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TOY.

APPLICATION FILED JULY 26, 1909.

953,209.

Patented Mar. 29, 1910.

2 SHEETS—SHEET 1.

Fig. 1—

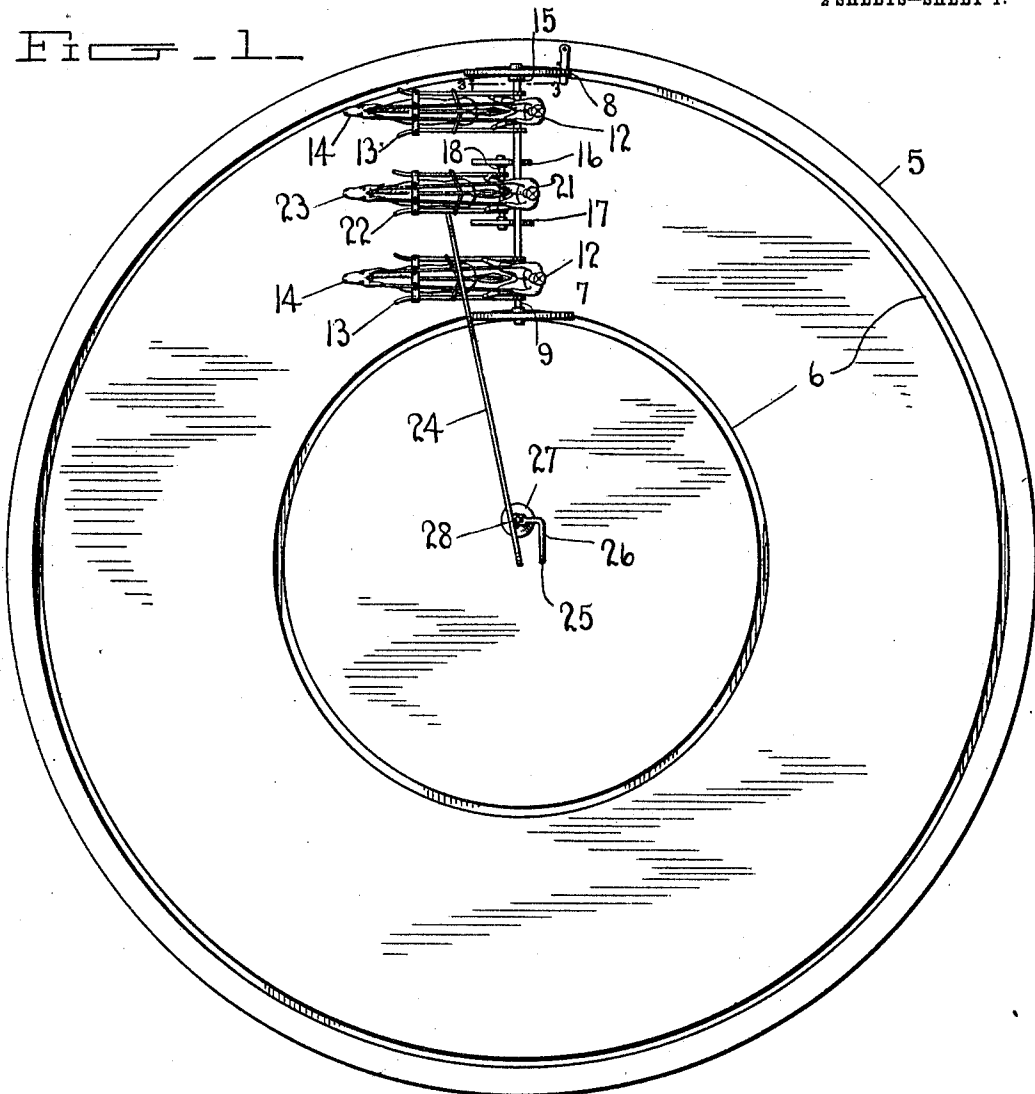
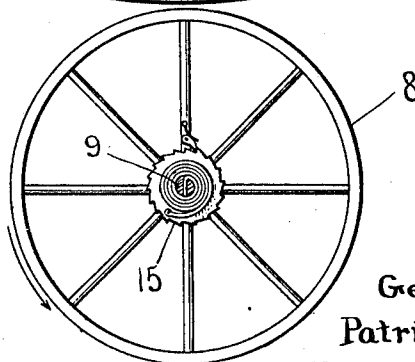


