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RACE TRACK BARRIER

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2 Claims. (Cl. 119—45.5)

This invention relates to race track barriers and has for the primary object the provision of a device of this character which may be caused to travel along a race track for a predetermined distance or to a point in adjacent with the starting line so that horses of a race in behind the barrier may be slowly advanced to the starting line giving the riders sufficient opportunity to bring the horses into proper position for the race and to cause the barrier to automatically assume a track-clearing position on reaching the starting line, permitting the horses to break with a fair chance for each horse.

With these and other objects in view, this invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawings, in which

Figure 1 is a top plan view illustrating a movable race track barrier constructed in accordance with my invention.

Figure 2 is a side elevation, partly in section, illustrating the same.

Figure 3 is a transverse sectional view taken on the line 3—3 of Figure 1.

Figure 4 is a top plan view illustrating one of the carriages.

Figure 5 is a fragmentary vertical sectional view illustrating one of the carriages and the automatic locking means thereof.

Figure 6 is a fragmentary vertical sectional view illustrating one of the power supporting mediums.

Figure 7 is a detail sectional view taken on the line 7—7 of Figure 2.

Referring in detail to the drawings, the character A indicates a fragmentary portion of a race track or course having at opposite sides thereof the usual fences or guard rails B and C the starting line of the race course. Supported by the fences or guard rails B are carriage tracks 10, suitable brackets 11 being provided for the mounting of the carriage tracks and the latter extend for a selected distance along the track A in advance of the starting line C. Each carriage track is of channel iron construction and has integral therewith rails 12. Guard flanges 13 overlie the rails 12. Carriages 14 having rollers travel upon the rails 12, the rollers being prevented from jumping off of the rails by the guard flanges 13. The carriages overhang the fences or guard rails of the race track and carry vertically arranged sleeves 15 in which are removably mounted barrier posts 16. Barrier arms 17 are pivoted on the upper ends of the posts and are connected together by barrier tape 18 which extends transversely of the race track A. Arcuately curved braces 19 are pivoted on the arms 17 and extend through openings in the posts. Coil springs 20 are mounted on the braces 19 and act upon the arms 17 to urge said arms upwardly to assume the dotted line position, as shown in Figure 2, and which positions the barrier tape 18 at a height sufficient to permit a horse and its rider to pass freely thereunder. The braces 19 have notches 21 to be engaged by latch pins 22 for releasably securing the arms 17 in a lowered position or in a position supporting the barrier tape below the heads of horses. The latch pins 22 operate in slots formed in the posts and form integral parts of spring pressed rods 23. The rods 23 are slidable in the posts and enter the supporting sleeves 15 and are engaged by pivotally mounted levers 24. The levers are pivoted on the carriages and extend through slots in the supporting sleeves 15. Pins 25 are slidable in the carriages and engage with the levers 24 to contact stops 26 located adjacent the starting line. The pins 25 when engaging the stops 26 push upwardly on the levers 24 which in turn push upwardly on the rods 23 and disengage the latch pins from the notches 21, freeing the arms 17 to swing upwardly under the influence of the springs 20 placing the barrier tape 18 in a position to clear the horses and riders.

Removably mounted on the ends of the carriage tracks adjacent the starting line C are motor housings 27 in which are located electric motors 28 geared to drums 29. The housings rotateably support the drums 29 and the latter have wound thereon cables 30 which pass over guide rollers 31 and along the carriage tracks and are connected to pivotally mounted dogs 32. The dogs are pivoted on the carriages and are spring influenced to normally engage with rack teeth 33 formed on the carriage tracks. The dogs engaging the rack teeth prevent accidental movement of the carriages. However, when the electric motors are set in operation to draw the drums 29 for the purpose of winding the cables thereon, the pull of the cables on the dogs disengages said dogs and draws the carriages along the carriage track towards the starting line consequently advancing the barrier tape 18 towards the starting line. Should the electric motors be stopped during the travel of the carriages towards the starting line the dogs immediately en-
gage the teeth 33 and secure the carriages against accidental movement.

The electric motors are connected in an electric circuit 34 which includes a main switch 35 and rheostat type switches 36. One of the rheostat switches controls one of the motors and the other rheostat switch controls the other motor permitting the starter or operator of the device to start and stop the electric motors as desired.

The carriages are removable from the carriage tracks, also the motor housings so that the device can be readily moved from one locality on the race track A to another, it being understood that the different localities of the race track have the carriage tracks installed on the guard rails B.

In operation, the carriages carrying the barrier are located at a selected distance from the starting line with the barrier tape in its lowermost position. The horses of the race are then brought in and lined up to the barrier tape. The starter or operator actuates the switches 36 to set the electric motors in operation which draws the carriages along the carriage tracks, allowing the horses of the race to advance and as the pins 25 engage the stops 26 the barrier arms 17 are released and caused to travel upwardly clearing the horses of the barrier tape, permitting the horses to break each having an even chance. During the time in which the horses are advancing towards the starting line by the advancement of the carriages the riders have sufficient time in which to get their horses into proper position for the race. Also, the horses being allowed to proceed along the track renders it easier for the riders to maintain the horses in their proper positions instead of having to hold the horses in a given position until the race is started by the removal of the barrier tape.

What is claimed is:

1. A movable race track barrier comprising carriage tracks arranged along a race track and terminating adjacent a starting line of the race track, carriages supported by the carriage tracks, barrier posts removable secured to said carriages, barrier arms pivoted on said posts, a barrier tape connecting said arms, spring means acting on said arms to elevate the barrier tape to clear the track, manually controlled means for advancing the carriages to the starting line, rack teeth carried by the carriage tracks, dogs pivoted on said carriages and spring influenced to engage the teeth, cables connected to said dogs, manually controlled electrical means for actuating said cables to advance the carriages to the starting line, and stops carried by the carriage tracks to actuate the latch means for freeing the barrier arms on the carriages reaching the starting line.

2. A movable race track barrier comprising carriages mounted for movement along a race track towards a starting line of said race track, carriage tracks for supporting said carriages, electrical power means carried by said tracks and including driven drums, cables wound on said drums, teeth on said carriage tracks, dogs pivoted on said carriages and spring influenced to engage the teeth and connected to said cables, manually actuated means for controlling the electrical power means, a self-elevating barrier carried by the carriages, latch means for securing the barrier means in a position to bar the race track, and means carried by the carriage tracks to actuate the latch means on the barrier reaching the starting line to permit the latter to automatically assume a track-clearing position.

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