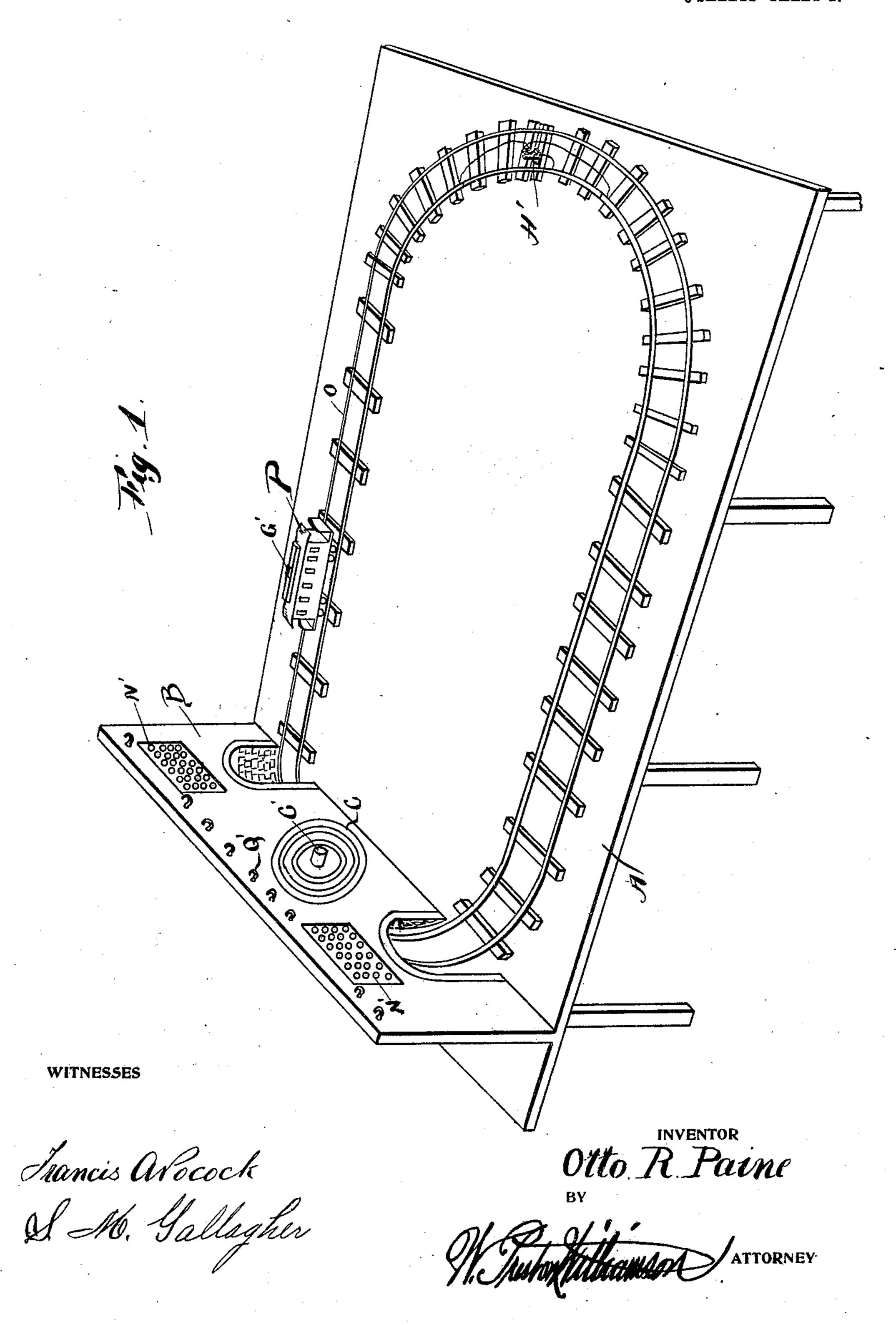
# O. R. PAINE. SHOOTING GALLERY. APPLICATION FILED DEC. 30, 1908.

922,182.

