R. M. BRENNER.

RACE GAME APPARATUS.

APPLICATION FILED APR. 1, 1911.

1,011,563.

Patented Dec. 12, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

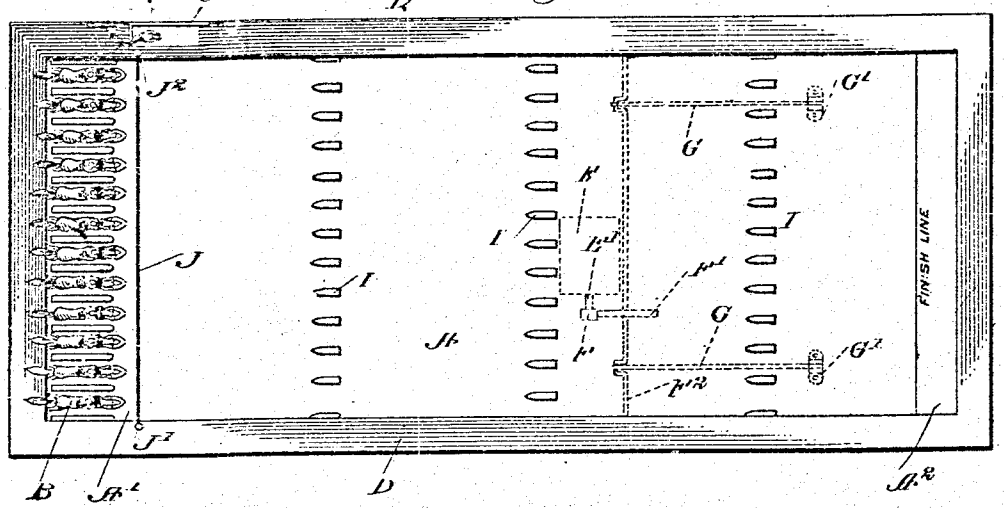


Fig. 2.

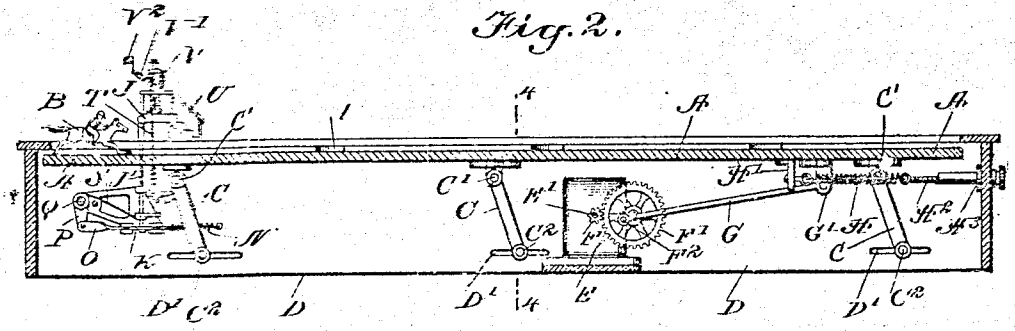


Fig. 4.

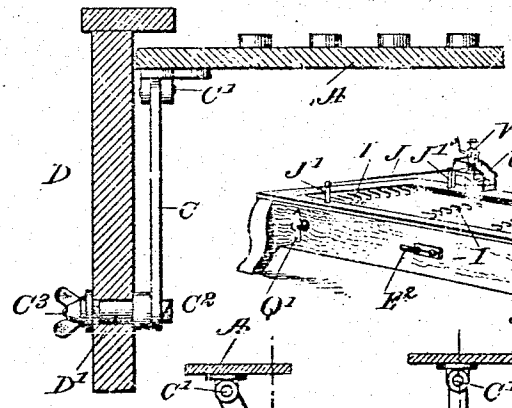


Fig. 5.

Fig. 9.

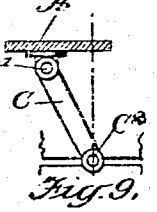
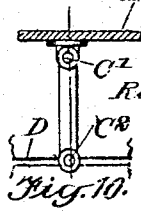


Fig. 10.



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2 SHEETS—SHEET 2.

Fig. 8.

