

947,954.

Fig. 1

Witnesses
Frank R. How
M. A. O'Donnell.

Inventor
J. S. Tuttle

By *[Signature]*

Witnesses
Frank R. Glon
M. A. O'Donnell.

Inventor
J. S. Tuttle

By George Thompson.

947,954.

Patented Feb. 1, 1910.

2 SHEETS—SHEET 2.

Fig. 3.

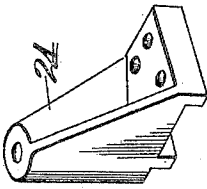
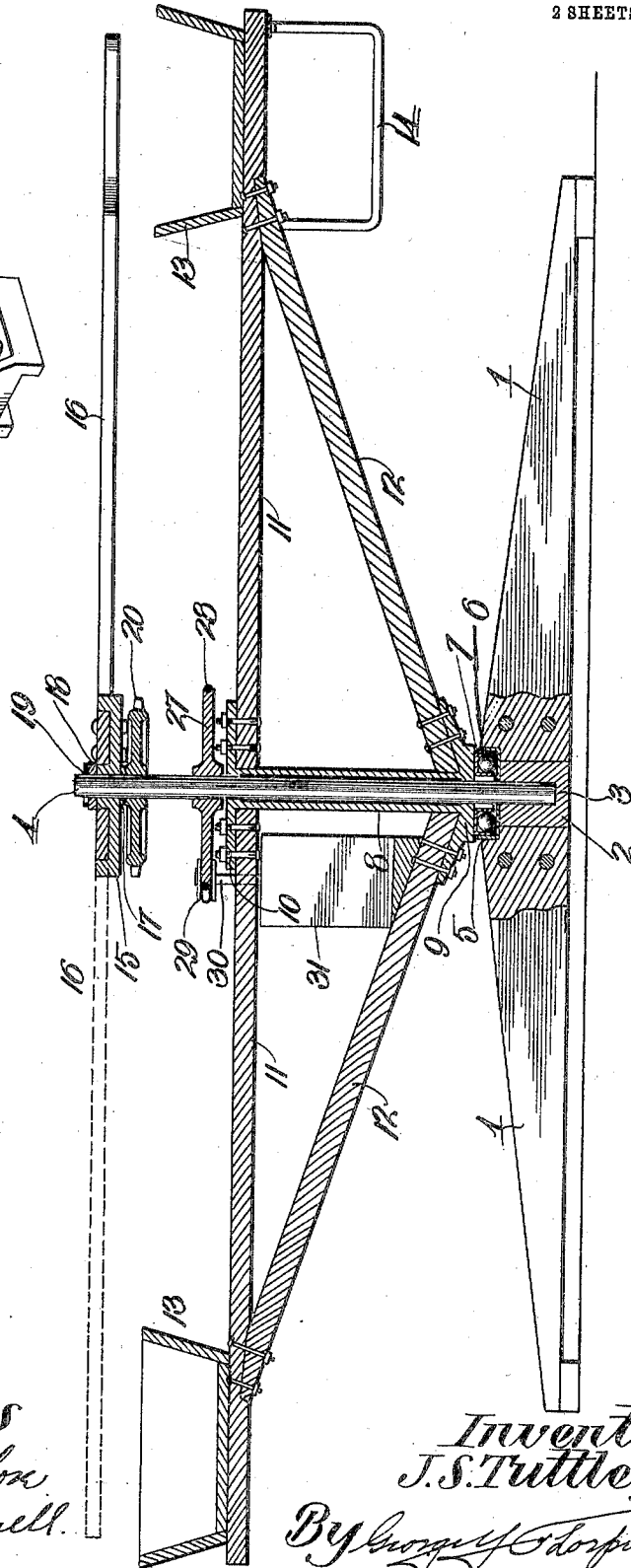


Fig. 2.



Witnesses
Frank A. Glou
M. a. O'Donnell.

Inventor
J. S. Tuttle
By George F. Thorpe Atty.

UNITED STATES PATENT OFFICE.

JOSIAH S. TUTTLE, OF KANSAS CITY, MISSOURI, ASSIGNOR TO GEORGE ERTTEL CO., OF QUINCY, ILLINOIS, A CORPORATION OF ILLINOIS.

MERRY-GO-ROUND.

947,954.

Specification of Letters Patent.

Patented Feb. 1, 1910.

Application filed May 21, 1909. Serial No. 497,497.

To all whom it may concern:

Be it known that I, JOSIAH S. TUTTLE, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Merry-Go-Rounds, of which the following is a specification.

This invention relates to merry-go-rounds or carousels of that class in which the motive power is supplied by the passengers and my object is to produce a swing of this character of simple, strong, durable and cheap construction which can be efficiently operated by a small child or by the united power of a number of children.

A further object is to produce a machine of this character which can be easily and quickly set up or taken down by an unskilled person.

With these general objects in view, the invention consists in certain novel and peculiar features of construction and organization as hereinafter described and claimed; and in order that it may be fully understood reference is to be had to the accompanying drawings, in which;

Figure 1, is a top plan view, partly broken away of a merry-go-round embodying my invention. Fig. 2, is a section taken on the line II—II of Fig. 1. Fig. 3, is a detail perspective view of a bearing bracket carried by the rotary frame of the machine.

