July 5, 1927. 1,635,108

G. A. BLUTHARDT

MERRY-GO-ROUND

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Fig. 1.

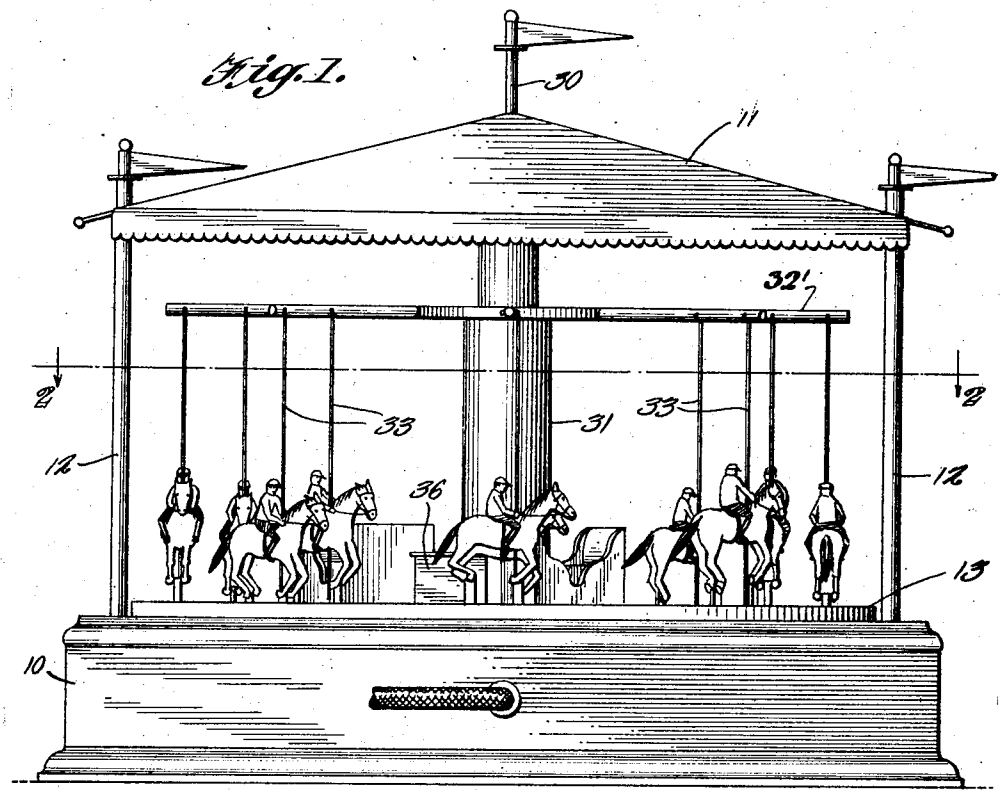


Fig. 3.

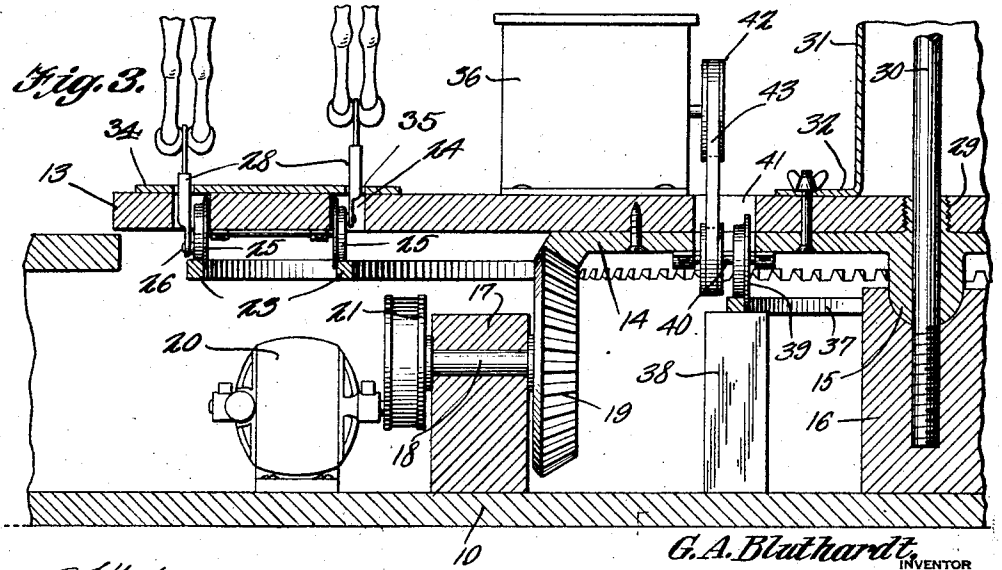


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Fig. 2.

