.

In one embodiment under the present invention the actuating means, the track and its traveller, and a target or indicator designed to be operated when the traveller has completed its journey, may constitute a complete unit. The traveller may be propelled along the track to a finishing station or goal only. This unit may have a depending pivot at or adjacent the winning post end of the track for pivotally mounting such end of the track in a base round the margin of which in spaced relation may be pivoted other like tracks, the height of the base and/or a shoulder on the pivot being so chosen as to give a desirable slope to the track, the starting end of which with the actuating means may be attached to a flat base for steadily supporting the starting end of the track.

The indicator may be at a distance from the winning end of the track, but interrelated with means at the end of the track, as for example by mechanical or electrical devices, as to give an indication when the traveller has completed its journey.

According to another embodiment of the present invention apparatus is provided by which an object, for example, an object representing a hare, may be caused to move along a track or path, as for example to revolve in a horizontal plane, and travelling members under the control of different players may be caused to be advanced towards different places in the path of the moving object for the purpose of arresting this and scoring a win for that player who is successful in doing so.

In order to provide for the arrest of the object without shock, another feature of the present invention consists in mounting the object upon a light rotating support so connected for friction drive from a driving member that only a small resistance will suffice to arrest the object without necessitating the stopping of the driving member.

In the accompanying drawings there are shown examples of apparatus made according to the present invention.

Fig. 1 is a plan view, and Fig. 2 a side view of apparatus in which the traveller is designed to operate a target or indicator on the completion of its journey.

Fig. 3 is a plan view, and Fig. 4 a side view of apparatus in which the traveller is designed to arrest a revolving object when the traveller has completed its journey.

Fig. 5 is a part side view of the indicator end of the track referred to in Fig. 1.

Fig. 6 is a similar view to Fig. 5 showing the indicator raised.

Fig. 7 is an end view of the indicator in Fig. 6 looking in the direction of the arrow A.

Fig. 8 is a side view of the impelling end of the track, and Fig. 9 a section across the track.

In referring to the drawings it is to be noted in Figs. 2 and 4 that the track is shown broken and the impelling end of the track at a lower level, so as to enable the device to be illustrated within the allowable dimensions of the drawings.

Referring more particularly to Figs. 1, 2, and 9, of the accompanying drawings, there is provided a channel shaped track 1 having overhanging edges 2 and provided at the finishing or winning end of the track with a depending pivot 3 for pivotally mounting such end of the track in sockets 4a at the margin 4 of a base 5 around which margin in spaced relation may be pivoted like race tracks.

The height of such base 5 or a shoulder 6 on the pivot 3 determines the slope of the track 1, assuming that the impelling end of the track is supported at the same ground level as the base 5.

Conveniently and advantageously the pivot 3 is itself pivoted by a horizontal pin 7 through the winning or finishing end of the track, and

on such pin 7 a target may be pivotally mounted as hereinafter described.

In one constructional form the pivot at the winning or finishing post end of the track 1 is conveniently made of folded metal with a forking at the upper end for pivotal attachment to the track by the pin 7, and such pin 7 may also form the pivot for the target. To form the shoulder 6 to seat against the base, a sleeve 15 is mounted on the pivot 3 by a push fit.

The impelling end of the track consists of a base 8 for steadily supporting such impelling end of the track, and the actuating means preferably takes the form of a bow-spring 9 under the free end 10 of which a steel or glass or other suitable ball 11 is adapted to be brought to rest by a stop 12 in such a position that on pressing the bow spring 9 downwardly its free end 10 slidingly flexes over the ball 11 moving slowly at first and then suddenly pressing downwards with a snap, and imparting an impulse to the ball 11 which gives it a sharp propulsive thrust towards a traveller 13.

The before mentioned stop 12 may be a blade spring which may be formed by slitting the lower member of the bow spring 9 to free a medial portion thereof for such service.

Buttons or the like 14 are attached to the top of the bow spring 9 for convenience in pressing thereon with the ball of a finger or thumb.

The traveller 13 may take divers forms, that shown being a model of an automobile mounted on a base 16 which may be in the form of a rectangular box-like structure on which the model 13 is mounted, and having a slipper guide 17 which extends beyond the overhangs 2 and prevents withdrawal of the traveller in an upward direction.

