No. 790,989. PATENTED MAY 30, 1905.

H. G. TRAVER.

CAR FOR SWINGS.

APPLICATION FILED MAR. 9, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

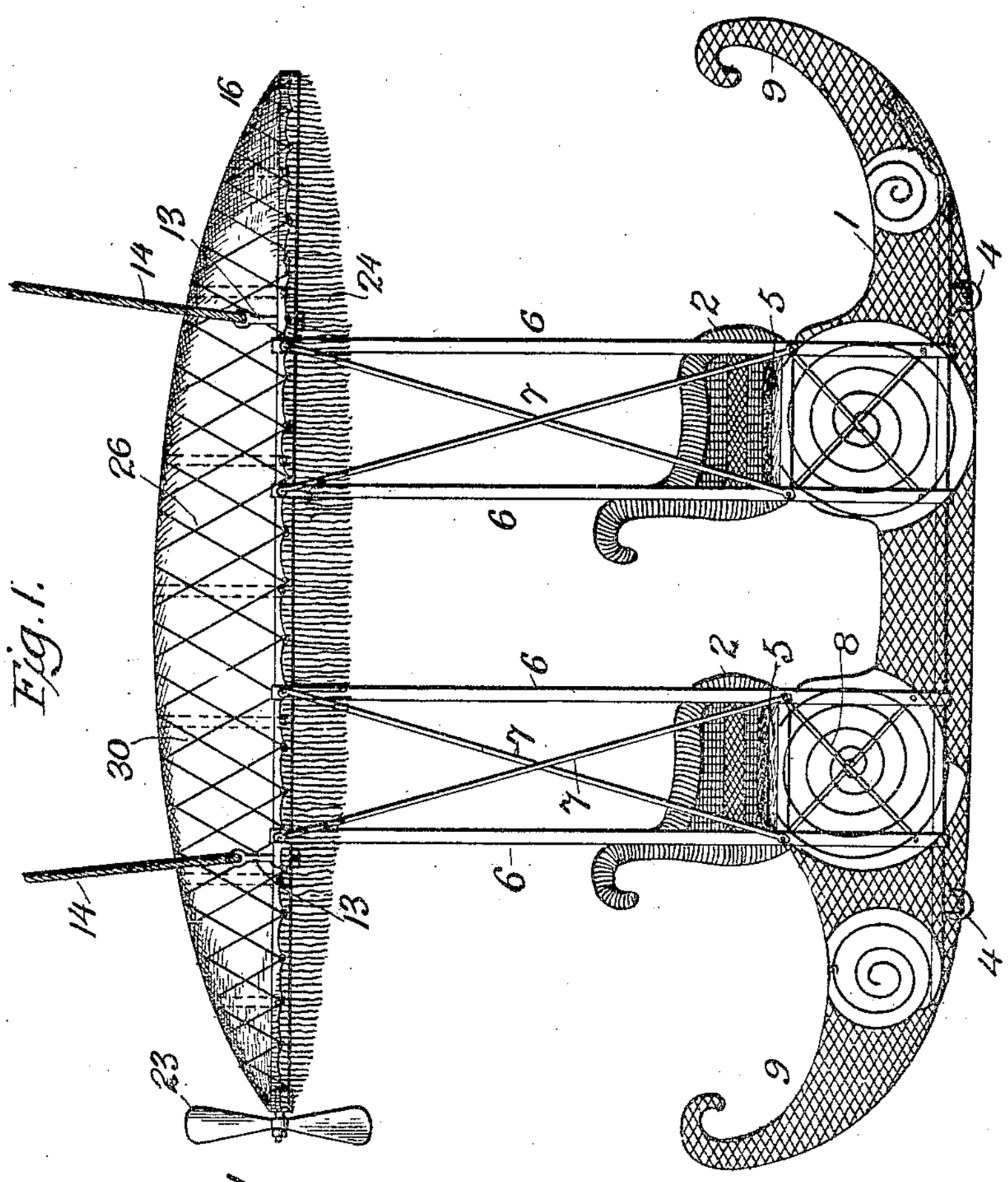
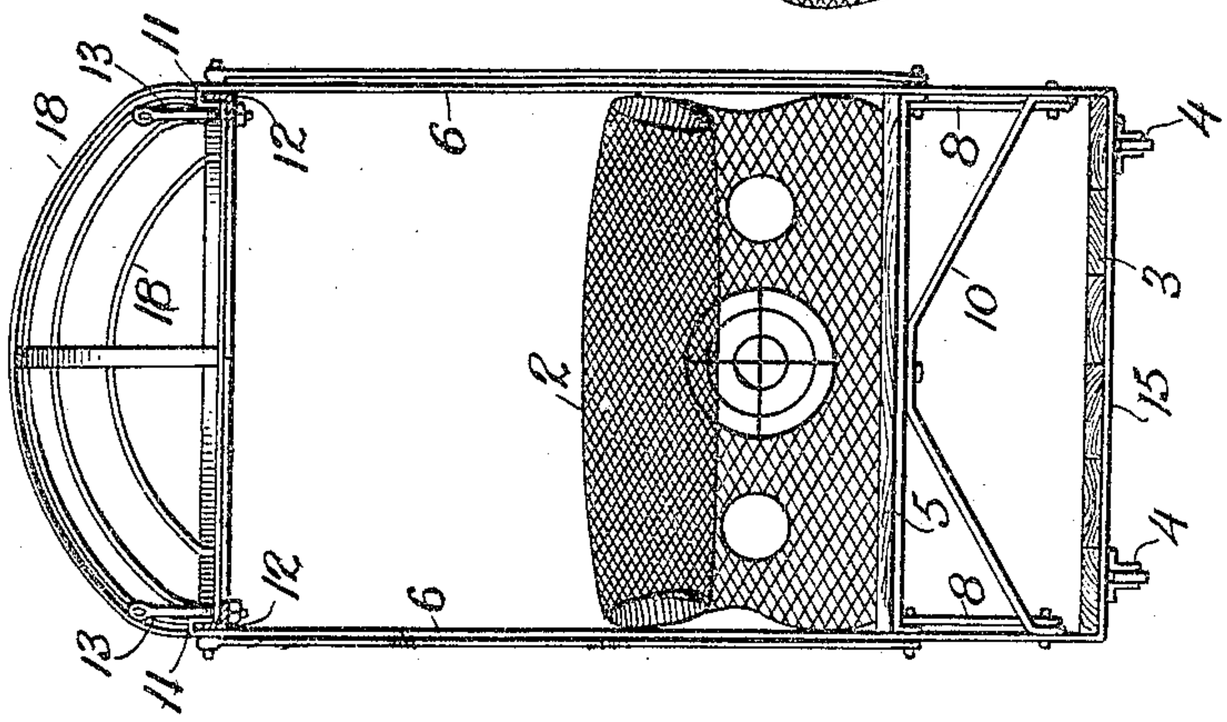