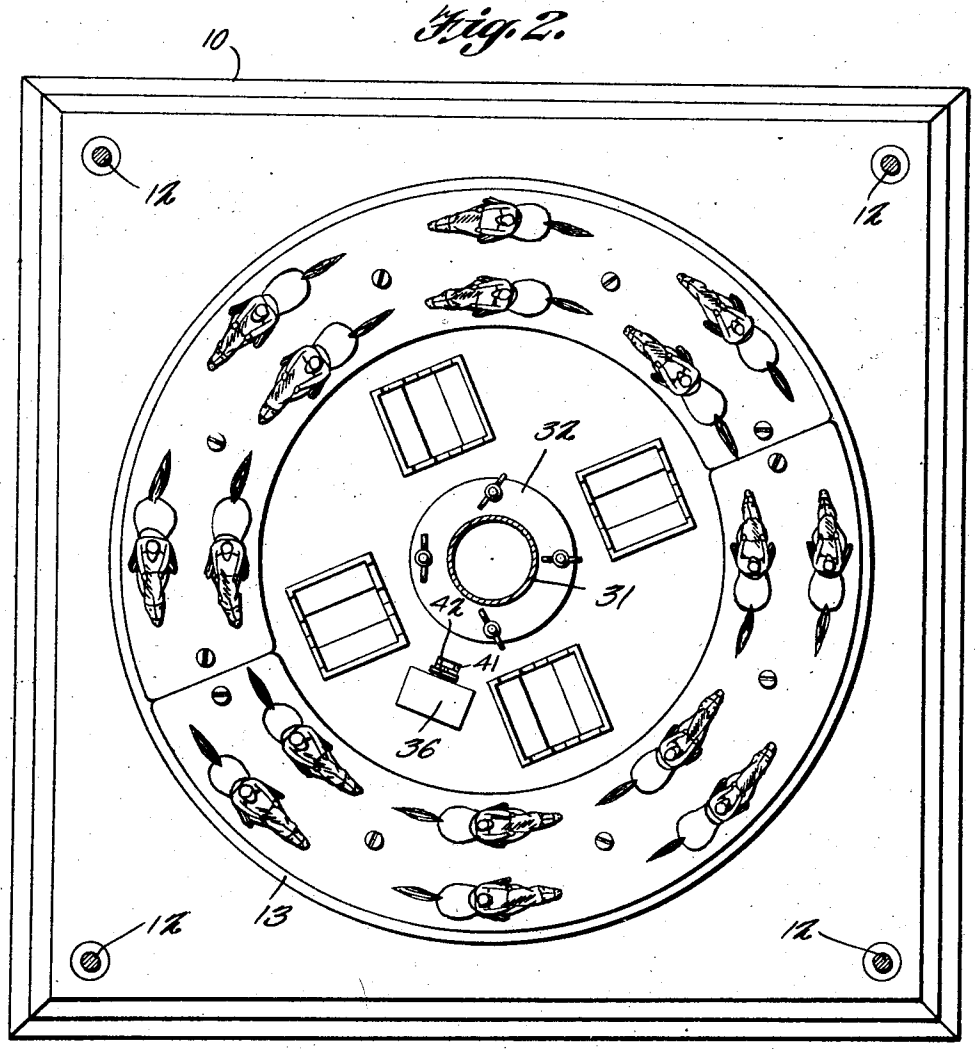


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Fig. 4.