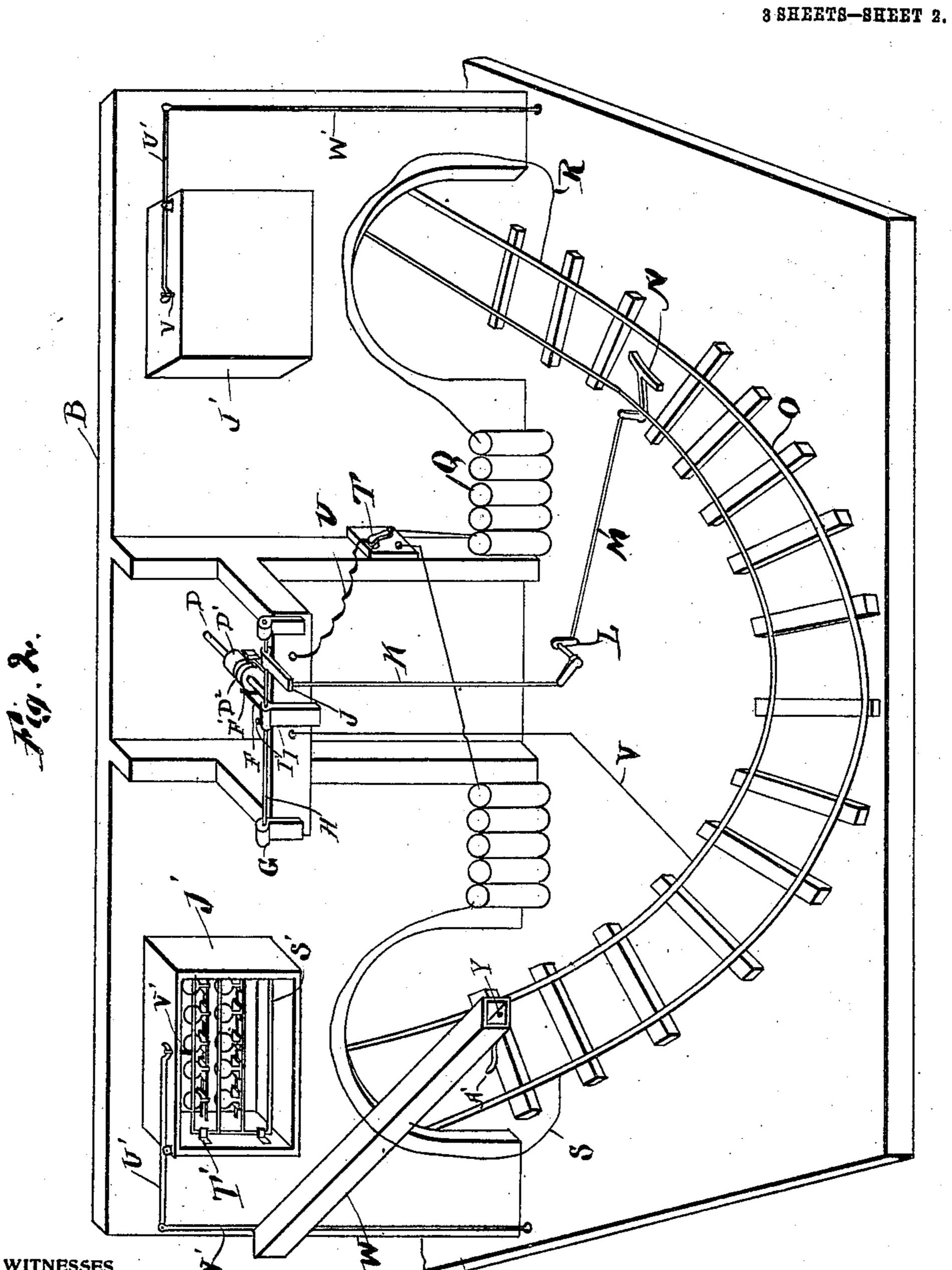
Patented May 18, 1909.
3 SHEETS-SHEET 1.



