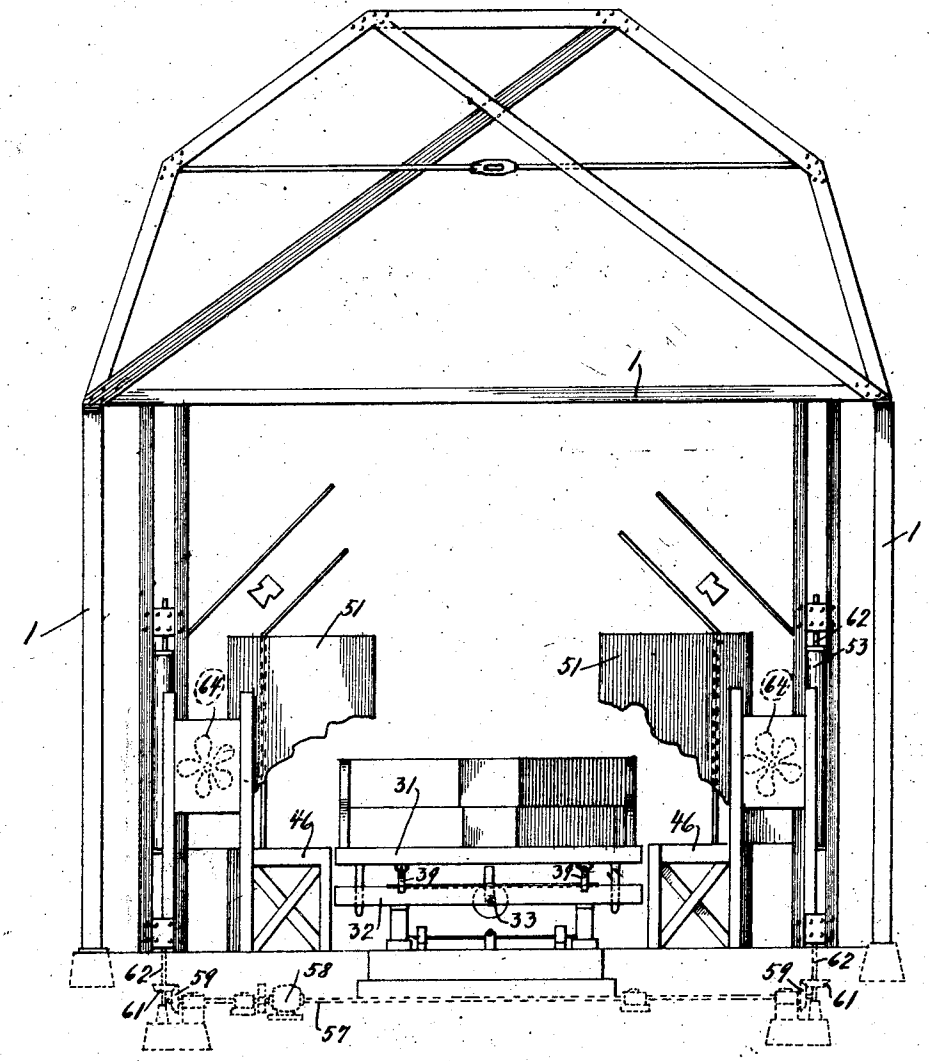
April 13, 1926. 1,580,460

D. S. WILLEFORD

AMUSEMENT APPARATUS

Filed Oct. 6, 1922 3 Sheets-Sheet 1

Fig. 1.



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Filed Oct. 6, 1922 3 Sheets-Sheet 2

Fig. 2.