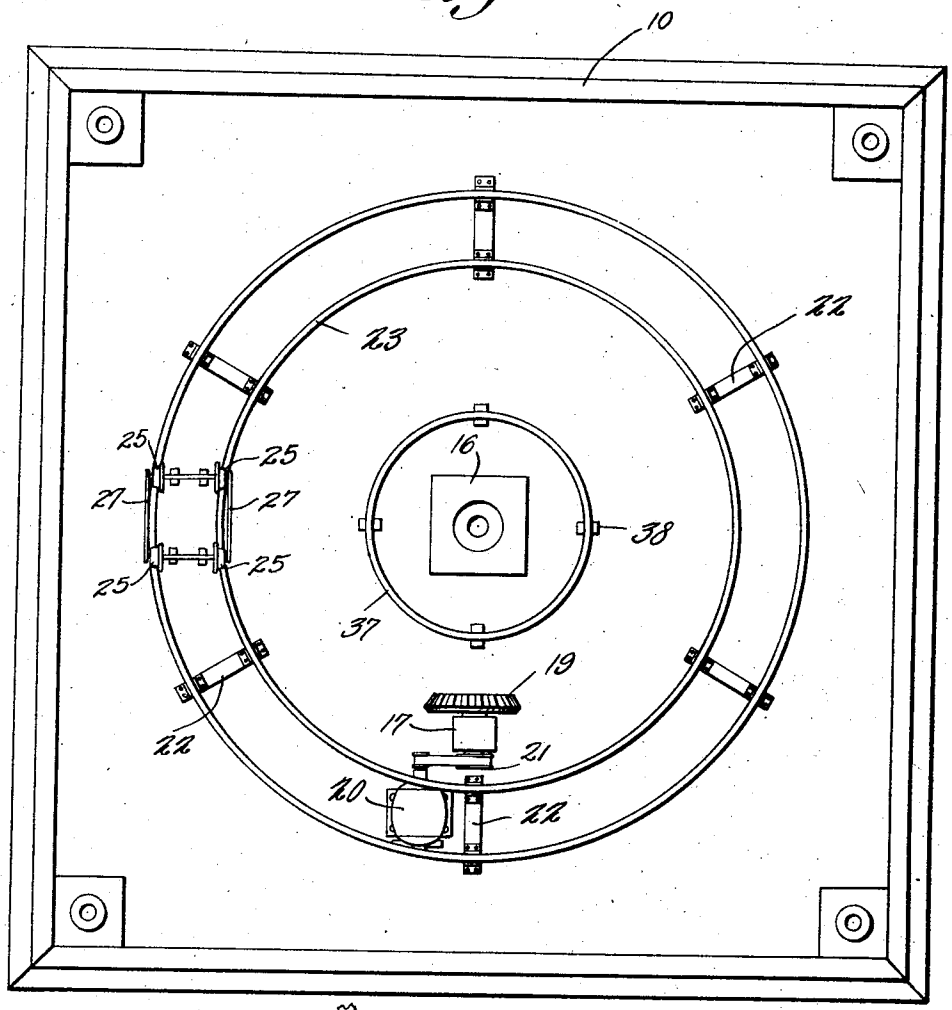
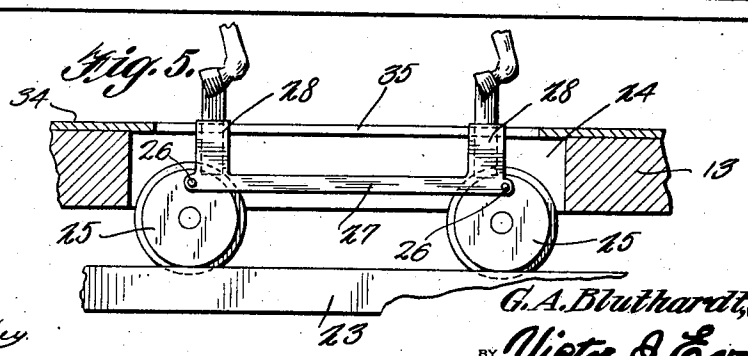



Fig. 5.

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# UNITED STATES PATENT OFFICE.

GUSTAV A. BLUTHARDT, OF DORCHESTER, MASSACHUSETTS.

## MERRY-GO-ROUND.

Application filed January 4, 1926. Serial No. 79,223.

This invention relates to improvements in merry-go-rounds, the general object being to provide a rotatable platform having figures to reciprocate and rotate therewith and a music box connected with the rotatable means whereby both the music box and figures will be set in motion simultaneously and simulate in every respect the merry-go-rounds now in use.

Another object of my invention resides in the peculiar and novel mounting of the figures upon the platform and their relative support upon tracks beneath the platform in imparting the necessary reciprocatory movement thereto in the instance of horses and like figures generally mounted upon merry-go-rounds.

With the above and other objects in view, the invention further includes the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the appended claims.

In the drawings:—

Figure 1 is an elevation of my invention.

Figure 2 is a transverse section taken on line 2—2 of Figure 1.

Figure 3 is a similar view taken through a portion of the platform and supporting means therefor and illustrating the rotatable means therefor.

Figure 4 is a top plan view of my invention with the platform removed.

Figure 5 is a fragmentary side elevation of the platform, the track, and the reciprocating means for the figures.

