E. KOHLER.

AMUSEMENT DEVICE (SKATING CAR).

APPLICATION FILED AUG. 28, 1919.

1,328,166.

Patented Jan. 13, 1920.

2 SHEETS—SHEET 1.

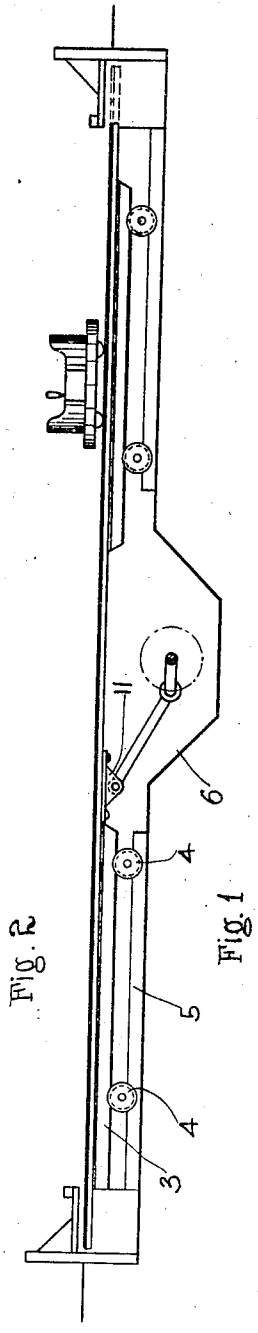

Fig. 2

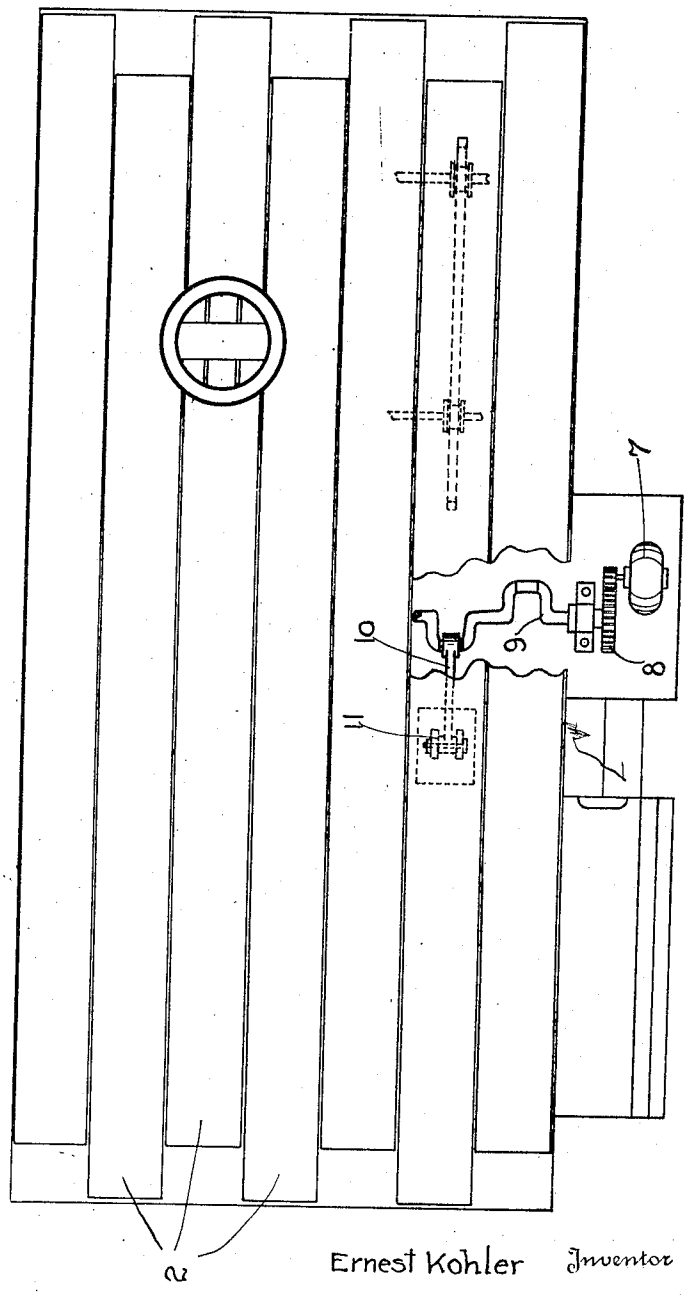

Fig. 1

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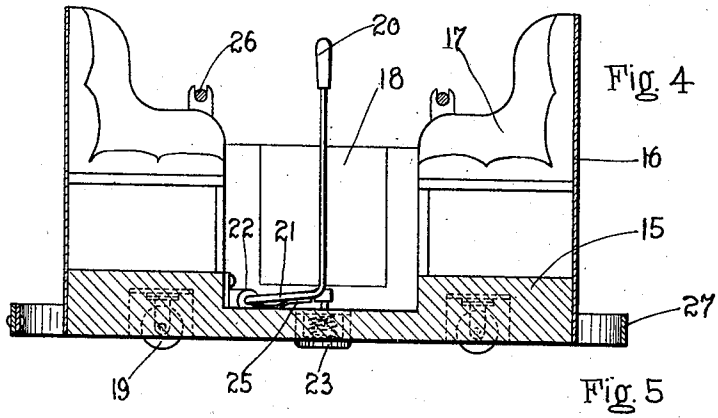


