H. B. ANDERSON & B. B. BROCKWAY.

AMUSEMENT APPARATUS OR AVIATOR INSTRUCTOR.

APPLICATION FILED MAR. 30, 1910.

978,263. Patented Dec. 13, 1910.

Fig. 1.

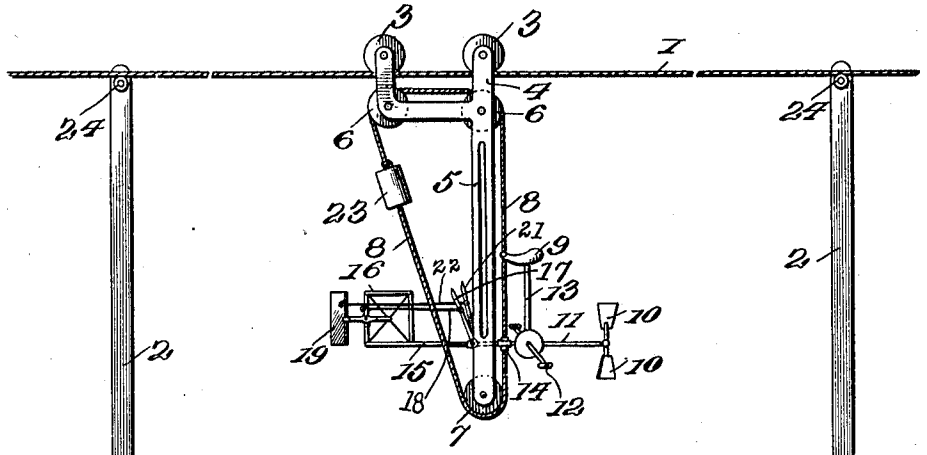
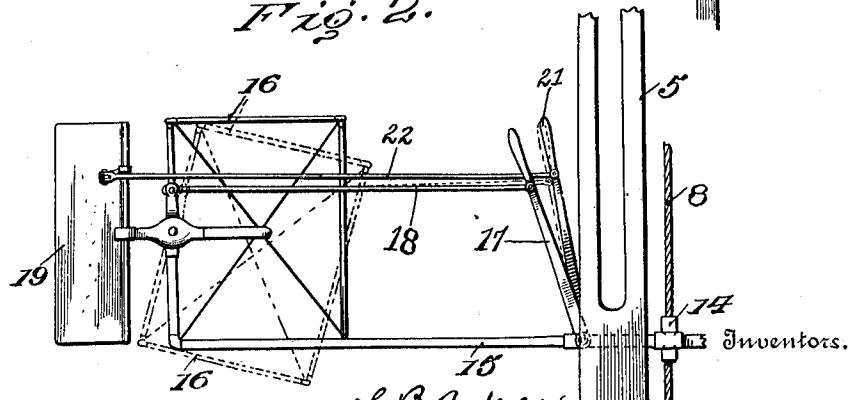


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

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AMUSEMENT APPARATUS OR AVIATOR-INSTRUCTOR.

978,263. Specification of Letters Patent. Patented Dec. 13, 1910.

Original application filed January 16, 1909, Serial No. 472,711. Divided and this application filed March 30, 1910. Serial No. 552,472.

To all whom it may concern:

Be it known that we, HAROLD B. ANDERSON and BYRON B. BROCKWAY, citizens of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Amusement Apparatus or Aviator-Instructors, of which the following is a specification, reference being had thereto the accompanying drawing.

This invention relates to improvements in an amusement apparatus or aviator instructor, the object of which is to produce a mechanism embodying an apparatus adapted to act in a manner similar to an aeroplane flying machine as an amusement or instruction device, and to so construct the mechanism as to eliminate the danger now present in the use of aeroplane flying machines, whether used for amusement or instruction.

This application is a division of our application filed January 16th, 1909, Serial No. 472,711.

Figure 1 of the drawing is a side elevation embodying the present improvements. Fig. 2 is an enlarged side elevation of the aeroplane construction.

