No. 837,803. PATENTED DEC. 4, 1906.

A. DAVIDSON.

ROUNDABOUT.

APPLICATION FILED AUG. 22, 1904.

2 SHEETS—SHEET 1.

Fig. 1

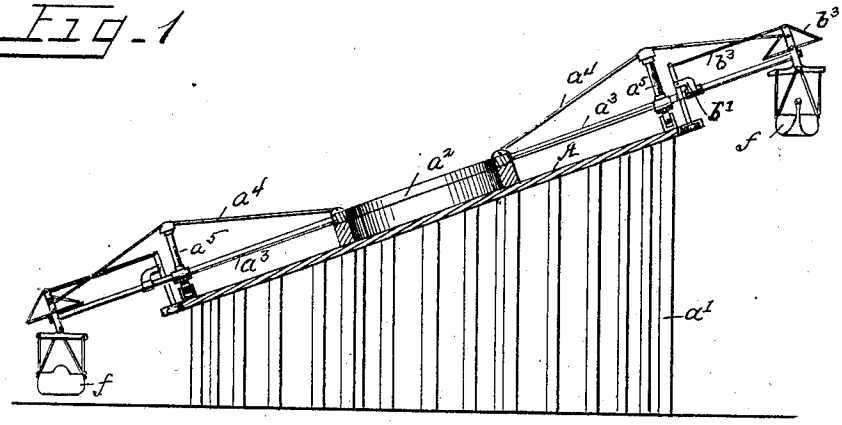


Fig. 2

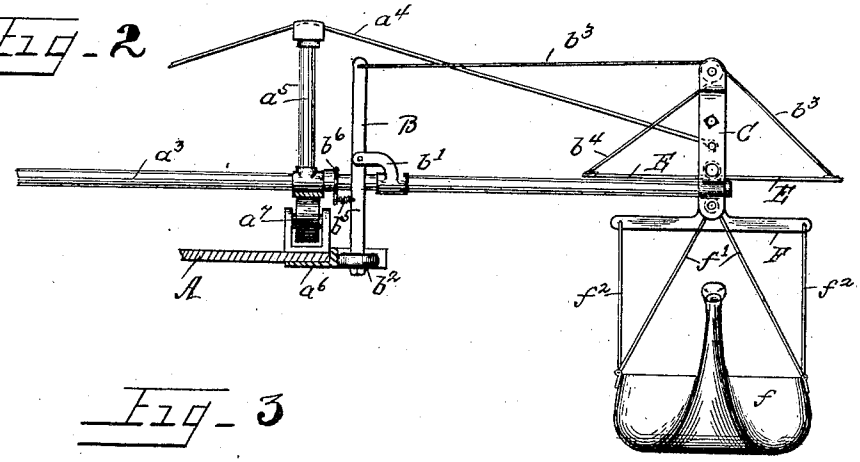
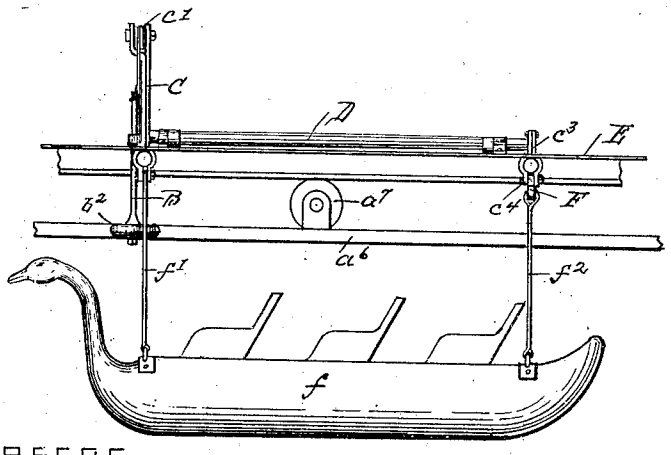


Fig. 3



Witnesses

J. W. Angell

Wm. B. Moore

Inventor

Alexander Davidson

by Fiedler & Benjamin Atty.