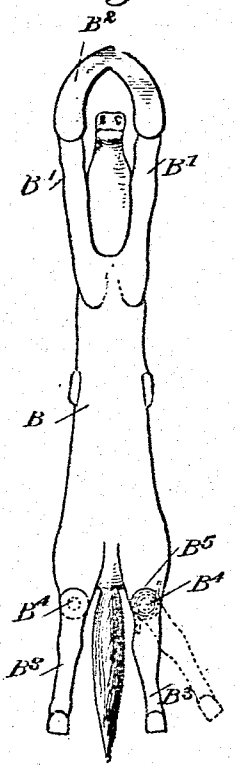


Fig. 5.

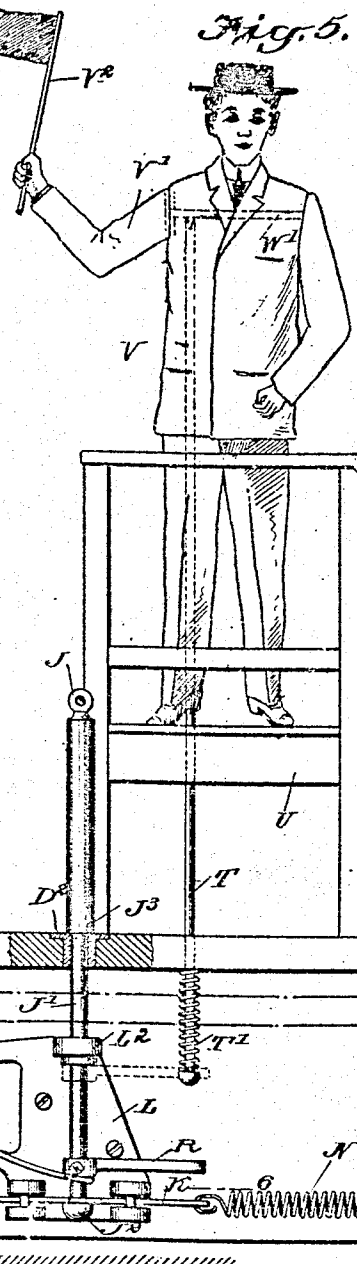
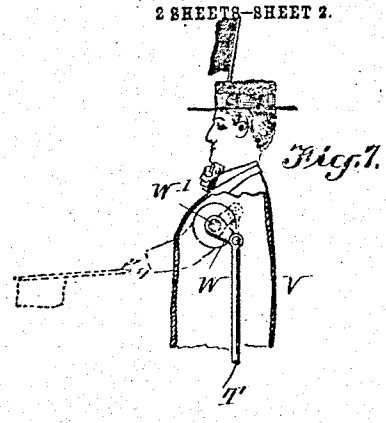


Fig. 7.



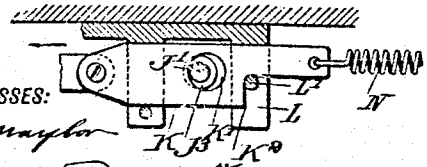


Fig. 6.

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RICHARD M. BRENNER, OF NEW YORK, N. Y.

RACE-GAME APPARATUS.

1,011,563. Specification of Letters Patent. Patented Dec. 12, 1911.

Application filed April 1, 1911. Serial No. 618,319.

To all whom it may concern:

Be it known that I, RICHARD M. BRENNER, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Race-Game Apparatus, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved race game apparatus, more especially designed for use in pleasure resorts, exhibitions and other places, and arranged to simulate a horse race or a similar race in all its stages, and one which is exceedingly interesting and amusing to the onlookers.

For the purpose mentioned, use is made of a racing table, mounted to move freely forward and upward and backward and downward without bumping, so that figures or other objects placed on the table move in a forward direction over the table during the return stroke thereof.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the amusement apparatus; Fig. 2 is a sectional side elevation of the same; Fig. 3 is a reduced perspective view of the same; Fig. 4 is an enlarged cross section of the amusement apparatus on the line 4—4 of Fig. 2; Fig. 5 is an enlarged side elevation of the barrier and starter and the mechanism for operating the same, parts being in section; Fig. 6 is a sectional plan view of the releasing mechanism for the barrier, the section being on the line 6—6 of Fig. 5; Fig. 7 is a cross section of the starter; Fig. 8 is an enlarged inverted plan view of one of the racing objects; Fig. 9 is a sectional side elevation of the table and one of the links for supporting the table, the link and table being in rearmost position; and Fig. 10 is a like view of the same and showing the table and link at the end of the forward stroke.