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Francis A Pocock S. M. Sallagher. Otto R. Paine

By

Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

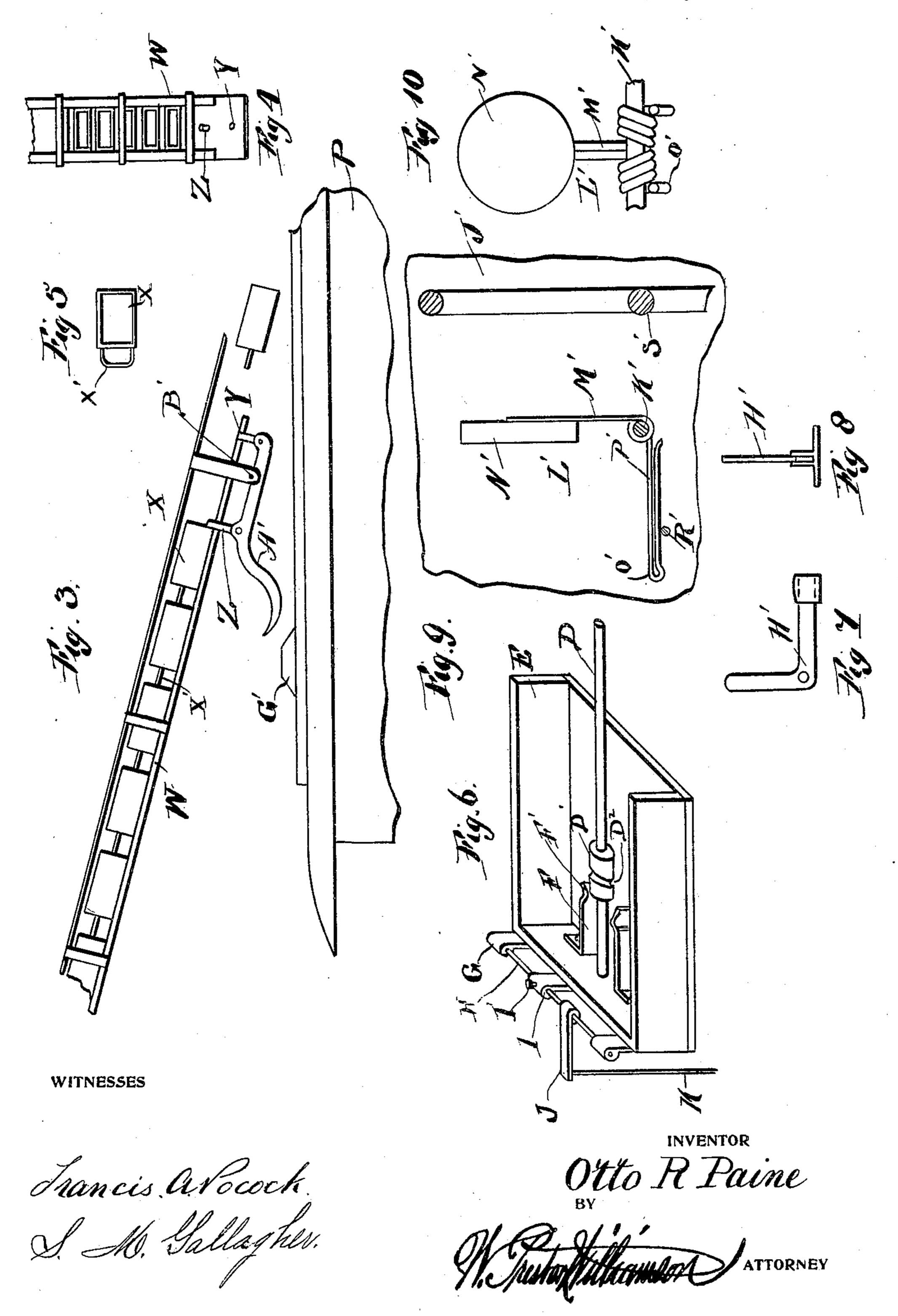
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8 SHEETS-SHEET 3.



THE NORRIS PETERS CO., WASHINGTON, D. C.

