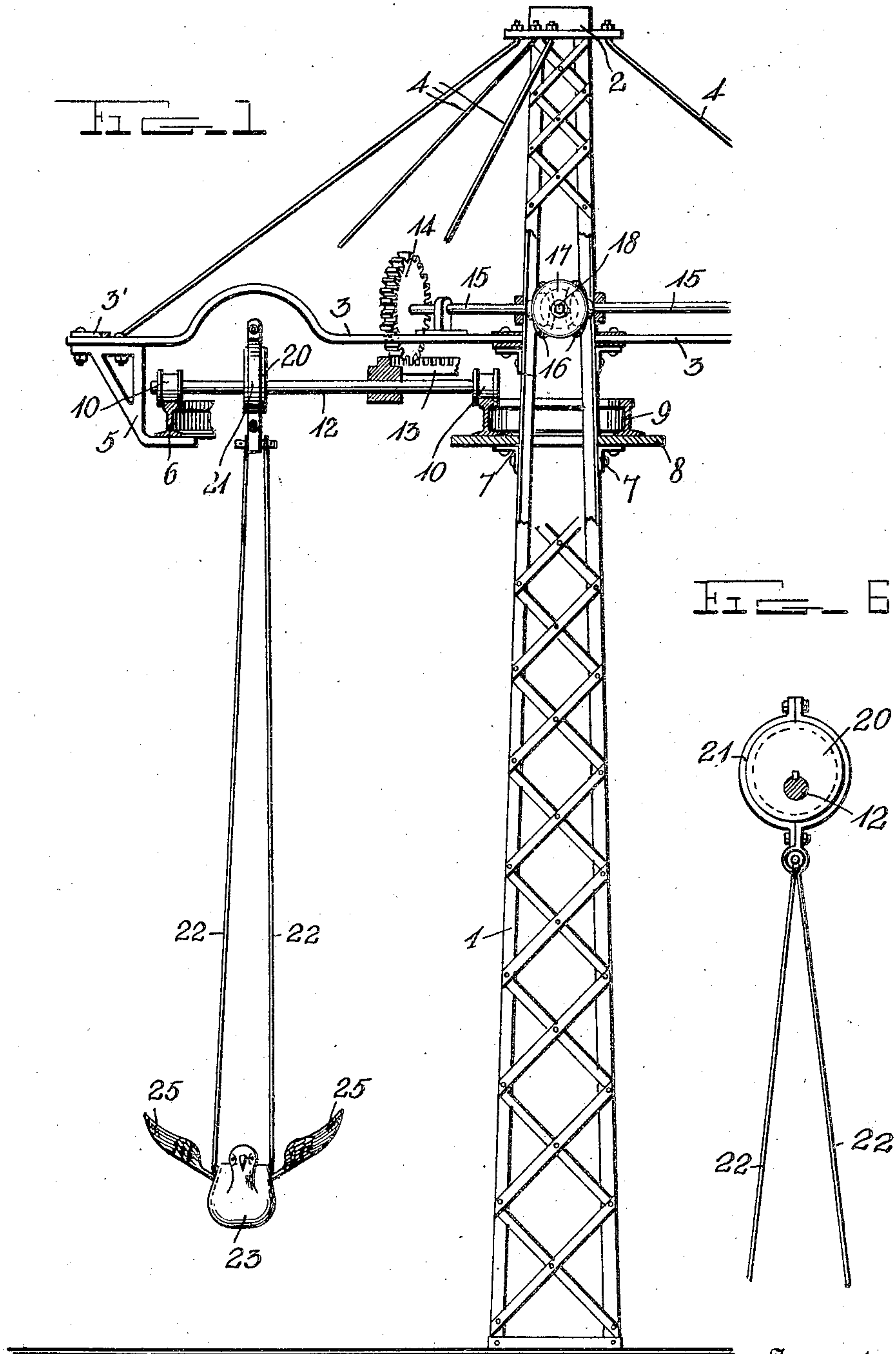


No. 880,040.

PATENTED FEB. 25, 1908.