Fig. 2.



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2 SHEETS—SHEET 2.

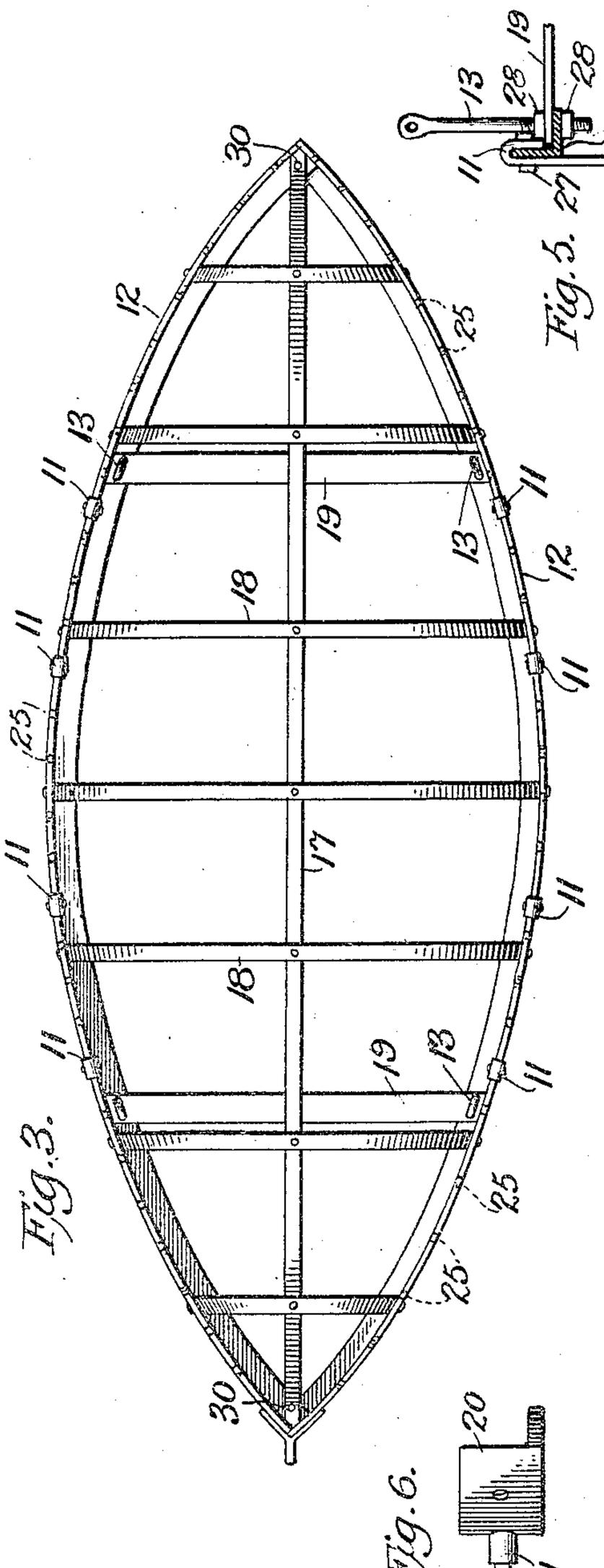

Fig. 3.

Fig. 5.

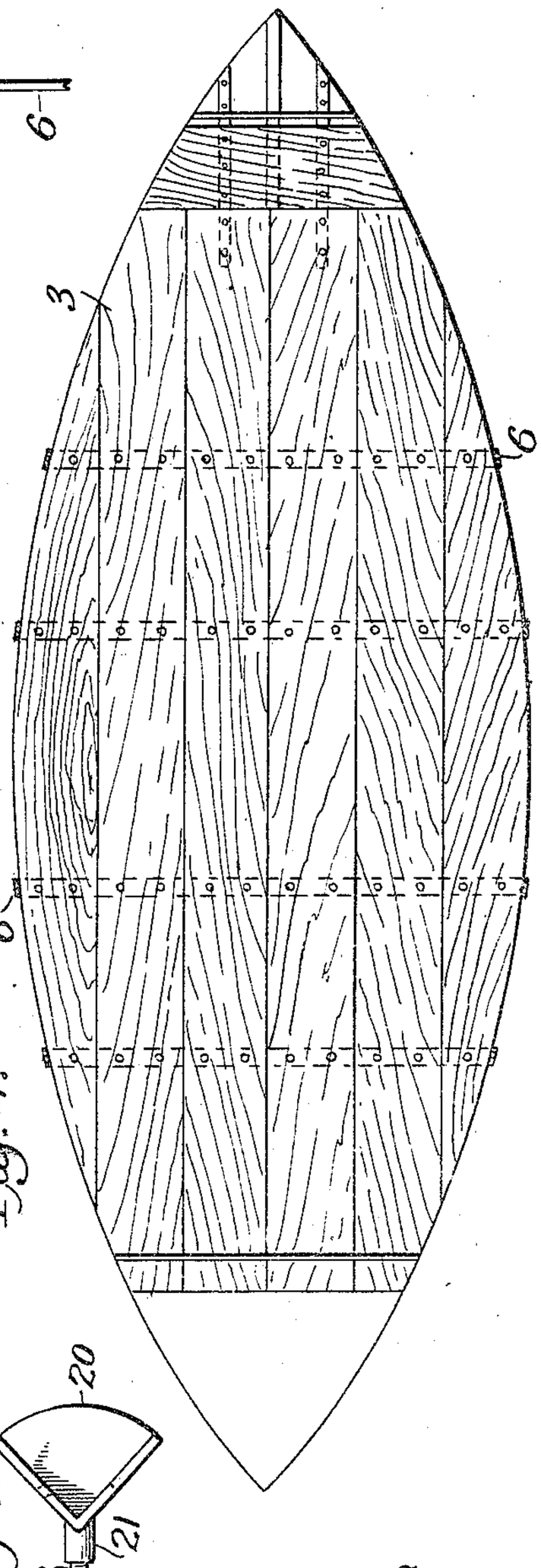

Fig. 4.

Fig. 6.

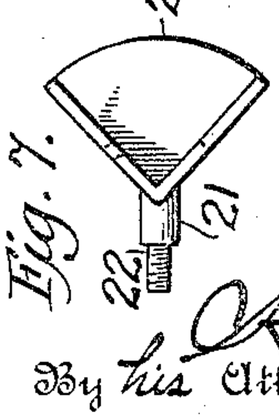

Fig. 7.

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UNITED STATES PATENT OFFICE.

HARRY G. TRAVER, OF NEW YORK, N. Y., ASSIGNOR TO TRAVER CIRCLE SWING COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

CAR FOR SWINGS.

SPECIFICATION forming part of Letters Patent No. 790,989, dated May 30, 1905.

Application filed March 9, 1904. Serial No. 197,283.