### UNITED STATES PATENT OFFICE.

OTTO R. PAINE, OF BLACKWELL, OKLAHOMA.

#### SHOOTING-GALLERY.

No. 922,182.

Specification of Letters Patent.

Patented May 18, 1909.

Application filed December 30, 1908. Serial No. 470,078.

To all whom it may concern:

Be it known that I, Otto R. Paine, a citizen of the United States, residing at Blackwell, in the county of Kay and State of Okla-5 homa, have invented a certain new and useful Improvement in Shooting-Galleries, of which the following is a specification.

My invention relates to a new and useful improvement in shooting galleries, and has 10 for its object to provide a shooting gallery in which a motor driven device will be placed in action each time the bull's eye of the target is struck, and cause said motor driven device to travel toward the marksman and deliver 15 the prizes, and then return to its normal position upon the track where the apparatus

will be set automatically.

A further object of my invention is to provide a shooting gallery having targets with 20 numbers secured thereto which are invisible until the target has been hit at which time a number will be displayed designating some prize to be given the marksman in combination with a motor driven vehicle which is 25 likewise invisible until the target has been hit at which time said motor driven vehicle will deliver a prize to the marksman.

With these ends in view, this invention consists in the details of construction and 30 combination of elements hereinafter set forth and then specifically designated by the

claims.

In order that those skilled in the art to which this invention appertains may under-35 stand how to make and use the same, I will describe its construction in detail, referring by letter to the accompanying drawing forming a part of this specification, in which-

Figure 1 is a perspective view of the gal-46 lery. Fig. 2, a perspective view of the rear portion of the gallery. Fig. 3, a side elevation of the chute containing the prizes and illustrating the manner by which the lowermost prize is removed from the chute by the 45 motor driven vehicle. Fig. 4, a plan view thereof. Fig. 5, a plan view of one of the boxes containing the prizes. Fig. 6, a perspective view of the mechanism for resetting the target and the electrical connection for 50 running the vehicle. Fig. 7, a side elevation of the switch for stopping the vehicle in order that the marksman may remove his prize. Fig. 8, an edge view thereof. Fig. 9, a sectional view of one of the target boxes show-55 ing the position of the different racks. Fig.

10, a front elevation of one of the targets carrying a number card the number being invisible until the bull's eye has been hit.

In carrying out my invention as here embodied, A represents a platform which may 60 be supported in any suitable manner, and near the rear end of this platform is a vertical portion B upon which a target C is represented, the bull's eye C' being the outer end of the rod D, said rod being slidably secured 65 to the casing E. With the rod D is formed the enlarged portion D' having the groove D2 formed around it. To the rear portion of the casing E are secured the springs F the forward ends of which are so bent as to form 70 the extensions F' which are adapted to engage with the groove D2 when the rod is moved rearward. To the upper part of the rear portion of the casing E are also secured the brackets G in which is movably secured 75 the rod H having adjustably secured thereto the depending bracket I by means of the set screw I', said depending bracket adapted to rest against the inner end of the rod D, and to the rod H is also secured the rearwardly ex- 80 tending bracket J to which is attached the rod K, the lower end of said rod being fastened to the crank shaft L to which is also secured one end of the rod M, the opposite end being fastened to the lever N which is 85 secured beneath the track O, said track being formed of two endless rails secured to the platform A and passing rearward through and behind the vertical portion B, said vertical portion may be painted to represent 90 masonry work so that the track will be given the appearance of passing in and out of a tunnel.

P represents a motor driven vehicle which may be in the shape of a car, automobile or 95 the like and this vehicle contains a motor adapted to obtain its current from the two rails of the track.

Q denotes two sets of batteries having a connection R running from one set of bat- 100 teries to one rail of the track and S is another connection running from the opposite set of batteries to the same rail of the track. These batteries are connected in the ordinary way to the switch T which has a connection U 105 running to one of the springs F, the other rail of the track is connected to the opposite spring F by the wire V, thus it will be seen that when the springs F are connected through the medium of the enlarged portion 110 D' of the rod D the current will pass through the rails and the motor of the vehicle thus causing said vehicle to travel along the track.