The target or indicator may be in the form of a flat post 18 mounted on the horizontal pivot 7 and so arranged that when lying down it presents an arm 19 in the path of a leading portion 20 of the traveller 13 so that when this has been propelled for a certain distance along the track, the leading portion 20 of the traveller strikes such arm 19 and raises the target or indicator to a vertical position, in which position a stop 21 (which may serve as a counter-weight) on the target is opposed to a shoulder 22 on the traveller 13 and arrests the traveller at the winning post end of the track.

Referring now more particularly to Figs. 3 and 4 in which like references indicate like parts to the construction already described with reference to Figs. 1 and 2, the target at the winning post end of the track is now replaced, in the particular constructional form now to be described, by a revolving object, which in the example shown is the model 23 of a hare.

This is mounted upon a light diametral bar or arm 24, and this bar or arm 24 is arranged to be revolved by frictional reaction thereof for drive with a driving wheel 25 shown as a hand-spun fly-wheel.

Conveniently and advantageously, the driving wheel 25 is a fly-wheel having at its centre a cap 26 which is supported on the sharp point or reduced end of a pivot post 27. As stated previously the support is a light diametral bar or arm 24 arranged to rest loosely by its own weight on a shoulder 28 of the hub 29 of the fly-wheel 25 and/or a raised marginal rim 30 thereof, so that the frictional reaction for drive between the fly-wheel 25 and the diametral arm or bar 24 is produced merely by the weight of the bar or arm and the object 23 carried at one end thereby and a balance weight or compensator 31 for the object arranged at the other end of the bar or arm. A resilient washer, e. g., a felt washer may be interposed between the bar or arm and its support.

The cap 26 forms a convenient finger knob whereby to spin the fly-wheel 25 by finger action, but in certain cases the driving wheel may be power driven.

For hand manipulation, the diameter of the cap 26 and the weight of the fly-wheel 25 are so chosen as to favour a more sustained comparatively slow speed of rotation rather than a less sustained comparatively fast speed of rotation.

The travellers 13 in Figs. 3 and 4 each of which may comprise a rectangular box-like structure 16 on which a small model of a racing greyhound 32 is mounted, are adapted to be advanced along the track 1 as before described, a leg or the head of the racing greyhound 32 being adapted, when advanced to the raised end of the track 1, to project into the path of the revolving hare 23 to intercept this and/or interlock therewith.

The raised end of the track is provided with a stop 33, and the corresponding end of the hollow base of the racing greyhound is constructed to act as an elastic member so that if the traveller contacts too heavily with the stop, the traveller rebounds and suffers a set back which prevents it from stopping in a position in which it can arrest the hare, although it may have temporarily contacted therewith, but the fly-wheel continuing to rotate will again carry on the hare after the rebound of the traveller.

Instead of the spring member being on the traveller the stop 33 provided at the raised end of the track may as shown serve to give the elastic rebound.

As soon as the energy imparted to the ball is exhausted, the ball returns by reason of the slope of the track and then by striking the stop below the bow spring rebounds somewhat up the track, in which movement the bow spring may be operated without any thrust being imparted to the ball, or with a thrust of lesser magnitude than if the bow spring is actuated after the ball has come to rest against the stop.

With apparatus under the present invention it is possible to provide a base which is marginally provided with a greater number of pivot bearings than race tracks supplied, so that a purchaser can commence with a centre piece and two or three tracks and then add other tracks if desired subsequently.

The apparatus permits of extremely economical mass manufacture, the major components being adapted to be made from stampings. Moreover the assemblage of the various components does not call for skilled assemblers, and a certain degree of individual skill is introduced into the game.

Each traveller may be advanced along its track by a series of intermittent thrusts imparted by an appertaining actuating device so that two or more players may oppose each other and each have independent control over the magnitude and period of the series of intermittent thrusts imparted through the mediation of the freely moving propelling unit allotted to the player.

In a modification the actuating means may include a rotating cam operated by a hand crank for flexing the bow spring. Or, otherwise the actuating means may take the form of a plunger which may be actuated by the recoil of a spring.

As many embodiments of the present invention may be made, and as the parts herein described may be varied in many ways all without departing from the scope of the invention, it is to be understood that all matter herein set forth or shown in the accompanying drawings is to be interpreted as illustrative and not in a limiting sense.

