March 21, 1933. S. W. SHEPHERD 1,902,381

AMUSEMENT DEVICE

Filed May 9, 1930 2 Sheets-Sheet 1

Fig. 1.

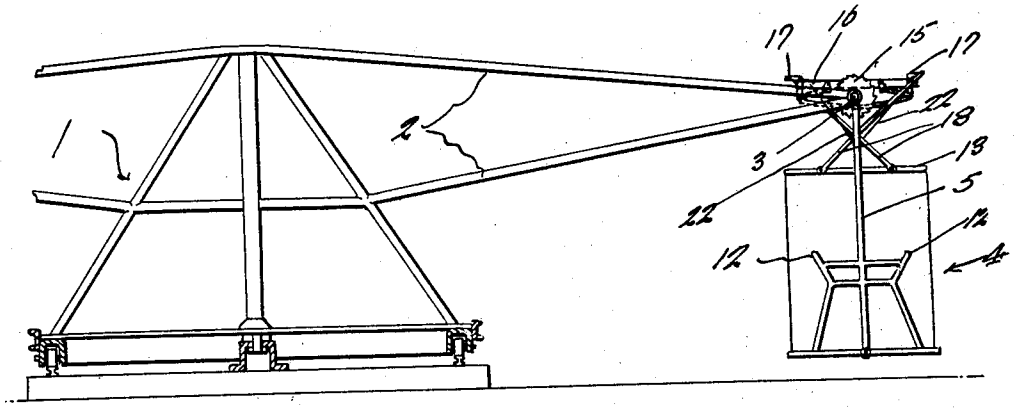


Fig. 2.

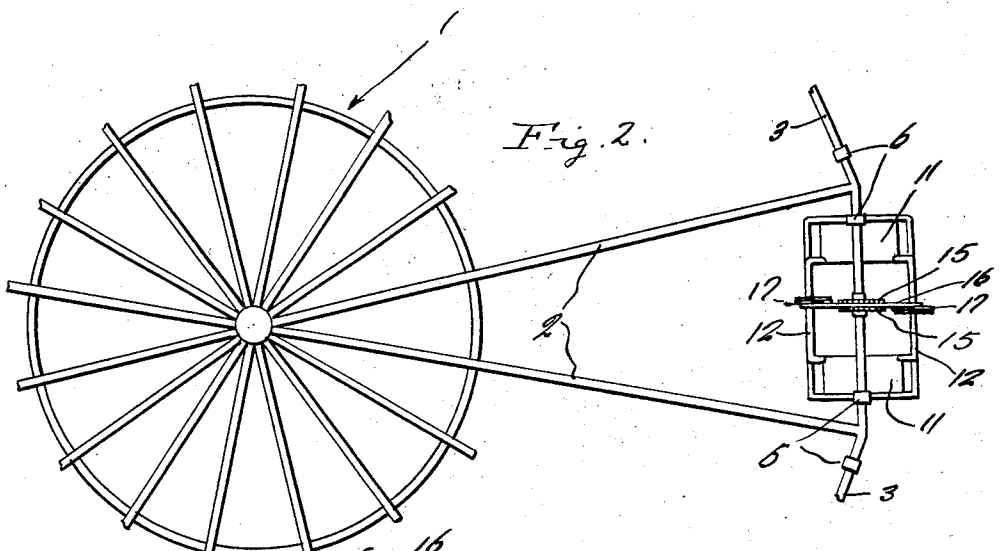
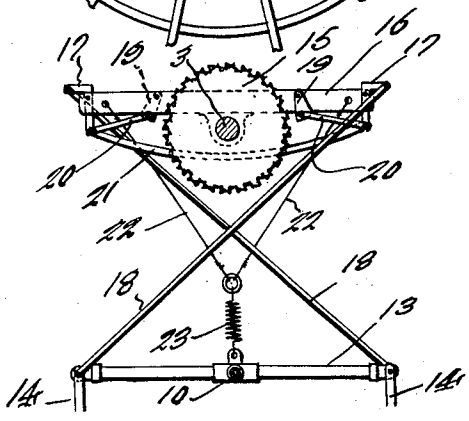


Fig. 3.



