Jan. 20, 1925. 1,523,871

H. D. GARDY

AMUSEMENT APPARATUS

Filed June 25, 1924

Fig. 1.

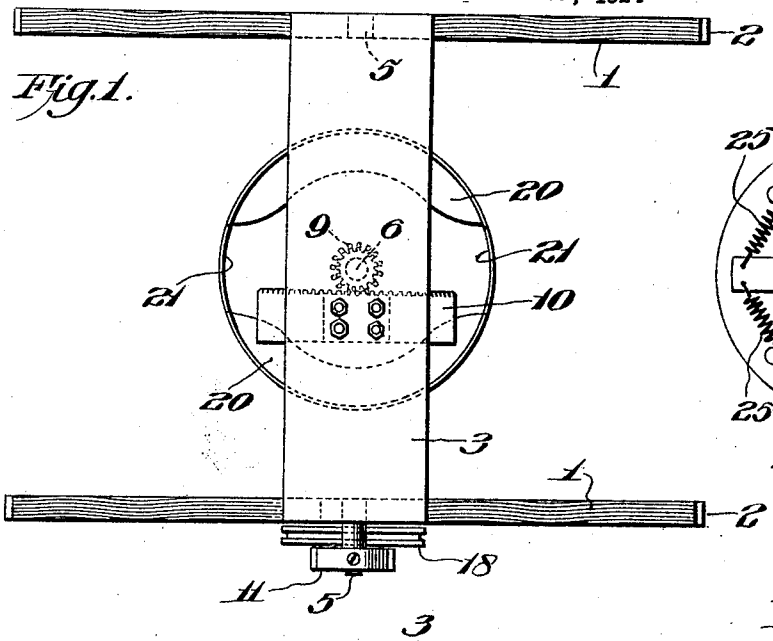


Fig. 4.

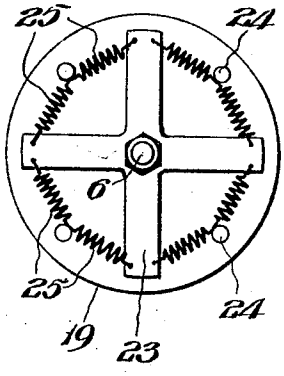


Fig. 2

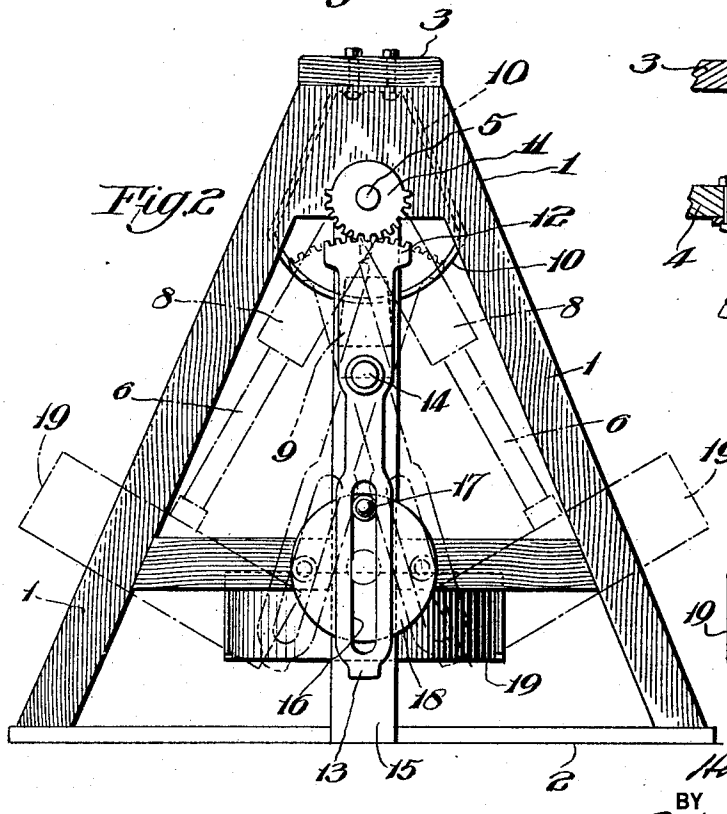
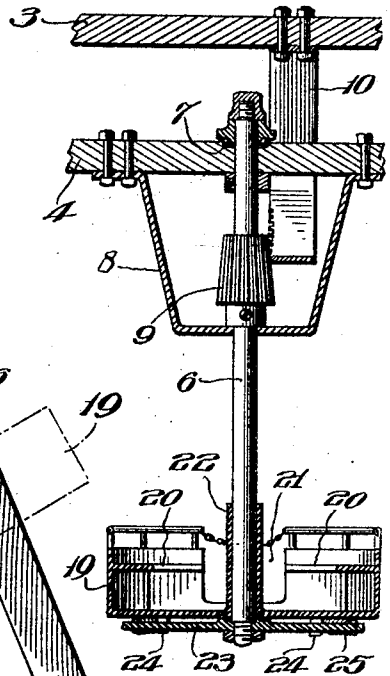


Fig. 3.



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UNITED STATES PATENT OFFICE.

HENRY D. GARDY, OF PHILADELPHIA, PENNSYLVANIA.

AMUSEMENT APPARATUS.

Application filed June 25, 1924. Serial No. 722,232.

To all whom it may concern:

Be it known that I, HENRY D. GARDY, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Amusement Apparatus, of which the following is a specification.

This invention, generally stated, relates to swings, and has more especial relation to a swing capable of use at amusement parks, carnivals, county-fairs, and like places where profits may be derived by its use although the swing may be used for private enjoyment, if desired, upon lawns or the like, or even indoors.