J. C. RECKWEG.  
PLEASURE RAILWAY.  
APPLICATION FILED SEPT. 4, 1907.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

FIG. 2

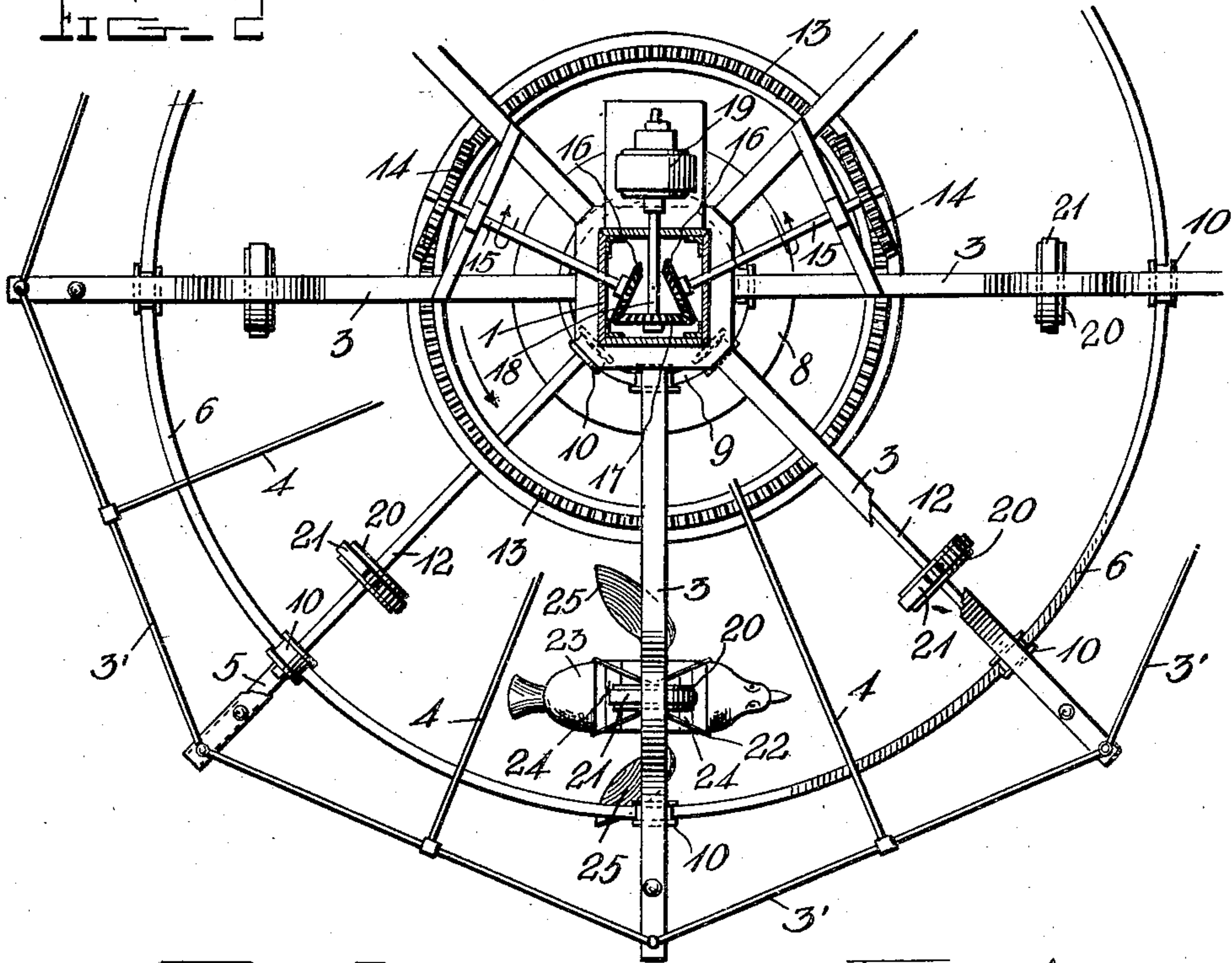


FIG. 3

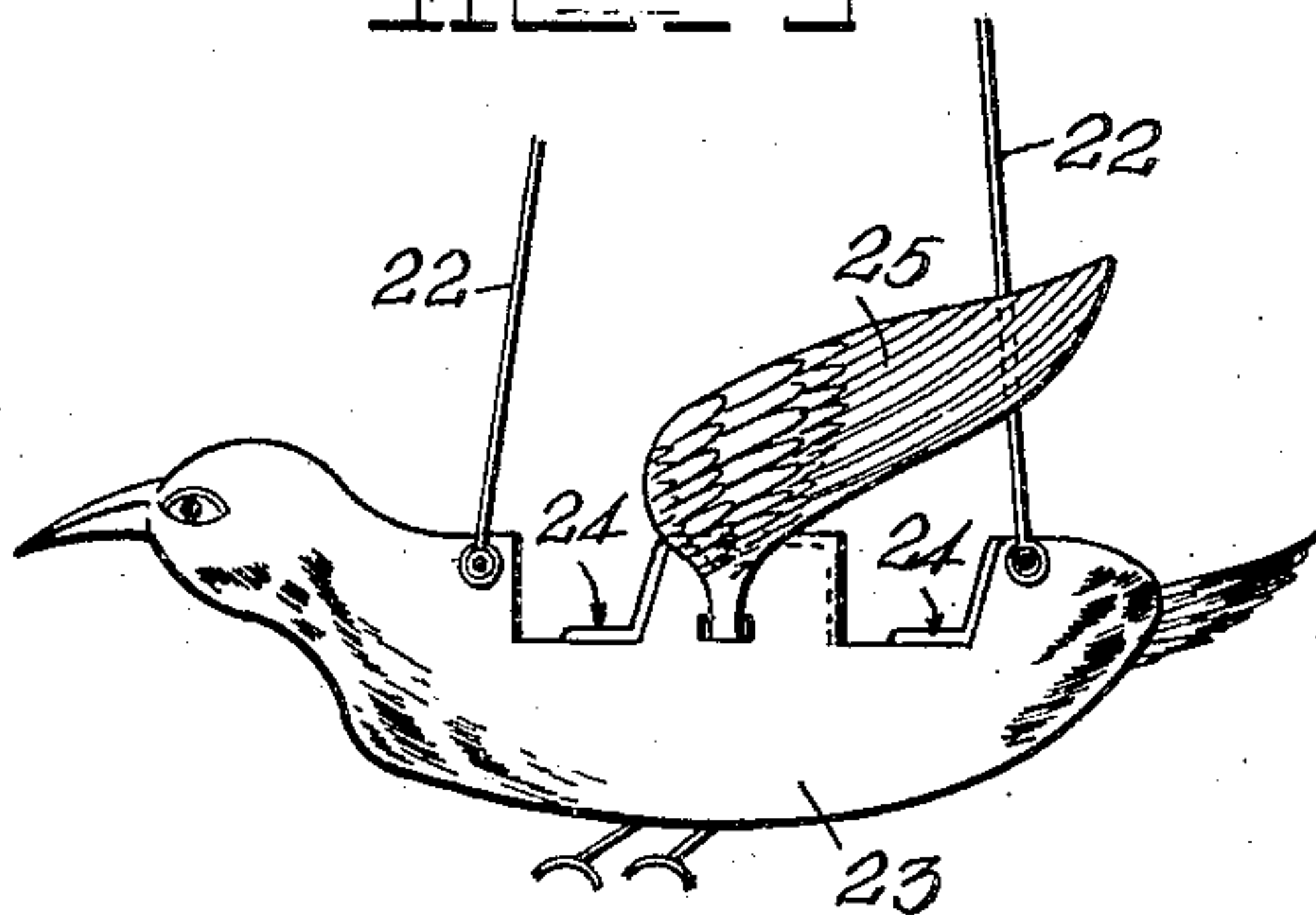


