June 1, 1937. C. HERMANN 2,082,287

AMUSEMENT DEVICE

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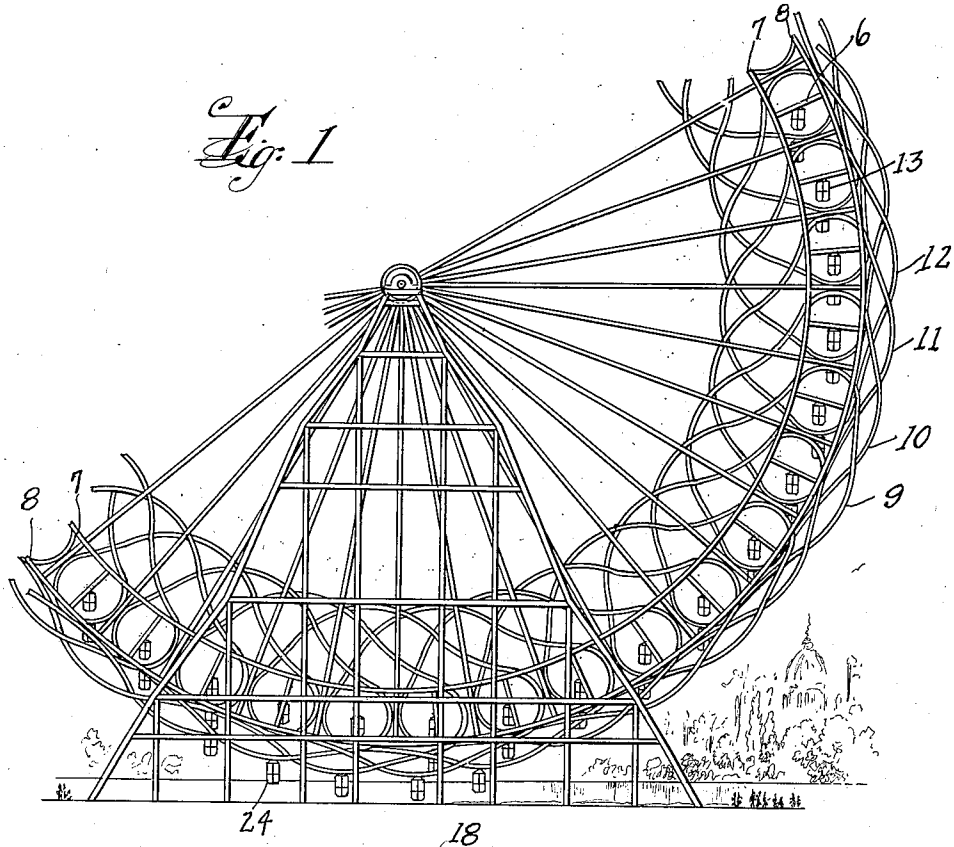
Fig. 1



