

No. 884,045.

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H. N. RIDGWAY.
AMUSEMENT APPARATUS.
APPLICATION FILED JULY 29, 1907.

Fig. 1.

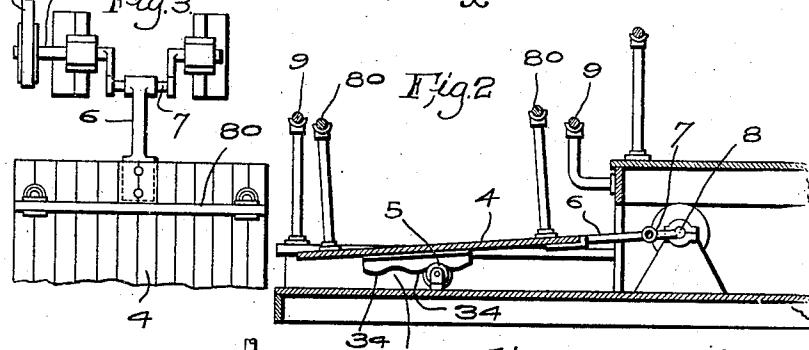
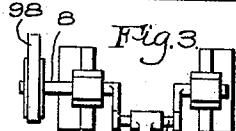
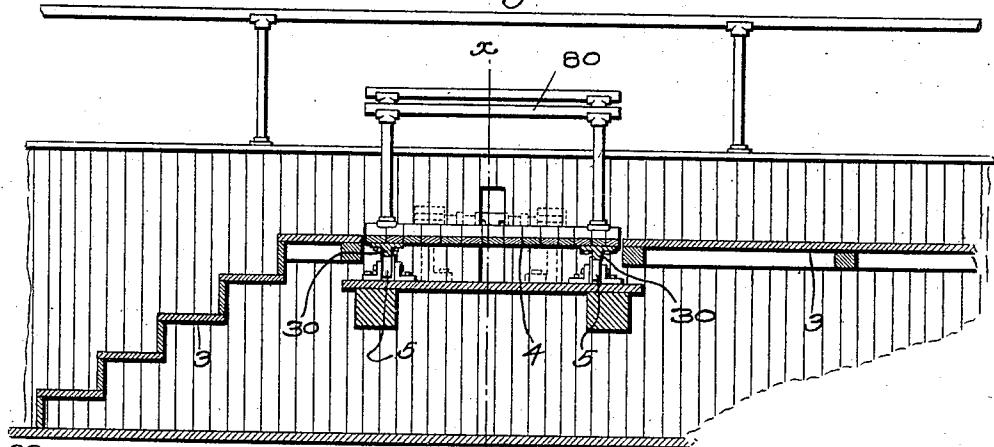


Fig. 4.

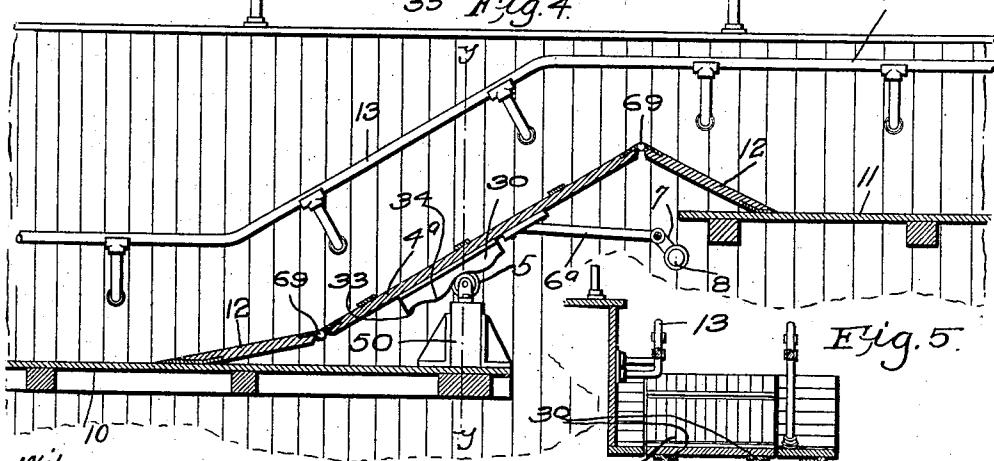
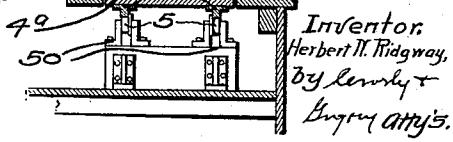


Fig. 5.