FIG. 4

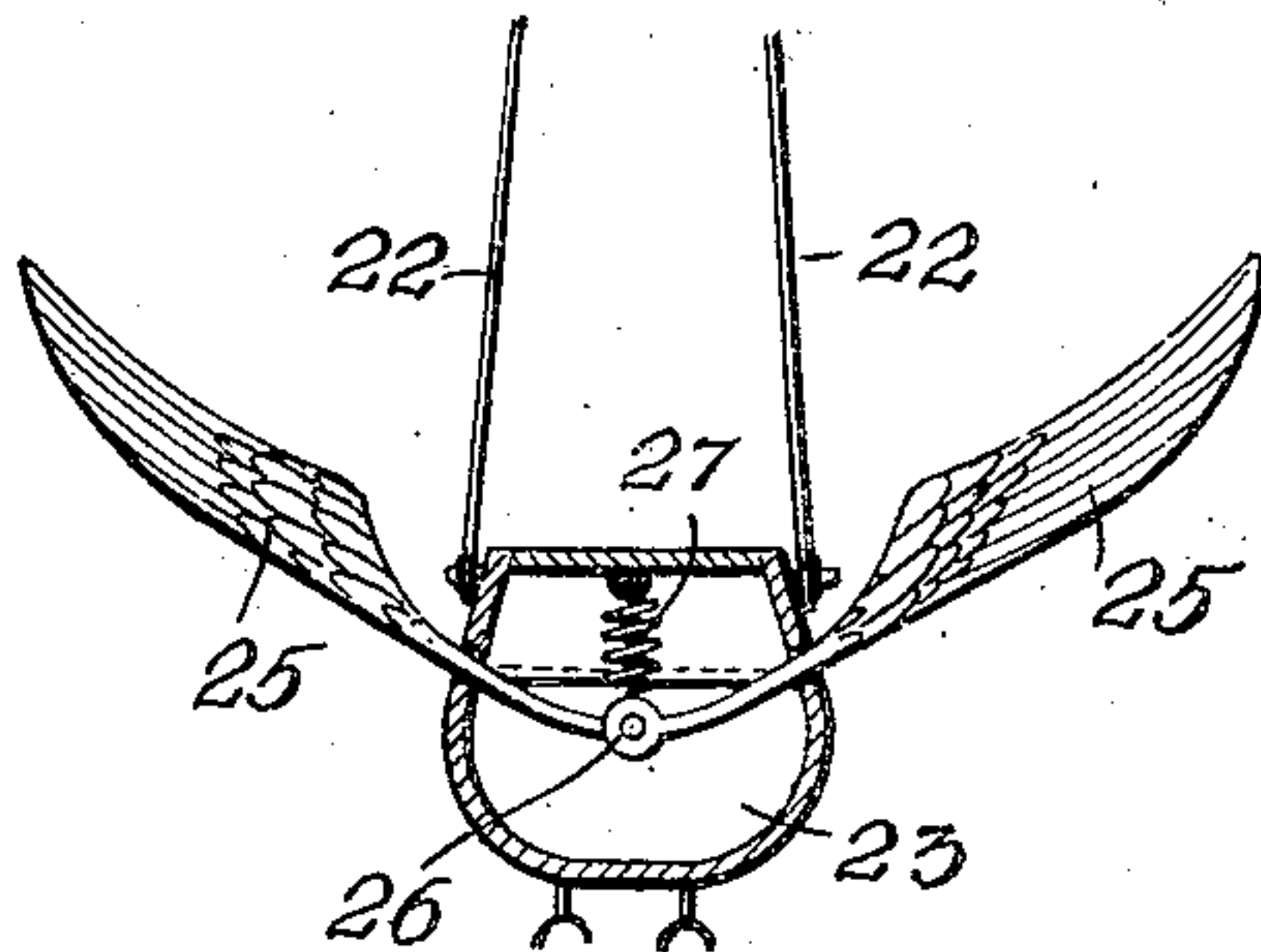
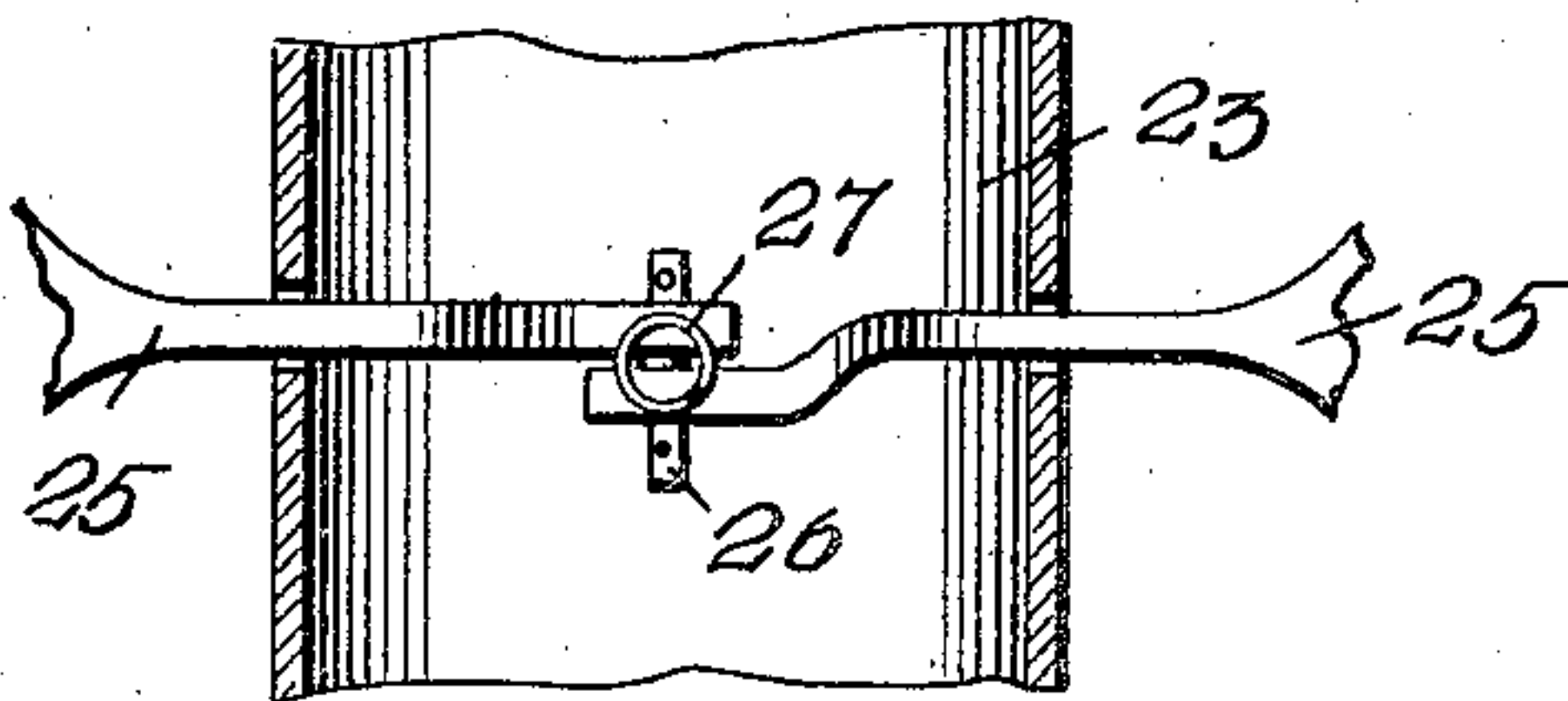