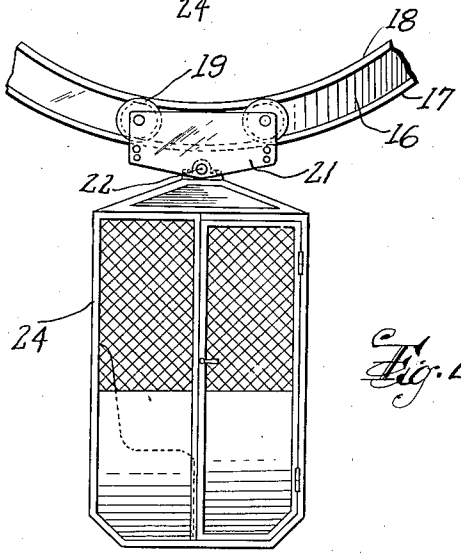


Fig. 2

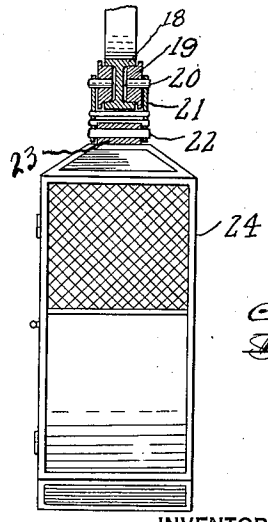


Fig. 3

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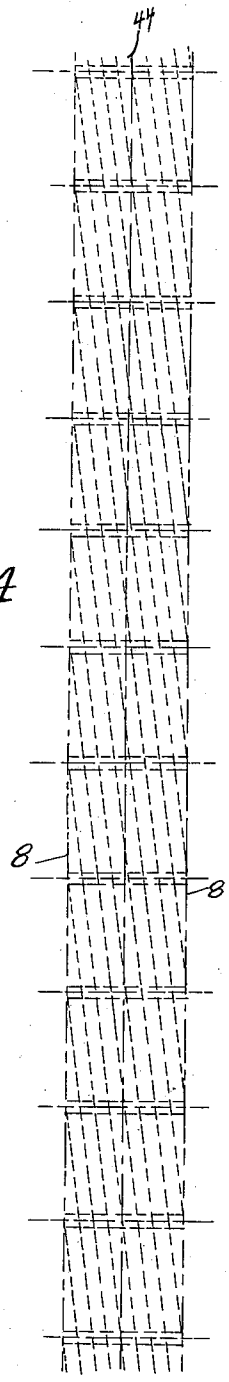

Fig. 4

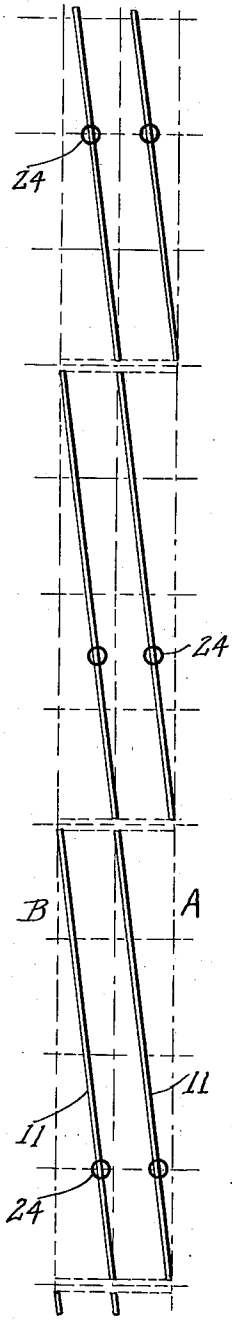

Fig. 5

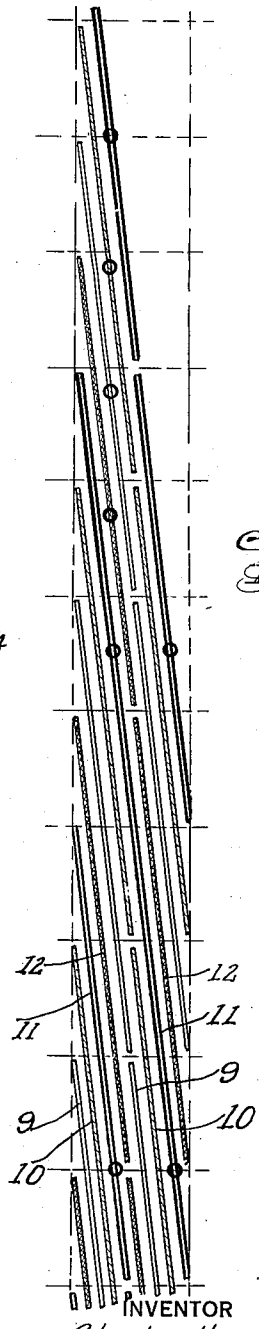

Fig. 6

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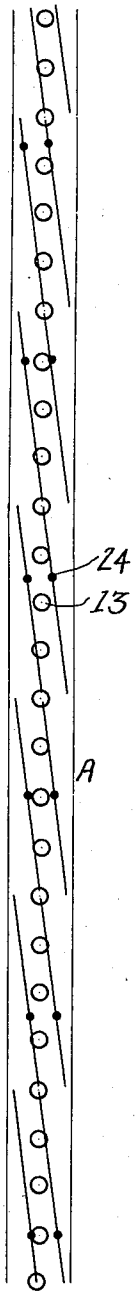
Fig. 7



