M. UNGER.

AMUSEMENT DEVICE.

APPLICATION FILED NOV. 8, 1920.

1,370,385. Patented Mar. 1, 1921.

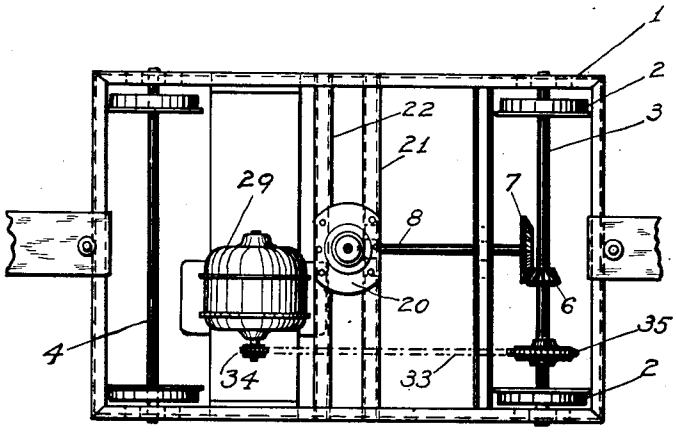


Fig. 2.

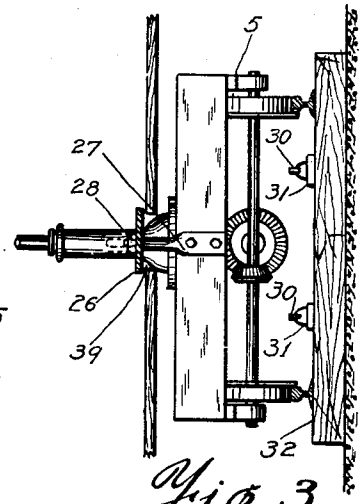


Fig. 3.

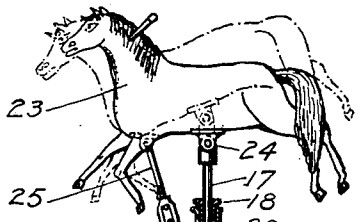
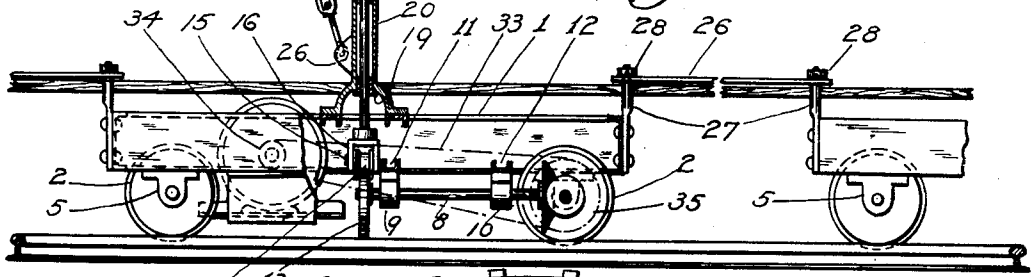
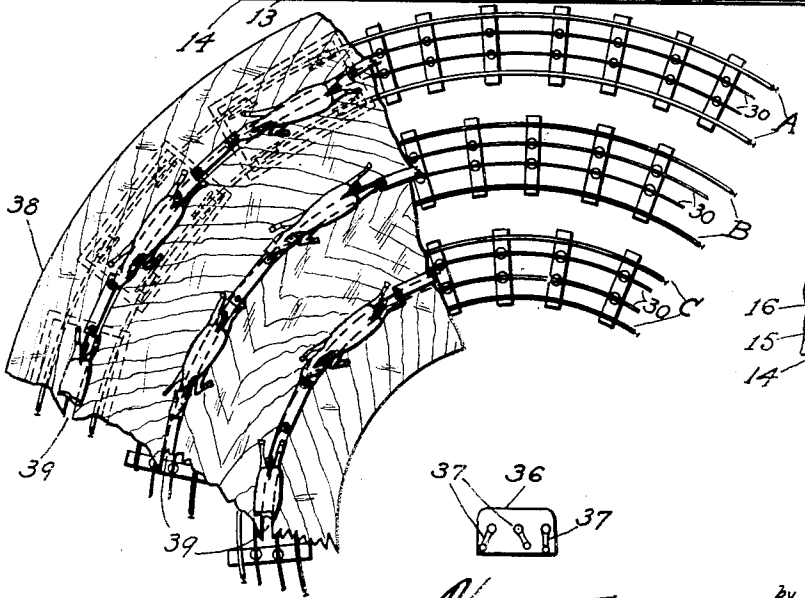


