July 7, 1925. 1,545,368

C. S. TINGLEY ET AL

AMUSEMENT DEVICE

Filed Nov. 16, 1922

Fig. 1

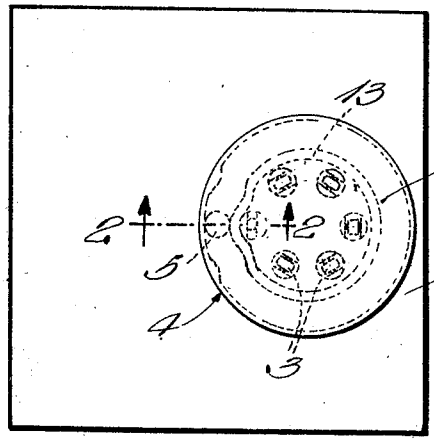
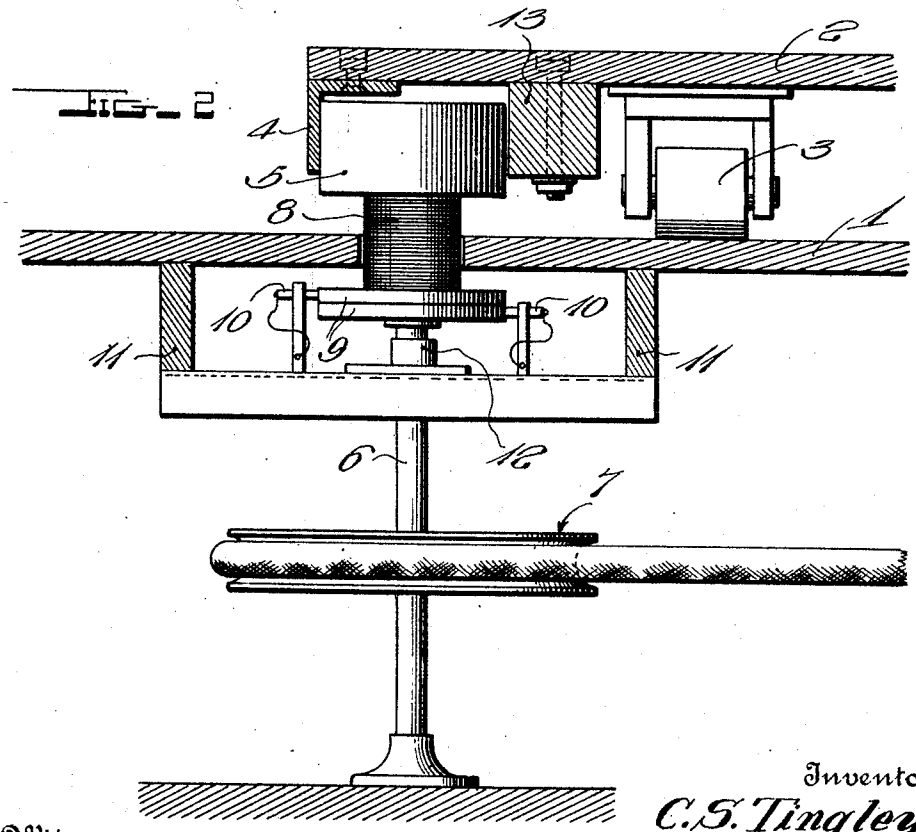


Fig. 2



Witness

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UNITED STATES PATENT OFFICE.

CLOE STANSBURY TINGLEY AND LEE NEWMAN BAKER, OF SAND SPRINGS, OKLAHOMA.

AMUSEMENT DEVICE.

Application filed November 16, 1922. Serial No. 601,348.

To all whom it may concern:

Be it known that we, CLOE STANSBURY TINGLEY and LEE NEWMAN BAKER, citizens of the United States, residing at Sand Springs, in the county of Tulsa and State of Oklahoma, have invented certain new and useful Improvements in Amusement Devices; 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.

Our invention relates to improvements in amusement devices and more particularly to driving mechanism for passenger carriages which are free to roll in numerous directions upon a supporting platform, the object being to provide a novel driving mechanism for the carriage, of such nature that it not only rotates said carriage, but permits it to freely swing to a great number of different positions around the driving wheel which is relatively stationary and engages a track ring mounted fixedly upon said carriage.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, the description being supplemented by the accompanying drawings.

Figure 1 is a plan view of an amusement device embodying the invention.