From the foregoing description it will be 5 seen that when the bull's eye which is the outer end of the rod D is hit by the marksman it will cause said rod to be moved rearward which will cause the lower end of the depending bracket I to do likewise thus turn-10 ing the rod H which will move the outer end of the rearwardly extending bracket J upward, and through the medium of the rod K the crank shaft L and the rod M will cause the lever N to move upward, at the same 15 time the extensions F' of the springs F will engage with the groove D<sup>2</sup> of the enlarged portion D' and this will cause the current to flow through the rails of the track and the motor of the vehicle causing said vehicle to 20 travel outward from behind the vertical portion B, but before passing from behind said vertical portion said vehicle P will pass underneath the chute W containing a number of boxes X in which prizes have been placed, 25 said boxes having a bail X' secured to one end thereof for holding the boxes apart, in the bottom of said chute are formed the openings Y through which pass the pins Z, said pins being attached to the locking lever A' 30 which is secured beneath the chute by the brackets B'.

To the top of the vehicle is fastened the trip G' which engages with the locking lever A' so that the upper pin Z will be moved up35 ward between the two lowermost boxes X.

The movement of this lever will also move the lower pin Z downward out of engagement with the lowermost box X allowing it to slide from the chute to the top of the vehicle,
40 and when the vehicle passes beyond the chute so that the trip disengages the lever A' the rest of the boxes X will be allowed to slide down the chute until the lowermost one comes in contact with the lower pin Z.

The vehicle will travel toward the forward part of the gallery carrying the prize box with it and when it arrives at the forward end of the gallery the vehicle will strike against the switch H' which will disconnect the cur-50 rent and cause the vehicle to stop until the prize box is removed from the vehicle, the operator may then raise the lever and reconnect the current and the vehicle will continue to travel around the track in behind the ver-55 tical portion B where it will come in contact with the lever N pressing it downward which will pull the outer end of the rearwardly extending bracket J downward through the medium of the rod M, crank shaft L and the 60 rod K which will cause the lower end of the depending bracket I to be moved inward thus resetting the target and forcing the enlarged portion D' from between the springs F which will cause the current to be discon-

65 nected and the friction of the lever N will re-

tard the vehicle but the momentum thereof will carry said vehicle past the lever N and shortly after said vehicle has passed said lever N it will stop as the current has been shut off from the tracks at the same time the 70 parts reset have another operation.

To the vertical portion B are secured the boxes J' to the sides of which are attached the horizontal rods K', and on these rods are placed the movable targets L' which are 75 formed to produce the stem M', to the upper end of which is attached the bull's eye N' and the hooks O' to which is removably secured the card P' on which is placed some designating number which will correspond with the 80 number above one of the hooks Q' secured to the vertical portion B, or said hooks if found desirable may be placed on a separate card to be known as the prize card, and on these hooks are hung the prizes so that when a per- 85 son hits the target and a number flies up he will at once know which prize is due him.

Forward of the rods K' is a stationary rack R' on which the forward ends of the hooks O' are adapted to rest when the bull's eye N' 90 is in position for use, thus it will be seen that when the bull's eye is in an upright position the number card P' will be in a horizontal position which will prevent the number from

being seen by the marksman. To the rear of the rods K' is attached a movable rack S' which is adapted to slide up and down in the brackets T', above the boxes J' are fastened the levers U' one end of each of which is secured to the movable rack S' 100 through the medium of a link V' and to the other end of the lever U' is attached the cord W' which runs downward behind the vertical portion B then forward beneath the platform A to the forward end thereof so that the oper- 105 ator may have easy access thereto to enable him to reset the targets L'after one or more of them have been hit. When the bull's eyes of these targets are hit by the marksman they will fall backward until they rest upon the 110 movable rack S' showing the number P' as before stated. When they are in this position the opera: 1 pulls the cord W' which will raise the coof the lever U' having the rack S' secured thereto which will reset the 115 targets.

Of course I do not wish to be limited to the exact details of construction here shown as these may be varied within certain limits without departing from the spirit of my in- 120 vention.