Fig. 1.





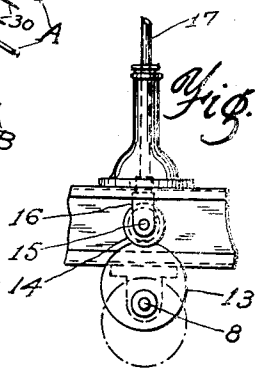


Fig. 4.

Fig. 5.

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AMUSEMENT DEVICE.

1,370,385. Specification of Letters Patent. Patented Mar. 1, 1921.

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To all whom it may concern:

Be it known that I, MORRIS UNGER, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Amusement Devices, of which the following is a specification.

This invention relates to amusement devices and more particularly to apparatuses of this character which simulate a horse race.

One of the main objects of the invention is to provide an apparatus of this character in which different sets of horses are made to race in parallel and endless tracks. A further object is to provide means for selectively increasing or decreasing the speed of each individual set of horses so as to create the impression of competitive race between the occupants of the various sets of horses. Another object is to provide an apparatus of simple construction and operation which may be installed at small cost. Further objects will appear from the detailed description.

In the drawings:

Figure 1 is a side view of my device, shown partly in section, and built in accordance with my invention.

Fig. 2 is a top plan view of one of the horse-carrying trucks, with the horse omitted.

Fig. 3 is an end view corresponding to Fig. 2.

Fig. 4 is a front elevation showing my preferred mechanism for oscillating the horses.

Fig. 5 is a top plan view, showing a section of the floor and rails of the endless track used in this invention.

Referring to the drawings, the moving part of my amusement device consists of the truck frame 1 mounted on the four wheels 2 pressed and keyed on the axles 3 and 4 journaled in the bearings 5 secured to the frame. Fixedly mounted on one of the axles is a bevel gear 6 which engages a second bevel gear 7 secured on a shaft 8 journaled centrally and longitudinally of the truck in the bearings 9 and 10 mounted on the cross members 11 and 12 positioned on the lower side of the frame.

An eccenter 13 is secured on the shaft 8, outwardly of the bearing 9, and is engaged by the flanged roller 14 rotatably mounted on a pin 15 secured on the forked member 16, secured on the lower end of the vertical plunger rod 17, slidably guided in bushings 18 and 19 secured in the vertical standard 20 mounted on the cross member 21 and 22.

A dummy horse 23 is rockably mounted on the upper end of the plunger rod by means of the forked pin connection indicated by the numeral 24. The horse is further supported by means of an adjustable brace-rod 25 which rockably connects the forward under-girth of the horse to a stationary lug 26 provided on the standard 20.

As will be readily understood, the plunger rod 17 will be moved up and down by the rotation of the eccenter and, owing to the brace-rod 25, the horse will occupy the forwardly inclined position indicated in dot and dash lines upon reaching its uppermost position. The inclination of the horse will be reversed as the plunger reaches its lowest position.

The resulting movement of the horse is therefore a combined "up and down" and "forward and backward inclined" motion which greatly resembles the motion of a trotting horse.

Any desired number of such horse-carrying trucks may be run on the several parallel endless tracks A, B, and C. The various trucks are connected together by suitable links 26 swingingly mounted on the link-pins 27 secured at each end of the truck frames. Suitable collars 28 are provided to keep these links in position.

