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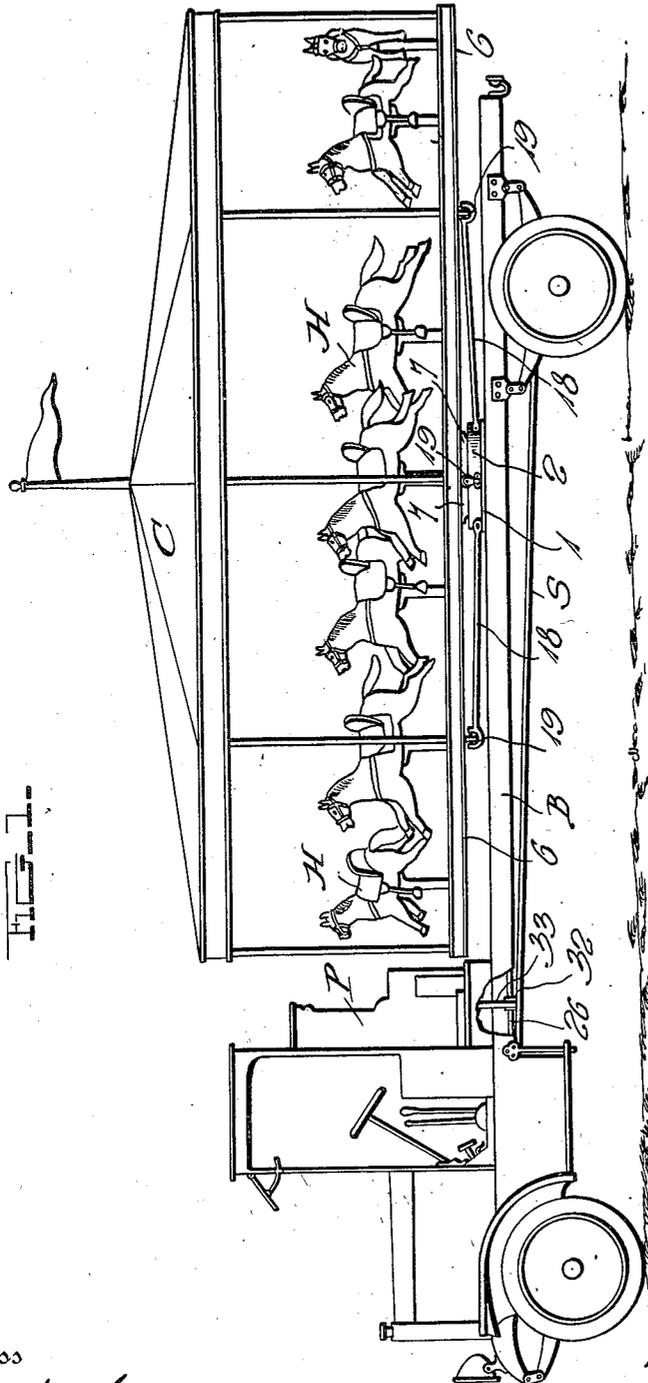
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CARROUSEL