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Fig. 4

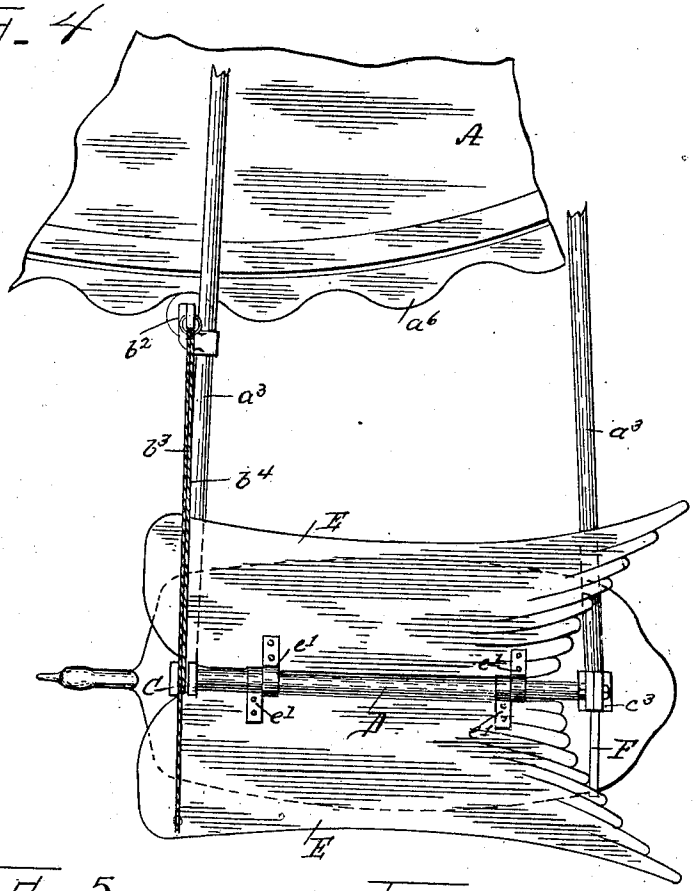


Fig. 5

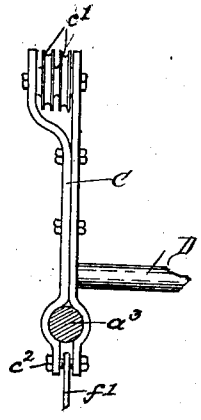
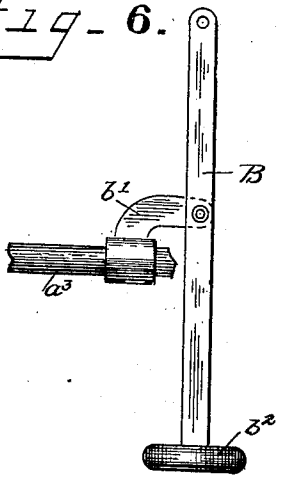


Fig. 6.



Witnesses
J. H. Angell.
Wm. B. Moore

Inventor
Alexander Davidson,
by Frederick Benjamin Atty.

UNITED STATES PATENT OFFICE.

ALEXANDER DAVIDSON, OF JOLIET, ILLINOIS.

ROUNDABOUT.

No. 837,803. Specification of Letters Patent. Patented Dec. 4, 1906.

Application filed August 22, 1904. Serial No. 221,638.

To all whom it may concern:

Be it known that I, ALEXANDER DAVIDSON, a citizen of the United States, residing at Joliet, in the county of Will and State of Illinois, have invented certain new and useful Improvements in Roundabouts, of which the following is a specification.

This invention relates generally to improvements in the construction and arrangement of amusement apparatus commonly known as "merry-go-rounds" or "roundabouts," and particularly to the construction and operation of the cars or passenger-carrying devices which form a feature of such apparatus.

Inasmuch as the details of my invention relate to a car that is especially adapted for use in an apparatus designed to travel in an inclined plane, I have shown my invention as applied to such apparatus; but it will be understood that my invention is also applicable to the ordinary roundabouts which rotate in a horizontal plane.

My invention consists in the means of swinging the car from its support and in the construction and operation of the car cover or roof, which serves the double purpose of an awning and a fan, which adds to the comfort and pleasure of the use of the apparatus.

In the accompanying drawings I have shown my invention in the following views: Figure 1 is a view, partly in elevation and partly in section, of an inclined roundabout equipped with my invention. Fig. 2 is a detail, on an enlarged scale, showing the main features of my invention. Fig. 3 is a side elevation of the parts shown in Fig. 2. Fig. 4 is a top plan view of the parts shown in Fig. 2. Fig. 5 is a detail showing the means of supporting the wing-operating ropes, and Fig. 6 is a detail of the wing-operating lever and its connections.

