

J. & N. CHRISTENSEN.
AMUSEMENT DEVICE.
APPLICATION FILED FEB. 28, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

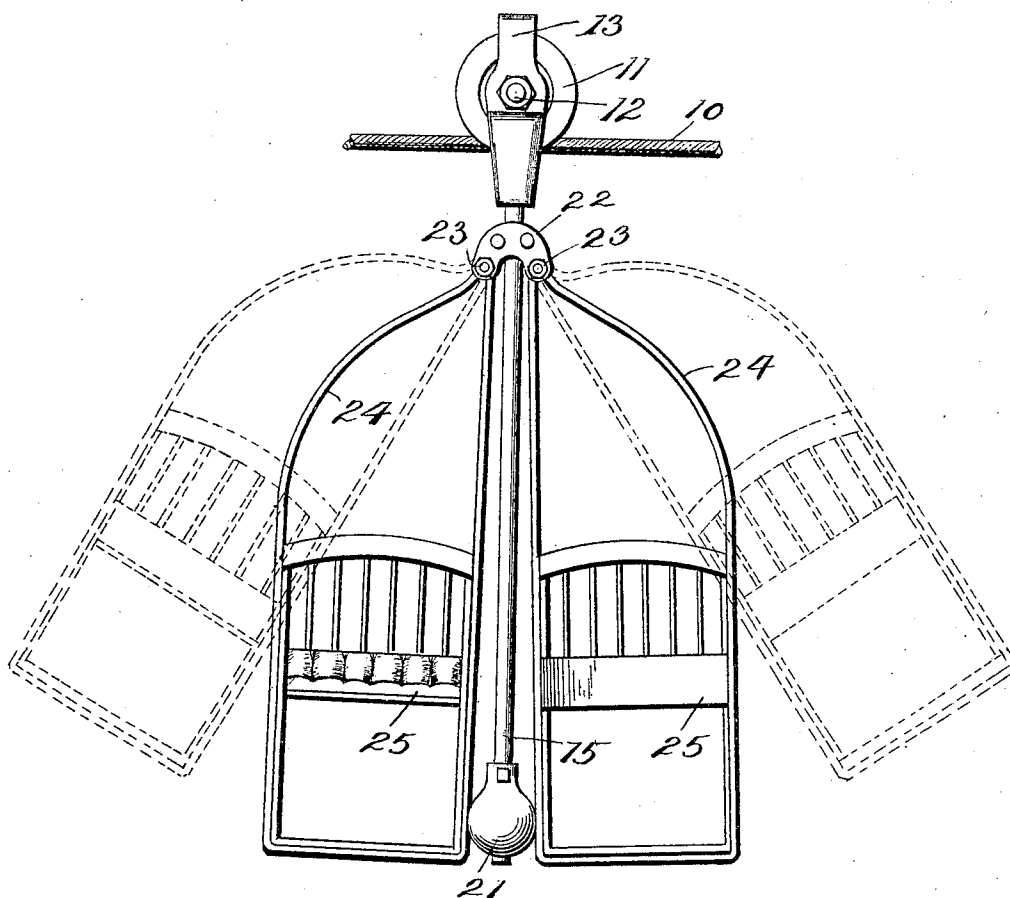
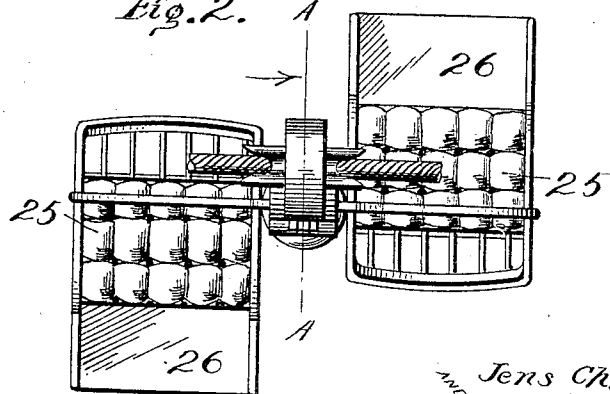


Fig. 2.



Witnesses

W. R. Taylor.
S. E. Fitzgerald

Inventors
Jens Christensen,
Nels Christensen.