Referring to the drawings in detail, wherein like characters of reference denote corresponding parts, the reference character 10 indicates a platform having a top 11 in the form of a canopy and similar in construction to the canopies or tops used upon the commercial type of merry-go-round and having posts 12 arranged at the corners of the platform 10 in supporting the canopy or top 11. All of the above is of the usual and well known construction and forms no part of the present application for Letters Patent but is merely shown for purposes of illustration in bringing forward the novel advantages of the above entitled invention.

The invention residing in the provision of a disk or platform, as indicated at 13, having a ring gear 14 mounted centrally and upon the under side thereof and which includes upon its under side a rounded apertured stud 15 received within a corresponding shaped pocket provided in the upper free end of a center post 16 in order that the said platform 13 and ring gear 14 will freely rotate upon the center post 16 within the base 10. Journaled within a bearing post 17 is a shaft 18 having a pinion 19 fixed upon one end thereof and meshing with the corresponding under side of the ring gear 14 in imparting the necessary momentum and rotation to the platform 13, connected in turn with a source of power in the form of an electric motor 20 which power being taken off by a pulley 21 fixed to the opposite end of the shaft 18 and communicating with the armature, not shown, of the motor 20. Supported at spaced intervals upon blocks 22 within the base 10 are rails or tracks 23 arranged directly below and registering with slotted portions 24 provided within the platform 13 adjacent the periphery thereof, the purpose of which will be presently apparent. Pairs of wheels 25 are journaled beneath the under sides of the platform 13 and extending within the slotted portions 24 and riding upon the upper sides of the rails 23 and having eccentrically mounted trunnions 26 upon their outer sides and pivotally secured thereto the opposite end portions of bars 27 having upwardly extending supporting arms 28 while their upper free ends are in turn connected to the lower extremities of the figures, as clearly illustrated in Figure 3 of the drawings.

Extending through and within a sleeved portion 29 provided upon the upper side and centrally of the ring gear 14 and in registration therewith the opening in the rounded stud 15 is a post 30. Encircling or housing the post 30 is a column 31 terminating at its lower periphery in an outwardly extending flanged portion 32 and secured to the upper side of the platform 13 while radially disposed arms 32′ are provided upon its upper free end and having supporting cords or lines 33 suspended therefrom and holding the figures, as clearly illustrated in Figure 1 of the drawings, from lateral or sidewise movement. Cover plates 34 are positioned over the slotted por-

tions 24 in the platform 13 and having elongated slots 35 therein whereby the upwardly extending end portions 28 of the plates 27 may be allowed to oscillate and reciprocate therein.

In order to provide means for operating a music box 36, as indicated in Figure 3 of the drawings, I provide a single track 37 supported upon a plurality of blocks 38 adjacent and surrounding the center post 16 and which also has traveling thereon a flanged wheel 39 upon a shaft 40 and having its upper portion extending within an opening or slot 41 provided in the platform and ring gear 14 while a pulley also carried upon the shaft 40 is connected to a pulley 42 and carried upon the corresponding side of the music box 36 by an endless belt 43.

In the mode and operation of the present invention it is clearly apparent and manifest that when the electric motor 20 is set in motion and owing to its connection with the pulley 21 connected therewith it will be noted that the shaft 18 to which the same is affixed will rotate the pinion 19 and in turn rotate the ring gear 14 and platform 13 which will cause both the wheels 25 and 39 respectively to travel upon their respective tracks 23 and 37 whereby the figures, as illustrated, will be caused to reciprocate and the music box to play.

Obviously, a motor 10 may be connected in circuit with a rheostat for controlling and governing the rate of speed of the merry-go-round and in so doing automatically time the organ whereby the faster the motor operates the faster the organ will play.

The invention is susceptible of various changes in its form, proportions and minor details of construction, and the right is herein reserved to make such changes as properly fall within the scope of the appended claims.

Having described my invention what is claimed is:—

1. In a merry-go-round, circular spaced track ways, traction wheels arranged in pairs for movement over said track ways, bars having their ends eccentrically connected to adjacent pairs of wheels, upwardly extending arms at the ends of said bars, figures carried by said arms and means having operative connection with said wheels for imparting movement to the same over said track ways.

2. In a merry-go-round, a center post member having a rounded seat at its upper end, a rotatable platform, a ring gear upon the underface of the platform centrally thereof with an upwardly projecting threaded sleeve extending through the platform, a rounded apertured stud having its lower end positioned within said rounded seat of the center post, an upright post threaded into the center post and extending through the apertured stud and the threaded sleeve, a column housing the last mentioned post and secured to the platform and radially disposed arms extending from said column.

In testimony whereof I affix my signature.

GUSTAV A. BLUTHARDT.