FIG. 5



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# UNITED STATES PATENT OFFICE.

JOHN C. RECKWEG, OF PALO ALTO, CALIFORNIA.

## PLEASURE-RAILWAY.

No. 880,040.

Specification of Letters Patent.

Patented Feb. 25, 1908.

Application filed September 4, 1907. Serial No. 391,357.

*To all whom it may concern:*

Be it known that I, JOHN C. RECKWEG, a citizen of the United States, residing at Palo Alto, in the county of Santa Clara and State of California, have invented certain new and useful Improvements in Pleasure-Railways; and I do 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 improvements in pleasure railways.

The object of the invention is to provide a device of this character in the form of a circular swing, the cars of which are constructed and arranged in the form of birds; and to provide suitable mechanism whereby the bird-like cars will be moved up and down while being swung in a circle; and means whereby the wings will move up and down after the manner of a bird in flight.

With these objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a sectional view of a portion of a pleasure railway constructed in accordance with the invention; Fig. 2 is a top plan view of the same, with parts broken away, and in section; Fig. 3 is a detail view of one of the cars used in connection with the device; Fig. 4 is a vertical cross sectional view of Fig. 3; Fig. 5 is a horizontal sectional view of a portion of the same; and Fig. 6 is a detail cross sectional view of one of the car supporting shafts, showing the mechanism for imparting the up-and-down movement to the car.

Referring more particularly to the drawings, 1 denotes a supporting tower, which may be of any suitable construction, and which is arranged in the center of the device, as shown. The tower is preferably of hollow skeleton form and is provided at its upper end with a cap, 2, below which is secured a series of radially projecting substantially horizontal supporting arms, 3, to which are connected the outer ends of upwardly and inwardly inclined brace rods, 4, the upper ends of which are secured to the edges of the cap, 2, as shown. On the outer

ends of the arms, 3, are secured depending supporting brackets, 5, on which is arranged an outer circular track, 6.

On the tower 1, below the arms, 3, are radially projecting brackets, 7, on the outer ends of which is supported a circular plate, 8, to which is secured an inner circular track, 9. Adapted to travel on the tracks, 6 and 9, are inner and outer flanged supporting wheels or rollers, 10, which are mounted on the ends of supporting shafts, 12. The roller 10 on one end of said shafts is rigidly connected thereto whereby the shafts are revolved. The shafts 12 are connected between the wheels 10 by means of a circular rack, 13, with which are adapted to be engaged driving gears, 14, which are mounted on the outer ends of drive shafts, 15, journaled in suitable bearings on the tower, and having rigidly mounted on their inner ends beveled gear wheels, 16, which are connected together and driven by a bevel gear wheel, 17, mounted on the end of a motor shaft, 18, which is connected to and operated by a suitable motor, 19, arranged on a platform supported by the arms, 3.