Fig. 4

Fig. 5

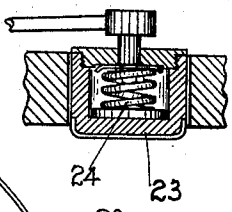
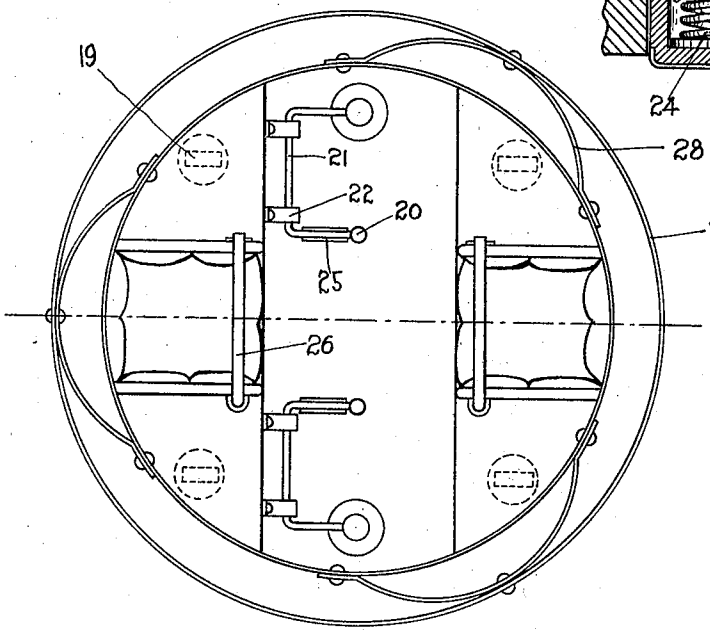


Fig. 3



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UNITED STATES PATENT OFFICE.

ERNEST KOHLER, OF DENVER, COLORADO, ASSIGNOR TO THE UNITED MINES AND MANUFACTURING COMPANY, A CORPORATION OF ARIZONA.

AMUSEMENT DEVICE, (SKATING-CAR.)

1,328,166. Specification of Letters Patent. Patented Jan. 13, 1920.

Application filed August 28, 1919. Serial No. 320,394.

To all whom it may concern:

Be it known that I, ERNEST KOHLER, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented certain new and useful Improvements in Amusement Devices, (Skating-Cars;) and I do hereby 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 amusement apparatus and more particularly to a type of apparatus in which a suitable number of totally independent passenger carrying cars or carriages are constructed and designed to be freely movable over a supporting surface comprising relatively movable areas.

It is one of the objects of the present invention to provide an amusement apparatus which, while providing for a very effectual source of innocent amusement, also is of a simple, substantial, inexpensive and safe form of construction. A further object of the present invention is to provide an amusement apparatus comprising a supporting structure having a roadway or surface over which passenger carrying devices or carriages are free to move universally over the surface and to provide a mobile surface which will serve to drive, impel or shift the carriage or carriages erratically over its exposed area to the pleasure of the occupants of the carriages and of the onlookers. Another object of the present invention is to provide an apparatus involving a supporting plane divided into a series of areas which are relatively movable to each other in diverse manners and to provide a carriage of such construction that it will be constrained to describe an indetermined path over the area or surface due to the complex impulses given by the relatively movable areas of the surface on which the carriage rests and by which it is moved and a further object of the invention is to provide means for manually controlling, to a certain degree, the motions of the carriage over the surface.

With the above and other objects in view as will be rendered manifest to those versed in the art, the invention consists of the construction, the combination, and in details and arrangements of the parts as more particularly described hereinafter relative to the embodiment of the invention shown in the accompanying drawings, in which:

Figure 1 is a plan view of the improved apparatus partly broken away.

Fig. 2 is a side elevation of the apparatus.

Fig. 3 is a plan view of one of the carriages.

Fig. 4 is a vertical central section of a carriage; and,

Fig. 5 is a detail sectional view of one of the brakes.

In the illustrated embodiment of my invention I have shown the platform or floor of suitable dimensions, the platform being sub-divided into a series of independent sections 2, mounted upon suitable respective supports as trucks 3, having wheels 4, running on track 5, appropriately mounted in the foundations 6. In the present case the floor or platform sections 2 are shown as comprising longitudinal parallel strips of suitable length and width but obviously the floor might be arranged of concentric strips or annuli which have independent movement of each other. The sections or strips of the platform may be moved in a designed path by suitable mechanism, in the present case shown as comprising a motor 7, mounted in the pit of the foundation 6, and having suitable reduction gearing 8, for driving a crank shaft 9, cranks of which are arranged at any suitable angle with respect to each other and which obviously may be of any desired length. These cranks are connected by respective links 10, to the relatively shiftable floor sections 2, such connection being indicated at 11, in Figs. 1 and 2, and by such mechanism the sections 2, are shifted longitudinally for predetermined strokes and preferably alternative to each other.