Filed Mar. 27, 1922

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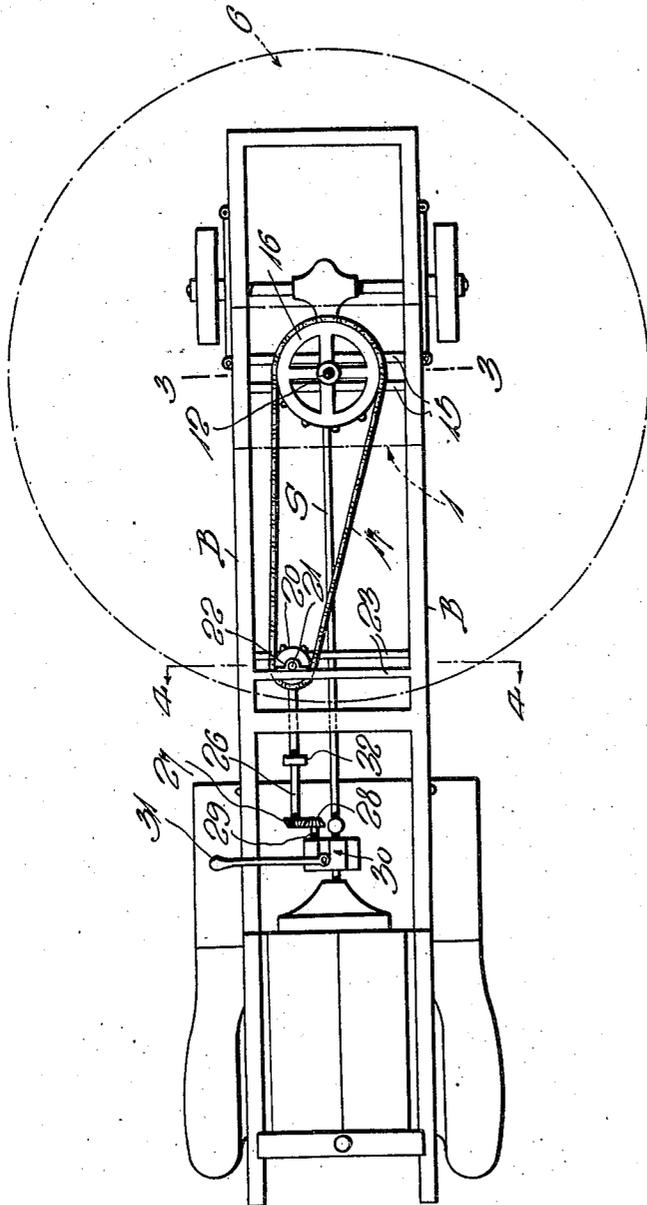
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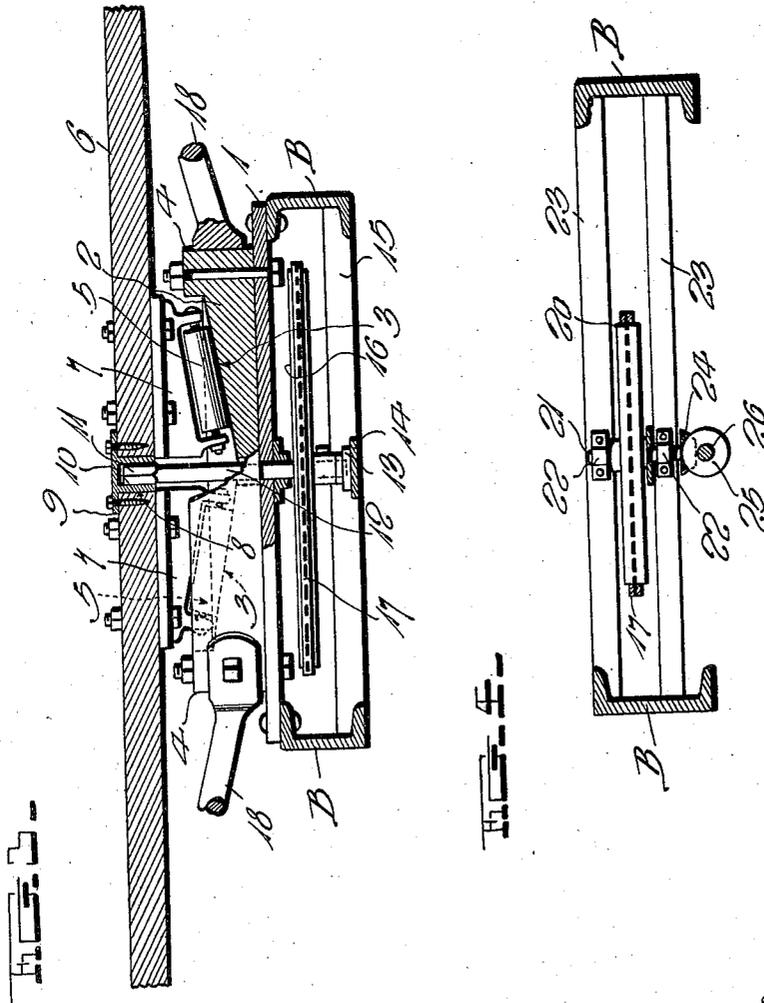
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# UNITED STATES PATENT OFFICE.

