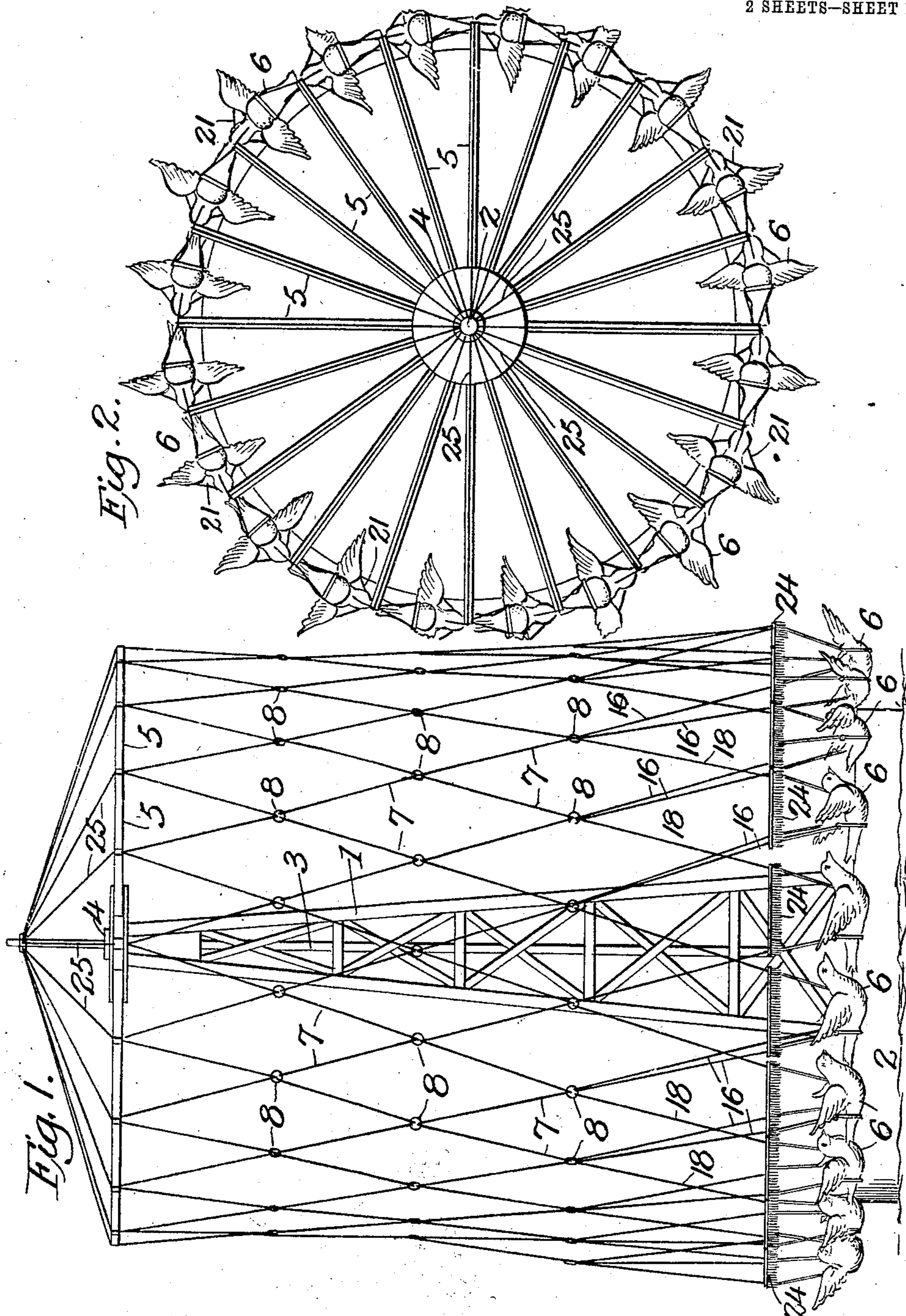


No. 842,276.

PATENTED JAN. 29, 1907.