Fig. 2—



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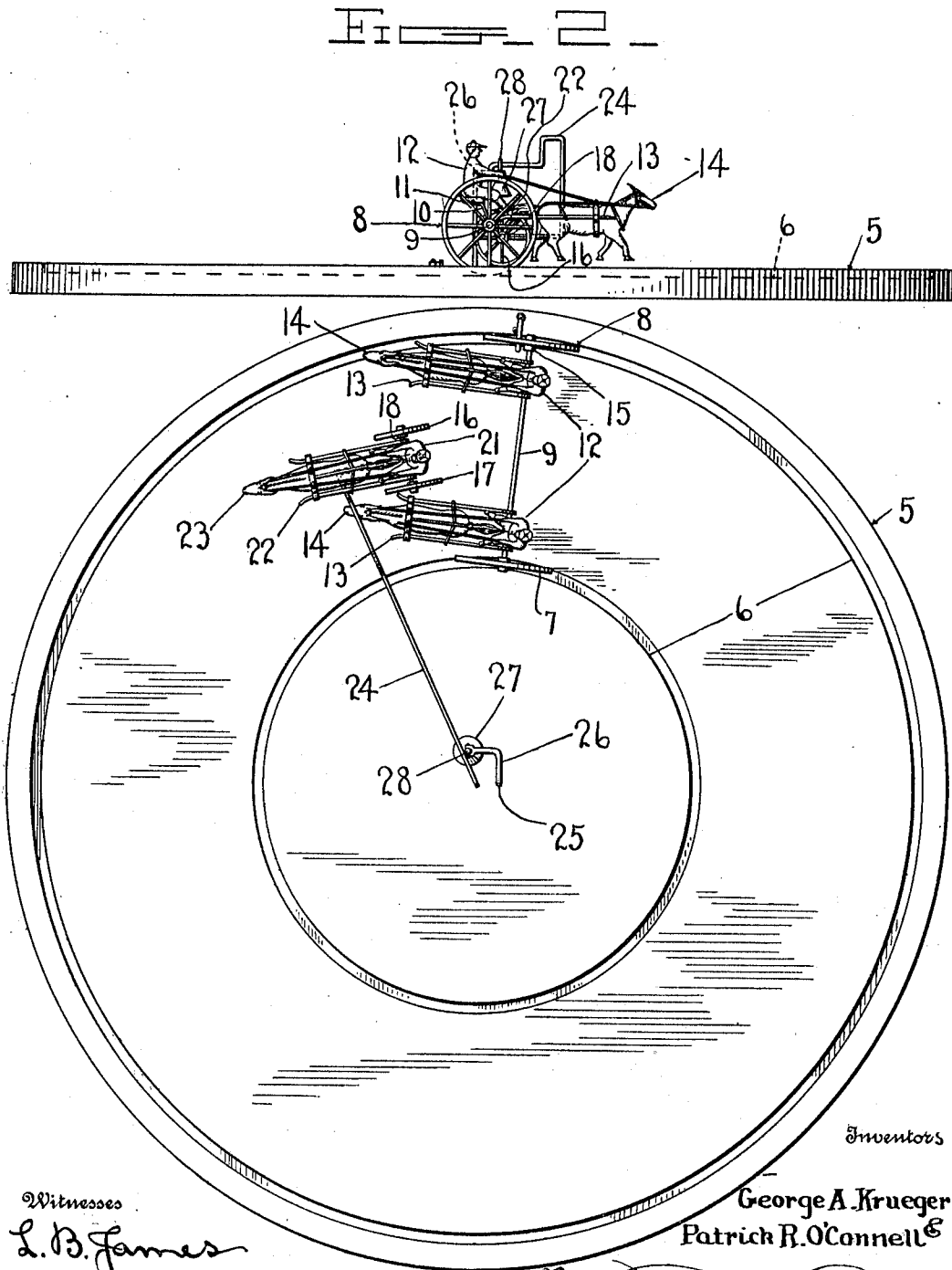
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# UNITED STATES PATENT OFFICE.

GEORGE A. KRUEGER AND PATRICK R. O'CONNELL, OF DANFORTH, ILLINOIS.

TOY.

953,209.

Specification of Letters Patent. Patented Mar. 29, 1910.

Application filed July 26, 1909. Serial No. 509,634.

*To all whom it may concern:*

Be it known that we, GEORGE A. KRUEGER and PATRICK R. O'CONNELL, citizens of the United States, residing at Danforth, in the county of Iroquois, State of Illinois, have invented certain new and useful Improvements in Toys; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in games and toys and more particularly to the type wherein a plurality of figures are adapted to travel around a track.

One object of the invention is the provision of a device of that kind wherein a certain figure will move in advance of the rest at the end of each journey around the track.

Another object is the provision of an audible signal operated by the figure moving in advance of the other figures.

With these and other objects in view as will more fully hereinafter appear, the present invention consists in certain and novel details of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings and more particularly pointed out in the appended claims, it being understood that various changes in the form, proportion, size and minor details of the device may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings forming part of the specification:—Figure 1 is a plan view of the device. Fig. 2 is a side elevation thereof. Fig. 3 is a detailed side elevation of the driving wheel and spring motor. Fig. 4 is a view similar to Fig. 1 but showing the position of the parts when the distance around the course has been completed.

Similar numerals of reference are employed to designate corresponding parts throughout.

The race course is designated in general by the numeral 5 and is substantially circular in contour, and forms the base upon which the figures travel. The base may be of any suitable material, such as wood and is provided with a pair of concentric grooves 6, one of which is arranged adjacent the

periphery of the course and the other intermediate of the first-named groove and center of the course.

