

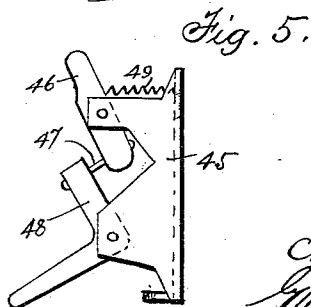
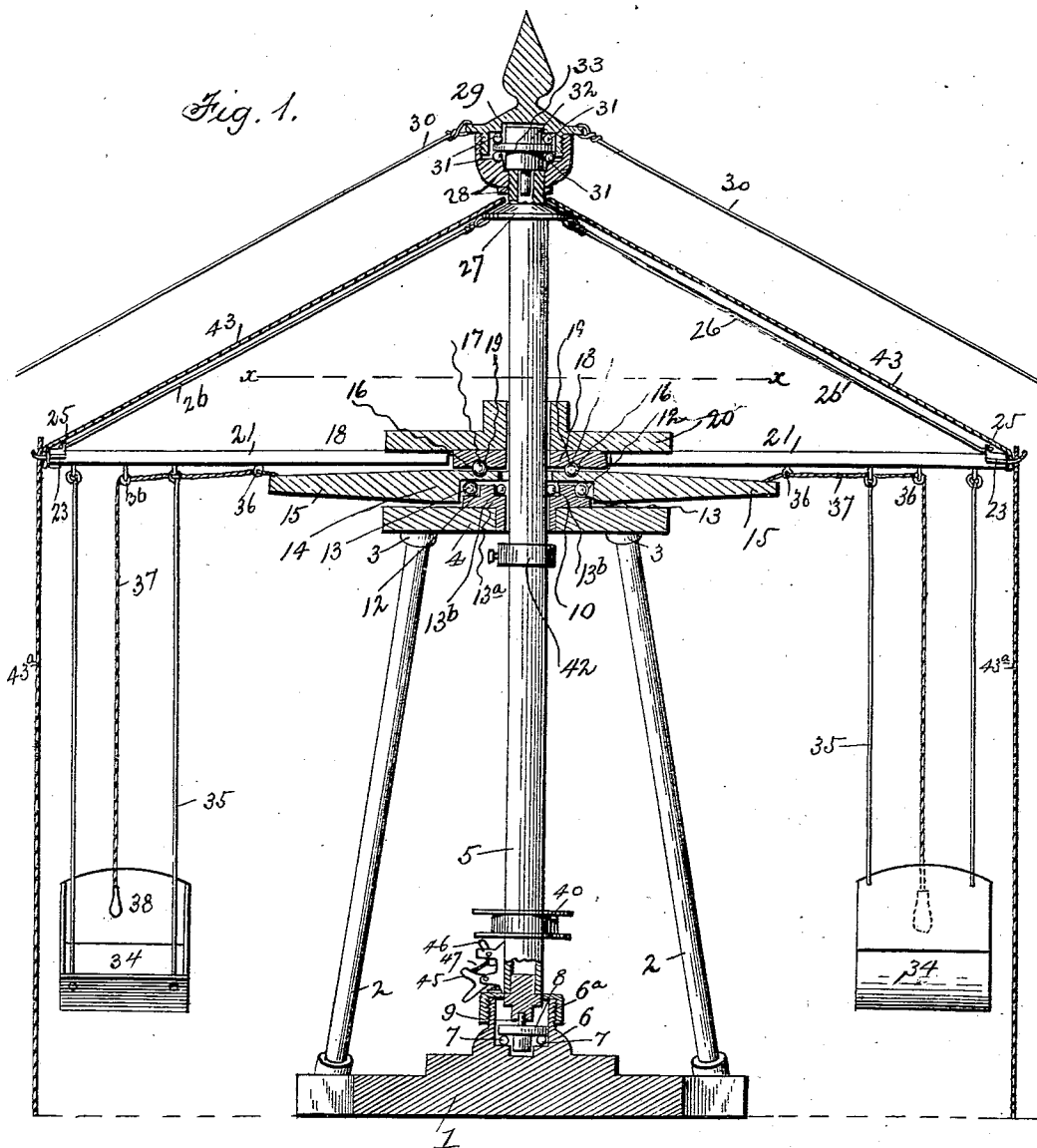
(No Model.)

2 Sheets—Sheet 1.

C. W. RODEHAFFER.  
REVOLVING SWING.

No. 555,338.

Patented Feb. 25, 1896.



Witnesses:  
F. L. Ourand  
J. L. Coombs

Inventor:  
Chester W. Rodehafer,  
By Louis Ruggier & Co.,  
Attorneys.