A racing table or board A is provided with a starting end A′ and a finishing end A^2, and over the said table A are adapted to travel racing objects B, such as figures representing horses and jockeys or the like, as plainly indicated in Figs. 1 and 2, the racing objects B starting at the end A′ and moving forward over the table A to the finishing end A^2. The table A is supported on sets of parallel links C having their upper pivots C′ attached to the under side of the table A while the lower pivots C^2 adjustably engage longitudinally-extending slots D′ formed in the sides of a support or stand D, preferably in the form of a rectangular frame open at the top to disclose the table A, as will be readily understood by reference to Figs. 1 and 2. The lower pivots C^2 of the parallel links C are secured to the sides of the support D after the links have been adjusted so that the links stand in an approximately vertical position at the time the table A is at the end of its forward stroke, while the links C swing downward and rearward during the return stroke of the table A, so that on the forward stroke the table A moves forward and upward and during the return stroke moves downward and rearward. The racing objects B are so adjusted in weight that during the forward and upward stroke of the table A they remain stationary on the table while during the downward and rearward stroke the racing objects move forward from the starting end A′ toward the finishing end A^2.

In order to accomplish the desired result with accuracy, use is made of a motor E, of any approved construction, having its shaft E′ provided with a pinion F in mesh with a gear wheel F′ held on a crank shaft F^2 connected by pitmen G with brackets G′ attached to the under side of the table A. Now it is evident that when the motor E is running a reciprocating motion is given to the table A, but as the links C are arranged in the manner described it is evident that during the forward stroke of the table A the motor E has to swing the table A forward and upward, while during the return stroke of the table A the motor E swings the table backward and downward and without jerk or jar or bumping action, thus insuring a proper forward movement of the racing objects without danger of the same falling over during their travel over the racing table. On one side of the support D is arranged a suitable switch E^2 for controlling the stopping and starting of the motor in case the latter is an electric one.

In order to control the speed of the return and downward movement of the racing

table A, use is made of a spring H secured at one end to a bracket H′ and attached at its other end to a screw rod H² mounted to screw in a nut H³ attached to the forward end of the support D. The operator on screwing the screw rod H² inward or outward can decrease or increase the tension of the spring H so as to diminish or increase the speed of the return and downward movement of the racing table A.

The top surface of the racing table A is provided with obstructions I, arranged in transverse rows, with the rear ends beveled to a point, and the obstructions of successive rows staggered, as indicated in Fig. 1. Each of the racing horses B has its fore-legs B′ attached to a front plate B² provided with tapering side edges terminating at the front end in a point so that the said plate B² on coming in contact with the pointed rear end of an obstruction I readily deflects the race horse B without danger of the race horse being turned over on its side. The rear legs B³ of the race horse B are preferably mounted to swing in a lateral direction on vertical pivots B⁴, and springs B⁵ are provided to hold the rear legs B³ in normal position. By the arrangement described the legs B³ are free to swing sidewise, so that in case the race horse B bumps against one of the obstructions I then a rear leg B³ is free to swing outward (see dotted lines in Fig. 8), thus increasing the area of the supporting base of the race horse, and preventing the same from toppling over in case of a forceful impact of the race horse with an obstruction I. Thus by the arrangement described the race horses B during their forward travel over the table A are properly deflected on striking an obstruction I without causing the race horse to topple over or deflecting it too far sidewise on its course to the finishing end A². It will be noticed that by the arrangement described the race horses although they have a uniform start are liable to be more or less retarded in their forward movement over the racing table A, so as to heighten the interest in the race, as it is practically impossible to foretell which of the race horses will first reach the finish line at the end A².

