

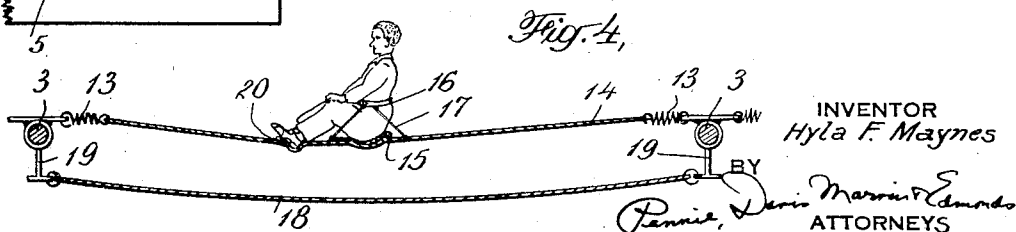
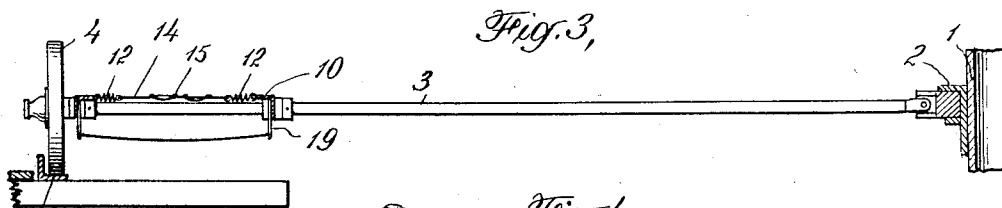
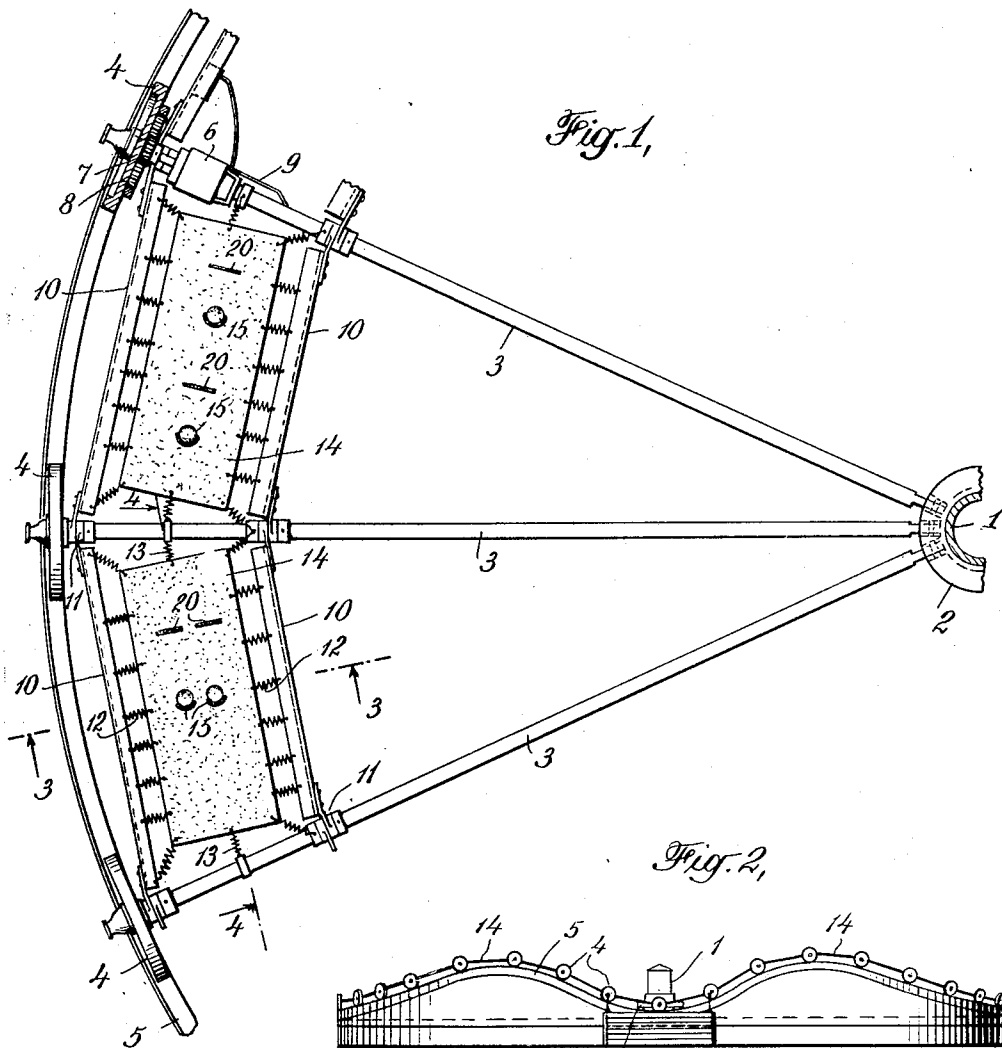
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AMUSEMENT RIDE