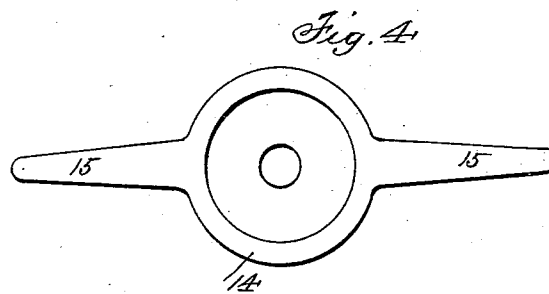
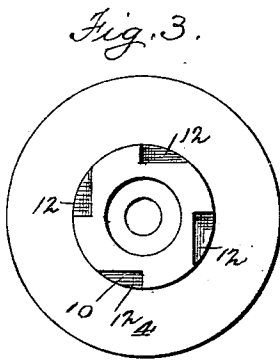
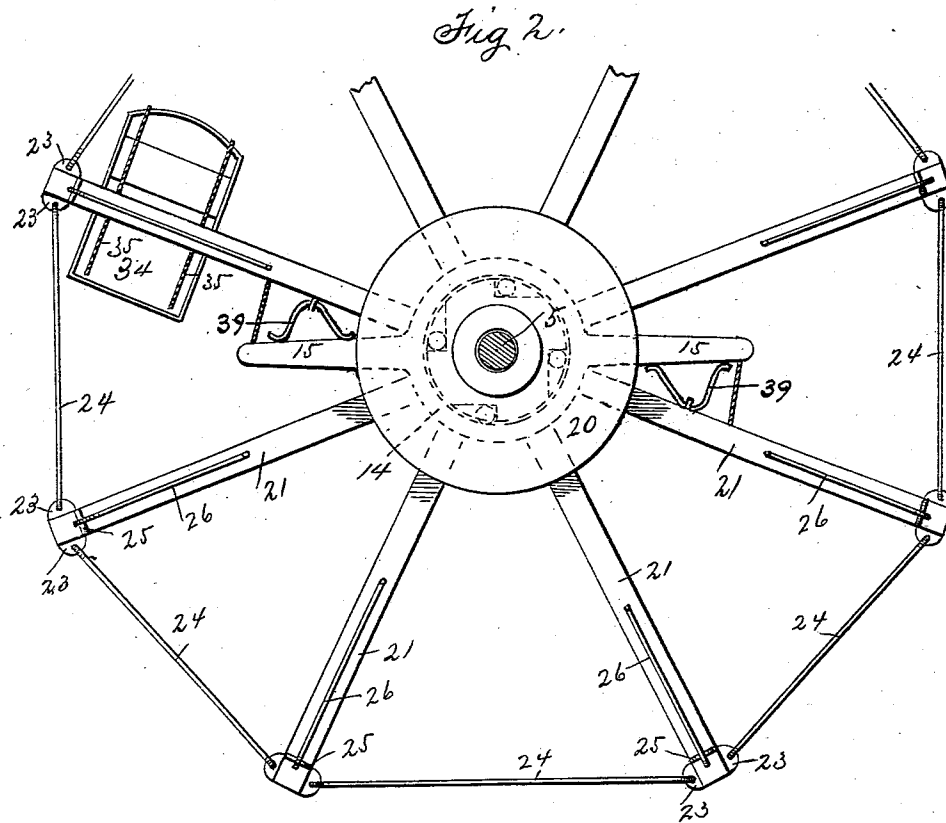
(No Model.)

2 Sheets—Sheet 2

C. W. RODEHAFFER.  
REVOLVING SWING.

No. 555,338.

Patented Feb. 25, 1896.



Witnesses:  
H. L. Curande  
H. L. Coombs

Inventor:  
Chester W. Rodehafer,  
By Louis Bagger & Co.  
Attorneys.

# UNITED STATES PATENT OFFICE.

CHESTER W. RODEHAFFER, OF SIDNEY, OHIO.

## REVOLVING SWING.

SPECIFICATION forming part of Letters Patent No. 555,338, dated February 25, 1896.

Application filed October 4, 1895. Serial No. 564,650. (No model.)

*To all whom it may concern:*

Be it known that I, CHESTER W. RODEHAFFER, a citizen of the United States, and a resident of Sidney, in the county of Shelby and State of Ohio, have invented certain new and useful Improvements in Revolving Swings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in that class of revolving swings termed "merry-go-rounds," and its object is to provide an improved construction of the same which is operated by the person swinging.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a central sectional view of a swing constructed in accordance with my invention. Fig. 2 is a horizontal section on the line *x x*, Fig. 1. Fig. 3 is a plan view of the stationary part of the clutch-plate. Fig. 4 is a view looking from the under side of the clutch. Fig. 5 is a detail view of the brake.

In the said drawings, the reference-numeral 1 designates the base of the apparatus, provided with a number of inclined legs 2, preferably three in number, the upper ends of which engage with lugs 3 on a supporting plate or disk 4, having a central opening for the passage of the rotatable shaft 5, which is preferably made of gas-pipe.

Cast with the base 1 is a box 6, in which are located a number of balls 7, forming bearings for a block 8, provided with a pintle 9, which engages with a recess in the lower end of the shaft, forming a step-bearing therefor. The upper end of this box is screw-threaded to receive a cap 6<sup>a</sup>. This cap is for the purpose of keeping the balls and pintle from falling out of box 6 in transporting the swing.