H. G. TRAVER.
AMUSEMENT APPARATUS.
APPLICATION FILED JULY 22, 1905.

2 SHEETS—SHEET 1.



WITNESSES:

James F. Duhamel.
C. Heiberg

INVENTOR:

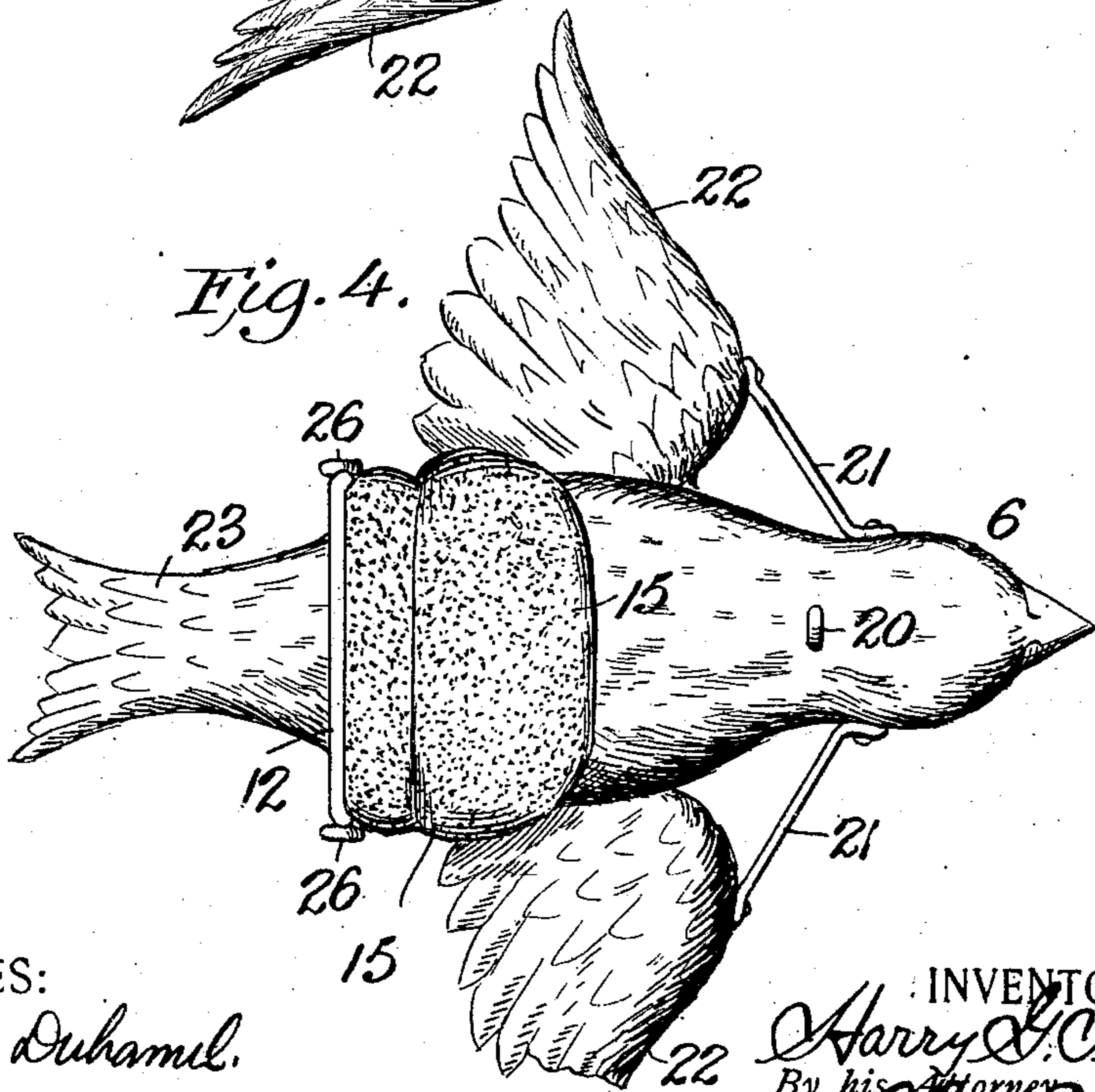
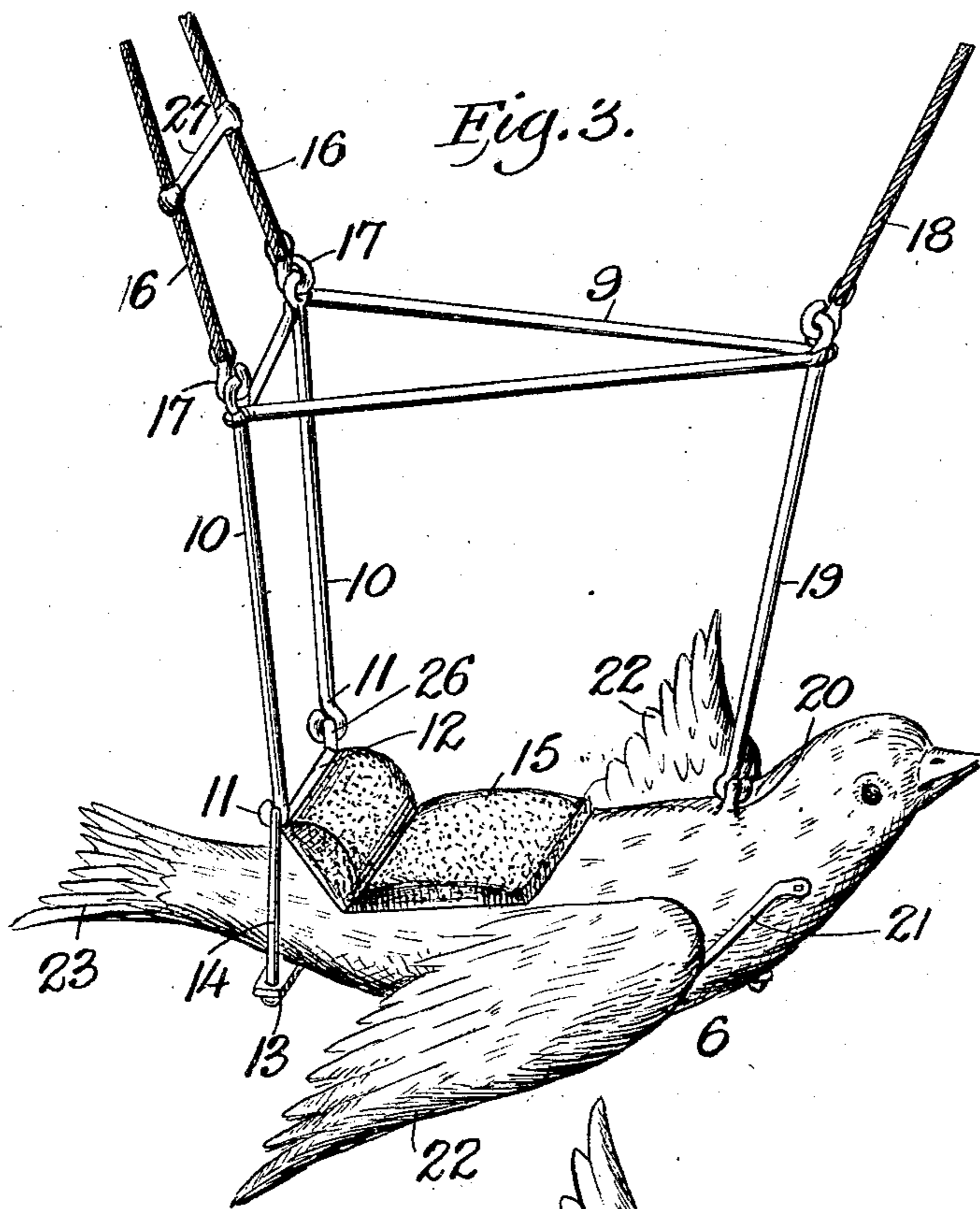
Harry G. Traver,
By *Attorney*
Fred W. Cooper.

