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2,107,196

AMUSEMENT APPARATUS

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Fig. 1.

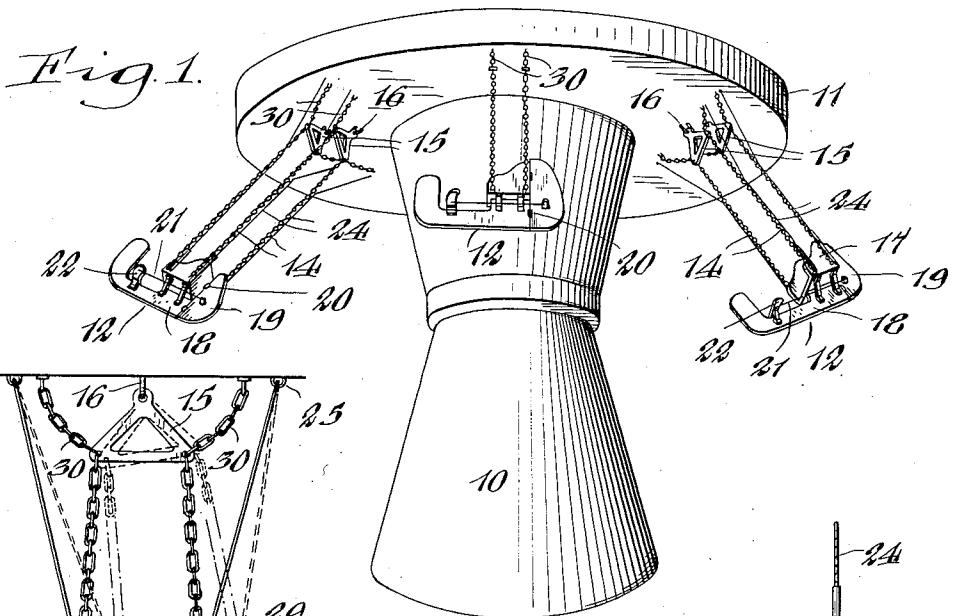


Fig. 2.

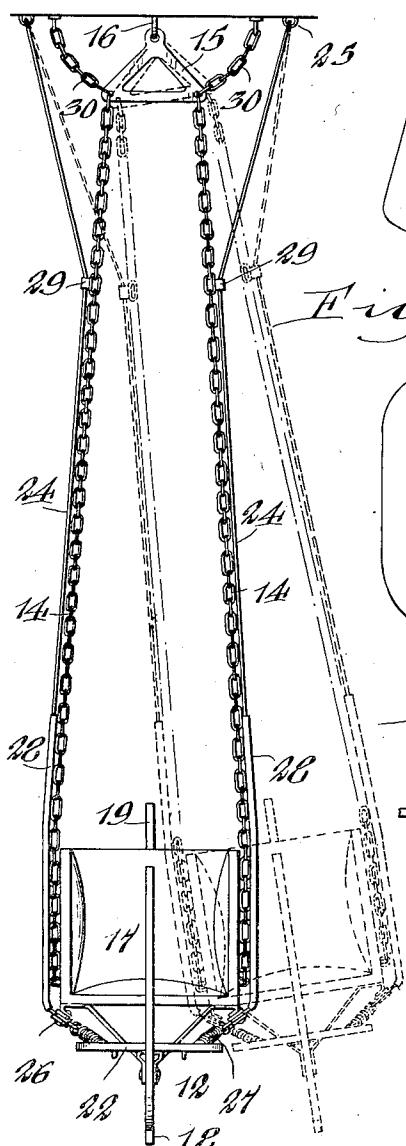


Fig. 3.