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UNITED STATES PATENT OFFICE

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AMUSEMENT RIDE

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This invention relates to amusement rides and its object is to add a new thrill to such rides. I do this by providing the passenger carriages with resiliently mounted supports, preferably of carpet or other heavy fabric, on which the passengers are seated, and imparting to these supports a rising and falling motion as the carriages progress over the ride, thus bouncing the passengers merrily up and down. This rising and falling motion is preferably imparted by moving the carriages rapidly over an undulating trackway of the kind common in roller coasters and roundabouts.

In the accompanying drawings I have shown the invention embodied in a rotary ride of the type illustrated in my Patent No. 1,627,192. In these drawings:

Fig. 1 is a fragmentary plan view of such a rotary ride embodying the invention; Fig. 2 is a side elevation on a reduced scale of the ride shown in Fig. 1; Fig. 3 is a vertical radial section taken through the ride along the line 3—3 of Fig. 1, and Fig. 4 is a section taken along the line 4—4 of Fig. 1 and showing the manner in which the carpets are supported.

The rotary ride shown in these drawings comprises a central standpipe 1 which acts as a pivot or axis for the ride. A spider 2 rotates about this standpipe to which are pivotally connected, for swinging in a vertical plane, a series of radial sweeps 3. At the outer end of each sweep is journaled a wheel 4 running upon an undulating trackway 5, these wheels supporting the weight of the sweeps. Near the outer end of certain of the sweeps is mounted an electric motor by which power is transmitted to the wheel 4 through a pinion 7 mounted on the armature shaft of the motor and meshing with an internal gear 8 fixed to the inner face of the wheel. Current is supplied to the motor through leads 9 which extend along the sweep and make contact with collector rings, not shown, concentric with the standpipe 1. A switch, also not shown, readily accessible to the operator controls the current to the motors and hence the starting and stopping of the ride.

At the outer end of the sweeps 3 are a pair

of links 10, these links serving to tie the sweeps together and maintain them in spaced relation. The links are composed of angle irons and are disposed parallel to each other a suitable distance apart. The links are rigidly fastened at their opposite ends to annular collars 11 surrounding and rotatable upon the sweeps 3, which are of cylindrical cross section, to permit the sweeps to follow the changes in elevation of the trackway. For a more detailed description of the structure described above, reference is made to my aforementioned U. S. Patent No. 1,627,192. The horizontal flanges of the angle irons forming the links extend toward each other, as shown in Fig. 3, and are perforated to receive one end of a series of helical springs 12. These springs at their other ends are passed through openings around the margin of a carpet 14 and the openings are suitably reinforced by grommets to prevent tearing the material under the pull of the springs which tend to normally hold the carpet taut in the plane of the links. The carpet is stretched in its longitudinal direction by means of springs 13 extending between the sweeps 3 and the ends of the carpet 14.

The carpet according to the preferred embodiment will be of sufficient size to accommodate two persons and in order to indicate their seating positions thereon a pair of cushions 15, forming seats, are fastened to the carpet, these cushions being arranged either in tandem or side-by-side, or both arrangements may be combined in a single structure as indicated in Fig. 1. A ledge 20 formed by either a pad or a section of rope against which the passenger may brace his feet is secured to the carpet.

In order to prevent passengers from being thrown from the ride I provide safety belts 16, these belts, as shown in Fig. 4, being connected by straps 17 to the carpet. The straps are of such length as to permit limited movement of the passenger's body in a vertical direction but to restrain it against excessive movement tangentially. Below the carpet 14, but beyond the range of its maximum downward movement, is provided a spread 18 of heavy fabric, as shown in Figs. 3 and

4, attached at its margin to downwardly extended arms 19 mounted upon the links 10 and the sweeps 3. The purpose of this spread is to serve as a secondary support for the body of the passenger in the event of a failure of the carpet 14.

