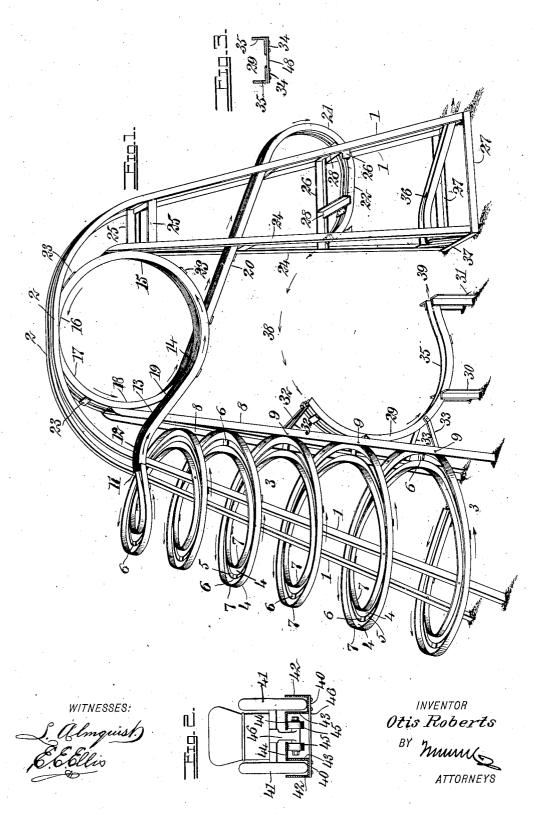
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AMUSEMENT APPARATUS.

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UNITED STATES PATENT OFFICE.

OTIS ROBERTS, OF WINFIELD, KANSAS.

AMUSEMENT APPARATUS.

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To all whom it may concern:

Be it known that I, OTIS ROBERTS, a citizen of the United States, and a resident of Winfield, in the county of Cowley and State 5 of Kansas, have invented a new and Improved Amusement Apparatus, of which the following is a full, clear, and exact descrip-

This invention relates to amusement appa-10 ratus; and it consists, substantially, in the details of construction and combinations of parts hereinafter more particularly described, and pointed out in the claims.

One of the principal objects of the inven-15 tion is to overcome numerous disadvantages and objections encountered in the use of many other amusement apparatus of the kind hitherto devised.

A further object is to provide an amuse-20 ment apparatus which is simple in construction and comparatively inexpensive to manufacture, besides possessing the capacity for long and repeated service.

The above and additional objects are at-25 tained by means substantially such as are illustrated in the accompanying drawings, in

Figure 1 is a perspective view of an amusement apparatus embodying my improvements. Fig. 2 is a part sectional view, in detail, to indicate more clearly the construction of certain portions of the run or track way employed; and Fig. 3 is a sectional view in detail.

Before proceeding with a more detailed description it may be stated that in the form of my improvements herein shown I employ a specially-constructed frame of suitable height, associated with which is a specially-40 constructed ascending section of run or track way employed, said section merging at the upper end thereof into another section, which is first descending and then ascending, but in a different plane from that of the said first-45 mentioned section, the second-mentioned section then merging into a corresponding or reversely-disposed section terminating in an under or return section, between which and a specially-constructed receiving-section em-50 ployed there is a gap or space over which the vehicle and the occupant or occupants thereof are carried along a trajectory, there being also a second gap or space between the lower

terminal of the receiving-section and the up-

way, over which final section the vehicle

55 per terminal of a final section of run or track

again reaches the surface of the ground from whence it started.

While I have herein represented my improvements in a certain preferred embodi- 60 ment, it will be understood that I do not limit myself thereto in precise detail, since immaterial changes therein may be made coming within the scope of my invention.