Any suitable passenger conveyance can be utilized and suitably formed, and shown in Figs. 3 and 4, as comprising a substantially circular carriage having a floor 15, from the side of which extends upwardly a body 16, provided with suitably disposed seats 17, in the present case shown as diametrically opposite to each other, access being had to the spaces between the seats through the doorway with a door 18. The floor 15, of the carriage is shown as pro-

vided with suitable swivel casters 19, arranged at desired positions with respect to each other so as to support a carriage with desired stability. Preferably the carriage is provided with means manually operable to control the movement of the carriage both for the purpose of amusement and also for the purpose of controlling the movement of the carriage as it may be shifted from place to place by the movement of the floor sections. Its manual control is shown as comprising a lever 20, up-standing between the seats 17, and having connection to a U-shaped or crank shaft 21, pivoted at 22, on the floor of the carriage; one of the cranks is provided with a shoe 23, operative through the carriage floor 15, and designed to be pressed into frictional engagement with the surface of the platform to check the motion of the carriage. To control the pressure of the shoe 15, a suitable spring can be introduced between the shoe and the lever as at 24. The lever 20 is automatically returned to the position shown in Figs. 3 and 4 by a spring 25, operating on one of the cranks of the crank shaft 21. Preferably each of the carriages is provided with two of these manual controlling devices as it is apparent that when the shoes 23 are pressed into frictional engagement with the surface of the platform this serves as a check against the movement of the carriage, and the latter will tend to swing around that shoe which is applied and therefore the amusement of the passengers of the carriage can be enhanced by enabling them to attempt to independently control the gyrations of the carriage while it is on the moving sections of the platform. If desired the seats of the carriage can be provided with bars or rails 26 by which to steady themselves while the carriage is being projected around over the platform. For the purpose of preventing injury and accident to the bodies of the carriages each is provided with a suitable bumper here shown as comprising a spring ring or band 27, disposed at a suitable distance about the carriage structure and being supported on spring bearings 28. As the bumpers will be arranged on the same plane of the different cars, that may be utilized in the apparatus, it will be seen that as the cars collide with each other they would strike at the bumpers first and these, being yieldable, would cause the reverse movement or reaction of the carriages and also tend to enhance the amusement capacity of the apparatus.

Having thus described my invention, what I claim is:

1. In an amusement apparatus, a supporting floor or platform comprising sections having independent movement with respect to each other in a horizontal plane; and a carriage for passengers constructed and arranged to be moved by relatively movable sections of the platform while resting on the same.

2. In an amusement apparatus, a supporting floor or platform comprising sections having independent movement with respect to each other in a horizontal plane; and a carriage for passengers constructed and arranged to be moved by relatively movable sections of the platform while resting on the same; the carriage having means for relatively controlling its movements.

3. In an amusement apparatus, a platform or floor having a generally plane surface and which is divided into relatively horizontally movable sections independent of each other and movable in respective to and fro motions, and the carriages movable over said platform.

4. In an amusement apparatus, a platform having a generally plane surface and independent sections movable longitudinally alternately with respect to each other and carriages movable over said platform.

5. In an amusement apparatus, a platform having a generally plane surface and independent sections movable horizontally to and fro; and passenger carrying carriages mounted for free movement over the platform.

6. An amusement apparatus comprising a platform having a generally plane surface and constructed of a plurality of parallel and independently movable sections, and passenger carrying means freely movable over said platform.

7. An amusement apparatus comprising a platform having a generally plane surface and constructed of a plurality of parallel and independently movable sections, and means for shifting said sections to and fro independently of each other.

8. An amusement apparatus comprising a platform having a generally plane surface and constructed of a plurality of parallel and independently movable sections, and in motions opposite to each other in alternative sections.

9. In an amusement apparatus, a mobile platform or supporting surface, and a carriage or passenger carrying car mounted to move to and fro over the mobile platform responsive to motion of the platform surface, the car having means connected with the platform manually operable for controlling means or partially controlling movement of the car.

10. In an amusement apparatus, a mobile platform or supporting surface, and a carriage or passenger carrying car mounted to move to and fro over the mobile platform responsive to motion of the platform surface, the car having plural means manually operable for controlling or partially controlling movement of the car, said means

operable by passengers independently for controlling or partially controlling its movement.

11. In an amusement apparatus, a mobile platform or supporting surface, and a carriage or passenger carrying car mounted to move to and fro over the mobile platform responsive to motion of the platform surface, the car having independent devices operable by each passenger, for controlling or partially controlling its movement.

In testimony whereof I affix my signature.

ERNEST KOHLER.