

No. 697,254.

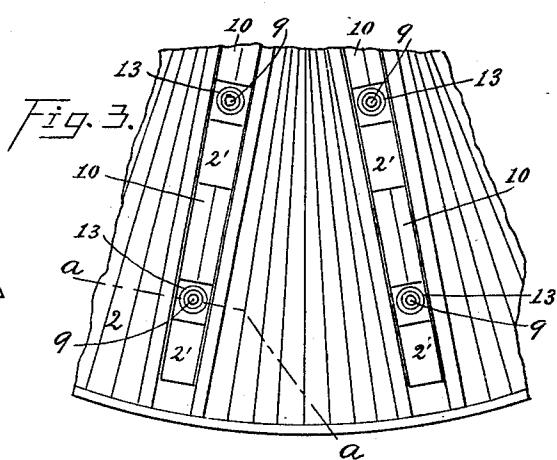
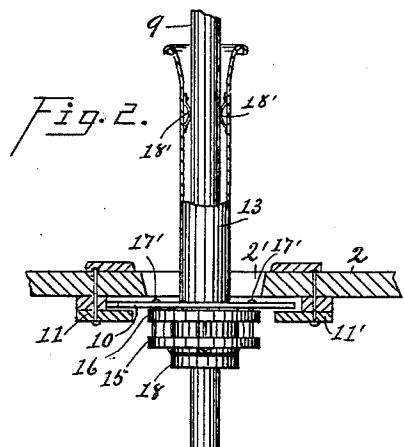
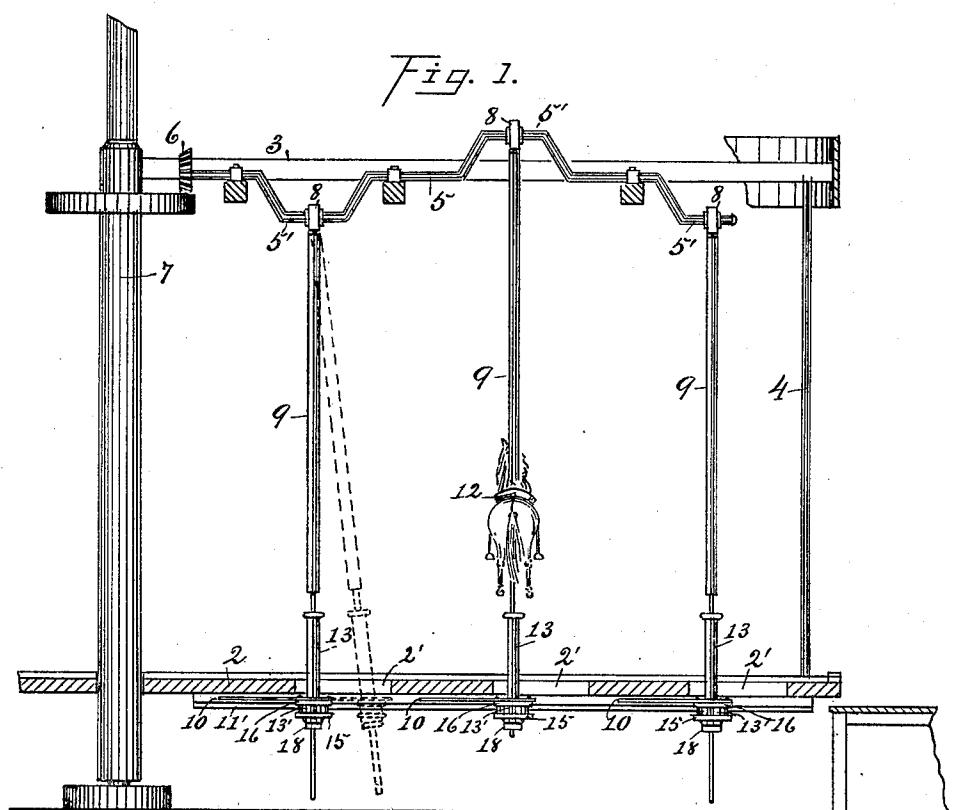
Patented Apr. 8, 1902.

W. JOHNSON.
CAROUSEL.

(Application filed Nov. 21, 1900.)

(No Model.)

2 Sheets—Sheet 1.



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2 Sheets—Sheet 2.

Fig. 4.