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2 SHEETS—SHEET 2.



WITNESSES:

James F. Duhamel.
C. Heberg

INVENTOR:

INVESTIGATION.
Harry F. Chaver,
By his Attorney,
Fred B. Caskey.

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.

AMUSEMENT APPARATUS.

No. 842,276.

Specification of Letters Patent.

Patented Jan. 29, 1907.

Application filed July 22, 1905. Serial No. 270,839.

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 Amusement Apparatus, of which the following is a specification.

This invention has to do with a roundabout apparatus for amusement purposes.

The principal object is to enable a large number of small cars to be used—cars adapted more especially for children's use—and also to provide a construction whereby swinging inwardly too far toward the tower is avoided and whereby numerous advantages in the construction and operation of a roundabout are acquired.

The invention consists, essentially, in a novel network or webbing for supporting the cars, so that they may be more numerous than usual, and in various details and peculiarities in the combination, construction, and arrangement, substantially as will be hereinafter described and then more fully pointed out in the claims.

In the annexed drawings, illustrating my invention, Figure 1 is a side elevation of my improved roundabout. Fig. 2 is a top plan view. Fig. 3 is a perspective view of one of the cars having the similitude of a bird. Fig. 4 is a top plan view of the car.

Like numbers of reference denote like parts throughout the different figures of the drawings.

1 denotes the tower, which is of any suitable height, width, and form. At its base or at some other point is a horizontal platform 2. Journaled in suitable bearings in the tower 1 is a vertical shaft 3, which extends above the top of the tower and which may be actuated by any suitable motor located in connection with the platform 2 or elsewhere. (Motor not shown.) The portion of this shaft 3 projecting above the top of the tower 1 carries rigidly attached thereto a hub 4, from which project radially a plurality of horizontal arms 5, of which in the present form of my invention I generally employ a large number set close together, as indicated in Fig. 2, so that there may be a large number of cars or seats for the children or other passengers who ride in the device. These arms 5 rotate with the vertical shaft 3, and

they are designed to support the cars by the means to be hereinafter described and to carry the cars around as the shaft 3 revolves, the effect being, as is well understood, to cause said cars to move swiftly through the air at a high rate of speed and to move outwardly away from the center of the shaft 3 by centrifugal action. In order to more firmly support the arms 5, I employ stay-rods or cables 7, fastened to the outer ends of arms 5, and also affixed to the shaft 3 near the upper end thereof.

6 designates a specimen of car or seat which may be used with my present amusement apparatus. For the purpose of a novel and taking shape I have patterned these cars after the similitude of a bird, having the lateral wings 22 outspread, a tail portion 23, and a head with its bill shaped to resemble those of a bird, the whole design being that of a bird in flight. Placed on its back is a suitable seat 15, which may accommodate one or more persons. Of course the bird-car and its accessories may vary widely in shape, form, size, and design, what I have given in the drawings being offered simply by way of illustration. The bird form, being attractive as a children's device, is believed to be rather preferable in the present instance. These cars are each supported by means of a front rod 19, the lower end of which has a hook that engages a staple 20 on the bird, said staple, if desired, being on the end of a rod running downwardly through the body of the bird or on its back encircling the body, and as a further means of support there are two parallel rear rods 10 10, having hooks 11 on the lower ends, which engage eyes 26 on a rod 12, which is also fastened to the vertical rods 14, that pass downwardly beside the tail of the bird and are connected to a strut 13 underneath the tail. 9 indicates a triangular top frame, which is suitably connected to the upper ends of the supporting-rods 10 10 and 19, said frame 9 being provided with a covering, as 24, to constitute a canopy or sun-top that will properly protect the seat 15 from the rays of the sun or from the rain.

The bird-cars and the supporting-frames above them which I have just described are suspended from the horizontal arms 5 by means of webbing or netting, as it were, of very wide mesh, consisting of diagonal strands or cables 7 and horizontal rows of rings 8,

which are interposed at certain points between the top and bottom of the webbing, so that the strands 7 may be connected thereto.