Inventor

Solomon W. Shepherd

By Clarence A. O'Brien

Attorney

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Filed May 9, 1930 2 Sheets-Sheet 2

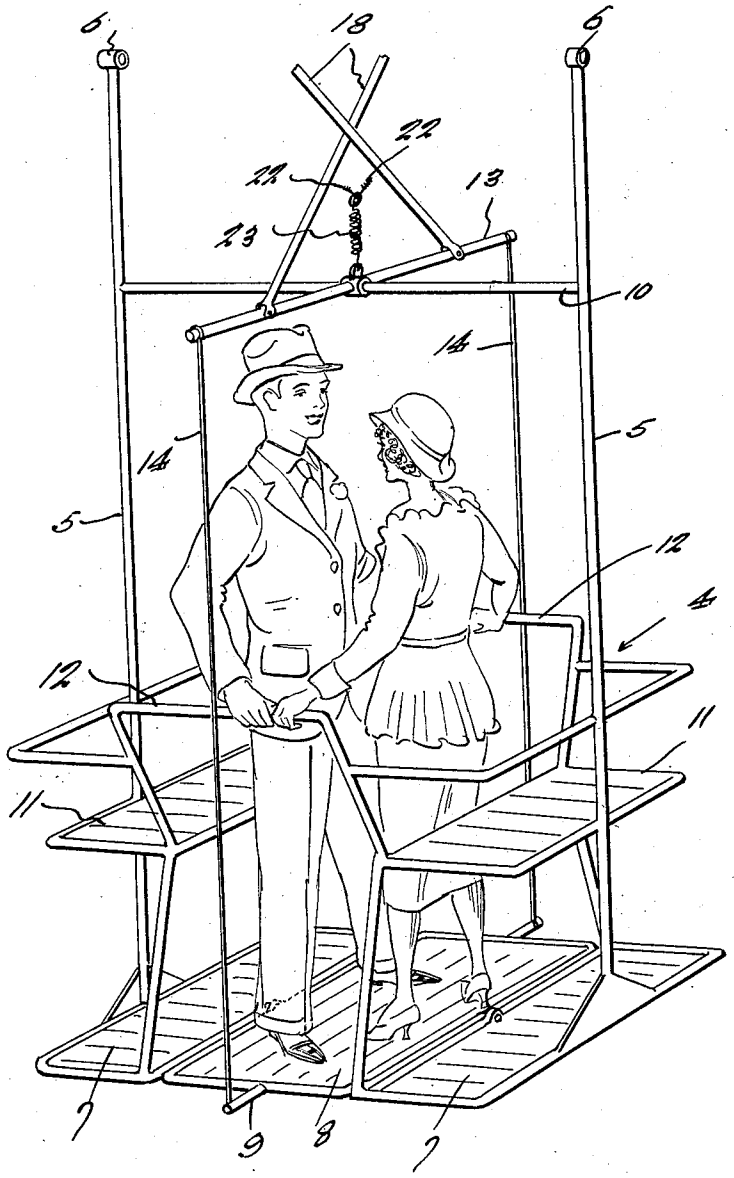

Fig. 4.

Inventor

Solomon W. Shepherd

By Clarence A. O'Brien

Attorney

Patented Mar. 21, 1933

1,902,381

UNITED STATES PATENT OFFICE

SOLOMON W. SHEPHERD, OF ORLO VISTA, FLORIDA

AMUSEMENT DEVICE

Application filed May 9, 1930. Serial No. 451,087.

This invention relates to amusement devices generally and more particularly to devices of this character of the rotary swing type.

The primary object of the invention is to provide, in a manner as hereinafter set forth, an amusement device of the aforementioned character embodying a supporting structure mounted for rotation in a horizontal plane and having suspended therefrom one or more carriages or cars which are adapted to be swung from side to side while traveling in a circle with the supporting structure.

Another important object of the invention is to provide an amusement device of the character described including one or more carriages or cars suspended for lateral swinging movement from a rotary supporting structure and having operatively associated therewith occupant actuated means whereby the carriages or cars may be caused to swing from side to side while traveling in a circular course with the supporting structure.

A still further important object of the invention is to provide an amusement device of the character set forth of a construction and arrangement whereby the lateral swinging movement of the carriages or cars may be eliminated when it is so desired.

Other objects of the invention are to provide an amusement device which will be comparatively simple in construction, strong, durable, which will provide considerable enjoyment for persons using the same and which may be manufactured and assembled at low cost.

All of the foregoing and still further objects and advantages of the invention may become apparent from a study of the following specification, taken in connection with the accompanying drawings wherein like characters of reference designate corresponding parts throughout the several views, and wherein:—

Figure 1 is a sectional view taken through the rotary supporting structure and showing a cariage or car supported therefrom, said carriage or car being shown in elevation.

Figure 2 is a top plan view thereof.

Figure 3 is a view illustrating the mechanism for causing the lateral swinging movement of the carriages.

Figure 4 is a view in perspective showing one of the carriages or cars.

Referring to the drawings in detail, it will be seen that the reference numeral 1 designates generally a suitable rotary supporting structure which includes the radiating arms 2 between the outer ends of which extend the connecting bars 3. The supporting structure 1 is to be rotated by any suitable means.