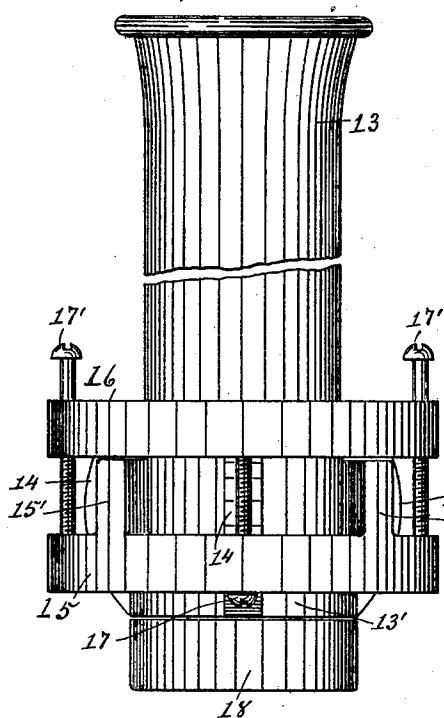


Fig. 5.

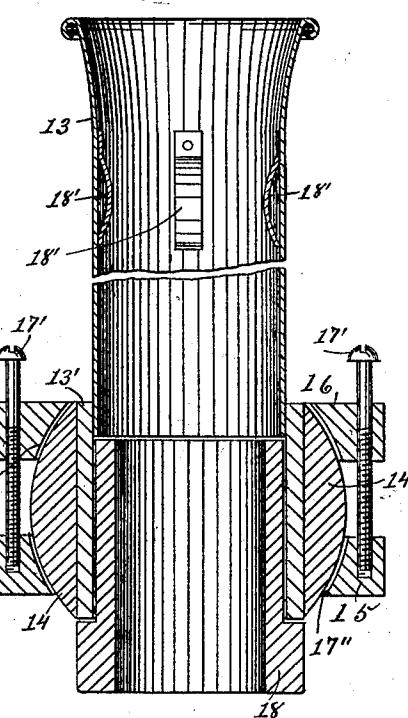
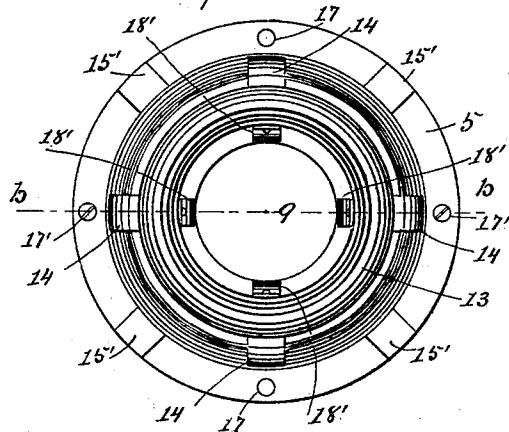


Fig. 6.



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WILLIAM JOHNSON, OF BROOKLYN, NEW YORK.

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SPECIFICATION forming part of Letters Patent No. 697,254, dated April 8, 1902.

Application filed November 21, 1900. Serial No. 37,261. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JOHNSON, a citizen of the United States, and a resident of New York, Brooklyn borough, (Coney Island,) in the county of Kings and State of New York, have invented certain new and useful Improvements in Carousels, which improvements are fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a fragmentary elevation view of a carousel embodying my said improvements. Fig. 2 is an enlarged detail sectional view illustrating the practical application of my said improvements, the section being taken as along the line *a a* of Fig. 3. Fig. 3 is an enlarged fragmentary plan view of the carousel - platform and certain parts carried thereby. Fig. 4 is a view in elevation, still 20 further enlarged, of the novel construction which I employ, the same being represented as detached from the carousel. Fig. 5 is a central vertical section of the assembled parts shown in Fig. 4, the section being taken 25 as along the line *b b* of Fig. 6. Fig. 6 is a plan view of the assembled parts shown in Fig. 4, the upper member of the universal socket which I employ being removed.

Similar reference-numerals denote like 30 parts throughout the several views of the drawings.

This invention relates to improvements in mechanical structures of that class commonly known as "carousels," the same being extensively employed at pleasure-resorts and other places for purposes of amusement.

The object of this invention is to provide means, simple, cheap, and novel as regards construction, whereby in a carousel embodying certain bearing-surfaces requiring lubrication such surfaces shall be at all times shielded in such manner as to prevent contact therewith of the clothing or person of the patrons of such carousel, the said means being efficient in operation, attractive in appearance, and capable of insuring the attainment of certain well-defined advantages over prior analogous appliances.