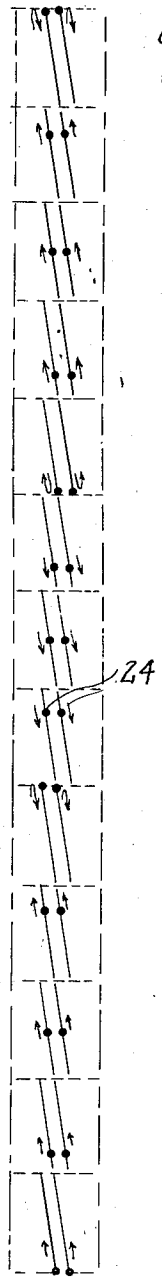


Fig. 8

Fig. 9

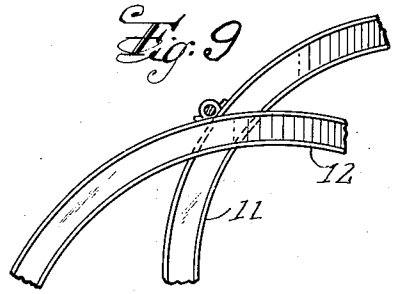
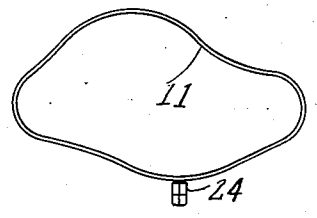


Fig. 10



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Patented June 1, 1937

2,082,287

UNITED STATES PATENT OFFICE

2,082,287

AMUSEMENT DEVICE

Charles Hermann, New York, N. Y.

Application June 13, 1936, Serial No. 84,992

2 Claims. (Cl. 272—49)

This invention relates to amusement devices, and more particularly to improvements in a combined Ferris wheel and scenic railway.

In U. S. Patent No. 1,354,436, granted to me on September 28, 1920, there is described a Ferris wheel provided with a plurality of loops or continuous tracks about the periphery thereof, so that cars movable on the tracks will have a scenic railway or roller coaster movement as the Ferris wheel rotates. However, the arrangement shown in the patent is objectionable in that the number of cars is limited; and considerable framework is necessary to support the tracks.

It is, therefore, an object of this invention to provide a combined Ferris wheel and scenic railway comprising a plurality rows of continuous tracks, so arranged that cars on adjacent tracks can pass each other without interference.

A further object is the provision of a Ferris wheel having a plurality of continuous tracks mounted about the periphery thereof and arranged so that said tracks can be rigidly joined together and to the wheel, obviating the necessity of extensive bracing and framework as heretofore has been the case.

These and other objects are attained by the novel construction, combination and arrangement of parts hereinafter described and shown in the accompanying drawings, constituting a material part of this disclosure, and in which:

Fig. 1 is a side elevational view of a section of a Ferris wheel embodying my invention.

Fig. 2 is a side elevational view of a car and a portion of a track used in the apparatus.

Fig. 3 is a front elevational view, partly in section of the structure shown in Fig. 2.

Figs. 4 to 8 are diagrams showing the arrangement of the continuous tracks on the Ferris wheel, and the movement of cars on the tracks.

Fig. 9 is a side view of portions of adjacent tracks showing the manner in which they are joined together, the space between adjacent tracks being sufficient to enable the passage of cars without interference.

Fig. 10 is a side elevational view of one of the continuous tracks.