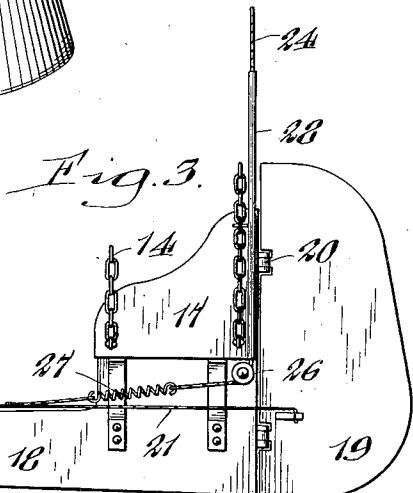
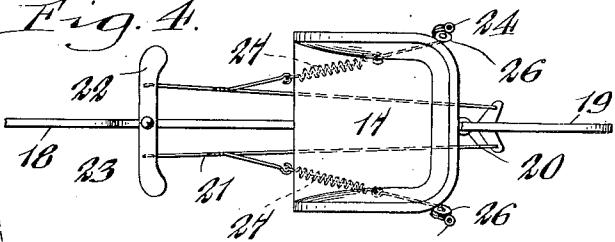


Fig. 4.



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## UNITED STATES PATENT OFFICE

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## AMUSEMENT APPARATUS

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6 Claims. (Cl. 272—41)

This invention relates generally to amusement devices but more particularly to a public amusement apparatus designed for use in amusement parks, expositions, and the like.

It has for one of its objects to provide an amusement device of the circular swing type embodying suspended carriages which may be constructed to simulate an airplane or a glider, and means under the control of the respective passengers for causing a change of position or displacement of the individual carriages out of their normal path of travel and thereby afford thrills and enjoyment to the passengers by simulating in some degree the movement of an airplane while in flight.

Another object of the invention is the provision of an amusement device of this character which is simple, rugged and inexpensive in construction, and wherein the control means is easily operable by the passengers and the desired effects produced with maximum safety.

In the accompanying drawing:—

Figure 1 is a perspective view of the amusement apparatus embodying my invention. Figure 2 is a front view showing the manner in which the carriages are suspended from the overhead support. Figure 3 is a side view of one of the carriages and the passenger control means associated therewith. Figure 4 is a top plan view of the same.

Similar characters of reference indicate corresponding parts throughout the several views.

Referring now to Figures 1-4, the numeral 10 indicates a central or main supporting column or structure upon which is mounted a revolving overhead support or frame 11 and from which frame the passenger-carrying bodies or carriages are suspended so as to revolve therewith and caused, by centrifugal force, to be carried outwardly of the structure in the manner common to circle swings. The revolving overhead support may be mounted and driven in any approved and well known manner, such mechanism forming no part of the invention and therefore not deemed necessary to be shown in the drawing.

The numeral 12 indicates the passenger-carrying bodies or carriages which are suspended in suitable spaced relation about the overhead support 11 in substantially the manner shown in Figure 1. The preferred means for suspending each carriage from the overhead support consists of suspension members 14 which may be in the form of chains or like connections and which have their lower ends connected with the carriages at their opposite sides thereof, while their upper ends are

connected to corresponding hangers 15 pending from the overhead support and engaging an attaching eye 16 secured to the underside of the support.

Each of the carriages 12 preferably consists of a seat portion 17 which is mounted upon the rear end of a keel-like member 18 and connected to the rear end of the latter is a vertical rudder 19 hinged at 20 to swing about a vertical axis. This rudder is connected by actuating cables 21 or the like to an actuating lever 22 pivoted intermediate its ends at 23 to the keel-like member 18 and so disposed as to be conveniently manipulated by the feet of the passenger.

Means are provided under the sole control of the passengers in the respective carriages for assisting or augmenting the action of the rudder 19 in effecting generally a change of position or displacement of the carriages out of their normal path of travel during their circular movement so as to in effect simulate in some degree the movement of an airplane while in flight, and particularly to effect a lateral or inward and outward swinging of the carriages and thereby afford additional thrills to the passengers. The

means associated with each carriage 12 for accomplishing these results preferably consists of pull-exerting or supplementary suspension members 24 auxiliary to the main suspension members 14, and as shown in Figures 2 and 3, two of

such suspension members are associated with each carriage and extend for the most part alongside the adjoining main suspension members 14. These pull-exerting members 24 are suitably connected at their upper ends at 25 to the overhead support at radially spaced points