A car or carriage designated generally by the reference character 4 (see Figure 4) is suspended from the connecting bars 3 through the medium of the hangers 5 having the eyes 6 on their upper ends for rotatably receiving said connecting bars 3. The car or carriage 4 further includes spaced stationary floor sections 7 between which is rockably mounted a platform 8 from the opposite ends of which project the stub shafts 9. The upper end portions of the hangars 5 are connected by a strut 10. The car or carriage 4 further includes a pair of seats 11 disposed above the rockable platform 8 and on opposite sides thereof. Extending between the seats 11 at the opposite ends of the car are the handles 12.

A bar 13 has an intermediate portion supported for rocking movement on the strut 10 and cables 14 connect the opposite end portion of said bar 13 with the stub shafts 9 in a manner to cause the rocking of the bar 13 when the platform 8 is rocked.

A pair of reversely disposed ratchet discs 15 are fixed on the connecting rods 3 between the hanger eyes 6 and mounted on said connecting rods between the ratchet discs is a bar 16 upon the opposite end portions of which are pivotally mounted the bell crank levers 17. Rods 18 cross each other and have their opposite ends secured to one end of the rod 13 and their opposite ends secured to the upper end of the bell crank levers 17 in the manner clearly illustrated in Figure 3 of the drawings. Pawls 19 are pivotally mounted on opposite sides of the bar 16 for engagement with the adjacent ratchet discs

15. The pawls 19 are operatively connected to the lower ends of the bell crank levers 17 for actuation thereby through the medium of the links 20. A rod 21 connects the bell crank levers 17 together in a manner to cause the same to swing in unison.

Rods 22 are anchored to the opposite end portions of the arms 16 and extend downwardly therefrom and are connected to the central portion of the bar 13 through the medium of a coil spring 23.

In operation, the occupants may repose on the seats 11 when the supporting structure 1 is in motion and the carriages or cars 4 will follow a true circular course. Should it be desired to cause the cars to swing laterally from side to side as the same travel around with the supporting structure, the occupants may assume the position clearly illustrated in Figure 1 of the drawings with one foot placed on one side of the axis of the rockable platform 8 and the other foot on the other side thereof. Now, by throwing all of the weight on one end of the platform 8, a pulling force is transmitted to the opposite end of the arm 16 in a manner to rock the bell crank levers and engage the dog or pawl 19 with its respective ratchet discs 15, thus securing the arm 16 against rotary movement on the connecting bar 3. In an obvious manner, the car will start to swing laterally in a direction opposite to the side upon which the weight has been placed. As the car reaches the end of this swinging movement the weight is shifted to the opposite end of the platform with the result that the first pawl is disengaged from its respective ratchet disc and simultaneously the other pawl is moved toward its respective ratchet disc. As before stated, the pawls move in unison and during the intervals when most pawls are disengaged from the ratchet discs, the spring 23, through the medium of the rods or wires 22 shift the bar 16 into parallelism with the member 13. The carriage then begins the return swing and the operation is repeated.

It is believed that the many advantages of an amusement device constructed in accordance with this invention will be readily understood, and although the preferred embodiment of the invention is as illustrated and described, it is to be understood that changes in the details of construction will be had which will fall within the scope of the invention as claimed.

What is claimed is:—

1. An amusement device comprising, in combination, a rotatable supporting structure including radiating arms, connecting rods extending between the outer ends of the arms, a car suspended for lateral swinging movement from the connecting rods, and coacting means carried by the connecting rods and the car and operable by the occupants of said car for causing the car to swing laterally.

2. An amusement device comprising, in combination, a rotatable supporting structure, a car suspended therefrom for rotary movement therewith and adapted for lateral swinging movement thereon, and coacting means on the supporting structure and the car and operable by the occupants of said car for causing the same to swing laterally.

3. An amusement device comprising, in combination, a rotatable supporting structure including outwardly extending arms and connecting rods disposed between the outer portions of said arms, a car suspended for lateral swinging movement from the rods, a pair of ratchet discs fixed on the connecting rods, said ratchet discs being reversely disposed with respect to each other, a bar mounted for swinging movement on the connecting rods between the discs, pawls mounted on the bar and engageable with the ratchet discs in a manner to secure the bar against rocking movement on the connecting rod, a rockable platform mounted in the car for actuation by the occupants thereof, means operatively connecting the opposite ends of the platform to the pawl in a manner to alternately engage said pawl with the respective ratchet discs upon rocking movement of the platform and resilient means for shifting the bar into parallelism with the car when the pawls are disengaged from the ratchet discs.

4. An amusement device comprising, in combination, a rotatable supporting structure, a car mounted for oscillation on the supporting structure, and means operable by an occupant of the car for positively oscillating said car.

5. An amusement device comprising, in combination, a rotatable supporting structure, a car suspended for lateral oscillation on the supporting structure, and means operable by an occupant of the car for positively oscillating said car independently of the rotary movement thereof with the supporting structure.

In testimony whereof I affix my signature.

SOLOMON W. SHEPHERD.