The invention consists in the employment 50 of certain novelly-formed parts, in the novel disposition and arrangement of the various parts, in certain combinations of the latter,

and in certain details of construction, all of which will be specifically referred to herein-after and set forth in the appended claims. 55

Having reference to the accompanying drawings, 2 denotes the carousel-platform having radial slot-like openings, as 2'; 3, a radial mast-arm; 4, an upright rigidly connecting said mast-arm and said platform; 5, 60 a suitably-mounted crank-shaft provided with a crank, as 5', and capable of receiving power and motion, as through the medium of a bevel-gear 6, arranged to mesh with a suitable bevel-gear carried by a revoluble mast, 65 as 7; 8, a crank-head; 9, a carrier-rod having a universal connection with the crank-head 8 and depending therefrom; 10, a slide arranged at said opening 2' in close proximity to the under side of said platform and capable of radial movement with respect to the mast 7, as in guides 11 11', the said slide being provided with a suitable opening loosely through which projects the lower portion of said carrier-rod, and the latter being provided with a patron-rest, as 12, commonly of arbitrary form, as that of an animal. 75

The parts thus far referred to are old and well known in the art, and in operation the slide 10 has a radial movement with respect to the 80 mast 7 under the centrifugal force which accompanies the revoluble movement of the mast 7 with its coöperating parts, and the lower portion of the carrier-rod 9 not only moves in unison with said slide, but also has 85 a longitudinal movement independent of said slide.

In practice, and as the parts have been heretofore assembled for operation, it has been found necessary to keep the lower portion of 90 the carrier-rod 9 well lubricated, and no provision having been heretofore made looking to the shielding of this lubricated portion of the carrier-rod 9 the clothing or person of patrons of the carousel could be readily soiled 95 or materially damaged by coming in contact therewith.

With a view to overcoming the objectionable defect above named in prior analogous structures I make use of a shield, as 13, having a universal connection with the slide 10 and adapted to receive and protect the lower lubricated portion of the carrier-rod 9 against contact therewith of the clothing or person 100

of patrons who may venture or move about upon the platform 2. The shield 13 is here shown as in the form of a tube, and to the end that the same may have a universal connection with the slide 10 I have shown said shield as being provided with an extension 13', carrying a plurality of suitably-spaced lateral projections or webs 14, each having a circular outer bearing edge, substantially as shown in the drawings. I further make use of a two-part socket, the same comprising a primary member 15, having a plurality of suitably-spaced adjusting-lugs 15' and a secondary member 16, the members 15 and 16 being held in their relative positions for service by means of any suitable fasteners, as the screws 17 17', and each having a continuous bearing-surface, as 17" 17'', for engagement of the circular bearing edges of the projections or webs 14.

The extension 13' is of suitable internal diameter to admit of the shield 10 being forced to a firm engagement therewith, or these parts may be fastened together for service in any other well-known manner, and any undue play between the socket members 15 16, resulting from wear or otherwise, may be eliminated by filing or grinding off or otherwise shortening the adjusting-lugs 15' and accordingly readjusting the socket members 15 16 one with respect to the other. The fasteners 17' are also availed of for securing the said socket as a whole to the under side of the slide 10, as shown in Fig. 2 of the drawings.

18 represents a removable bushing, preferably of wood. It serves to receive the thrusts of the carrier-rod 9 after the manner of a bearing, and when rendered unfit for service through wear or otherwise the same may be removed and replaced by a serviceable one.

In connection with the shield 13, and particularly where a bushing, as 18, of wood or other material analogous as to resisting quality, is used, I prefer to further employ a plurality of interior guides, as 18', suitably spaced circumferentially of the shield and capable of maintaining the alinement of the carrier-rod 9 with respect to the bushing 18 and ordinarily capable of yieldingly maintaining said carrier-rod in alinement with the bushing 18, the said guides being formed from elastic material by preference.

It will be observed that by reason of the universal connection of the carrier-rod 9 with the slide 10, as through the medium of the intermediate parts herein described, the lower portion of said rod may be swung outward or radially away from the mast 7; further, that a rocking reciprocating motion may be imparted to said rod at all times and as through the action of the crank 5', and this irrespective of the degree of radial movement which the lower portion of said rod may undergo in practical operation. It will be further understood that the shaft 5 may be provided with a plurality of cranks, as 5', or equivalents therefor, and that a plurality of car-

rier-rods, as 9, slides, as 10, and shields, as 13, may be employed, one of said shields being arranged for service with each of said rods and each of said shields having a universal connection with its coöperating slide, as through the medium of intermediate parts, substantially as herein specified.