In the operation of the ride which has just been described, the passengers seat themselves upon the cushions 15 on the carpets 14 with the safety belts 16 attached about their waists. The operator by throwing a switch sends current to the motors 6 which, through the pinion 7 and internal ring gear 8 fastened to the wheels 4, cause the ride to travel along the circular trackway. As the wheels follow the undulations of the trackway a sequence of rising and falling motions is communicated to the carpets 14. Due to the resilient mounting of the carpets by means of the springs 12 and 13 and also because of the inertia of the bodies of the passengers seated upon the carpets, the passengers are agitated in a manner to produce the sensation of being tossed up and down in a blanket.

I claim:

1. An amusement ride comprising a resiliently mounted flexible support adapted to accommodate a passenger thereon, wheels carrying the support, and an undulating trackway upon which the wheels are arranged to run, the construction and arrangement being such that when the wheels travel along the trackway a succession of vertical impulses is imparted to the support to toss the passenger up and down.

2. An amusement ride comprising a flexible fabric adapted to accommodate a passenger thereon, resilient means for normally holding the fabric taut, wheels supporting the fabric and an undulating trackway upon which the wheels are arranged to run, the construction and arrangement being such that when the wheels travel along the trackway a succession of vertical impulses is imparted to the support to toss the passenger up and down.

3. An amusement ride comprising a carpet for seating a passenger, resilient means for maintaining said carpet in a substantially flat condition, wheels supporting the carpet, and an undulating surface upon which the wheels are arranged to run, the construction and arrangement being such that as the wheels travel over the undulating surface a succession of vertical impulses is imparted to the support to toss the passenger up and down.

4. An amusement ride comprising the combination of a central pivot, a plurality of radial sweeps designed to rotate about the pivot, wheels on the sweep, a circular undulating trackway upon which the wheels run, means for rotating the sweeps as a unit and a resiliently-suspended flexible support for

a passenger located at the outer ends of the sweeps.

5. An amusement ride comprising the combination of a central pivot, a plurality of radial sweeps designed to rotate about the pivot, wheels on the sweeps, a circular undulating trackway upon which the wheels run, means for rotating the sweeps as a unit, a flexible fabric float located between adjacent sweeps, and means for resiliently supporting the float.

6. An amusement ride comprising the combination of a central pivot, a plurality of radial sweeps designed to rotate about the pivot, wheels on the sweeps, a circular undulating trackway upon which the wheels run, means for rotating the sweeps as a unit, a pair of spaced links connecting adjacent sweeps, and a flexible fabric support for a passenger fastened to said links.

7. An amusement ride comprising the combination of a central pivot, a plurality of radial sweeps designed to rotate about the pivot, wheels on the sweeps, a circular undulating trackway upon which the wheels run, means for rotating the sweeps as a unit, a pair of spaced links connecting adjacent sweeps, a flexible fabric located between said links for supporting a passenger and resilient means for stretching said fabric taut in the plane of the links.

8. An amusement ride comprising the combination of a central pivot, a plurality of radial sweeps designed to rotate about the pivot, wheels on the sweeps, a circular undulating trackway upon which the wheels run, means for rotating the sweeps as a unit, a pair of spaced links connecting adjacent sweeps, a flexible fabric support for a passenger located between said links, resilient means for maintaining said fabric taut, and a safety device connected to the support and designed to engage the body of the passenger.

9. An amusement ride comprising the combination of a central pivot, a plurality of radial sweeps designed to rotate about the pivot, wheels on the sweeps, a circular undulating trackway upon which the wheels run, means for rotating the sweeps as a unit, a pair of spaced links connecting adjacent sweeps, a flexible fabric located between said links for supporting a passenger, resilient means maintaining said fabric normally taut and a safety belt flexibly connected to the ride and adapted to be attached to the body of the passenger.

10. An amusement ride comprising the combination of a central pivot, a plurality of radial sweeps designed to be rotated about the pivot, wheels on the sweeps, a circular undulating trackway upon which the wheels run, means for rotating the sweeps as a unit, a resiliently suspended flexible support located between adjacent sweeps and a second-

ary support located a spaced distance below the flexible support.

5 11. An amusement ride comprising a carpet for seating a passenger, a supporting frame for the carpet, springs extending from the frame to the margin of the carpet to hold it taut and flat when not occupied, wheels supporting the frame, and an undulating surface or track upon which the wheels
10 run to impart a succession of vertical impulses to the carpet to toss the passengers up and down.

In testimony whereof I affix my signature.

HYLA F. MAYNES.