The motive power required for actuating each set of trucks may be derived from any suitable source of power which is adapted for locomotion, such as internal combustion engines, storage batteries or electric motors. In my drawings I have shown the truck provided with an electric motor 29 which obtains its power from the electric lines 30 mounted on the insulating blocks 31 fastened to the rail cross ties 32. The power is transmitted from the motor to the wheel-axle 3 by means of a suitable chain or belt 33 which connects the driving member 34 with the chain-wheel or pulley 35 securely mounted on the axle 3.

The current in the different lines may be easily varied by an operator from the controller 36 provided with a control-handle 37 for each circuit. By means of this controller the operator can optionally vary

the speed on the various tracks thereby creating among the riding public the sensation of a real horse race.

When the motive power is derived from an internal explosion motor, the speed of the trucks may be varied by the operator by changing the ratio of the power transmission between the motor and the driven axle. For this purpose any one of the many speed changing methods known to the art may be employed and therefore need not be dealt with in detail in this application. As will be understood, not every truck needs be provided with a driving motor; I have found, by actual practice, that it is sufficient to provide only every fourth or fifth truck with a motor; the intermediate trucks being considered as trailers.

To facilitate the access of the public to the horses, I provide a wooden flooring 38 which covers the tracks and trucks. Suitable slots 39 are provided in the floors to allow for the passage of the standards 20 and the link-pins 27.

While I have illustrated and described herein the preferred embodiment of my invention, and one which I have found by actual use to be very practical, it may be found desirable after continued experience to make slight changes in construction and arrangement of the details of my invention, and I intend to include in this application all such variations as fall within the scope of the appended claims.

What I claim is:

1. In an amusement device of the character described, the combination of a track, a plurality of interlinked trucks movable on said track at selective speeds; propelling means carried by said trucks; a bevel gear securely mounted on one revolving axle of said trucks; an eccenter securely mounted on a shaft centrally and longitudinally disposed on said trucks and driven by the bevel gear on said axle; a vertical rod reciprocatingly actuated by said eccenter and an animal dummy rockably mounted on the upper end of said vertical rod.

2. In an amusement device of the character described, the combination of a track, a plurality of interlinked trucks movable thereon at selective speeds; propelling means carried by said trucks; means for transmitting the power from said propelling means to the axles of said trucks; a bevel gear securely mounted on one revolving axle of said trucks; an eccenter securely mounted on a shaft centrally and longitudinally disposed on said trucks and driven by the bevel gear on said axle; a vertical rod reciprocatingly actuated by said eccenter and an animal dummy rockably mounted on the upper end of said vertical rod.

3. In an amusement device of the character described, the combination of a plurality of parallel endless tracks, a plurality of groups of interlinked trucks movable on each individual track at selective speeds, propelling means carried by said trucks; means for transmitting the power from said propelling means to the axles of said trucks; a bevel gear securely mounted on one revolving axle of said trucks; an eccenter securely mounted on a shaft centrally and longitudinally disposed on said trucks and driven by the bevel gear on said axle; a vertical rod reciprocatingly actuated by said eccenter and an animal dummy rockably mounted on the upper end of said vertical rod.

4. In an amusement device of the character described, the combination of a plurality of parallel endless tracks, a plurality of groups of interlinked trucks movable on each individual track at selective speeds, propelling means carried by said trucks; means for transmitting the power from said propelling means to the axles of said trucks; a bevel gear securely mounted on one revolving axle of said trucks; an eccenter securely mounted on a shaft centrally and longitudinally disposed on said trucks and driven by the bevel gear on said axle; a vertical rod reciprocatingly actuated by said eccenter and an animal dummy rockably mounted on the upper end of said vertical rod; a floor covering said tracks and trucks, and slots provided in said floor to permit the passage of the protruding parts of said trucks.

In testimony whereof I affix my signature.

MORRIS UNGER.