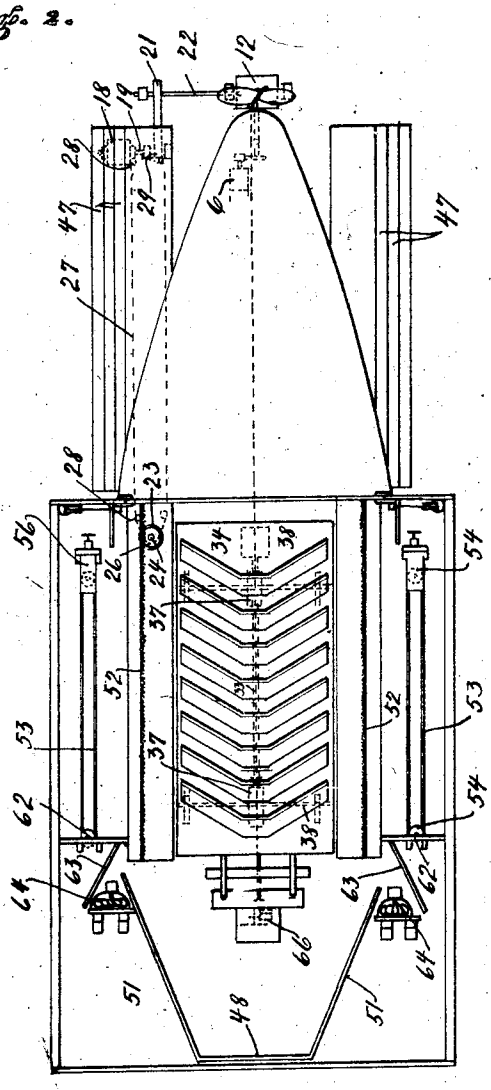

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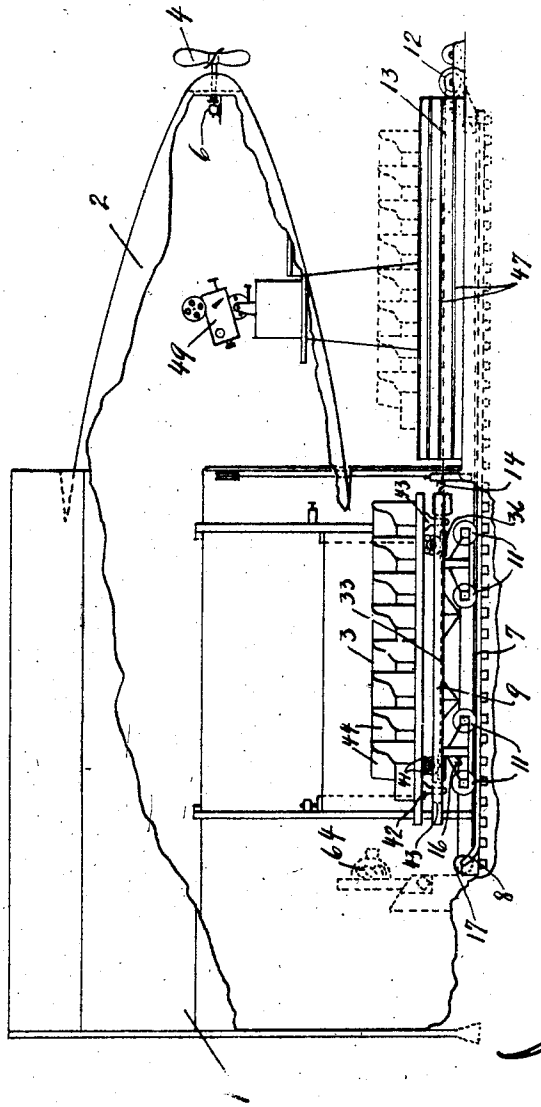
Fig. 3.



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UNITED STATES PATENT OFFICE.

DAVID S. WILLEFORD, OF ALAMEDA, CALIFORNIA.

AMUSEMENT APPARATUS.

Application filed October 6, 1922. Serial No. 592,808.

To all whom it may concern:

Be it known that I, DAVID S. WILLEFORD, a citizen of the United States, and a resident of Alameda, county of Alameda, State of California, have invented a new and useful Amusement Apparatus, of which the following is a specification.

The present invention relates to improvements in amusement apparatus and its particular object is to provide a device of the character described to be erected on fair grounds or the like for the purpose of giving to the persons using the device the sensation of flying in an airship. It is proposed to provide a structure resembling in its general outlines an airship and to provide certain features in combination with this device adapted to imitate the sensation experienced by a person riding in the carriage of an airship, the principal features being a motion picture arrangement adapted to exhibit in front of the passengers views such as would ordinarily be seen by the passenger of an airship, the providing of sliding curtains along the sides of the carriage holding the passengers adapted to create in the passengers a sensation of fast forward motion, the providing of means for causing the carriage to rise and fall alternately and other arrangements as will appear from the description of the device.