By *W. J. Fitzgerald*
Attorneys

No. 795,483.

PATENTED JULY 25, 1905.

J. & N. CHRISTENSEN.
AMUSEMENT DEVICE.
APPLICATION FILED FEB. 28, 1905.

2 SHEETS—SHEET 2.

Fig. 3.

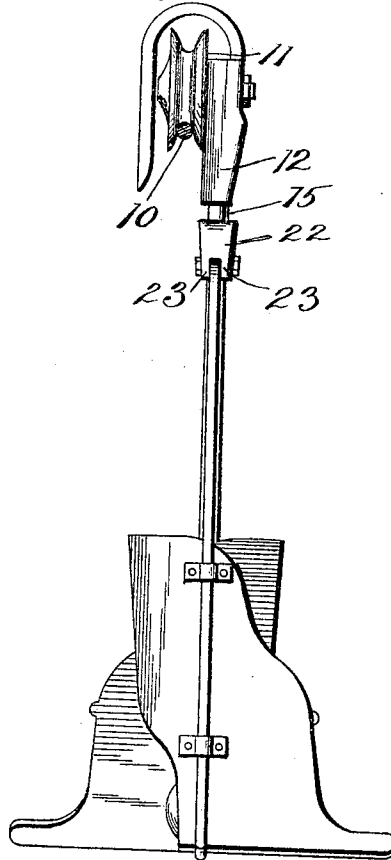


Fig. 5.

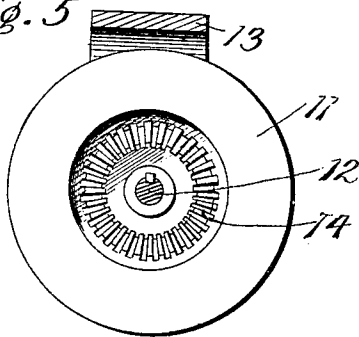
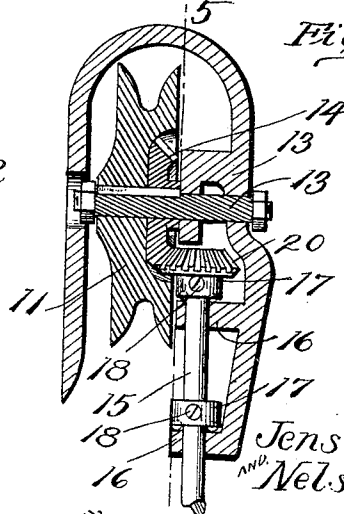


Fig. 4.



Witnesses
Mr. R. Taylor.
S. H. Fitzgerald

Inventors
Jens Christensen.
Nels Christensen
w. J. Fitzgerald
Attorneys

UNITED STATES PATENT OFFICE.

JENS CHRISTENSEN AND NELS CHRISTENSEN, OF BROOKLYN, NEW YORK.

AMUSEMENT DEVICE.

No. 795,483.

Specification of Letters Patent.

Patented July 25, 1905.

Application filed February 28, 1905. Serial No. 247,750.

To all whom it may concern:

Be it known that we, JENS CHRISTENSEN and NELS CHRISTENSEN, citizens of the United States, residing at Brooklyn borough, in the county of Kings and State of New York, have invented certain new and useful Improvements in Amusement Devices; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to amusement devices, and particularly to devices which travel upon a suspended cable or track.

The object of the invention is to impart a rotary movement to the object suspended from the cable in addition to the traveling movement along the cable.

The invention will be fully described hereinafter, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of a device embodying our invention supported to travel on a suspended cable or track. Fig. 2 is a top plan view thereof. Fig. 3 is an end elevation. Fig. 4 is a vertical section on line A A, Fig. 2, of the trolley-wheel and the supporting means carried thereby, while Fig. 5 is a section on line 5 5 of Fig. 4.

10 indicates the track, in the present case shown as a cable, and this track may be supported in an elevated position in any suitable manner not necessary to particularly describe nor to illustrate, as it forms no part of our present invention.