A barrier J, in the form of a rod or the like, extends across the table A immediately in front of the racing horses or objects B, and against the said barrier J, when in lowermost position, the heads of the race horses B abut so that the latter are prevented from moving forward over the table A until the barrier J is raised. The ends of the barrier J are attached to vertically-extending rods J′, terminating at their lower ends in spherical buttons J² adapted to pass through openings K′ formed in retaining slides K mounted to slide longitudinally on suitable brackets L attached to the sides of the support D. One end of each slide K is pressed on by a spring N to abut a shoulder K² of the slide K against a pin L′ on the bracket L, and the other end of each slide K is pivotally connected by a link with an arm P attached to a shaft Q journaled in the sides of the support D, one outer end of the shaft Q being provided with a handle Q′ under the control of the operator (see Fig. 3). The rods J′ are mounted to slide vertically in bearings D² and L², of which the bearings D² are secured to the sides of the support D, and the bearings L² form parts of the brackets, as plainly indicated in Fig. 5. The upper portions of the rods J′ are provided with shoulders J³ adapted to be seated on top of the bearings D² to limit the downward sliding movement of the rods J′.

To one of the rods J′ is secured an arm R pressed on by a spring S so as to exert an upward pressure against the rod J′ and consequently against the barrier J to lift the latter whenever the slide K is moved from the right to the left, so as to move the slide out of engagement with the button J² to release the same, and with it the barrier J for the latter to move upward and above the race horses or racing objects B for the latter to pass under the barrier after the same is raised. The arm R previously mentioned is adapted to engage a vertically-disposed rod T, mounted to slide vertically in one side of the support D and in a stand U erected on the said side of the support D adjacent to the barrier J. The rod T is pressed on in a downward direction by a spring T′, and the upper end of the rod T extends through a hollow figure V, representing a starter, and mounted on the stand U. The upper end of the rod T is pivotally connected with an arm W attached to a shaft W′ journaled in the figure V, and on one end of the shaft W′ is secured one arm V′ of the figure V, and which arm carries a flag V², or a similar device, normally in vertical position. Now when the several parts are in the position shown in Fig. 5, then the barrier J is in a lowermost position and held therein by the slide K engaging the button J, and the arm V′ of the starter and carrying the flag V² is held in an uppermost position owing to the action of the spring T′. Now when the operator turns the handle Q′ in the direction of the arrow *a′* (see Fig. 5), then the slide K is moved from the right to the left to release the button J², whereby the barrier J is moved upward by the action of the spring S and the arm R moving upward with the barrier finally engages the lower end of the rod T and forces the same upward against the tension of the spring T′ so that the crank arm W is caused to turn the shaft W′ and the arm V′ is swung downward and with it the flag V², thus giving the signal for starting the race.

It is understood that prior to the operator manipulating the handle Q', the motor E was started, to cause the forward traveling of the race horses B as soon as the barrier J is raised, as above mentioned.

When the operator releases the handle Q' then the spring N draws the slide K back to normal position so that the opening K' is eccentric to the vertical axis of the button J^2, and when the operator presses the barrier J downward then the button J^2 engages the wall of the opening K' away from the spring N and pushes the slide K sufficiently in the direction away from the spring N for the button to pass through the opening K'. When this has been done the slide K returns to its normal position by the action of the spring N, thus engaging the top of the button J^2, to lock the rod J' and consequently the barrier J in a lowermost position until again released by the operator turning the handle Q'.

It is understood that when the barrier J is pressed downward by the operator, the arm R moves away from the rod T and consequently the spring T' pushes the rod T downward so that the arm V' and with it the flag V^2 swing back into normal upright position, as indicated in Figs. 5 and 7.

It is understood that by adjusting the pivots C^2 of the links C, the latter can be given more or less inclination to increase or diminish each forward jump of the racing objects.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. An amusement apparatus, comprising a racing table mounted to move unobstructedly forward and backward, and racing objects placed on the rear end of the said racing table and remaining stationary on the racing table during the forward stroke of the racing table, and traveling forwardly during the return stroke of the said racing table.

2. An amusement apparatus, comprising a racing table, parallel links supporting the said racing table, a motor, and means connecting the said motor with the said table for imparting an unobstructed forward and backward reciprocating motion to the said table, the said parallel links being approximately in a vertical position on the end of the forward stroke of the table and the said links being inclined rearwardly during the return stroke of the table, whereby the latter moves downward on the return stroke and upward on the forward stroke.