PHILIP ADELSON AND EDWARD ADELSON, OF CAMBRIDGE, MASSACHUSETTS.

## CARROUSEL.

Application filed March 27, 1922. Serial No. 547,030.

*To all whom it may concern:*

Be it known that we, PHILIP ADELSON and EDWARD ADELSON, citizens of the United States, residing at Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Carrouseles; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improved carrousel and the principal object is to devise a novel amusement device of this class and to mount it upon the chassis of a motor-driven vehicle so that it may be transported from place to place in a condition ready for use without requiring disassembling.

Another object of the invention is to provide a carrousel and driving means therefor which is such in construction as to enable the carrousel to be installed on a conventional type of vehicle without requiring extensive alterations.

More specifically speaking, it is one of the objects of the invention to secure a plate to the upper sides of the side bars of the vehicle chassis, and to arrange a platform above this plate in spaced relation for rotation, the platform being designed to carry the horses or other conveyances desired for use, there being novel means interposed between the platform and the plate to facilitate rapid rotation of the former, and there being novel means associated with these parts for utilizing the power of the motor for rotating the platform.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same:

Figure 1 is a side elevational view of a carrousel constructed in accordance with this invention showing the same mounted upon a motor truck.

Figure 2 is a top plan view with the platform and parts supported thereon removed.

Figures 3 and 4 are enlarged transverse sections taken on the lines 3—3 and 4—4 respectively of Fig. 2.

In the drawings, the side bars of the truck chassis are designated by the letters B, and the propeller or drive shaft by the letter S.

Other details are, of course, illustrated but these need not be referred to by reference characters.

In carrying out the invention, we secure a rectangular plate 1 (see Fig. 3) to the upper flanges of the channeled side bars B and a circular bearing member or track 2 is bolted or otherwise secured to the upper side of the plate, this track being formed with an inwardly and downwardly inclined runway 3. The runway is circumscribed by an annular rim 4 to prevent the roller bearings 5 from becoming displaced during the rapid rotation of the platform 6. For the purpose of securing the roller bearings to the platform, suitable brackets 7 are employed. As clearly shown here, the platform is formed at its center with an opening 8 and a plate 9 is secured to the upper face of the platform and embodies a central hub 10 which is positioned in the opening. The inner face of this hub 10 is flat-faced for co-action with a flat-faced upper end 11 of a vertical driven shaft 12. This shaft 12 extends through an opening in the center of the aforesaid plate 1 and has its lower end received in a bearing socket 13 mounted on a short plate 14 arranged transversely between the spaced transversely disposed cross-bars 15. A relatively large sprocket wheel 16 is keyed or otherwise fixedly connected with the shaft 12 between the plates 1 and 14 and this serves to impart rotation to the shaft, the same deriving power from a chain 17 which surrounds its periphery. While on this figure of the drawing, it may be well to point out that a plurality of radially disposed arms 18 are secured at their inner ends to the bearing member 2 and these arms are provided at their outer ends with anti-friction rollers 19 which bear against the underside of the rotary platform as clearly shown in Fig. 1 to facilitate thereof.

