Dec. 15, 1931. F. W. SMITH 1,836,289

AMUSEMENT DEVICE

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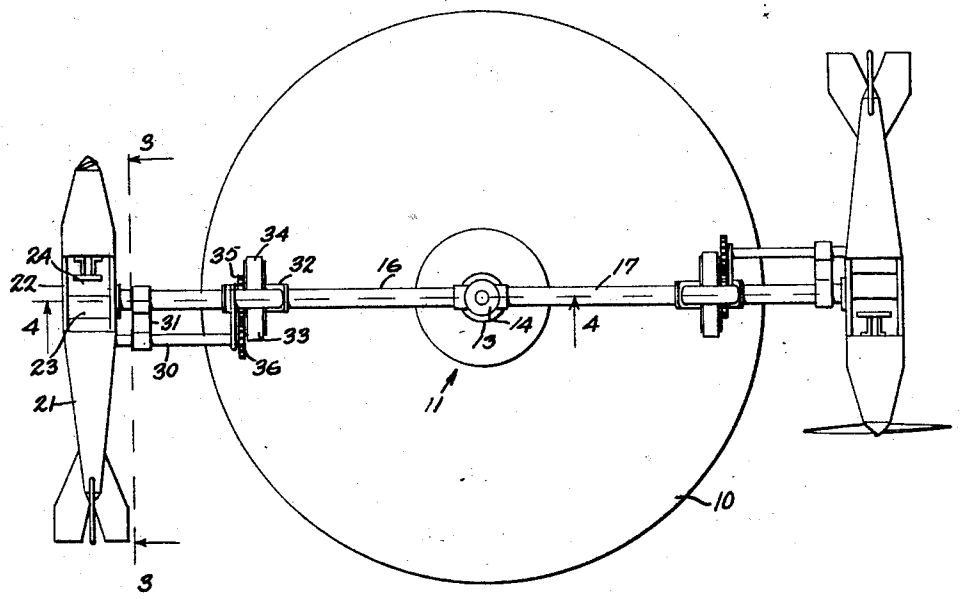


Fig. 1.

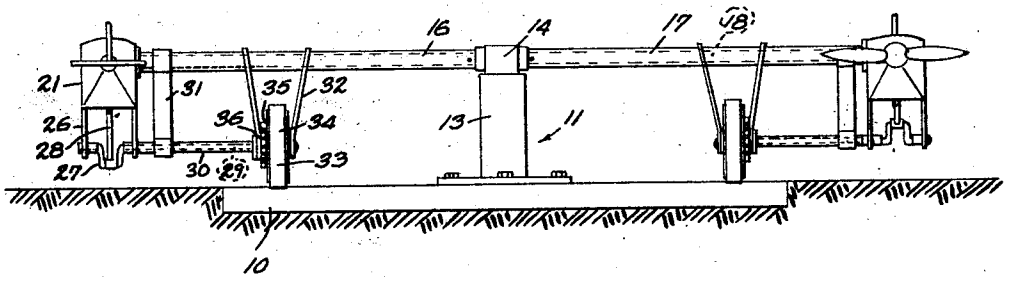


Fig. 2.

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Fig. 3.