Reference being had to the drawings by 65 the designating characters thereon, 1.1 represent duplicate members of the supportingframe of my amusement apparatus, the same being united at the upper end thereof by arched portions 2, the said members of each 70 set being inclined toward each other upwardly, so that the said connecting arched portions 2 are brought practically parallel with each other and comparatively close to-The members and arched portions 75 in question are preferably constructed of angle-steel, as shown, and it will be understood that the frame may be of any height desired. Associated with the members 1 at one side of the frame and winding about the same is an 80 ascending spiral run or track way 3, the lower terminal of which rests on the ground, so as to enable ready entrance thereonto of a suitable motor-propelled vehicle, in which may be seated one or more persons or per- 85 formers desiring to make the run of the apparatus. Said ascending spiral run or track way 3 is also preferably constructed of anglesteel and comprises continuous parallel rails 4, separated by a space 5, and connected at 90 suitable intervals throughout the spiral by means of braces or strengthening-strips 6, it being noted that the said parallel rails are provided at the outer edges thereof with continuous parallel guards 7 for the purpose of 95 maintaining the vehicle ascending the run or track way in proper position upon the said In order to sustain the said ascending spiral run or track way in proper position, suitable parallel upwardly-disposed support- 10c ing-braces 8 are employed, to which one of the guards 7 is secured at intervals by means of rivets or bolts 9 or in any other suitable way. Said upwardly-disposed braces 7 are also preferably constructed of angle-steel and 105 are inclined to each other at their upper ends for the purpose presently to be explained.

At the upper end or terminal 10 of the ascending spiral run or trackway 3 the same merges into the upper end of a section 11 of 110 run or track way, which first rises somewhat at 12, then descends on an incline at 13, thence

curving downwardly at 14 and upwardly at 15 to a point 16, as indicated by arrows, thus describing a half-circle, at which point 16 the run or track way merges into a corresponding 5 reversely - disposed section 17, which descends on a downward curve at 18, as indicated by an arrow, thence to a point 19 alongside of the descending incline 13 of the said section 11 of the run or track way in comple-10 tion of a circle or loop, from which point 19 the run or track way descends at 20 on an incline and terminates in a curve 21 and a reverse or return section 22, as shown. curved portions of the sections of run or 15 track way referred to which make up the circle or loop explained may be secured in any suitable way to the upper ends of the hereinbefore-mentioned upwardly-disposed braces 8, thus to give rigidity thereto, and said 20 curved portions may also be secured together by means of brace-plates 23 to lend further rigidity thereto. At the opposite side of the structure another set of parallel braces 24 is employed, to the upper end of which the upper portions of run or track way may also be employed for a similar purpose, these braces 24 being connected to the members 1 adjacent thereto by means of sets of parallel connecting-braces 25, 26, and 27, the latter being 30 located at the base-line, and the connectingbraces 26, connected together by other connecting-braces 28, as shown. In this way it is apparent that a structure is derived capable of withstanding all the strain to which the 35 same may be subjected in use. Located adjacent to the said vertically-disposed parallel braces 8 is a downwardly-curved receivingsection of run or track way 29, the same being secured in position in any suitable way, as by means of props 30 and 31 and rods 32, connecting the upper end thereof with said braces, additional strengthening means being also employed therefor in the shape of plates 33, connecting the same with the braces. The 45 said receiving-section of run or track way is constructed with parallel rails 34 for the wheels of the vehicle taking the run of the structure, as well as with side guards 35 to maintain the wheels of the vehicle in position 50 on said rails. Located beyond the lower end or terminal

Located beyond the lower end or terminal of the receiving-section of run or track way is the upper end or terminal of a downwardly-inclined section 36 of run or trackway, the lower end or terminal of which leads to the ground surface, as shown, suitable props 37 being employed to maintain this last-named section in position.

From the foregoing it will be seen that between the end of the under or return section
22 of run or track way employed and the upper end or terminal of the receiving-section
thereof there is a gap or space 38, while there
is another but shorter gap 39 between the ad5 jacent terminals of said receiving-section of

therun or track way and the said downwardlyinclined section 36 thereof. In the use of the apparatus one or more persons start up the ascending spiral section of the run or track way in an automobile or other motor-pro- 70 pelled vehicle, and as the vehicle reaches the rise at the upper end of the section 11 of the run or track way it urges over such rise and acquires an impetus which carries it around the portions of section of track way which 75 form the circle or loop in an obvious manner, after which the vehicle descends the run or track way and rounds the curve 21 thereof, thence traverses the under or return section 22 and loops the gap or space 38, as indicated 80 by arrows, and alights onto the receivingsection 29, moving around the same, thence over the gap 39 onto the downwardly-in-clined section 36 of the run or track way, and finally on the surface of the ground.