Figure 2 is a vertical sectional view as indicated by line 2—2 of Fig. 1.

In the form of construction shown in Figs. 1 and 2, the numeral 1 designates a suitable supporting platform upon which a passenger carriage 2 is free to move, said carriage being provided with appropriate supporting rollers or casters 3 resting upon the platform 1. The lower side of the carriage 2 is provided with an outer metallic ring 4 which is in frictional contact with a driving and pivot wheel 5, the latter being positioned at the upper side of the platform 1, and being stationary with respect to the carriage. In the construction here shown, the wheel 5 is mounted on the upper end of a drive shaft 6 which may be rotated by any preferred means, such as an electric motor or the belt and pulley indicated by the numeral 7.

To retain the wheel 5 in contact with the ring 4, we prefer to provide magnetic means. As here shown, this means includes an electro-magnet 8 carrying the driving and pivot wheel 5 on one end of its core. To supply electric current to the magnet 8, we preferably employ a pair of collecting rings 9 in electrical contact with the terminals of the magnet coil through any suitable connections. These collecting rings coact with a pair of brushes 10 suitably mounted in any desired manner, for instance upon a hanger frame 11 which is positioned beneath the platform 1 and may well carry the uppermost bearing 12 for the shaft 6.

In connection with the features of construction above described, we prefer to employ a non-magnetic guard ring 13 secured to the lower side of the carriage 2, in concentric relation with the ring 4. The arrangement is such however that normally the ring 13 does not contact with the driving and pivot wheel 5, but when the current is cut off from the magnet 8, the two rings 4 and 13 will hold the carriage 2 in proper relation with the wheel 5.

The aforesaid rings 4 and 13 may be truly circular, of the undulated form shown in dotted lines in Fig. 1, or of any other desired shape. By providing sets of rings of different shapes, it will be seen that the carriage may be made to move in numerous ways. Regardless of the shaping of these rings however, it will be understood that the carriage is practically free to float about on the platform to a great number of positions around the driving wheel, said carriage being at the same time rotated by said wheel.

As excellent results may be obtained from the details disclosed, they may be followed if desired, but it is to be understood that within the scope of the invention as claimed, numerous minor changes may be made.

What is claimed is:

1. An amusement device of the class described comprising a lower supporting platform, a roller-supported carriage disposed in close spaced parallelism above said platform with its supporting rollers resting upon the upper surface of the platform and supporting the carriage for movement upon the platform, a pair of inner and outer concentric rings fixedly mounted on the under side of said carriage, and a rotatable driving and pivot wheel disposed between the platform and said carriage and located between said concentric rings and engaging one of said rings to cause the carriage to rotate and

swing about said wheel when the wheel is rotating, the other ring serving to retain the wheel and first ring in position for operative engagement with each other.

2. In an amusement device, a supporting platform, a roller supported carriage resting upon the platform and freely movable over the same, an annular depending ring carried by said carriage, and drive means for said carriage including a rotary shaft extending vertically through the platform and having a head positioned for peripheral engagement with a side face of said ring whereby upon rotation of the drive shaft and head thereof the carriage through engagement of the ring with the drive shaft head will be caused to rotate upon the platform and swing bodily about the driving head.

3. An amusement device of the class described comprising a supporting platform, a roller-supported carriage resting upon the platform and movable thereon, a metallic ring fixedly mounted on said carriage in depending annular relation thereto, a rotary driving and pivot wheel stationarily mounted at the upper side of said platform and having its periphery in engagement with said ring to cause the carriage to rotate upon the platform and swing bodily about the wheel, and magnetic means for holding said ring in contact with said wheel.

4. The combination with a supporting platform and a roller-supported carriage thereon; of a metallic ring fixedly mounted on said carriage adjacent said platform, a relatively stationary driving and pivot member having a metallic rotary head engaging said ring, an electro-magnet for energizing said head, and current supply means for said electro-magnet including a collecting ring and a brush, the one being rotatable with said driving and pivot member while the other is stationary.

5. A structure as specified in claim 3; together with an additional ring concentric with the other, the driving and pivot wheel being located between the two rings.

6. The combination with a supporting platform and a roller-supported carriage thereon; of an irregularly shaped ring fixedly carried by said carriage, and a relatively stationary driving and pivot wheel disposed above said platform and engaging said ring.

In testimony whereof we have hereunto affixed our signatures.

CLOE STANSBURY TINGLEY.
LEE NEWMAN BAKER.