The operation of my said improved construction will be apparent from the foregoing description thereof, and it will be further seen that the same may be modified to some extent without material departure from the principle and spirit of my invention.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a carousel, in combination, a revolute platform having a radial opening; a shield-supporting slide carried by and movable radially along the platform at the opening therein, the said shield projecting upwardly from said slide and being capable of movement universally in radial planes with respect thereto; a rotatable part situated above the platform; a carrier-rod depending from said part, the said part being adapted when rotated to impart a rocking reciprocating movement to said rod and said rod having a telescopic engagement with said shield; and means for rotating said part, substantially as herein specified.

2. In a carousel, in combination, a revolute platform having a radial opening; a slide carried by and movable radially along the platform at the opening therein; a tubular shield mounted on said slide and movable universally in radial planes with respect thereto, the said shield being provided with a bushing at one end; a carrier-rod extending longitudinally through said shield and telescopically engaging said bushing; and means for imparting a rocking reciprocating movement to said carrier-rod.

3. In a carousel, in combination, a revolute platform having a radial opening; a slide carried by and movable radially along the platform at the opening therein; a tubular shield mounted on said slide and movable universally in radial planes with respect thereto; a carrier-rod extending telescopically through said shield; and means for imparting a rocking reciprocating movement to said carrier-rod.

4. In a carousel, in combination, a revolute platform having a radial opening; a slide carried by and movable radially along the platform at the opening therein; a tubular shield having an extension provided with a plurality of bearing parts; a socket comprising a primary member and a secondary member, and each of said members having a suitable bearing-surface for engagement by said bearing parts; means for adjustably securing said socket members in position for service and in a manner that said shield may be moved in variable planes with respect thereto, the said socket as a whole being firmly mounted on

said slide; a carrier-rod extending telescopically through said shield; and means for imparting a rocking reciprocating movement to said carrier-rod.

5 5. In a carousel, in combination, a revolute platform having a radial opening; a slide carried by and movable radially along the platform at the opening therein; a socket firmly mounted on said slide; a tubular shield 10 engaging said socket and capable of movement in variable planes with respect thereto; a carrier-rod extending telescopically through said shield; and means for imparting a rocking reciprocating movement universally to 15 said carrier-rod.

6. In a carousel, in combination, a revolute platform having a radial opening; a slide carried by and movable radially along the platform at the opening therein; a socket firmly mounted on said slide, the said socket 20 comprising a primary member and a secondary member, each having a suitable bearing-surface and the former having adjusting-lugs; a tubular shield having bearing parts adapted to engage the bearing-surfaces of said socket members, in service; means for securing said socket members in position for service at the bearing parts of said shield, and in 25 a manner that the latter may be moved in variable planes with respect to said socket; a carrier-rod extending telescopically through 30 said shield; and means for imparting a rocking reciprocating movement to said carrier-rod.

35 7. An apparatus of the class herein described comprising a revolute platform having a suitable opening; a slide carried by said platform at the opening therein; a tubular shield having a bushing let into one end there- of; elastic guides located within said shield 40 away from said bushing; a carrier-rod extending longitudinally through said shield, and movably engaging said guides and said bushing; and a socket whereby said shield may be secured in position for service, the 45 said shield having a universal connection with said socket, substantially as herein set forth.

8. In a carousel, in combination, a revolute platform having a radial opening; a slide carried by and movable radially along the 50 platform at the opening therein; a tubular shield mounted on said slide and movable in variable planes with respect thereto, the said shield being provided interiorly with a guide or guides suitably removed from the confined 55 end thereof; a carrier-rod extending telescopically through said shield and having a sliding engagement with said guide or guides; and means for imparting a rocking reciprocating movement to said carrier-rod, substantially as herein specified.

9. In a carousel, in combination, a revolute platform having a radial opening; a slide carried by and movable radially along the platform at the opening therein; a tubular 65 shield loosely connected at its lower end to said slide, projecting upwardly therefrom, and movable universally in radial planes with respect thereto; a carrier-rod telescopically 70 engaging said shield; and means for imparting movement to said carrier-rod, all substantially as herein described and for the purposes set forth.

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Witnesses:

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