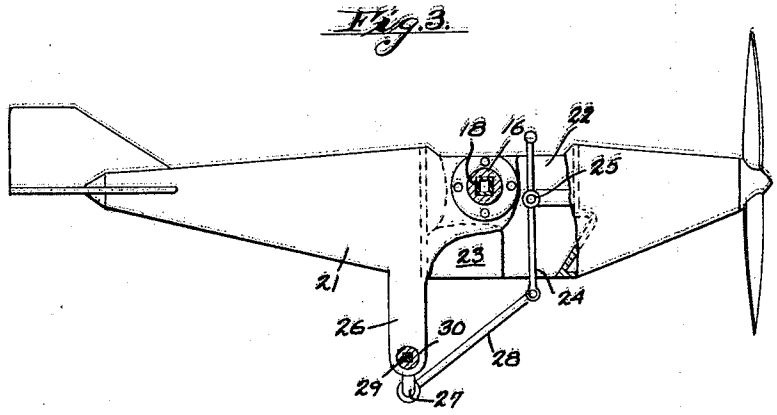
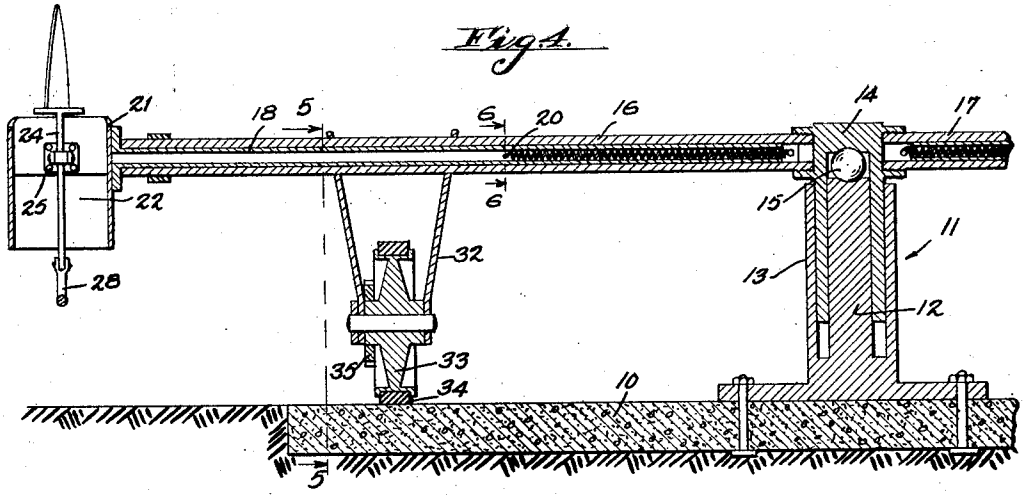


Fig. 4.



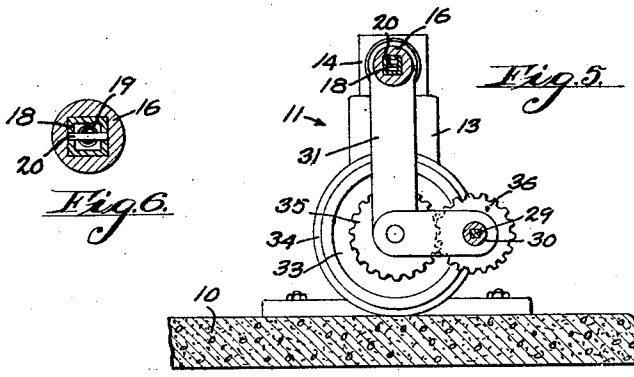


Fig. 5.

Fig. 6.

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UNITED STATES PATENT OFFICE

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AMUSEMENT DEVICE

Application filed November 13, 1930. Serial No. 495,412.

This invention relates to improvements in amusement devices.

An object of the invention is to provide a novel amusement device somewhat in the nature of a merry-go-round in which there are a plurality of suitable carriages mounted for rotation about a central support with a mechanism enabling persons riding in the carriages to propel the construction, causing it to rotate about the support.

Another object of the invention is to provide an amusement device having a support on which a supporting beam is rotatably mounted and having carriages carried by the outer ends of the supporting beam by means of an extensible construction so that as the speed of rotation increases the carriages will move outwardly with respect to the supporting beam under centrifugal action, increasing the delight capable of being developed by the use of the device.

A further object of the invention is to provide an amusement device having the above mentioned characteristics and which is so designed that the driving connection by which the device is propelled from the carriages will be maintained although the carriages may have moved outwardly under the centrifugal action.

With the foregoing and other objects in view, which will be made manifest in the following detailed description, and specifically pointed out in the appended claims, reference is had to the accompanying drawings for an illustrative embodiment of the invention, wherein:

Fig. 1 is a top plan view of the improved amusement device.

Fig. 2 is a side elevation of the same.

Fig. 3 is a sectional view taken substantially upon the line 3—3 upon Figure 1.

Fig. 4 is a sectional view taken substantially upon the line 4—4 upon Figure 1.

Fig. 5 is a section taken substantially upon the line 5—5 upon Figure 4.

Fig. 6 is a section taken substantially upon the line 6—6 upon Figure 4.

