No. 830,687. PATENTED SEPT. 11, 1906.

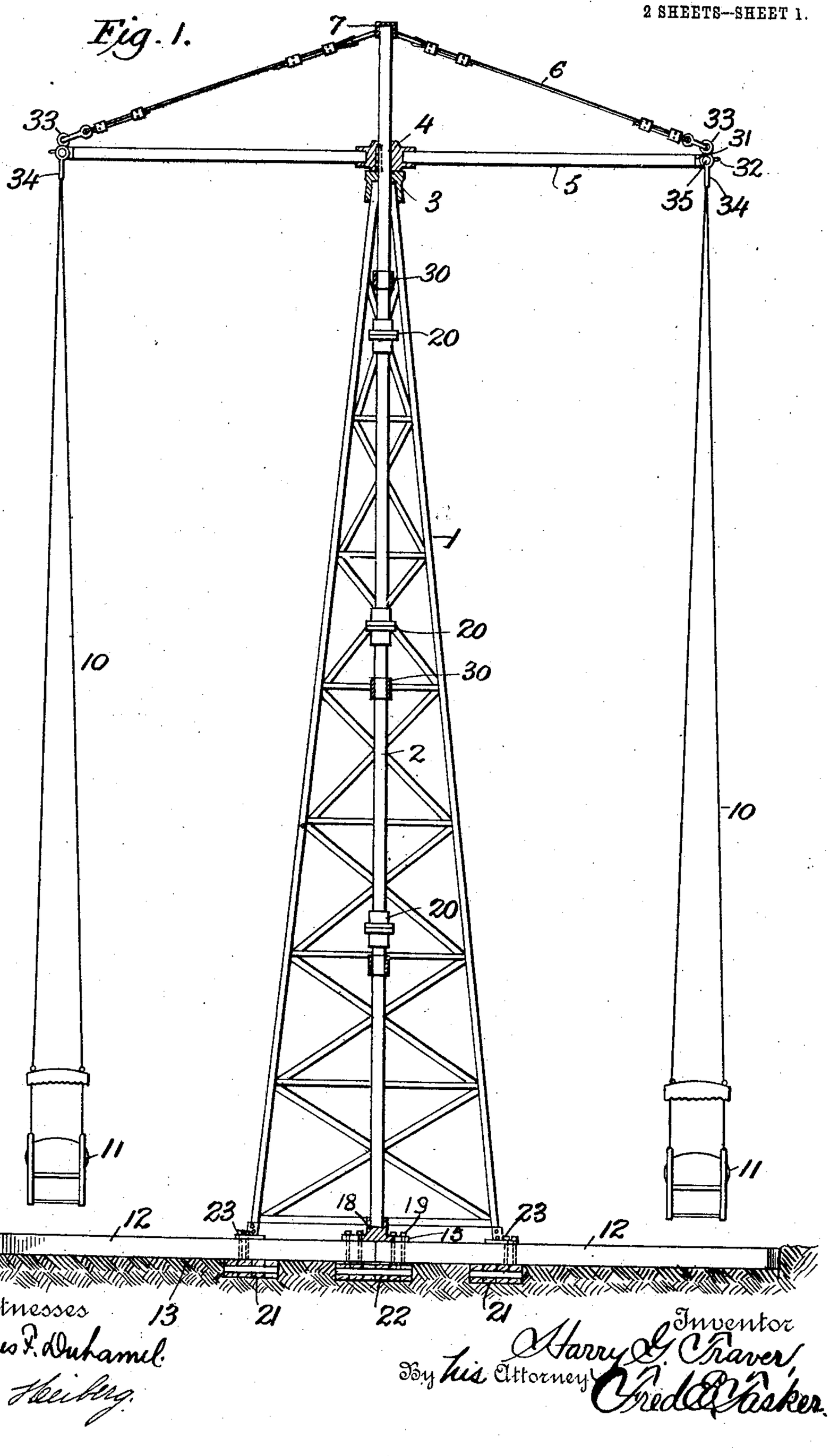
H. G. TRAVER.

CIRCLE SWING.

APPLICATION FILED JAN. 28, 1905.

2 SHEETS—SHEET 1.

Fig. 1.



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2 SHEETS—SHEET 2.

Fig. 2.