3. An amusement apparatus, comprising a racing table, parallel links supporting the said racing table, a motor, means for connecting the said motor with the said table for imparting an unobstructed forward and backward reciprocating motion to the said table, the said parallel links being approximately in a vertical position on the end of the forward stroke of the table, and the said links being inclined rearwardly during the return stroke of the table, whereby the latter moves downward on the return stroke and upward on the forward stroke, and racing objects placed on the rear end of the said racing table and of such weight that during the forward stroke of the racing table the objects remain stationary on the racing table and travel forward during the return stroke of the racing table.

4. An amusement apparatus, comprising a racing table, parallel links supporting the said racing table, a motor, means connecting the said motor with the said table for imparting an unobstructed forward and backward reciprocating motion to the said table, the said parallel links being approximately in a vertical position on the end of the forward stroke of the table, and the said links being inclined rearwardly during the return stroke of the table whereby the latter moves downward on the return stroke and upward on the forward stroke, and an adjustable tension device for the said table to govern the speed on the return movement of the racing table.

5. An amusement apparatus, comprising a racing table, means for unobstructedly reciprocating the said table, and means carrying the said racing table and arranged to move the racing table upward on the forward stroke and downward on the return stroke.

6. An amusement apparatus, comprising a racing table, a motor, means connecting the said motor with the racing table to unobstructedly reciprocate the same, parallel links carrying the said racing table and arranged to move the racing table forward and upward on the forward stroke and rearward and downward on the return stroke, and racing objects placed on the rear starting end of the said racing table, and of such weight that on the forward and upward movement of the racing table the objects remain stationary, and during the rearward and downward movement of the racing table the objects move forward.

7. An amusement apparatus, comprising a racing table, a motor, means connecting the said motor with the racing table to unobstructedly reciprocate the same, parallel links carrying the said racing table and arranged to move the racing table forward and upward on the forward stroke and rearward and downward on the return stroke, a support, adjustable pivots on the said supports for the said parallel links, and racing objects placed on the rear starting end of the said racing table and of such weight that on the forward and upward movement of the racing table the objects remain sta-

tionary, and during the rearward and downward movement of the racing table the objects move forward.

8. An amusement apparatus, comprising a racing table, a motor, means connecting the said motor with the racing table to unobstructively reciprocate the same, parallel links carrying the said racing table and arranged to move the racing table forward and upward on the forward stroke and rearward and downward on the return stroke, a support, adjustable pivots on the said supports for the said parallel links, racing objects placed on the rear starting end of the said racing table and of such weight that on the forward and upward movement of the racing table the objects remain stationary, and during the rearward and downward movement of the racing table the objects move forward, and an adjustable tension device connected with the said racing table to govern the speed of the return movement of the racing table.

9. An amusement apparatus, comprising a support, a table mounted to reciprocate on the said support and having a starting end and a finishing end, a barrier extending across the said table adjacent to the said starting end, the barrier having vertical rods slidable in the said support and one of the rods terminating at its lower end in a button, a spring pressing the said barrier to raise the same, a spring-pressed retaining slide for engagement with the said button to hold the barrier in lowermost position against the tension of the said spring, manually-controlled means for actuating the said slide to release the button and allow the barrier to rise, an arm on one of the said barrier rods, a starter mounted on the said support adjacent to the said barrier and provided with a movable member, a spring-pressed starter rod adapted to be engaged by the said arm, and a connection between the said starter rod and the said movable member.

10. An amusement apparatus, provided with a reciprocating racing table having obstructions on its face, and racing objects adapted to travel on the said table and having movable members to prevent the objects from falling over on the object striking the obstruction.

11. An amusement apparatus, provided with a reciprocating racing table having obstructions on its face, and racing objects adapted to travel on the said table, and having a front plate, and rear pivoted members, the said plate and rear members resting on the table and the front plate being adapted to contact with the said obstructions.

12. An amusement apparatus, provided with a figure representing a race horse and having a front plate integral with the forelegs of the figure, the rear legs of the figure being pivoted to swing sidewise.

13. An amusement apparatus provided with a figure representing a race horse and having a front plate integral with the forelegs of the figure, the rear legs of the figure being pivoted to swing sidewise, and springs for holding the rear legs in normal position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RICHARD M. BRENNER.

Witnesses:
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PHILIP D. ROLLHAUS.