Witnesses.

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UNITED STATES PATENT OFFICE.

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AMUSEMENT APPARATUS.

No. 884,045.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HERBERT N. RIDGWAY, a citizen of the United States, residing at Boston, county of Suffolk, and State of 5 Massachusetts, have invented an Improvement in Amusement Apparatus, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like 10 parts.

This invention relates to an amusement apparatus and is especially designed for affording amusement both to the persons who participate in the use of it and to spectators.

15 The device of this application has been especially designed to be used in connection with a runway or passage leading from one location to another, so that in passing from one point to another over the runway a person is compelled to pass through the apparatus; and the amusement is provided by the attempts of persons to safely traverse 20 the apparatus without losing their balance.

The device herein shown comprises a 25 movable platform which is connected to a vibrating mechanism in such a way that said platform has a peculiar vibrating motion, and in the preferred embodiment of my invention, this platform is situated so 30 that persons are compelled to pass over the same in traversing the length of the runway.

I will first describe some embodiments of my invention, and then point out the novel features thereof in the appended claims.

35 Figure 1 is a vertical section through a runway embodying one form of my invention; Fig. 2 is a section on the line $x-x$, Fig. 1; Fig. 3 is a plan view of the vibrating mechanism; Fig. 4 is a longitudinal section 40 through a runway having a different form of my invention; Fig. 5 is a section on the line $y-y$, Fig. 4.

Referring to Fig. 1, 3 designates a runway or passage which leads from one point to 45 another, and as shown in said figure, the runway includes a flight of steps and a level platform. The shape of the runway, however, forms no part of the present invention.

Situated in the runway is a floor section 4 50 which has a shaking or vibrating motion which in this embodiment is secured by supporting the platform on a fulcrum member and giving to said platform both a rocking movement on said fulcrum member and a vibrating movement thereacross.

One convenient form of fulcrum member

comprises two or more axially-aligned rolls, and in Figs. 1 and 2, such rolls are designated by 5. I prefer to so place the fulcrum member that the axis about which the platform rocks is situated somewhere near its center. The combined rocking and vibrating movement of the platform can conveniently be secured by connecting one end of said platform or an arm rigid therewith to a crank 60 shaft or a crank disk and as shown in Figs. 1-3, the platform has rigid therewith an arm 6 which is connected to the crank portion 7 of a driving shaft 8, which shaft is driven by any suitable mechanism such as 65 a belt 98. The rolls 5 and the crank shaft 8 are so placed that the axis about which the platform rocks extends in the direction of travel, that is, the direction in which persons move in passing over the platform, and the 70 said platform is vibrated transversely to the direction of travel. This peculiar motion of the platform makes it very difficult for a person to maintain his balance while standing 75 or walking thereon.

In the embodiments shown in Figs. 1, 2 and 3, the movable platform 4 is provided with hand rails 80 which a person will naturally grasp in an attempt to steady himself as he is walking across the platform, but as said 80 hand rails are situated considerably above the platform, they will have a greater amplitude of motion than the platform and will not in reality be of any assistance to a person in his attempt to keep his balance. If desired, stationary hand rails 9 may be provided although this is not essential.

In Figs. 4 and 5 I have shown a runway in which the movable platform is arranged to be moved longitudinally of the runway 95 rather than transversely thereof, and to rock about an axis extending transversely of the runway. In this embodiment 4^a is the movable platform and it is mounted on two axially-aligned rolls 5 that are supported in 100 fixed bearings 50. In said Fig. 4, 10 and 11 designate the fixed non-movable portions of the runway and they are placed at different levels so that the movable platform 4^a has an inclination. Said platform has rigidly 105 secured thereto an arm 6^a which is secured to the crank portion 7 of a driving shaft 8. With this arrangement the movable platform 4 will have a movement longitudinally of the runway and also a rocking movement on the 110 rolls 5 about an axis that extends transversely of the runway, as will be obvious.