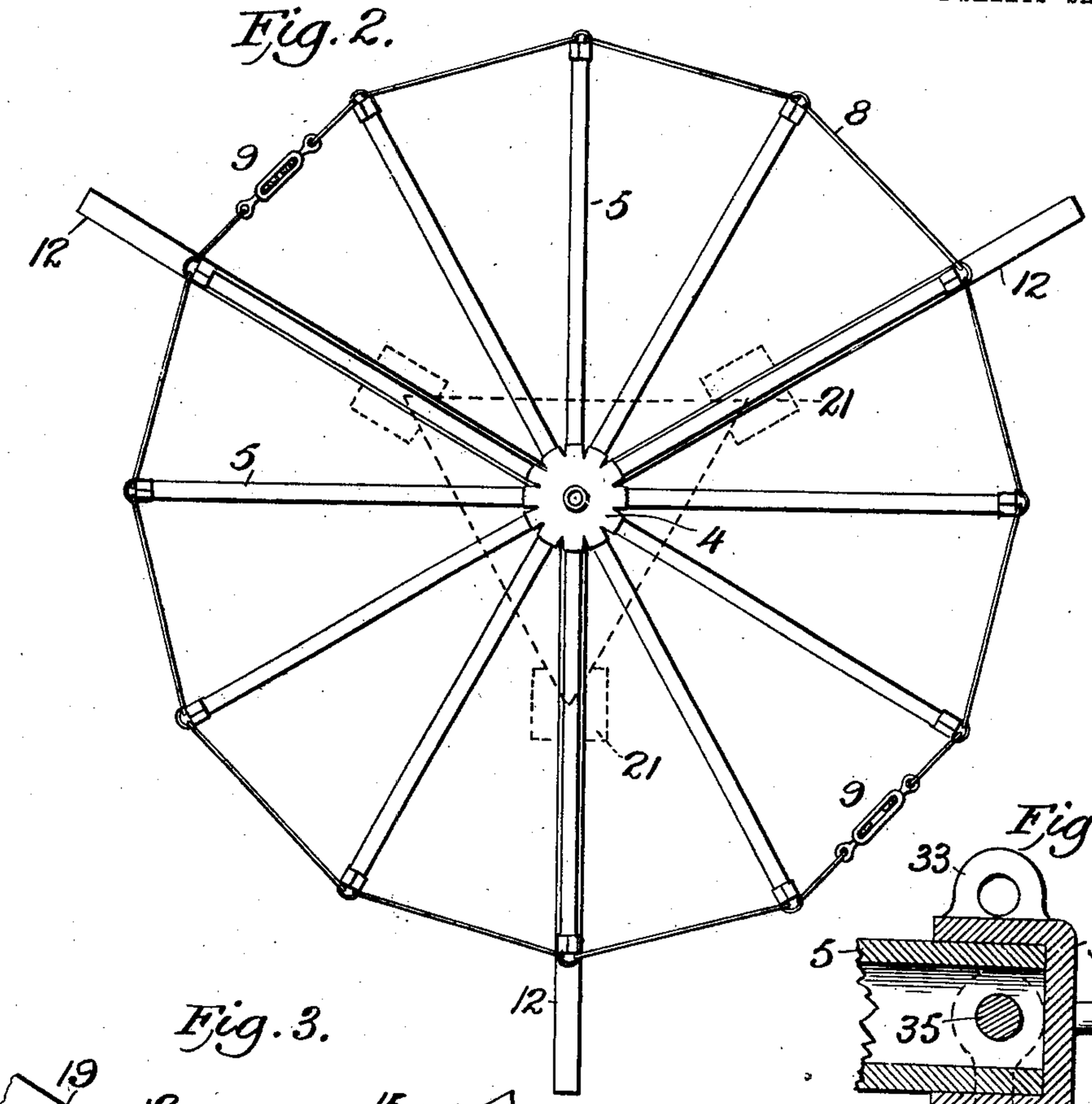


Fig. 5.

Fig. 3.