To all whom it may concern:

Be it known that I, HARRY G. TRAVER, a citizen of the United States of America, and a resident of the city, county, and State of New York, have invented certain new and useful Improvements in Cars for Swings, of which the following is a specification.

This invention relates to certain improvements in cars or baskets for swings and similar amusement devices, the object being to simplify and perfect the construction of a passenger-carriage of this kind.

The car is designed and intended for use with a circle swing described and claimed in Letters Patent, granted April 26, 1904, to myself and Charles W. Nichols, upon an improvement in amusement apparatus, No. 758,341.

The present invention consists, essentially, in the arrangement, construction, and combination of parts and in certain details and peculiarities thereof, substantially as will be hereinafter more fully described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a side elevation of my improved car for swings and the like. Fig. 2 is a sectional end view of the same. Fig. 3 is a plan view of the frame of the canopy. Fig. 4 is a bottom plan view of the car. Fig. 5 is a detail sectional view of the means for supporting the car from the canopy. Fig. 6 is a side view, and Fig. 7 a plan view, of the device for carrying a propeller on the canopy.

Similar numerals of reference designate corresponding parts throughout the different figures of the drawings.

1 denotes the body of the car. It is preferably made of wicker-work, reed, or some suitable equivalent light and attractive material and is of any desirable shape, having, preferably, the curved, hooked, and pointed canoe ends 9 9. In the bottom of the body 1 is a flooring 3, preferably of wood, provided on the under side with small rollers or wheels 4. Furthermore, the body 1 is provided with comfortable ratan or wicker seats 2, supported on springs or otherwise, if desired, the bottom of the seat being a horizontal board 5, beneath which is a brace 10 to assist in keeping the parts rigid.

16 denotes the canopy, which provides a sunshade and storm protection for the car 1, it being supported at a convenient distance above the car. I shall presently describe the details of construction of the canopy. First, however, I will speak of the means for holding it. Said means consist of vertical side bars 6, by means of which the car 1 is hung from the canopy. These bars 6 are metallic strips and are arranged in pairs, there being two alongside of each of the seats 2. The upper ends of the bars 6 are bent to form hooks 11, that overlap and engage the vertical edges of the angle-bars 12, which form the sides of the canopy-frame, These car-supporting bars 6 pass downward alongside the seats 2 until they reach the car-floor 3, where they are bent at right angles and caused to pass beneath said floor at 15, so that the floor and the car rest upon them. It will thus be seen that the car-supporting bars 6 consist of integral metallic strips extending from one side of the canopy 16 downward around the car and up to the other side of the canopy, the two points of attachment to the canopy being horizontally opposite to each other. All four of the metallic bars 6 are placed in this way. Cross-braces 7, extending from the upper ends of the side bars 6 to points adjacent to the seat-boards 5, are employed to keep the said pieces 6 from buckling or becoming displaced, and also cross-rods 8 below the seat-boards 5 are likewise bolted to the metal pieces 6 for the purpose of strengthening the combination at the points below the seats. The canopy 16 has this general form and appearance of a cigar-shaped air-ship, while the car 1, which is, in effect, suspended from it, is similar to a basket suspended from an air-ship or balloon. The frame of the canopy consists, as shown in Fig. 3, of the curved side rails 12, of angle-iron, which meet at the ends and are bolted together. At certain points between the ends of the angle-bars 12 horizontal cross-braces 19 are

bolted thereto to strengthen the frame. By referring to Fig. 5 it will be seen that the ends of the braces 19 rest on the angle-bars 12 at points adjacent to where the hooked ends 11 engage the vertical edges of angle-bars 12. Bolts 27 are passed through the angle-bars 12 and the hooks 11 in order to securely fasten the side pieces 6 to the canopy-frame. 13 denotes an eyebolt, of which there are preferably four on the canopy, to each bolt there being attached a suspending-cable 14. These eyebolts are fastened to the canopy by being passed through the braces 19 at the point where the ends of said braces rest on the angle-bars 12 and likewise through the said angle-bars, and the eyebolts 13 are provided above and below the braces 19 with nuts 28. It is also to be observed that the eyebolts 13 have screw-threaded portions of considerable length in order to allow adjustment of the bolts, so that the four corners of the passenger-car to which the four supporting-cables are attached may be properly leveled and positioned with respect to the surface or platform on which the car may temporarily rest or otherwise. In addition to the angular side pieces 12 the canopy-frame comprises the curved medial strip 17, which is fastened at the conjunction of the ends of the angle-pieces 12, bolts 30 being employed to unite the ends of the strip 17 to the ends of the angle-pieces 12. Also there are curved transverse strips 18, which are secured to the central strip 17 and at their ends to the angle-pieces 12, all as clearly shown in Fig. 3. Over the frame thus constituted a canvas covering 26 is placed and properly secured, and in order to increase the similarity of the structure to a balloon or air-ship a suitable netting 30 is placed over the canvas, and also a fringe 24 is sewed around the lower edge of the canopy, the sewing taking place through holes 25, punched in the angle-bars 12; and, furthermore, it will be noted that at one end of the canopy 16 (the rear end) an angle or corner piece 20 is bolted, said angle-piece being provided with a journal-pin 21, which terminates in a screw-threaded portion 22, the latter for carrying a retaining-nut, while the journal-pin 21 supports a propeller 23. This propeller 23 performs no service and is for ornamental purposes solely, being used to cause the canopy to more fully present the appearance of an air-ship.