Referring to the accompanying drawings wherein similar reference characters designate similar parts throughout, the improved amusement device consists of a support shown as comprising a circular concrete base 10 having a pedestal generally designated 11 consisting of a central column 12 surrounded by a spaced sleeve 13. The base 10 may be of any desired construction and in some instances it need not be other than hard packed earth. On top of the pedestal there is positioned a cap 14 having a tubular lower end fitting about the column 12 within sleeve 13. A suitable thrust bearing carries the load imposed by cap 14 on column 12 and while this thrust bearing may be of any preferred construction, it is illustrated as consisting of merely a large single ball 15. A supporting beam is carried by the cap 14 so as to be rotatable therewith on pedestal 11. This supporting beam may be provided by tubular sections 16 and 17 which are threaded into sides of the cap. These tubular sections are illustrated as having squared interiors as shown in Figure 6, and squared extension members 18 telescope within them so as to have a longitudinally slidable but non-rotatable connection with the beam sections 16 and 17. Some construction is provided for urging the extension members 18 into their innermost positions, this construction being illustrated by a spring 19 having one end fastened to the inner end of a beam section and the other end connected to a pin 20 extending across the interior of the extension member.

On the outer ends of the extension members suitable carriages, indicated at 21, are mounted. These carriages may be of any desired form or shape, the ones illustrated being designed to simulate the fuselage of an aeroplane. In the body of the carriage there is provided a suitable cockpit 22 in which there is a seat designated at 23. A manually operable lever 24 is pivotally mounted as at 25 within the cockpit and is adapted to be oscillated by the person sitting within the carriage on seat 23. Beneath the carriage there is a suitable hanger 26 for a crank 27 which is connected to the lower end of lever 24 by a link 28. Crank 27 is connected to a squared shaft 29 which is longitudinally slidable but not rotatable within a tubular shaft 30.

Tubular shaft 30 is mounted for rotation within hangers 31 and 32 suspended from the beam section. Each hanger 32 is angular in form, as shown in Figure 5, and serves to rotatably support base engaging wheels designated at 33. These wheels are preferably rubber tired, as indicated at 34, so as to be capable of frictionally engaging the base 10. They are illustrated as having gears 35 fastened thereto which mesh with pinions 36 on the ends of the tubular shafts 30.

In the improved construction it will be readily appreciated that a child may seat himself within a carriage 21. While within the carriage he may manually oscillate lever 24 with the result that squared shaft 29 will be rotated by the crank 27 and consequently the pinions 36 will be rotated by tubular shaft 30. In this manner the base engaging wheels 33 will be forcibly rotated, causing the supporting beam to rotate about the pedestal. As the speed increases the centrifugal action on the carriages overcomes the tension of spring 19 with the result that the extension members 18 slide outwardy from within the beam sections. At the same time squared shaft 29 slides outwardy within the tubular shaft 30, preserving the driving connection between lever 24 and the base engaging wheels. On subsequently slowing down, the tension of springs 19 overcomes the centrifugal forces, drawing the extension members and the carriages back into their initial positions.

From the above described construction it will be appreciated that a novel amusement device is provided which enables the construction to be driven by persons using the construction while seated in the carriages. The ability of the carriages to move outwardly from the center of rotation under the centrifugal action with the result that the carriages are carried through greater arcs gives the rider the sensation of traveling at a greater speed than in the initial positions.

Various changes may be made in the details of construction without departing from the spirit or scope of the invention as defined by the appended claims.

I claim:

1. An amusement device comprising a support, a supporting beam rotatable upon the support, extension members carried by the support, carriages mounted upon the extension members and adapted to move outwardy therewith with respect to the beam under centrifugal action, means urging the extensible members and carriages into their innermost positions, and means for rotating the beam upon the support.

2. An amusement device comprising a support, a supporting beam rotatable upon the support, extension members carried by the support, carriages mounted upon the extension members and adapted to move outwardy therewith with respect to the beam under centrifugal action, means urging the extensible members and carriages into their innermost positions, and manually operable means operable from the carriages for rotating the beam upon the support.

3. An amusement device comprising a support having a base and a pedestal, a supporting beam rotatably mounted upon the pedestal, extension members mounted for sliding but nonrotational movement upon the supporting beam, carriages carried by the extension members, means urging the extension members and carriages into their innermost positions but adapted to be overcome by centrifugal action, wheels carried by the beam engageable upon the base, and means including an extensible shaft for rotating the wheels from the carriages so as to produce rotation of the beam.

4. An amusement device comprising a support having a base and a pedestal, a supporting beam rotatably mounted upon the pedestal, extension members mounted for sliding but nonrotational movement upon the supporting beam, carriages carried by the extension members, means urging the extension members and carriages into their innermost positions but adapted to be overcome by centrifugal action, wheels carried by the beam engageable upon the base, an extensible shaft connected to each wheel, a crank connected thereto, and an oscillatable lever in each carriage for rotating the cranks and thus producing rotation of the beam.

In testimony whereof I have signed my name to this specification.

FRANK W. SMITH.