The leading object of the present invention is to provide a swing of the character stated, commercially known as jazz swing, which in use is designed to promote an amusing, exhilarating, and sensational feeling to the occupants thereof.

A further object is to provide a swing in which not only is a to-and-fro or pendulum motion imparted to the swing basket or cage but a partial rotation thereof in reverse directions is had during a to-and-fro movement.

Other and further objects reside in the provision of a novel arrangement, connection and combination of parts for attaining the results sought by the foregoing objects.

The invention consists of the novel construction hereinafter described and finally claimed.

The nature, characteristic features and scope of the invention will be more fully understood from the following description taken in connection with the acompanying drawings forming part hereof, and in which:

Fig. 1, is a top or plan view of a swing embodying the invention.

Fig. 2, is a view thereof in side elevation.

Fig. 3, is a fragmentary view, principally in central section, and

Fig. 4, is a view of the underside of the car, basket or cage of the swing.

For the purpose of illustrating my invention I have shown in the accompanying drawings one form thereof which is at present preferred by me, since the same has been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of the instrumentalities as herein shown and described.

Referring now to the drawings in detail, the numeral 1 designates fixed side supports of standards, mounted upon base rails 2 and connected at their tops by means of a fixed cross-piece 3. Arranged below the cross-piece 3, in spaced relation, is a vertical shaft 6. This shaft has ball-bearing relation, as at 7, with the movable or rocking cross-bar 4, see Fig. 3. Fixed to and depending from the rocking cross-bar 4 is a bracket 8 which supports a tapered, spur-gear 9, fixed to shaft 6, the latter being rotatable through and braced by said bracket. The spur-gear 9 is in mesh with the teeth of a fixed rack 10 carried by cross-piece 3. Motion is imparted to the rocking cross-bar 4 either by hand or motor power. One of the journals 5 has fixed thereto a segmental gear 11, see Fig. 2, which is in mesh with the segmental gear 12 of a lever 13, pivoted at 14 to a standard side piece 15. The lever 13 is slotted as at 16 and a pin 17, connected to a rotatable drive disc 18, works through said slot in the rotation of said disc 18 to rock cross-bar 4 and thus cause spur-gear 9, as it coacts with the teeth of rack 10, to rotate shaft 6 first in one direction and then in an opposite direction during the pendulum movement of said shaft. The disc 18 may be operated by a belt from an electric or other motor or it may be operated by manual means. The shaft 6 carries at its lower portion a car, basket or cage 19, preferably of circular contour and provided therein with seats 20 for accommodating passengers or others, entrances 21 being present, as best seen in Fig. 3. Extended upwardly from the floor of the car, basket or cage 19 is a sleeve 22, Fig. 3, which has a relatively loose fit with respect to shaft 6. Carried by and fixed to shaft 6 is a cross-shaped member 23, see Fig. 4, for supporting the car 19, the car bottom having secured thereto as at 24 a plurality of coiled springs 25 the free ends of which are in turn connected to adjacent arms of the cross-shaped member 23. Thus as shaft 6 is rotated during to-and-fro movement, the car is rotated first in one direction and then in an opposite direction, the said springs 25 serving as recoil springs to prevent undue jars and jolts of the car during reversing movement. The effect of my swing is that

of producing an amusing novel and exhilarating sensation of to-and-fro or pendulum motion plus rotative movement of the car in reverse directions depending upon the direction of rotation of shaft 6.

It will now be apparent that I have devised a novel and useful construction which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description and while I have in the present instance shown and described the preferred embodiment thereof which has been found in practice to give satisfactory and reliable results, it is to be understood that the same is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

What I claim is:

1. In a swing, a rocking-bar, a shaft rotatably supported thereby, a seating compartment carried by said shaft, means for imparting movement to said rocking-bar and independent means for rotation of said seating compartment in opposite directions during to-and-fro movement thereof.

2. In a swing, a pair of standards, a cross-piece connecting said standards at their tops, a rocking cross-bar supported between said standards, means for rocking said cross-bar, a shaft rotatably supported by said cross-bar, a seating compartment carried by said shaft, and means for rotating said shaft in opposite directions during to-and-fro movement thereof.

3. In a swing, a pair of standards, a cross-piece connecting said standards at their tops, a rocking cross-bar supported between said standards, means for rocking said cross-bar, a shaft rotatably supported by said cross-bar, a seating compartment carried by said shaft, a spur-gear fixed to said shaft and a rack fixed to said cross-piece with which rack said spur-gear is in mesh for obtaining rotation of said shaft during to-and-fro movement thereof.

4. In a swing, a pair of standards, a cross-piece connecting said standards at their tops, a rocking cross-bar supported between said standards, eccentric means for rocking said cross-bar, a shaft rotatably supported in ball bearings by said cross-bar, a seating compartment carried by said shaft, a spur-gear fixed to said shaft and a rack fixed to said cross-piece with which rack said spur-gear is in mesh for obtaining rotation of said shaft during to-and-fro movement thereof.

5. In a swing, a pair of standards, a cross-piece connecting said standards at their tops, a rocking cross-bar supported between said standards, means for rocking said cross-bar, a shaft rotatably supported by said cross-bar, a seating compartment carried by said shaft, means for rotating said shaft in opposite directions during to-and-fro movement thereof, and means including spring connections arranged between the bottom of said compartment and said shaft functioning as a recoil medium during a reversing period.

In testimony whereof, I have hereunto signed my name.

HENRY D. GARDY.