This webbing, therefore, will have a general cylindrical form and will depend from the outer ends of the arms 5 and will be fastened at the lower ends of its lowermost strands or cables to the frame which carry the canopy or covering above the seats. I preferably employ three rows of the rings 8, as indicated in Fig. 1. From the outermost end of each of the arms 5 drop two diagonal single cables 7, leading to separate rings 8 in the upper series of rings. From each of these rings drop two diagonal cables 7, extending to rings in the next series, and so on, for obviously there may be as many rows of the rings 8 as desired. At the rear of the car-canopy is a pair of cables 16, with hooks 17 on their ends, which engage eyes in the upper ends of the rear rods 10. A spacing and spreading rod 27 connects the cables 16 a short distance above the hooks 17. These cables 16 run upward to one of the rings 8. The front end of the canopy is supported by a cable 18, having a hook on the lower end which engages an eye in the upper end of the front rod 19, said cable 18 being suspended from one of the rings 8.

Various modifications and changes in the construction and arrangement may be made without varying from my idea. With a multiplicity of seats, as described, the weight carried by the rotating arms is distributed much more evenly than is ordinarily the case in roundabouts of a similar character. The bird-cars may, if desired, be made of stamped steel or other metal, and the seat may be upholstered or not, as preferred. Furthermore, single or multiple cables may be employed at the different points, and the mode of attaching the ends thereof to the arms, as also to the rings, may vary widely, and likewise the detail of arrangement of the canopy-carrying frame and the way it is sustained may be changed in many ways.

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 series of radial rotating arms and means for driving them, of a series of passenger-carriers, and means for suspending the carriers from the arms consisting of a network of intersecting cables, said network being connected to all the carriers.

2. The combination with a vertical shaft and radial arms carried thereby, of a series of passenger-carriers, and an approximately cylindrical webbing depending from and connecting the arms and supporting the carriers.

3. The combination with a vertical shaft and a series of horizontal arms projecting therefrom, of a series of passenger-carriers, each having a canopy, a network depending

from the arms and sustaining the said carriers, said network consisting of inclined cables and rings to which they are fastened.

4. The combination with a vertical revolving shaft and a series of radially-projecting arms thereon, a series of bird-cars designed to carry passengers, and means for supporting the cars from the arms consisting of a network of cables connected to rings which are arranged in horizontal series, each car being immediately held by a pair of rear cables and a single front cable.

5. The combination with a vertical shaft and a series of radial arms projecting therefrom, of a series of passenger-carriers each having a canopy, a network depending from the arms, and sustaining the carriers, said network consisting of intersecting cables, and means at the intersections to which they are attached.

6. In an amusement apparatus, the combination with a vertical rotating shaft of radial arms on said shaft, carriers suspended from said arms, and a means connecting said carriers and supporting them.

7. In combination with a vertical rotating shaft, radial arms carried by said shaft, carriers depending from said arms, and a means of connecting and supporting said carriers consisting of a network of cables approximately cylindrical in shape.

8. In combination with a vertical rotating shaft, a series of horizontal radial arms carried by said shaft, carriers depending from said arms, supports for said arms consisting of cables fastened to the top of said shaft and to the extremities of the arms, and a network of intersecting cables, supporting the carriers, depending from said arms.

9. In combination with a vertical rotating shaft, radial arms supporting carriers carried by said shaft, and cables or strands attached to said carriers and depending from each arm and attached to other cables at crossing-points intermediate between the arms and carriers.

10. In combination with a vertical rotating shaft radial arms carried by said shaft, a network of intersecting cables depending from said arms, strands of cable supported by each arm and extending downwardly at an angle to each other, and carriers supported by said cables.

11. In combination with a vertical rotating shaft, radial arms carried by said shaft, a network of intersecting cables depending from said arms, said network being of approximately cylindrical shape and consisting of cables extending downwardly at an angle to each other, and carriers supported by said cables.

12. In combination with a vertical rotating shaft, radial arms carried by said shaft, cables depending from said arms and extending downwardly at an angle to each other and

intersecting each other, forming figures of approximately diamond shape, means for fastening said cables together at each intersection, and carriers supported by said cables.

5 13. In an amusement apparatus, the combination with a series of radial rotating arms, and means for driving them, of a series of passenger-carriers, and means for suspending

them consisting of an approximately cylindrical network encircling the device.

Signed at New York city this 12th day of July, 1905.

HARRY G. TRAVER.

Witnesses:

RUDY STEPHEN UZZELL,
FRED ELMER TASKER.