From the point at which the section 11 of the run or track way joins with the upper end of the ascending spiral section thereof the run or track way is constructed as shown in Fig. that is to say, the same is formed with par- 90. allel rails 40 for the main wheels 41 of the automobile or other vehicle to move upon, said rails having at the outer edges thereof the guards 42 to prevent the vehicle from falling off at the sides. At the inner edges of the 95 rails 40 are inner guards 43 for the wheels 41 of the vehicle, having at the upper ends thereof inner parallel rails 44, against the under surface of which move smaller wheels 45, carried by a hanger 46 on the axle for the 100 wheels 41, and it will thus be seen that it is impossible for the vehicle to be precipitated below when rounding either the circle or loop or the curve 21 and under or return section 22 due to the fact that when the vehicle is up- 105 side down it is supported by said inner parallel rails 44 in an obvious manner.

The rails 40 in Fig. 2 are shown as connected together at suitable intervals by means of strengthening-plates 46, while the rails 34 110 of the receiving-section of run or track way 29 are similarly connected by plates 48, as shown in Fig. 3.

It should be added that in leaping the said gap or space 38 the vehicle turns a somersult, thus causing the wheels thereof to properly ride upon the rails of the receiving section of the run or track way after landing thereon.

Having thus described my invention, I 120 claim as new and desire to secure by Letters Patent—

1. An amusement apparatus, comprising an ascending spiral section of trackway for a vehicle, and a descending section of trackway merging therewith at the upper end thereof, the descending section being provided with a rise adjacent to its junction with the spiral section.

2. An amusement apparatus, comprising 130

an ascending spiral section of trackway for a vehicle, and a descending section of trackway merging therewith at the upper end thereof, each section referred to having side guards 5 for the wheel of the vehicle, the descending section being provided with a rise adjacent to its junction with the spiral section.

3. An amusement apparatus, comprising duplicate arched frame members, an ascendto ing spiral section of trackway for a vehicle, disposed about upwardly-disposed portions of said frame, and a descending section of trackway merging with the said first-named

section at the upper end thereof.

4. An amusement apparatus, comprising an ascending section of trackway for a vehicle, a descending section of trackway having a rise merging therewith, at the upper end thereof, an ascending semicircular section 20 into which the lower end of the descending section merges, and a descending semircircular section merging at its upper end, into the corresponding end of said ascending semicircular section.

5. An amusement apparatus, comprising an ascending section of trackway for a vehicle, a descending section of trackway having a rise merging with said spiral section at the upper end thereof, an ascending semicircular 30 section into which the lower end of the descending section merges, a descending semicircular section merging at its upper end into the corresponding end of said ascending semicircular section, a downwardly-inclined 35 section leading from the lower end of the descending semicircular section, and terminating in a down curve and a return-section, a receiving-section between the upper end of

which and said return-section there is a gap, and a final downwardly-inclined section dis- 40 posed beyond the lower end of said receiving-

section to provide another gap.

6. An amusement apparatus, comprising an ascending section of trackway for a vehicle, a descending section of trackway having 45 a rise merging with said spiral section at the upper end thereof, an ascending semicircular section into which the lower end of the descending section merges, a descending semicircular section merging at its upper end into 50 the corresponding end of said ascending semicircular section, a downwardly-inclined section leading from the lower end of the descending semicircular section, and terminating in a down curve and a return-section, a 55 receiving-section between the upper end of which and said return-section there is a gap, and a final downwardly-inclined section disposed beyond the lower end of said receivingsection to provide another gap, all the sections referred to, excepting the spiral sections tion, the receiving-section and final section, being constructed with rails for the side wheels of the vehicle, and with guard-rails for supporting the auxiliary wheels on the 65 vehicle, in the inverted position of the latter, said first-named rails also having outer guards.

In testimony whereof I have signed my name to this specification in the presence of 70

two subscribing witnesses.

OTIS ROBERTS.

Witnesses:

EMORY W. EINHART. L. H. WEBB.