Referring now to the drawings, a cable or track 1, is suitably supported upon standards 2 for receiving the supporting wheels 3 of a frame 4. These wheels 3 rest upon an arm supported by the cable or track 1. Extending downward from the frame 4 is a depending portion or arm 5. Journaled in the frame 4 are rollers or wheels 6, shown here as located below the supporting wheels 3, and a wheel or roller 7 is journaled in the lower end of the depending arm 5. Passing around these rollers 6 and 7 is an endless cable 8, to which is attached an operator's seat 9 and a propeller 10, which has its shaft 11 operatively connected in any well-known way (not here shown) with the pedals 12. A rod 13 depends from the seat 9 and the pedal-mechanism is suitably connected with the cable 8, at 14. A forwardly projecting arm 15 extends from the connection 14 and carries suitable aeroplanes 16, which are adapted to be tilted by means of levers 17 and connection 18, as shown in dotted lines. Supported in front of the aeroplanes 16, is a vertical rudder 19, which is capable of being turned on a vertical axis by means of a lever 21 and connection 22. These levers are within easy reach of the operator for controlling the aeroplanes and the rudder. A weight 23 is connected with a cable 8 and is proportioned to about counterbalance the weight of the operator and the aeroplane mechanism so that the operator and the aeroplane are about balanced and are readily raised or lowered.

The operator, through the means of the pedals, causes the rotation of the propeller 10 and thereby causes the device to travel on the cable 1. By operating the aeroplanes the operator can cause himself and the aeroplane mechanism to be raised or lowered and can cause it to swing horizontally through the means of the rudder 19. The lateral supports 24 extending from the vertical posts 2, will, of course, be sufficiently long to support the cable or track 1 away from the vertical post, so that the aeroplane can be caused to swing horizontally, the treads of the supporting wheels 3 oscillating on the cable or track 1.

It will be understood, of course, that the cable or track may be either straight or of a circular form, or horizontal, or with elevations and depressions somewhat similar to the well-known roller coaster without affecting the present invention.

Having thus described our invention, what we claim and desire to secure by Letters Patent is:

1. An apparatus of the character described, comprising a track, and an aeroplane having an attached traveling support upon said track, and arranged in respect to the aeroplane to support it in its operative position as it travels on the support.

2. An apparatus of the character described, comprising a track, and an aeroplane having an attached support arranged in respect to the aeroplane to position the center of gravity below said track and thereby support the aeroplane in operative position as it travels on the track.

3. An apparatus of the character described, comprising a track, an aeroplane device, and an auxiliary support formed as a part of the aeroplane device, the auxiliary support and the aeroplane device attached at all times to the main support and to each other.

4. An apparatus of the character described, comprising a track, a frame having

supporting wheels resting upon the track and an aeroplane device supported by the frame and movable vertically independent of the frame and an operator's seat attached to the aeroplane device.

5. An apparatus of the character described, comprising a track, a frame having wheels supported upon the track, a vertically movable member supported on the frame, an aeroplane device and operator's seat carried by the vertically movable member, and means for controlling the aeroplanes for the purpose described.

6. An apparatus of the character described comprising a supporting track, a frame having supporting wheels resting upon said track, a vertically movable member carried by the frame, an aeroplane device and an operator's support carried by the vertically movable member and a counterbalance connected to the vertically movable member for counterbalancing the operator and the aeroplane device.

7. An apparatus of the character described, comprising a supporting track, a frame having supporting wheels on said track, the lower end of the frame being free to move horizontally, an aeroplane device and an operator's seat connected together carried by the frame and vertically movable independent of the frame.

8. An apparatus of the character described, comprising a supporting track, a frame having supporting wheels resting on the track, a vertically traveling cable carried by the frame, an aeroplane device and an operator's support attached to the cable, and means for causing the supporting wheels to travel on the track.

9. An apparatus of the character described, comprising a supporting track, a frame having supporting wheels resting on the track, a vertically movable aeroplane and operator's support carried by the frame, and means for causing the operator's support to move vertically, and means for causing the supporting wheels to travel on the track.

10. An apparatus of the character described, comprising a supporting track, a frame having its upper end supporting wheels resting on the track, the lower end of the frame capable of a horizontal swinging movement, an operator's seat movable vertically in respect to the frame, means for causing the supporting wheels to travel on the track, and means under the control of the operator to cause the frame to swing horizontally and the said operator's support to move vertically.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses.

HAROLD B. ANDERSON.
BYRON B. BROCKWAY.

Witnesses:
W. J. WARD,
G. M. LAVELLE.