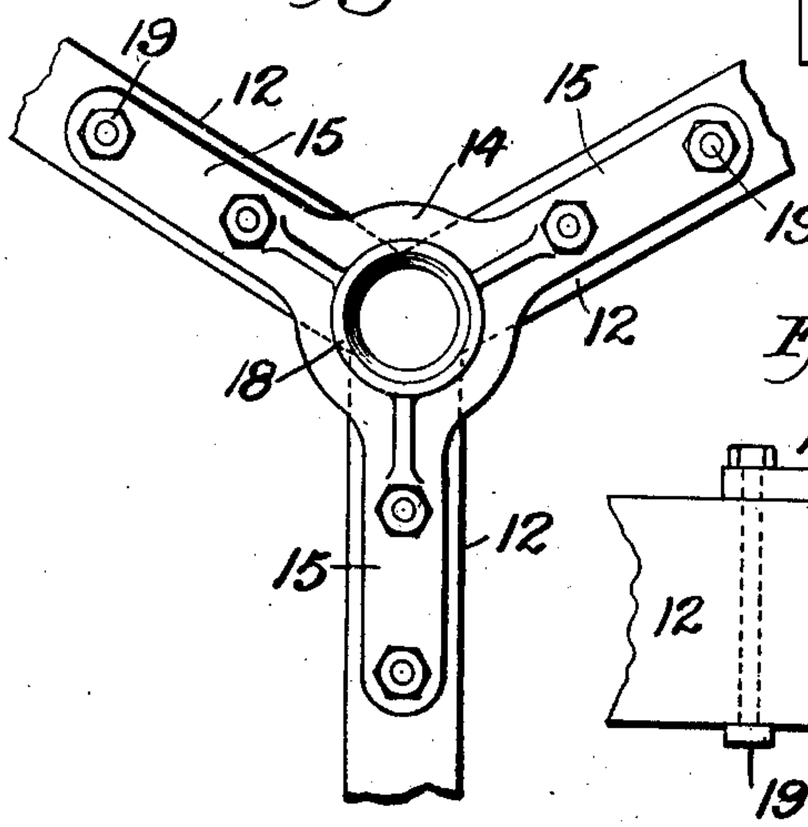
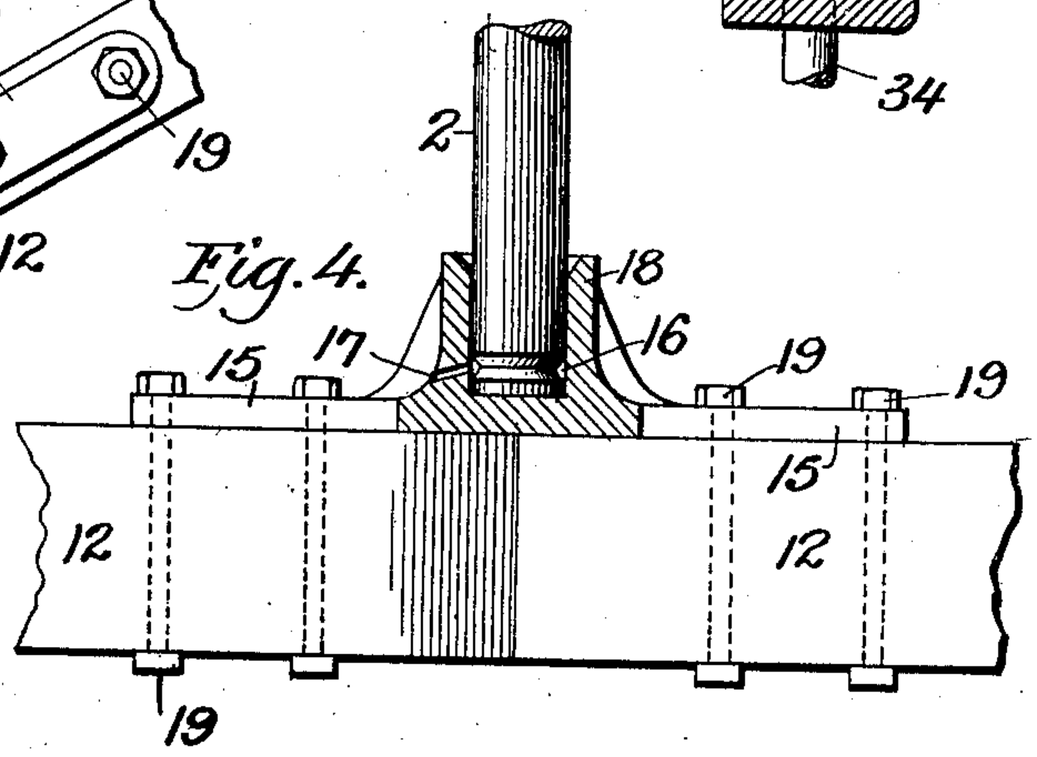


Fig. 4.



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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.

CIRCLE-SWING.

No. 830,687. Specification of Letters Patent. Patented Sept. 11, 1906.

Application filed January 28, 1905. Serial No. 243,050.

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 Circle-Swings, of which the following is a specification.

My invention relates to an amusement apparatus or roundabout device, the object being to so construct a device of this character that it will be simple and efficient; and the invention consists, essentially, in the combination, construction, and arrangement of mechanical parts, substantially as will be hereinafter described and claimed.

In the annexed drawings, Figure 1 is a front elevation of my improved amusement apparatus. Fig. 2 is a top plan view. Fig. 3 is a detail plan view of the bottom bearing for the lower end of the central revoluble shaft. Fig. 4 is a sectional side view of the same. Fig. 5 is a sectional detail of one of the arm end sockets.

