W. E. MILLER.

AMUSEMENT APPARATUS.

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1,013,203.

Patented Jan. 2, 1912.

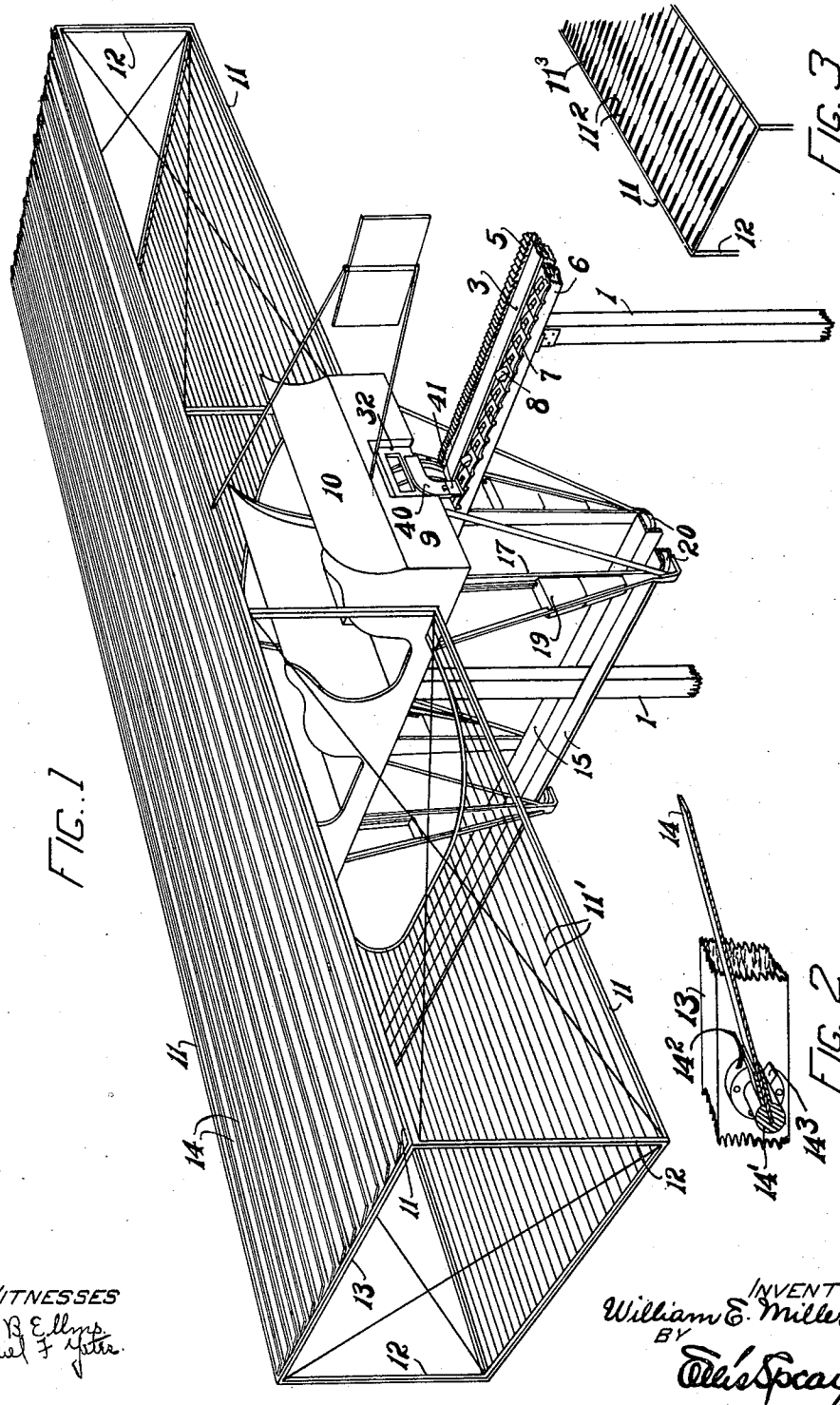


FIG. 1




FIG. 3




FIG. 2

WITNESSES

R. B. Ellis

Ethel F. Yetter.

INVENTOR

William E. Miller

BY

Ellis Spear Jr.

ATTY.

# UNITED STATES PATENT OFFICE.

WILLIAM E. MILLER, OF REVERE, MASSACHUSETTS.

## AMUSEMENT APPARATUS.

1,013,203. Specification of Letters Patent. Patented Jan. 2, 1912.

Application filed November 7, 1911. Serial No. 659,005.