Having thus fully described my invention, what I claim as new and useful, is—

1. In a shooting gallery, an endless track, a vertical portion through and behind which 125 the rear end of the track extends, a target represented upon the front face of the vertical portion, a casing secured to the back of the vertical portion having springs secured to the rear portion thereof, the forward ends 130

922,182

of said springs being so bent as to form extensions, a rod, an enlarged portion formed with said rod having a groove formed therein with which the extensions of the springs are 5 adapted to engage, the forward end of said rod adapted to extend through the vertical portion for forming the bull's eye of the target, brackets secured to the rear of the casing, a rod journaled therein, a rearwardly extend-10 ing bracket fastened to said rod, a depending bracket adjustably secured to said rod so that the lower end thereof rests against the inner end of the first named rod, a crank shaft, a rod for connecting said crank shaft 15 with the outer end of the rearwardly extending bracket, a lever situated beneath the track, a rod for connecting one end of said lever with the crank shaft, an electric motor driven vehicle adapted to travel on the track, 20 a source of electricity for supplying the current to the motor of the vehicle, the normal position of the vehicle being behind the vertical portion so that when the bull's eye is struck the circuit will be closed causing the 25 vehicle to travel, a switch at the forward end of the gallery adapted to be actuated by the vehicle for opening the circuit, said circuit adapted to be closed by the operator which will cause the vehicle to resume its travel, 30 means for automatically opening the circuit and resetting the target when the vehicle reaches its normal position behind the vertical portion, a chute containing prize boxes, a swinging lever secured beneath the lower 35 end of the chute, pins secured to said lever adapted to extend through the bottom of the chute for engaging with the prize boxes, and means for removing one of the prize boxes from the chute each time the vehicle is placed 40 in motion, said vehicle adapted to carry said prize boxes to the forward end of the gallery, as specified.

2. In a shooting gallery, an endless track, a vertical portion through and behind which 45 the rear end of the track extends, a target represented upon the front face of the vertical portion, a casing secured to the back of the vertical portion having springs secured to the rear portion thereof, the forward ends 50 of said springs being so bent as to form extensions, a rod, an enlarged portion formed with said rod having a groove formed therein with which the extensions of the springs are adapted to engage, the forward end of said 55 rod adapted to extend through the vertical portion for forming the bull's eye of the target, brackets secured to the rear of the casing, a rod journaled therein, a rearwardly extending bracket fastened to said rod, a de-60 pending bracket adjustably secured to said rod so that the lower end thereof rests against the inner end of the first named rod, a crank shaft, a rod for connecting said crank shaft with the outer end of the rearwardly extend-65 ing bracket, a lever situated beneath the

track, a rod for connecting one end of said lever with the crank shaft, an electric motor driven vehicle adapted to travel on the track, a source of electricity for supplying the current to the motor of the vehicle, the normal 70 position of the vehicle being behind the vertical portion so that when the bull's eye is struck the circuit will be closed causing the vehicle to travel, a switch at the forward end of the gallery adapted to be actuated by the 75 vehicle for opening the circuit, said circuit adapted to be closed by the operator which will cause the vehicle to resume its travel, means for automatically opening the circuit and resetting the target when the vehicle 80 reaches its normal position behind the vertical portion, a chute containing prize boxes, a swinging lever secured beneath the lower end of the chute, pins secured to said lever adapted to extend through the bottom of the 85 chute for engaging with the prize boxes, means for removing one of the prize boxes from the chute each time the vehicle is placed in motion, said vehicle adapted to carry said prize boxes to the forward end of the gallery, 90 boxes attached to the vertical portion having horizontal rods secured to the sides thereof, targets formed to produce a stem and hooks on which is secured a bull's eye movably secured to the horizontal rods, a card 95 having a number secured thereon removably secured to the hooks, a stationary rack forward of the horizontal rods on which are adapted to rest the outer ends of the hooks, a movable rack slidably secured to the rear 100 of the horizontal rods on which the bull's eye is adapted to rest when hit by the marksman, and means for moving said rack upward for resetting the targets, as shown and described.