Where the movable platform has a vibratory movement longitudinally of the runway and also a rocking movement about an axis, as shown in Fig. 4, there will exist at times 5 open spaces between the ends of the platform and the stationary parts 10 and 11 of the runway into which open spaces a person might step and thus be injured. To prevent any such danger, I propose to hinge to the 10 ends of the runway protecting treads 12 which rest on the fixed floor portions 10 and 11 of the runway. These pivoted protecting tread portions 12 completely fill the gap between the ends of the platform 4 and the 15 fixed floor portions 10 and 11 and prevent any injury to persons using the apparatus. They also add much to the amusement given by the apparatus because the motion of the tread sections 12 will be different from that 20 of the platform 4^a and considerable agility and skill will be required to successfully traverse the runway from one fixed portion to the other.

The pivoted tread portions 12 are preferably hinged to the ends of the movable platform 4^a in such a way that there will be no danger of a person becoming caught in the hinge. As shown in Fig. 4, each section 12 is united to the platform 4^a by a hinge 69 so 25 arranged that the axis thereof is substantially in the plane of the upper surface of the platform 4^a, said platform 4^a and tread section 12 being rabbeted or recessed to receive the leaves of the hinge so that the hinge will set 30 flush with the upper surface of said platform and tread section.

I prefer to place tracks 30 on the bottom of the rocking platforms which tracks rest on and move over the rolls 5, and if desired said 40 rolls may be flanged, as shown, so as to prevent any movement of the platform in the direction of the axis about which it rocks. If the tracks are provided with an irregular bearing surface or one which is formed with 45 recesses 33 and projections 34, as seen in Fig. 4, the moving platform will have an up-and-down movement as well as the rocking and vibrating movement and the successful traversing of the platform will be made very 50 much more difficult.

The principal difference between the embodiment shown in Figs. 1 and 2 and that shown in Fig. 4 is that in Figs. 1 and 2 the movable platform vibrates transversely of 55 the runway and rocks about an axis extending longitudinally of the runway, while in Fig. 4 the movable section vibrates longitudinally of the runway and rocks about an axis extending transversely to the runway.

60 If desired suitable hand rails 13 may be provided to assist a person in successfully making the journey across the apparatus.

It is not essential to my invention that the apparatus be used as the part of a runway or 65 passage. I have not attempted to show

herein all embodiments of the invention, but have selected the two preferred embodiments for the purpose of illustrating the invention.

Having described my invention, what I 70 claim as new and desire to secure by Letters Patent is:—

1. In an amusement apparatus, a runway having fixed floor portions and a movable platform or floor section, in combination 75 with a fulcrum on which said movable platform rests, and means to rock said platform about the fulcrum and to slide said platform on the fulcrum in one direction when one end of the platform is in elevated position 80 and in the other direction when said end of the platform is in lowered position.

2. In an amusement apparatus, the combination with a runway having fixed floor portions and a movable floor section intermediate of the fixed floor portions, of a fulcrum member on which the movable floor section 85 freely rests, an arm rigid with said movable floor section, a crank shaft directly connected with said arm, and means to rotate the crank shaft.

3. In an amusement apparatus, the combination with a runway having fixed floor sections and a movable platform or floor section intermediate of the fixed floor sections, of two axially aligned rolls mounted in 95 fixed bearings on which said movable platform rests and fulcrums, an arm rigid with said movable platform, and a driven crank shaft connected to said arm.

4. In an amusement apparatus, the combination with a movable platform or floor section, of a fulcrum having a fixed position on which said platform rests for rocking and sliding movement, an arm rigid with the platform and extending in the general direction thereof, a crank shaft directly connected to said arm, and means to rotate the crank shaft whereby the platform is given both a rocking and a sliding movement on the fulcrum, the sliding movement in one direction occurring when one edge of the platform is in elevated position and the sliding movement in the other direction occurring when said edge of the platform is in lowered position. 110

5. An amusement apparatus comprising a movable floor section or platform having tracks on its under side provided with recesses and projections, axially-aligned rolls on which said tracks rest, and means to rock 120 said platform about said rolls and to vibrate the platform in a direction at right angles to the axis of the rolls.

In testimony whereof, I have signed my name to this specification, in the presence of 125 two subscribing witnesses.

HERBERT N. RIDGWAY.

Witnesses:

LOUIS C. SMITH,
CHAS. L. RIDGWAY.