In the said drawings where like reference numerals identify corresponding parts, a stationary frame or base to rest upon the ground or other support, consists of a plurality of radially-arranged bars 1 and a central casting 2 bolted to and connecting said bars and provided with a socket 3 wherein is rigidly secured a vertical shaft 4.

5 is a circular cup-bearing in superposed and rigid relation to the casting and 6 are balls in said cup around the shaft, an inverted channeled cap 7 depending into the cup and resting on the balls so as to travel with the latter, the said cup, cap and balls together constituting an anti-friction bearing.

8 indicates a vertical sleeve journaled on the shaft and overlying and bearing a rigid relation to the cap to turn with the same.

9 indicate arms extending outward and upward by preference, from the lower end

of the sleeve, and 10 are arms projecting outward from the upper end of the sleeve in the vertical planes of arms 9.

11 and 12 are horizontal and inclined bars respectively bolted to and extending outward from arms 10 and 9, bars 12 forming braces for bars 11. The said bars in conjunction with the said sleeve, constitute a rotary frame carrying at its outer ends seats 13 or equivalent supports for the passengers, 14 indicating foot-rests for the latter. A handle whereby rotation may be imparted to the seat-carrying frame, is journaled on shaft 4, and preferably consists of a central casting 15 provided with as many arms 16 as there are seats 13, the handle-end of each arm being disposed in advance of the adjacent seat and within convenient reach of the occupant thereof. To maintain the rotary handle at the desired elevation, the shaft carries a rigid collar 17 underlying and a washer 18 overlying the handle, the washer being held in position by a spring-cotter 19 engaging the shaft.

20 is a sprocket wheel rigidly secured to the shaft and connected by chain 21 to a smaller sprocket wheel 22 journaled on a short vertical shaft 23 journaled in a bearing bracket 24 bolted or otherwise rigidly secured to one of the bars 11 of the rotatable seat-carrying frame, the shaft being equipped at its upper end with a crank 25 pivotally connected by a link 26 to one of the handle arms 16.

27 is a belt wheel rigidly secured on shaft 4 and connected by a belt 28 to a smaller belt wheel 29 upon the shaft 30 of an organ 31 carried by the rotatable seat-carrying frame, the special construction of the organ being immaterial as it forms no part of the invention.

One or more of the occupants of the seats operate the machine by grasping the adjacent handle arms and alternately pulling and pushing upon them, the result of this operation being to cause rotation of sprocket wheel 22 through the connection between one of said arms and shaft 23, that is through the link and crank connection. By thus turning said sprocket wheel it imparts travel to the chain and thus causes the seat-carrying frame to rotate, the sprocket wheel 20 compelling such action because it remains stationary,—it being obvious that the han-

dle rotates with the seat-carrying frame because of the said link and crank shaft connection between them.

- It will be noticed that there is no chance
 5 for the occupants of the seats to be pushed or pulled therefrom by the handle because the oscillatory movement of the same is limited, that is to say, it is not free to swing forward or backward beyond certain points.
 10 Furthermore the handle by remaining constantly within convenient reach of the passengers enables the latter if engaged in the propulsion of the machine, to more reliably maintain their equilibrium upon the seats.
 15 The circular travel of the organ with relation to the stationary wheel 27 results in rapid rotation of belt wheel 29 and shaft 30 for the production of music during the operation of the machine, as will be readily understood.
 20

From the above description it will be apparent that I have produced a merry-go-round embodying the features of advantage enumerated and I wish it to be understood
 25 that I reserve the right to make such changes in the form, proportion, detail construction and arrangement of the parts as properly fall within the spirit and scope of the appended claims.

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

1. A merry-go-round, comprising a base,
 35 a stationary shaft carried by and projecting upward from the base, a wheel rigid with said shaft, a rotary seat-carrying frame journaled on said shaft and suitably upheld, a journaled wheel carried by the seat-carrying frame and geared to the first-named

wheel, an oscillatory handle mounted on the
 40 shaft and connected to the journaled wheel and means whereby oscillatory movement imparted to the handle shall cause rotation of the journaled wheel.

2. A merry-go-round, comprising a base, 45
 a stationary shaft rising therefrom, a sprocket wheel mounted rigidly on said shaft, a rotary seat-carrying frame journaled on said shaft and resting rotatably on the base, a bracket carried by the seat-
 50 carrying frame, a vertical shaft journaled in said bracket and provided with a crank at its upper end, a sprocket wheel secured on said shaft, a chain connecting said sprocket wheel with the first-named sprocket wheel,
 55 an oscillatory handle mounted on said shaft and a link pivotally connecting said handle with the crank of said shaft.

3. A merry-go-round, comprising a base,
 60 a stationary vertical shaft carried by and projecting upward therefrom, a rotatable seat-carrying frame mounted on said shaft, a ball bearing upon the base acting as an anti-friction support for the seat-carrying
 65 frame, a wheel rigid with said stationary shaft, a journaled wheel carried by the seat-carrying frame and geared to the first-named wheel, a handle journaled on the
 70 shaft and connected to the journaled wheel and means whereby oscillatory movement imparted to the handle shall cause rotation of the journaled wheel.

In testimony whereof I affix my signature in the presence of two witnesses.

JOSIAH S. TUTTLE.

Witnesses:

M. A. O'DONNELL,
 G. Y. THORPE.