With these objects in view I have shown the preferred form of the invention in the accompanying drawings in which Figure 1 shows a front view of my device with the front screen removed so as to allow a clear view throughout the structure, Figure 2 a top plan view of the structure with the cover of the same removed, and Figure 3 a side elevation of the same with the side of the structure partly removed so as to disclose the interior. While I have shown only the preferred form of the invention it should be understood that various changes or modifications may be made within the scope of the claims hereto attached without departing from the spirit of the invention.

My device is enclosed in a frame structure (1) of any suitable design and of suitable dimensions to accommodate the various apparatuses and mechanisms hereinafter referred to. This frame has incorporated therein a balloon-like structure (2) the rear end of which projects outside of the structure as shown in Figure 3 so as to leave ample space underneath the same for the accommodation of the car (3) hereinafter described and which is provided at its rear end with a propeller (4) adapted to be driven by a motor (6), the propeller serving the purpose of attracting attention. A track (7) is provided in the frame structure and extends rearwardly of the same through a distance substantially equal to the length of the track inside the frame structure. At its front end the track terminates in a curved portion (8) adapted to serve as a bumper.

This track is adapted to accommodate the truck (9) supported in any suitable manner on the wheels (11). This truck can be moved forwardly and backwardly on the track by means of a drum (12) over which runs the cable (13) secured to the rear end of the truck as shown at (14) and to the front end as shown at (16), the front end of the cable being guided over a pulley (17) provided in the front end of the frame structure. It will be seen that if the drum is rotated the truck will be moved over the track either forwardly or rearwardly according to the direction of rotation of the drum. The drum is rotated by means of a motor (18) driving a shaft (19) from which power is transmitted through the belt (21) to a parallel shaft (22) which latter has the drum mounted thereon. The drum is preferably controlled from the inside of the structure by means of a hand wheel (23) on the shaft (24) which latter has a sprocket wheel (26) thereon over which passes a chain (27) guided by additional sprockets (28) and engaging a clutch member (29) of any suitable design on the shaft.

The floor (31) of the car is preferably of the same dimensions as the top plate (32) of the truck and is supported on the same in such a manner that a rolling motion may be brought about. For this purpose I provide a central longitudinal shaft (33) adapted to be rotated by means of a motor (34) and provided with two worms (36) engaging worm gears (37) on transverse shafts (38). The latter shafts are provided with eccentric wheels (39) each of which supports a pair of rollers (41) provided underneath the floor of the car. It will be seen that when the shaft (33) is rotated the transverse shafts (38) will also rotate

and will cause the floor of the car to alternately rise and fall due to the engagement of the eccentric wheels (39) with the rollers (41). To prevent lateral displacement of the floor relative to the truck I provide guide members (42) extending downwardly from the floor and riding in slots (43) in the top plate of the truck. Benches (44) of any suitable design are provided on the floor to accommodate the passengers. A platform (46) extends along each side of the car on the same level as the floor of the car in the structure as well as outside and the outside portion is provided with suitable steps (47) allowing the passengers to board the car.

In the front of the car so as to be viewed by the passengers on the same is provided a motion picture screen (48) on which suitable pictures may be thrown by the motion picture apparatus (49) mounted preferably in the rear end of the balloon-like structure. Lateral screens (51) serve to exclude everything else from the view of the passengers.

Along the sides of the car I provide screens (52) and behind the same moving curtains (53). The latter are supported on two rollers (54) one of which may be moved relative to the other so as to tighten the curtain by means of the take up boxes (56). The curtains are illustrated with appropriate pictures and are moved in a direction opposite to that of the car so as to create the sensation of fast travel. The mechanism for operating the curtains is shown in Figure 1 from which it appears that a transverse shaft (57) is rotated by a motor (58) and provided at either end with a bevel gear (59), the latter meshing with bevel gears (61) on the vertical shafts (62) supporting one of the rollers (54) on which the curtains are supported.

Behind the side curtains (63) in front of the car so as to be hidden from view I provide electrical fans (64) which cause an air current passing from the front to the rear and intensifying the sensation of travel. An atmosphere projector (66) may be placed in front of the car in a foot-light arrangement for the purpose of throwing clouds or other scenic effects on the motion picture screen.

I claim:

As an advertising means for an amusement device creating in a closed structure the illusion of travel, a body projecting outside of the structure resembling the front portion of an airship, the said body being mounted relative to a carriage conducting passengers into the closed structure in simulation of a customary arrangement of an airship relative to its carriage.

DAVID S. WILLEFORD.