Referring to the details of the drawings, A represents an inclined circular platform supported on timbers a' and about which the cars revolve through the application of any suitable power to the ring a^2. Extending radially from the ring are a series of tubes a^3, which, with vertical tubes a^5 and rods a^4, form trusses from the outer ends of which the cars are suspended. The central portion of the trusses is supported on rollers a^7, mounted in suitable bearings on the platform A. To the periphery of the platform is secured a rim a^6, which is formed in a series of scallops or undulations for a purpose to be described.

Secured to one of each pair of tubes a^3 is a bracket b', on which is pivoted a vertically-arranged lever B. On the lower end of the lever B a wheel B^2 is horizontally mounted with its periphery normally in frictional contact with the rim a^6. The wheel is held in contact relation with the rim by a spring b^5, which is secured at one end to the lever below its pivotal point and at the other end is fastened to a collar b^6, fixed on the tube a^3 near the post a^5.

To the upper end of the lever is secured the ends of wire cords b^3 b^4, which are passed over pulleys c', mounted in the upper end of the flat vertical bars C and have their opposite ends respectively secured to the outer and forward edge of the wings E. The bars C are bolted together and near their lower ends embrace the tube a^3, as shown in Fig. 5. A bolt c^2 passes through the lower ends of the bars C and has swung thereon the car-front suspension-rods f'. The bars also furnish bearings for the front end of the longitudinal tube D, which extends the length of the car and has its rear end secured in the short bars c^3, which embrace the rear bar C, and have a bolt c^4 passing through their lower ends. Centrally hung on the bolt c^4 is a horizontal hanger F, to the outer ends of which are secured the parallel suspension-rods f^2, which swingingly support the rear portion of the car f. This hanger and the connected suspension-rods constitute an important feature of my invention, owing to the fact that when the cars are traveling in an inclined plane if the rods f^2 were arranged in the same manner as the rods f' they would extend over the rear seat of the car and strike the heads of the occupants thereof.

The cars f are preferably made in the swan form shown, and placed above them are the wings E E, which are made in any suitable manner and are adapted to extend over and shade a substantial part of the car. The wings are hinged on the rod D by plates e', which are secured to the inner edges of the wings and loosely encircle the said rod, as clearly shown in Fig. 4. The cords b^3 b^4 are normally taut when the wings are in the horizontal position, so that when the lower end of the lever B moves outwardly through the wheel b^2, riding over a convex portion of the rim a^6, the wings will be raised. When said wheel enters a concave portion of the rim, the resulting outward movement of the upper part of the lever B will relax the cords b^3 b^4

and permit the wings to drop by gravity. The spring b^5 insures the inward movement of the lower part of the lever.

From the construction and arrangement above set forth it will be seen that I have provided a method of swinging the cars which keeps them in substantially a horizontal position throughout their travel around the platform, except for the slight inclination when on the inclined plane of their movement. The agitation of the wings adds to the cooling effect resulting from the rapid movement of the cars.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a roundabout, a platform, rotatable means for supporting a car, a car swingingly suspended from said means, horizontal wings vibratingly mounted above said car, and means for vibrating said wings.

2. In a roundabout, a platform, rotatable means for supporting cars, cars suspended from said means, pairs of wings horizontally hinged above said cars, and means for vibrating said wings, said means operable from said platform substantially as set forth.

3. In a roundabout, a platform, rotatable means for supporting cars, cars suspended from said means, wings arranged in pairs over said cars and hinged on said supporting means, cords attached to said wings and means for operating said cords whereby the wings will be vibrated substantially in the manner described.

4. In a roundabout, a platform having a scalloped periphery, cars, means for supporting said cars from said platform, wings arranged over said cars and hinged on said supporting means, cords attached to said wings, and means for operating said cords, said means adapted to be operated by contact with the periphery of the platform.

5. In a roundabout, a platform having a scalloped periphery, cars, means for supporting said cars from said platform, wings arranged over said cars and adapted to vibrate, rollers arranged in frictional contact with the periphery of said platform, levers carrying said rollers, and means connecting said levers with said wings whereby the movements of the levers will be communicated to said wings.

In testimony whereof I affix my signature in presence of two witnesses.

ALEXANDER DAVIDSON.

Witnesses:
F. BENJAMIN,
M. A. MILORD.