*To all whom it may concern:*

Be it known that I, WILLIAM E. MILLER, a citizen of the United States, residing at Revere, county of Suffolk, Commonwealth of Massachusetts, have invented certain new and useful Improvements in Amusement Apparatus, of which the following is a specification.

This invention relates to an amusement apparatus and particularly to a ride in which the cars are given the approximate appearance and construction of an aeroplane. In devices of this sort it is necessary that the appearance of the car as seen from the ground should completely resemble an actual aeroplane. It is not only of the greatest advantage in interesting the public to try the ride but in inspiring that state of mind in which the greatest degree of enjoyment can be afforded.

In despatching the car over an undulating track in which the drops and rises are usually very sudden, a great difficulty is experienced in the action of the planes or wings in their resistance to the air. In descending an incline the planes which are tilted down as the car pitches forward, will hold back the car and decrease the momentum. In ascending the planes in drawing against the air have a tendency to make the car leave the rail which would, of course, be disastrous if actually accomplished.

It is the object of my present invention therefore to construct an apparatus in which the approximate appearance desired is secured and yet in which the disadvantages would be avoided. I secure this by constructing planes on my cars in such a manner that, while apparently of substantial continuity of surface they are of substantially non-resisting construction with regard to the air. This I effect in several ways but more broadly speaking through the use of planes which while apparently continuous are in fact slatted or open so as to be non-resistable.

As illustrative of my invention I have shown the car which I find adapted to practical use equipped with planes in accordance with my invention and illustrating the principles thereof.

Throughout the specification and drawings like reference numerals are employed to indicate corresponding parts and in the drawings: Figure 1 is a general view of the car of the amusement apparatus in the form of an aeroplane. Fig. 2 is a sectional detail view of one of the slats of the plane, and Fig. 3 is a view of a modification.

The car 9 runs on a mono-rail trackway 3 supported on posts 1. On one side of the trackway 3 is a safety cog rail 5 and on the other side is shown a portion of an endless chain 7 having drawing dogs 8 arranged therealong. The plate 40 on the car has a hinged portion 41 which is adapted to be engaged by the dog 8.

The car is balanced by rollers 20 which run on and under angle irons 15, the same being supported in brackets 17 which carry steadying weights 19.

The car is provided with a biplane frame 11, 12, 13, of the general oblong construction equally disposed on the two sides of the car. The lower planes are cut away adjacent to the car to permit passengers who ascend from below to enter the car, to occupy the seats 10. The upper plane, as illustrated, has a plurality of pivoted slats 14 running transversely. These slats are set in shafts 14′ journaled in end pieces 13 and provided with stops $14^2$ and $14^3$ for limiting the motions of the slats. As these slats are therefore pivoted at their forward edge they will balance in the wind in whatever direction the rush of air is received. In this way instead of presenting a large plane of great resisting area the plane automatically opens to permit the passage of air, although retaining its appearance of being an actually continuous plane.

In some instances I find it possible to use, instead of my slatted construction, simple bars as shown in the lower plane 11 of Fig. 1. These bars 11′ may be spaced a considerable distance apart. By painting them in a conspicuous color as a clear white or by striping them with bright colors on the white background, I am able to so arrest the gaze of the eye as to cause the observer to believe that he is looking at a continuous plane.

A modification of this construction is shown in Fig. 3 in which the grids of the lower plane 11 are shown as running fore and aft as indicated by $11^2$, and in this figure I have attempted to indicate the striping as at $11^3$.

Various modifications may obviously be made in my device all without departing

from the spirit of my invention if within the limits of the appended claims.

What I, therefore, claim and desire to secure by Letters Patent is:

1. A car for a gravity amusement ride having an inclined trackway comprising a car body, supporting wheels under said body to run on said trackway, a plane frame carried by said car and a substantially non-resisting but apparently continuous filling for said plane frame.

2. A car for a gravity amusement ride having an inclined trackway comprising a car body, supporting wheels under said body to run on said trackway, a plane frame carried by said car, a gridded filling for said plane frame substantially non-resisting to the air and of apparently continuous surface to the eye.

3. A car for a gravity amusement ride having an inclined trackway comprising a car body, supporting wheels under said body to run on said trackway, a plane frame carried by said car, a slatted filling for said plane frame comprising a plurality of slats pivoted on their forward edges and free to trail in the path of the breeze as the car is in motion.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM E. MILLER.

Witnesses:

JOSEPH W. DOWNS,
RUTH B. ELLMS.