on opposite sides of the hanger suspension eye 16, while their lower ends are connected to the opposite ends of the actuating lever 22 to be manipulated thereby. Rearwardly of their connection to the actuating lever, said members 24 pass around guide wheels or pulleys 26 mounted on the carriage adjacent either side of its seat 17 and interposed between such pulleys and the actuating member are suitable shock absorbing elements 27 which may be in the form of coil springs or the like. The lower portions of these

pull-exerting members adjoining the seat 17 may be enclosed within a protective tubing 28 and short of their upper ends these members engage 50 suitable guide sleeves 29 carried by the adjoining main suspension members 14, as shown in Figure 2.

By this construction, when the passenger rocks the actuating lever 22 in one direction or the

other, he exerts a pull on the corresponding auxiliary suspension member 24 to accordingly swing or tilt the carriage 12 either inwardly or outwardly of its normal riding position and thereby give the passenger the thrill of turning the carriage out of its normal course defined by the revolving overhead support. Such a swung position of the carriage is shown by dotted lines in Figure 2. For the purpose of preventing any over-swinging action of the carriage and afford maximum safety to the passengers when a pull is exerted on the respective members 24, I provide flexible tie members 30 which connect the ends of the carriage hanger 15 with the under-side of the overhead support 11.

I claim as my invention:—

1. An amusement apparatus, comprising a revolvable overhead support, a passenger-carrying device suspended therefrom to revolve therewith and including a laterally swinging hanger, passenger-controlled, flexible guy means connecting the opposite sides of said carrying device with said support, whereby upon exerting a pull on such means the carrying device is correspondingly swung out of its normal path of travel, and means connecting said hanger with the overhead support for limiting the swinging of said carrying device.
2. An amusement apparatus, comprising a revolvable overhead support, a passenger carriage, suspension members connected at their upper ends to said support and at their lower ends to said carriage, passenger-controlled, flexible pull-exerting means substantially coextensive with said suspension members and connecting the opposite sides of the carriage with its overhead support for effecting a lateral swinging of the carriage in response to a pull exerted on said means, and means connecting said suspension members with said overhead support for limiting the degree of the lateral swinging of the carriage.
3. An amusement device, comprising a traveling overhead support, a passenger carriage, suspension members connected at their upper ends to said support and at their lower ends to said carriage, flexible guy means disposed at opposite sides of said carriage and connected at their upper ends to said support, and a passenger-actuated control member pivoted to rock hori-

zontally fore and aft of the carriage and to which the lower ends of said guy means are connected, whereby upon the exertion of a pull on one or another of the guy means through the actuation of the control member by the passenger, the carriage is swung laterally.

4. An amusement device, comprising an overhead support, a passenger carriage, suspension members connected at their upper ends to said support and at their lower ends to said carriage, flexible guy means disposed at opposite sides of said carriage and connected at their upper ends to said support, and a passenger-actuated control lever mounted on the carriage for relative horizontally-swinging movement and fulcrumed thereto intermediate its ends, the lower ends of said guy means being connected to the free ends of said control lever.

5. An amusement device, comprising an overhead support, a passenger carriage, suspension members connected at their upper ends to said support and at their lower ends to said carriage, flexible guy means substantially paralleling said suspension members and disposed at opposite sides of said carriage and connected at their upper ends to said support, a laterally-swinging passenger-actuated control member on the carriage and to which the lower ends of said guy means are connected, whereby, upon the exertion of a pull on one or another of the guy means through the actuation of the control member by the passenger, the carriage is swung laterally, and shock-absorbing means interposed between the guy means and said control member.

6. An amusement apparatus of the character described, comprising a traveling overhead support, a passenger-carrying body suspended from said support to move therewith and having an adjustable air-impinging element applied thereto for varying the path of movement of the body, a passenger-actuated control member on said body for shifting said air-impinging element, flexible guy means disposed at opposite sides of said body and connected at their upper ends to said support and at their lower ends to said control member, whereby upon actuating the latter to shift the air-impinging element a pull is exerted on the corresponding guy means to swing the passenger-carrying body laterally.

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