11 indicates a grooved trolley-wheel to run on the elevated track. This wheel is keyed or otherwise secured to a shaft 12, journaled in a hanger 13. As shown, both sides of the hanger extend below the trolley-wheel and serve as guards against disengagement of the hanger from the track. Obviously instead of keying the trolley-wheel to its shaft the latter might be fixed in the hanger and the wheel revolve on it.

One face of the wheel 11 is recessed to receive a bevel-gear 14, which is also keyed to the shaft 12 and may, if desired, be pinned or otherwise secured to the wheel 11 to turn with it.

15 indicates a vertically-extending shaft supported to turn in openings in lugs 16 16, projecting inwardly from one side of the hanger. As shown, there are two collars 17 17, secured to the shaft 15 by set-screws 18,

and ball-bearings 19 will preferably be interposed between the collars and the lugs in order to reduce friction. A bevel-pinion 20 is secured to the upper end of the shaft 15 and meshes with the bevel-gear 14. By this arrangement it is obvious that when the trolley-wheel revolves on its horizontal axis rotary movement will be imparted to the shaft 15 about its vertical axis. A weight 21 is secured in any suitable manner to the shaft near its lower end to maintain shaft 15 in substantially a perpendicular position.

22 indicates a bracket rigidly supported to the shaft 15 just below the hanger 13 and provided with a pair of ears 23 on opposite sides, and between the ears of each pair a supporting-frame 24 is pivoted at its upper end, and these frames are adapted to support a seat or other device, in the present case a chair 25 being shown. The frames may of course be of any desired form to carry the object to be supported, and any other object besides a chair or seat may be supported thereby. In the present instance the device illustrated is designed to carry two persons, one in each chair, and the chairs are provided with foot-rests 26 and may also be provided with straps to prevent the person from falling out during the course of travel along the elevated track.

Such being the general construction of the device, it will operate as follows: It is to be assumed that the track will be inclined and that the trolley and the supported device will be propelled along the track by gravity. As the trolley-wheel rotates in traveling along the track, the bevel-gear 14 and pinion 20 will cause the shaft 15 to rotate, and this will cause the supported devices to swing outwardly, as indicated in dotted lines, Fig. 1, and they will also swing around the axis of the shaft 15, and these movements will continue until the trolley-wheel stops.

The outwardly-swinging motion of the supported devices will of course vary with the variation of the speed at which the trolley travels along the track. When the travel ceases, the seats will move toward each other, but the weight will prevent them from coming in contact with each other. The weight may have flat surfaces to engage the chairs, if desired, and the latter may have rubber or other spring bumpers attached to them to engage the weight and prevent unnecessary shock to the chairs and their occupants.

Without limiting ourselves to the precise

details of construction illustrated and described, we claim—

1. In an amusement device, the combination of an elevated track, a trolley-wheel rotatably supported in a hanger to travel along the track, a vertical shaft supported for rotation in the hanger, and means for transmitting rotary movement of the trolley-wheel to the shaft, substantially as set forth.

2. In an amusement device the combination of an elevated track, a trolley-wheel rotatably supported in a hanger to travel along the track, a shaft supported in said hanger to rotate about an axis perpendicular to that about which the trolley-wheel rotates, and beveled gearing for transmitting rotary movement from the trolley-wheel to the shaft, as and for the purpose set forth.

3. In an amusement device, the combination of an elevated track, a trolley-wheel rotatably supported in a hanger to travel along the track by gravity, a vertically-extending shaft supported for rotation in the hanger, a bevel-gear secured to the trolley-wheel to turn there-

with, a bevel-pinion secured to the shaft and engaging said gear, a weight on the lower end of the shaft and supporting-frames pivotally connected to said shaft near its upper end, substantially as set forth.

4. In an amusement device, the combination of an inclined elevated track, a trolley-wheel supported in a hanger to travel along said track by gravity, a vertically-extending shaft supported for rotation in the hanger, bevel-gearing for transmitting rotary movement from the trolley-wheel to the shaft, a weight on the lower end of the shaft, supporting-frames pivotally connected to the shaft just below the hanger, and chairs carried by the frames, substantially as set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JENS CHRISTENSEN.
NELS CHRISTENSEN.

Witnesses:

THOMAS HOJER,
CHRISTIAN BUSCH.