3. In combination, a platform, a vertical portion secured to the rear of said platform, an endless track secured to said platform adapted to pass through and behind the vertical portion, a target represented on the front face of the vertical portion, a motor of the vehicle adapted to travel upon the track, a source of electricity for supplying the current to the motor of the vehicle, a rod adapted to pass through the vertical portion forming a bull's eye for the target, and means arranged in conjunction with said rod for closing the circuit thus causing the vehicle to travel, as and for the purpose set forth.

4. In combination, a platform, a vertical portion secured to the rear of said platform, an endless track secured to said platform adapted to pass through and behind the vertical portion, a target represented on the front face of the vertical portion, a motor driven vehicle adapted to travel upon the 125 track, a source of electricity for supplying the current to the motor of the vehicle, a rod adapted to pass through the vertical portion forming a bull's eye for the target, means arranged in conjunction with said rod for clos- 130

ing the circuit thus causing the vehicle to travel, and means at the forward end of the gallery adapted to be actuated by the vehicle for opening the circuit, said circuit adapted to be closed by the operator to cause the vehicle to resume its travel.

5. In combination, a platform, a vertical portion secured to the rear of said platform, an endless track secured to said platform 10 adapted to pass through and behind the vertical portion, a target represented on the front face of the vertical portion, a motor driven vehicle adapted to travel upon the track, a source of electricity for supplying 15 the current to the motor of the vehicle, a rod adapted to pass through the vertical portion forming a bull's eye for the target, means arranged in conjunction with said rod for closing the circuit thus causing the vehicle 20 to travel, means at the forward end of the gallery adapted to be actuated by the vehicle for opening the circuit, said circuit adapted to be closed by the operator to cause the vehicle to resume its travel, a chute situ-25 ated behind the vertical portion containing prize boxes, and means for removing the lowermost prize box from said chute each time the vehicle is set in motion, said vehicle adapted to carry said prize boxes to the for-30 ward end of the gallery, substantially as shown and described.

6. In combination, a platform, a vertical portion secured to the rear of said platform, an endless track secured to said platform adapted to pass through and behind the vertical portion, a target represented on the front face of the vertical portion, a motor driven vehicle adapted to travel upon the track, a source of electricity for supplying the current to the motor of the vehicle, a rod adapted to pass through the vertical portion forming a bull's eye for the target, means arranged in conjunction with said rod for closing the circuit thus causing the vehicle to travel, means at the forward end of the gallery adapted to be actuated by the vehicle

for opening the circuit, said circuit adapted

to be closed by the operator to cause the vehicle to resume its travel, a chute situated behind the vertical portion containing prize 50 boxes, means for removing the lowermost prize box from said chute each time the vehicle is set in motion, said vehicle adapted to carry said prize boxes to the forward end of the gallery, and targets secured to the vertical portion having number cards secured thereto, the numbers of which are invisible until the target has been hit by the marksman.

7. In combination, a platform, a vertical 60 portion secured to the rear of said platform, an endless track secured to said platform adapted to pass through and behind the vertical portion, a target represented on the front face of the vertical portion, a motor 65 driven vehicle adapted to travel upon the track, a source of electricity for supplying the current to the motor of the vehicle, a rod adapted to pass through the vertical portion forming a bull's eye for the target, means ar- 70 ranged in conjunction with said rod for closing the circuit thus causing the vehicle to travel, means at the forward end of the gallery adapted to be actuated by the vehicle for opening the circuit, said circuit adapted 75 to be closed by the operator to cause the vehicle to resume its travel, a chute situated behind the vertical portion containing prize boxes, means for removing the lowermost prize box from said chute each time the ve- 80 hicle is set in motion, said vehicle adapted to carry said prize boxes to the forward end of the gallery, targets secured to the vertical portion having number cards secured thereto, the numbers of which are invisible until 85 the target has been hit by the marksman, and means for resetting said targets, as specified.

In testimony whereof, I have hereunto affixed my signature in the presence of two subscribing witnesses.

OTTO R. PAINE.

Witnesses:

JAMES SHAVER, A. L. STRONG.