Attention now being directed to Fig. 4, it will be seen that a smaller sprocket wheel 20 co-acts with the opposite end of the aforesaid sprocket chain 17, this sprocket wheel 20 being keyed to a short vertical shaft 21 journaled in bearings 22 mounted on upper and lower spaced horizontally disposed cross-bars or members 23 secured to the side bars of the chassis adjacent the front of the machine. The shaft 21 projects below the lower cross-bar 23 and is equipped with a beveled pinion 24 with which a pinion 25 on the driven shaft 26 meshes. There is

also a beveled pinion or gear 27 on the opposite end of the shaft 26 and this meshes with still another gear 28 on a stub-shaft 29 which is controlled by a suitable clutch means 30 slidably mounted on the main drive shaft S. This clutch is controlled by a lever 31 arranged at any suitable point to permit convenience of operation. Inasmuch as the construction of the clutch may be of any design, it has not been shown and need not be described. It is to be understood however that by grasping the lever 31 and moving it in one direction, the shaft 26 will be coupled for rotation with the main shaft S, whereas by moving it in an opposite direction, the last named shaft will be permitted to operate independently of the supplemental shaft 26. If desired, the last named shaft 26 may be provided intermediate its ends with a pulley 32 to permit a belt 33 to be connected thereto for actuating a piano P or organ.

In operation, it will be seen that when the vehicle motor is set into operation, the supplemental driven shaft 26 will be simultaneously rotated after the clutch 30 is thrown in. Inasmuch as the shaft 26 has permanent driving connection with the vertical shafts 21 and 12, it will be seen that these will be set into rotation by the moving sprocket chain which acts thereon. The last named shaft 12 is connected with the platform 6 in such a manner as to rotate the same. It may be conveniently stated here that the platform 6 is of course designed to support horses or the like H over which a suitable canopy or top C is arranged. It may also be included here that the rim of this canopy in actual use will be designed to permit it to serve as an advantageous medium for advertising purposes.

By carefully considering the description in connection with the drawings, persons familiar with devices of this class will doubtless be able to obtain a clear understanding of the invention. Therefore, a more lengthy and detailed description is deemed unnecessary.

Since probably the best results may be obtained with the construction and arrangement herein shown and described, this is taken as the preferred embodiment of the invention. However, we wish it to be understood that minor changes coming within the scope of the invention as claimed may be resorted to, if desired.

We claim:

1. In a carrousel, a support, a plate mounted thereon, a runway secured to the upper

side of the plate, a platform arranged above said runway, roller bearings carried by the platform and cooperable with the runway, a shaft connected at its upper end to said platform, a sprocket secured to said shaft, a drive chain cooperable with the sprocket, and a plurality of radially disposed bracing arms secured at their inner ends to said runway and provided at their outer ends with anti-friction rollers engaging the underside of said platform to facilitate the rotation thereof.

2. In a carrousel, a support, a drive shaft, a supplemental shaft arranged in parallelism with said drive shaft, clutch means for coupling said shafts together for simultaneous rotation, a pair of vertically disposed shafts, one of said shafts being equipped with a pinion, said supplemental shaft being provided with a gear meshing with said pinion, sprocket wheels keyed to said vertically disposed shafts, a chain co-operating with said sprocket wheels, a rotary platform mounted above the support, one of said vertical shafts being connected with said platform to impart rotation thereto, and anti-friction means arranged between the platform and support to facilitate rotation of the former.

3. A carrousel comprising a support, a plate secured thereto and formed at its center with an opening, a bearing secured to the upper side of said plate and having a central opening which registers with the opening in the latter, the upper face of said bearing being concaved to provide a run-way, said run-way being surrounded by a rim, a platform disposed above said bearing, brackets carried by the under side of said platform, roller bearings secured to said brackets and cooperable with said concaved bearing surface, a shaft extending through the aforesaid openings, a socket secured to said platform, the upper end of said shaft being received in said socket, a second socket secured to the support, the lower end of said shaft being rotatably received in said last named socket, a sprocket secured to said shaft beneath said plate, a drive chain cooperable with said sprocket, and a plurality of radially disposed bracing arms secured at their inner ends to the aforesaid bearing, said arms carrying anti-friction rollers at their free ends engaging the underside of said platform.

In testimony whereof we have hereunto set our hands.

EDWARD ADELSON.  
PHILIP ADELSON.