The figures represent horses drawing sulkies upon which are seated drivers. The sulky is of peculiar construction inasmuch as it travels on one wheel. As shown in the drawings two sulkies are employed, the wheels of which are journaled on the opposite ends of a common shaft, the two wheels supporting the two sulkies are designated by the numerals 7 and 8 and the single shaft connecting the wheels is designated by the numeral 9. The wheels 7 and 8 are disposed in the grooves 6 of the course. Rising from the opposite end portions of the shaft and adjacent the wheels 7 and 8 are inclined seat supports 10, the upper ends of which terminate in seats 11 upon which are seated the drivers 12. The supports 10 are preferably of sheet metal and have openings in their lower ends for the reception of the shaft 9 and extending forwardly from the lower ends of the supports are shafts 13, between which are disposed horses 14. The weights of the horses and shafts will slightly exceed the weights of the drivers and seats, so that the latter will be maintained upright on the shaft 9.

Mounted on the outer end of the shaft 9 is a clock work mechanism, constituting a spring motor 15, the ratchet wheel of which engages with a pawl disposed on one of the spokes of the outer wheel. The motor may be of any well known type and the spring is adapted to store sufficient energy to propel the wheels once around the track.

By referring now to the drawings it will be seen that a third figure is used, and represents a driver, sulky and horse. This sulky is constructed with two wheels designated by the numerals 16 and 17, which are connected by a shaft 18 upon which they are journaled. Rising from the shaft 18 is an oblique standard, terminating at its upper end in a seat 20 upon which is disposed a driver 21 and extending forwardly from the lower end of the standard are a pair of shafts 22, between which is arranged a horse 23. With this construction it is obvious that the last-named sulky will travel on its own wheels when forced. Extending radially from the center of the course is an arm 24, one end of which is pro-

vided with a down-turned extension which is journaled in the center of the course and the outer end of which rises above the inner wheel of the first-named sulky and  
 5 has its end portion secured to the horse 23, with its extremity turned at right-angles and extending between the wheels of the last-described sulky, and in position to bear on the first-named shaft 9. It might here  
 10 be stated that the wheels 18 and 19 of the second-described sulky are considerably less in diameter than the wheels 7 and 8 in the grooves and rise to a height somewhat less than the distance of the shaft 9 from the  
 15 surface of the course. With this construction it is obvious when the motor has been wound as before described, and the second-named sulky placed between the wheels 7 and 8 so that the rear ends of the arm will  
 20 bear on the shaft 9, that the movement of the wheels 7 and 8 will force the second-described sulky around the track. As before stated, the energy of the spring will be sufficient to drive the wheels 7 and 8 once around  
 25 the track, so that when the said wheels arrive at the end of their journey, the second-described sulky and its parts will have sufficient momentum to move the horse slightly in advance of the horses 14, thus permitting  
 30 the middle horse to win the race. In order that this may be accomplished successfully at each operation a pivoted lug extends transverse the outer groove, adjacent the starting point so that a sudden check will  
 35 be given to the wheels 7 and 8.

By referring now to the drawings it will be seen that rising from the central portion of the track is a standard 25, the upper end of which is disposed below the plane of the  
 40 rod 24. This standard is provided with a lateral arm 26 which supports a bell 27 from the upper end of which rises a projection 28, which is in the path of movement of the arm 24. Thus it will be seen as the  
 45 intermediate horse moves in advance of the outer and inner horses and passes over the starting line, that the rod 24 will bear on the projection 28 and ring the bell.

From the foregoing it can be seen that we  
 50 have provided a device which is comparatively simple in structure and inexpensive to manufacture, embodying few parts and these so arranged that the danger of derangement will be reduced to a minimum.

Having thus described our invention what 55 is claimed as new, is:—

1. In a toy race course, a figure provided with a motor for propelling it around said course, a second figure free from and in advance of the first-named figure and operated thereby to travel around said course,  
 60 means combined with the course for checking the movement of the first-named figure after the latter has moved a certain distance on the course whereby the second-named figure  
 65 is permitted to move by its own momentum in advance of the first-named figure.

2. In a toy race course provided with grooves, a wheeled figure disposed in said grooves, means for propelling said figure  
 70 around said course, a second figure free from and in advance of the first-named figure and operated thereby to travel around said course and means combined with the course and over-lying one of said grooves, said  
 75 means operating to stop the first-named figure after the latter has moved around the course whereby the second-named figure is permitted to move by its own momentum in advance of the first-named figure.  
 80

3. In a toy race course provided with grooves, a wheeled figure disposed in said grooves, means for propelling said figure around said course, a second figure free from and in advance of the first-named figure and  
 85 operated by the latter to move around the course, and means combined with the course and operating to stop the first-named figure after the latter has moved around the course, whereby the second-named figure is permitted to move by its own momentum in advance of the first-named figure.  
 90

4. In a toy race course, a figure provided with a motor for propelling it around said course, and a second figure free from and in  
 95 advance of the first-named figure and operated by the latter to travel around said course, a radial arm having one end secured to the second-named figure and its opposite end to the course and a signal adapted to be  
 100 sounded by the arm.

In testimony whereof, we affix our signatures in presence of two witnesses.

GEORGE A. KRUEGER.

PATRICK R. O'CONNELL.

Witnesses:

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