Fixedly mounted on each of the drive shafts, 12, is an eccentric or cam disk, 20, around which is arranged an eccentric strap, 21, to which are pivotally connected the upper ends of depending car supporting rods, 22, on the lower ends of which are connected cars, 23. The arms 3 are preferably bent or curved upwardly near their outer ends to accommodate the cam disks, 20. The outer ends of the arms 3 are preferably connected together by a tie-rod, or wire 3'.

The cars 23 may be of any desired style or design, but are here shown and are preferably constructed in the form of birds, in the hollow bodies of which are arranged seats, 24, on which the passengers are seated. The bird cars, 23, are provided with movable wings, 25, which are pivotally mounted on the sides of the body portion of the car and have their inner ends projecting into the cars beneath the seats, where said ends are pivotally connected together, as shown at 26. The pivotally connected ends of the wings are connected to the undersides of the seats or other fixed portion of the cars, by means of a coiled spring, 27, which assists in moving the wings down after the same have been raised or swung upwardly by the downward



movement of the cars when operated by the cam disks, 20, thereby simulating the motion of a bird's wings when in flight.

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

1. A device of the character described, comprising a centrally disposed supporting tower, a series of radially projecting supporting arms secured at their inner ends to said tower, brace rods adapted to support the outer ends of said arms, an outer circular track supported by the outer ends of the arms, an inner circular track supported by the tower, an inner and outer series of flanged rollers or wheels adapted to travel on the tracks, shafts to connect said wheels, means to drive said shafts, bird-like cars supported by said shafts, means on the latter to move the cars up and down when being swung around, pivoted wings arranged on said bird-like cars, and means whereby said wings are moved up and down with the movement of the car, substantially as described.

2. A device of the character described, comprising a centrally disposed supporting tower, a series of radially projecting supporting arms secured at their inner ends to said tower, brace rods adapted to support the outer ends of said arms, an outer circular track supported by the outer ends of the arms, an inner circular track supported by the tower, inner and outer series of flanged rollers or wheels adapted to travel on the tracks, shafts to connect said wheels means to drive said shafts, eccentric disks fixedly mounted on the latter, eccentric straps arranged around said disks, supporting rods pivotally connected at their upper ends to said straps, bird-like cars secured to the lower ends of said rods, seats arranged in said cars, and wings pivotally mounted on the body of the same and adapted to be moved up and down to simulate the motion of a bird in flight, substantially as described.

3. A device of the character described, comprising a centrally disposed tower, a series of radially projecting supporting arms connected at their inner ends to said tower,

brace rods adapted to support the outer ends of said arms, depending brackets arranged on said outer ends, an outer circular track secured to said brackets, an inner circular track secured to the tower, flanged supporting rollers traveling on said tracks, shafts to connect said flanged rollers, a circular rack connecting said shafts, radially disposed drive shafts mounted on the tower, spur gear wheels mounted on the ends of said shafts and engaging said circular rack, bevel gears on the inner ends of said shafts, a motor, a motor shaft operated thereby, a bevel gear wheel on said shaft adapted to operate the bevel gears on said drive shafts, a series of bird-like cars, supporting rods, whereby said cars are operatively connected with the drive shafts, and means to move said cars up and down while being swung around, substantially as described.

4. A device of the character described, comprising a centrally disposed tower, a series of radially disposed supporting arms secured to said tower, inner and outer circular supporting tracks, means to connect said tracks with said tower and supporting arms, flanged rollers traveling on said tracks, supporting shafts connecting said rollers, operating cams fixedly mounted on said shafts, cam or eccentric straps arranged on said cams, bird-like cars, supporting rods adapted to connect said cars with the eccentric straps on said cams, wings pivotally connected to the sides of the body portion of said cars, said wings being pivotally connected together at their inner ends, a coiled spring connected to said pivoted inner ends and a fixed part of said cars, whereby when said wings are swung upwardly by the downward motion of the car, said spring will restore or swing the same downwardly when the car is being raised, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN C. RECKWEG.

Witnesses:

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