Referring to the drawings, in Fig. 1, the Ferris wheel two spaced pairs of inner rings 7 and outer rings 8, the rings 7 and 8 being braced by struts 6, and pivotally mounted on cross bars between said rings are cars 13, of the usual Ferris wheel type.

Mounted on the rings 7 and 8, in staggered relation are pairs of continuous tracks 9, 10, 11, 12, each track or loop having a length sufficient to embrace four of the cars 13 to form a unit.

On each of the continuous tracks there is suspended a car 24, see Fig. 2. Each track is formed from an I-beam having a web 16, with a lower flange 17 and an upper flange 18. Positioned between said flanges are rollers 19, mounted on pins 20, supported by a hanger 21, which is pivotally connected by a pin 22 to a block 23, fixed to the top of the car 24. As will be seen from Fig. 10, the cars 24, are suspended and move on the outside of the tracks.

At any point on the wheel, between rings 8 or rings 7 there are eight tracks, that is four pairs of tracks. See Figs. 4, 5, 6. The tracks are arranged at an angle to the center line 44, and adjacent tracks are staggered as indicated in Fig. 6.

Referring to Fig. 6, it will be noted that tracks 11, shown in the solid black line, are directly opposite each other and bear the same relation to the other tracks; similarly, pairs 9, 10 and 12, are directly opposite each other. In Fig. 5 is shown the movement of a car on tracks 11 as the Ferris wheel. Starting from the bottom of the figure, it will be seen that as the wheel rotates, the car 24 gradually moves from side A of the wheel to side B, during one-half revolution. During the other one-half revolution, the car 24 moves from side A to side B, see Fig. 8. Consequently, as the Ferris wheel rotates, the cars 24, not only have the roller coaster or scenic railway effect on the continuous tracks, but there is a continual movement of the cars from one side of the wheel to the other. Also, during these movements, cars on tracks 11 continue opposite each other, and from time to time pass cars on tracks 9, 10 and 12, and also pass the suspended cars 13. It should be noted, however, that by the staggered arrangement of the tracks, cars on adjacent tracks do come abreast of each other at any time.

From the above description, it will be seen that there has been provided a novel and attractive amusement device, which combines the features of a Ferris wheel and a scenic railway. The continuous tracks can be mounted relatively very close to each other, as the cars are suspended thereon, and cars on adjacent tracks do not interfere with each other. All of the framework and tracks are confined to the periphery of the wheel, thus obviating the necessity of the usual braces radiating from the center of the wheel, and enabling the construction of the apparatus at a considerable saving over similar apparatus.

The outer rings 7 and 8 are connected to the hub of the wheel by cables or the like.

Obviously, with a wheel of the same diameter as the wheel shown in Patent No. 1,354,436, I am able to provide a great many more cars. In order to load passengers into the cars, a platform is provided for cars 13, and a lower platform for cars 24.

The foregoing disclosure is to be regarded as descriptive and illustrative only, and not as restrictive or limitative of the invention, of which obviously an embodiment may be constructed including modifications without departing from the general scope herein indicated and denoted in the appended claims.

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

1. In an amusement apparatus of the Ferris wheel type, a wheel structure rotating on a horizontal axis and having a pair of spaced apart parallel rims, a plurality of continuous tracks arranged in staggered relation between said rims, and passenger cars suspended on said tracks, said cars pivotally turning and moving along the tracks as the wheel rotates, the space between said rims being greater than the combined width or two or more cars.

2. In an amusement apparatus of the Ferris wheel type, a wheel structure rotating on a horizontal axis and having a pair of spaced apart parallel rims, a plurality of continuous tracks arranged in staggered relation between said rims, said tracks being inclined to the planes of said rims and extending from one rim to the other, and passenger cars suspended on said tracks, said cars pivotally turning and moving along the tracks as the wheel rotates, the space between said rims being greater than the combined width of two or more cars.

CHARLES HERMANN.