Similar numerals of reference denote like parts throughout the different figures.

1 indicates a main tower made of any desirable framework, height, shape, size, &c. In this tower at convenient points are bearings 30 for the central upright shaft 2, which is preferably made in sections connected by couplings 20, said shaft being actuatable by any convenient motor, (not shown,) as is customary with roundabout devices of a similar character, the speed of rotation being regulated, as desired, and the object being to carry at a high rate of speed the airship-cars pendent from arms projecting from the upper end of said central shaft 2. On the upper end of the tower 1 is a top casting 3, and on this rests a hub 4, which is fast to the shaft 2 and is provided with a circular series of sockets for holding rigidly the inner ends of the arms 5, that project horizontally outward. Thus it will be seen that as the shaft 2 rotates the arms 5 are carried around with it. Suitable cables or supporting-rods 6 connect the outer ends of the arms 5 with the top of the shaft 2, there being on said top a crown casting 7, to which said cables or rods 6 are fastened. Furthermore, the ends of the arms 5 are stayed and made rigid by means of links, stay-rods, or braces 8, which connect them. Turnbuckles 9 are employed at certain points in the connections between the arms 5 for the purpose of taking up any slack and keeping the connections 8 taut and firm.

Suspended from the outer ends of the arms 5 are the cars, baskets, or airship-carriages 11, the support being made by means of cables 10, which are fastened to the cars 11 and to the arms 5, there being any suitable number of the cars 11. Obviously, therefore, as the shaft 2 revolves the cars pursue a movement around the shaft as a center.

In Fig. 2 the lower end of the tower 1 is represented in dotted lines as a triangle. The preferred form of the tower is triangular, although it may have any number of sides. Each apex of the triangle rests on a foundation 21, made of wooden cross-pieces or cement or other material. At these corners the bottom of the tower is provided with foot-castings 23. Between them and the foundations 21 are the radially-extending foundation-beams 12, which are embedded in the ground and which rest not only on the foundations 21, but at their inner ends, where they abut against each other, upon a similar central foundation 22, which sustains the weight also of the revoluble shaft 2. These foundation-beams 12 are preferably three in number, although I am not restricted to any precise number, and are longer than the arms 5, so that they may extend far enough outwardly from the shaft 2 and the tower 1 to form a strong and not easily displaced base for upholding the apparatus in an immovable position and preventing it from being tipped over by high winds or other causes that would tend to dislodge it if the anchorage were not sufficiently strong. Suitable bolts are used to bolt the foot-castings 23 to the beams 12. Bottom bearing 18 rests on the inner ends of the beams 12 and is provided with projecting flanges 15, that are secured to the beams 12 by means of bolts 19. This bearing 18 receives the lower end of the shaft 2, which lower end is preferably grooved at 16, and adjacent to this

groove is an oil-drainage hole 17. Thus it will be seen that the shaft 2 is supported at its lower end in a step or cup bearing, wherein it can revolve, and that this bearing, as well as the bottom of the structure, is firmly and securely strengthened and upheld by means of a broad and ample foundation, the parts of which are easily attachable and removable from each other whenever it is desired to transport the swing from point to point. All the parts of the swing, as I have described, are easily and promptly disconnected for purposes of shipment, so that portability is insured, as well as ease and facility of assembling and erection of the swing.

At the ends of the arms 5 are castings, shown in detail in section in Fig. 5 and consisting, essentially, of a socket or hollow casting 31, having on the top an eye 33 for connection with the stay-pieces 6, on the side an eye 32, engaged by the links 8, and depending therefrom a clevis 34, to which the car-supporting cables 10 are attached, the bolt 35 which holds the clevis 34 passing through the casting 31 and likewise through the arm 5, which enters said casting, all as clearly delineated in Fig. 5. The arms 5 may be hollow, if preferred.

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

1. In an amusement apparatus, the combination with a tower and a central shaft, of arms radiating from the shaft, cars, and castings on the ends of the arms shaped to inclose said ends and provided with a top eye, a side eye and a clevis, the latter holding the car-supporting cables, and the bolt which passes through the clevis serving to connect the clevis to the end of the arm.

2. In an amusement apparatus, the combination with a tower and a central shaft, of arms radiating from the shaft, cars pendent from said arms, and castings on the ends of the arms shaped to inclose said ends and provided with a clevis, the latter holding the car-supporting cables, and the bolt which passes through the clevis connecting the clevis to the arm.

Signed at New York city this 14th day of January, 1905.

HARRY G. TRAVER.

Witnesses:
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