What we claim is:—

1. Game playing apparatus comprising a plurality of tracks, a support common to such tracks, the tracks sloping to one end, a depending member at the finishing end of each track for mounting this on the support, said member being pivoted by a pin to the finishing end of the track, a corresponding series of units mounted capable of propulsion along the tracks, an actuating device in each track for imparting intermittent thrusts to the unit therein to propel it therealong, the actuating devices being returned by gravity along the tracks after impact, independent means in each track for intermittently impelling the actuating devices, and a target at the finishing end of each track adapted to be engaged by the unit in said track as it completes its allotted distance of travel, said target being pivoted on the aforesaid pin.

2. Game playing apparatus comprising a plurality of tracks, a raised support common to such tracks, the tracks sloping to one end, a corresponding series of units mounted capable of propulsion along the tracks, an actuating device in each track for imparting intermittent thrusts to the unit therein to propel it therealong, the actuating devices being returned by gravity along the sloping tracks after impact, independent means in the form of a bow spring in each track for intermittently impelling the actuating devices, a stop in each track against which the actuating device is brought to rest, said stop being in the form of a blade spring made by slitting the lower member of said bow spring and indicating means at the finishing end of the tracks adapted to be engaged by a unit as it completes its alloted distance of travel.

3. Game playing apparatus, comprising in combination, an object moving along a path, a plurality of tracks leading to different places in said path, travelling members for said tracks under the control of different players, and means for advancing said travelling members along the tracks for the purpose of arresting the movement of said object.

4. Game playing apparatus comprising in combination, an object moving along a path, a plurality of sloping tracks leading to different places in said path, travelling members in said tracks under the control of different players, an actuating device in each track for imparting intermittent thrusts to the traveller therein to propel it therealong for the purpose of arresting the movement of said object when the traveller reaches the finishing end of the track, said actuating devices being returned by gravity along the sloping tracks after impact, and means for intermittently impelling the actuating devices.

5. Game playing apparatus comprising a driving wheel, a member carrying a model, said member being revolved by frictional reaction with said driving wheel, a plurality of tracks leading to different places in the path of the revolving model, a raised support common to such tracks, the tracks sloping to one end, a corresponding series of units mounted capable of propulsion along the tracks and arresting the movement of said model when at the finishing ends of the tracks, an actuating device in each track for imparting intermittent thrusts to the unit therein to propel it therealong, the actuating devices being returned by gravity along the sloping tracks after impact, and/independent means in each track for intermittently impelling the actuating devices.

6. Game playing apparatus, comprising a hand-spun fly-wheel, a diametral bar carrying a model, said bar being revolved by frictional reaction with said fly-wheel, a plurality of tracks leading to different places in the path of the revolving model, travellers for said tracks, and means for advancing said travellers along the tracks for the purpose of arresting the movement of said model when the said travellers reach the finishing ends of the tracks.

7. Game playing apparatus comprising a plurality of channel shaped tracks having overhanging edges, a raised support common to such tracks, the tracks sloping to one end, means for mounting the tracks in spaced relation on said support a corresponding series of units mounted capable of propulsion along the tracks, an actuating device in each track for imparting intermittent thrusts to the unit therein to propel it therealong, the actuating devices being returned by gravity along the sloping tracks after impact, a spring device at the impelling end of each track for intermittently impelling the actuating devices, a base for supporting the said impelling end of each track, and a target at the finishing end of each track adapted to be moved to indicating position by a unit as it completes its allotted distance of travel.

8. Game playing apparatus comprising a support, a hand-spun fly-wheel mounted thereon, a diametral arm carrying a model, said arm being driven from said fly-wheel by frictional reaction, a plurality of channel shaped tracks having overhanging edges, means for mounting the tracks in spaced relation on said support, the tracks sloping to one end, a corresponding series of units mounted capable of propulsion along the tracks, an actuating device in each track for imparting intermittent thrusts to the unit therein to propel it therealong, the actuating devices being returned by gravity along the sloping tracks after impact, a spring device at the impelling end of each track for intermittently impelling the actuating devices, and a base for supporting the said impelling end of each track, the said model having its movement arrested by being engaged by a unit as this completes its allotted distance of travel.

9. Game playing apparatus comprising a plurality of tracks, the tracks in use sloping to one end, a corresponding series of units mounted capable of propulsion along the tracks, means for preventing sidewise movement of the units in said tracks, an actuating device in each track for imparting intermittent thrusts to the unit therein to propel it therealong, the actuating devices being returned by gravity along the tracks after impact, independent manually operated mechanical means in each track for intermittently impelling the actuating devices, and means at the finishing end of the tracks adapted to be engaged by a unit as it completes its allotted distance of travel for giving an indication.

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