By reference to my copending application it will be understood that my present improved car is suspended by the cables 14, which I have described as being attached to the canopy, and that the car is set in motion by power applied to mechanism carrying the cables, so that the car swings in a circle whose radius increases in proportion to the speed of the car.

The rollers 4, hereinbefore referred to, are for the purpose of facilitating the contact of the bottom of the car with the ground or a platform on which it may temporarily rest before the propelling mechanism is set in motion.

One important feature of the present improvements, on which I lay stress, is the attachment of the cables to the canopy instead of to the car-body. In practice it has been found that when the car is started there is a backward drag due to the fact that the propulsive action is applied at the upper end of the long suspending-cables, and this drag or backward pull is greater the nearer to the bottom of the car the attachment of the cables is made and is less the farther away from the bottom of the car the point of attachment of the cables is placed. Therefore in attaching the cables to the canopy instead of to the car-body I preferably diminish this backward pull and enable the car to be more easily started.

The bolts 27, that are passed through the angle-bars 12 and the hooks 11, pass through both sides of said hook 11 and are provided with nuts on the opposite ends, as indicated in Fig. 5. Thus by means of these bolts and hooks there are two separate and distinct modes of fastening provided for the vertical side bars 6 to the canopy 16, and the strain comes in part on the bolts and in part on the hooks. This being so, it would obviously be impossible to disconnect the side bars from the canopy during the jarring and oscillation of the machine.

Many changes in the precise construction and arrangement of the various parts may be made without varying from the spirit of the invention.

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

1. In a cable-supported car for swings and the like, the combination of a body having seats, a canopy, and side bars having hooked ends that engage the canopy, said bars consisting of integral pieces passing around underneath the body and thus extending from the canopy on one side to the canopy on the opposite side, substantially as described.

2. The combination of a car-body having seats, a canopy having the appearance of an air-ship, means for supporting the body from the canopy consisting of integral bars passing around underneath the body and having hooked ends that engage the canopy, eyebolts fastened to the canopy, and car-supporting cables connected to the eyebolts.

3. In a car for swings and the like, the combination with a body and its seats composed of a light wicker construction, of a canopy consisting of a skeleton frame, and means for supporting the car-body from the canopy consisting of strips or bars having hooked upper ends that engage the side rails of the canopy-frame, which strips or bars pass around un-

derneath the car-body, from side to side and are connected to the canopy at points opposite to each other.

4. In a car for swings and the like, the combination of a body having seats, a canopy, and side bars having hooked ends that engage the canopy, together with bolts passing through the hooked ends and the side bars, so that the hook and the bolt may provide a doubly-strong support, said side bars passing downward and beneath the car-body, each side bar thus extending from the canopy on one side around underneath the body to the canopy on the opposite side.

5. In a car for swings and the like, a canopy having a frame consisting essentially of horizontal side rails that are curved and that are connected together at the pointed ends, curved transverse strips and one or more longitudinal strips connected together and to the side rails, a body having seats, means for supporting the car-body from the canopy consisting of bars having hooked upper ends that engage the side rails of the canopy-frame, which bars pass around underneath the car-body so that each bar runs from the canopy on the one side to the canopy on the other side, eyebolts fastened to the canopy and car-supporting cables connected to the eyebolts.

6. In a car for swings and the like, the combination with a body, of a canopy consisting of a skeleton frame having curved side rails fastened together at the ends and curved pieces secured to the side rails, a covering for the frame of netting, and means for supporting the car-body from the canopy consisting of side bars that engage the side rails of the canopy-frame and are connected to the body, eyebolts fastened to the canopy, said bolts being screw-threaded and provided with nuts, and car-supporting cables connected to the eyebolts.

Signed at New York city this 4th day of March, 1904.

HARRY G. TRAVER.

Witnesses:

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