Secured to the upper side of a steel band 13<sup>a</sup> is the stationary portion of a clutch mechanism consisting of disk 10, having at its upper side a number of inclined notches 12, in which are seated balls 13.

The numeral 13<sup>a</sup> designates a steel band,

which fits around the shaft 5 at the point where it passes through disks 4 and 10, for the purpose of affording a steel bearing for balls 13<sup>b</sup> to work around.

The numeral 14 designates the movable clutch having a central opening, and on its under side formed with an annular recess. This clutch fits over the stationary disk and is provided with opposite arms 15. On its upper side the clutch is formed with an annular groove 16, in which is seated a number of balls 17. Above this clutch is a disk 18 securely fixed to the shaft and formed on its under side with an annular groove 19 corresponding with groove 16, and above this disk is a hub 20, to which are secured a number of radial seat-arms 21. The outer ends of these seat-arms are provided with clips 23, with which are secured brace-rods 24, which connect said rods together. They are also provided with clips 25, provided with brace-rods 26, the outer ends of which are secured to a collar 27, near the upper end of said shaft. The upper end of said shaft is provided with a box 28, which is seated in a stationary cylindrical block 29, provided with guy-ropes 30 by which it is held against rotation. Located in this box is a pintle 32, provided with a collar 33, and above and below this collar are balls 31, which are held in place by the block 29 screwed to the lower end of said box. It will thus be seen that the shaft is supported between ball-bearings both at the upper and lower ends.

The numeral 34 designates seats connected with the seat-arms by rods or ropes 35, and connected to the arms to which said seats are connected are pulleys 36, around which pass ropes 37. One end of each of these ropes is connected with one end of the clutch, and the other end is provided with a handle 38 within reach of the occupant of the seat. A curved or V-shaped spring 39 is secured to each of these clutch-arms and to the seat-arm in front thereof.

The numeral 40 designates a flanged belt-wheel near the lower end of the shaft to drive an organ or other musical instrument, and is also used for setting the brake against in stopping the swing.

The numeral 42 designates an adjustable collar, secured to the shaft below the clutch-

supporting plate. The purpose of this collar is that when the swing is to be transported it is moved up tight against disk 4 to hold the bearings and clutches in place, and when the swing is set up in operative condition it is slipped down so as not to rub against disk 4 and cause friction.

The numeral 43 designates a canopy and 43<sup>a</sup> curtains. These curtains are hooked into the ends of brace-rods 24 and extend down to the ground, and are for the purpose of inclosing the entire swing so that it may be used as a tent.

The numeral 45 designates a bracket in which is pivoted a brake-shoe 46, connected by means of a rod 47 with an elbow-lever 48, adapted to be depressed by the foot to throw the brake-shoe into engagement with flange of wheel 40. A coiled spring 49 is employed for returning the brake-shoe to normal.

The operation is as follows: The movable clutch is set in position so that the arms thereof will be about midway between the seat-arms with which the ropes are connected and the seat-arms in advance thereof. The persons in the seats or carriages now pull upon the handle of the ropes. The clutch-arms will remain stationary by reason of the balls in the inclined notches of the stationary disk acting as wedges. This will cause the seat-arms to approach the clutch-arms. The ropes are then let go and the springs will now move the clutch-arms forward, when the ropes are again pulled. By thus alternately pulling and releasing the ropes the swing will be rotated.

Having thus fully described my invention, what I claim is—

1. In a revolving swing, the combination with the base, the legs, the supporting-plate, the stationary disk having inclined notches, the balls seated therein and the clutch having arms and provided with a central recess, of the box cast with said base, the balls located therein, the block and pintle seated on said balls, the cap-plate, the rotatable shaft hav-

ing a recess in its lower end with which said pintle engages, the radial seat-arms and their seats, the pulleys connected with said seat-arms, and the ropes connected with said clutch-arms, and passing around the pulleys, substantially as described.

2. In a revolving swing, the combination with the base, the legs, the supporting-plate, the stationary disk having inclined notches, the balls seated therein and the clutch having arms and provided with a central recess, of the rotatable shaft passing through said clutches and plate, the radial seat-arms and their seats, the pulleys connected with said seat-arms, the ropes connected with said clutch-arms, and passing around the pulleys; substantially as described.

3. In a revolving swing, the combination with the base, the legs, the supporting-plate, the stationary disk having inclined notches, the balls seated therein and the clutch having arms and provided with a central recess, of the rotatable shaft passing through said clutches and plate, the radial seat-arms and their seats, the V-shaped springs interposed between said clutch and seat-arms, the pulleys connected with said seat-arms, and the ropes connected with said clutch-arms, and passing around the pulleys, substantially as described.

4. In a revolving swing of the character described, the combination with the base, the cap connected therewith and the bracket secured to said cap of the brake-shoe pivoted to said bracket, the elbow-lever also pivoted to said bracket, the rod connecting said shoe and lever, the wheel fixed to said shaft with which said shoe is adapted to engage, and the coiled spring, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

CHESTER W. RODEHAUFER.

Witnesses:

G. C. HUTCHISON,  
S. J. HATFIELD.