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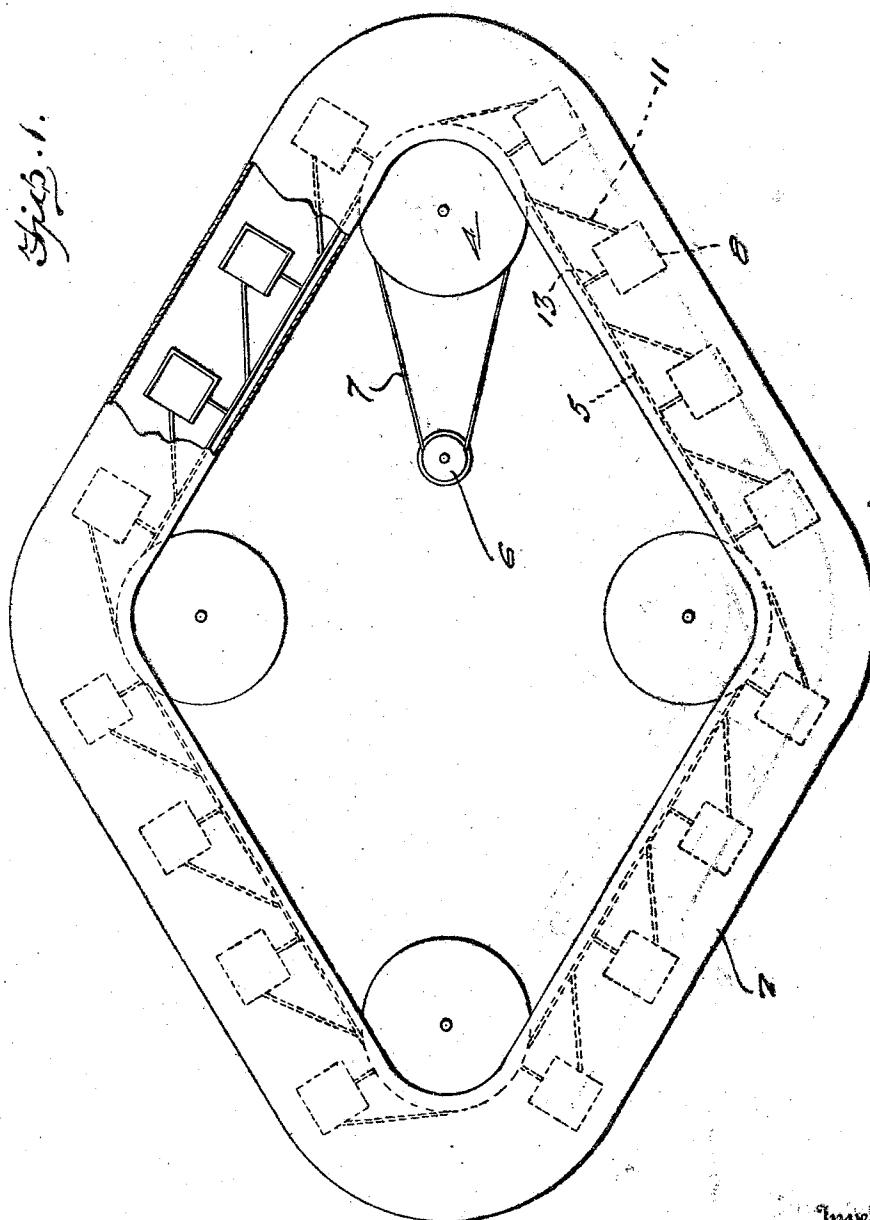
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W. H. FORSYTHE

AMUSEMENT STRUCTURE

Filed June 16, 1924

2 Sheets-Sheet I



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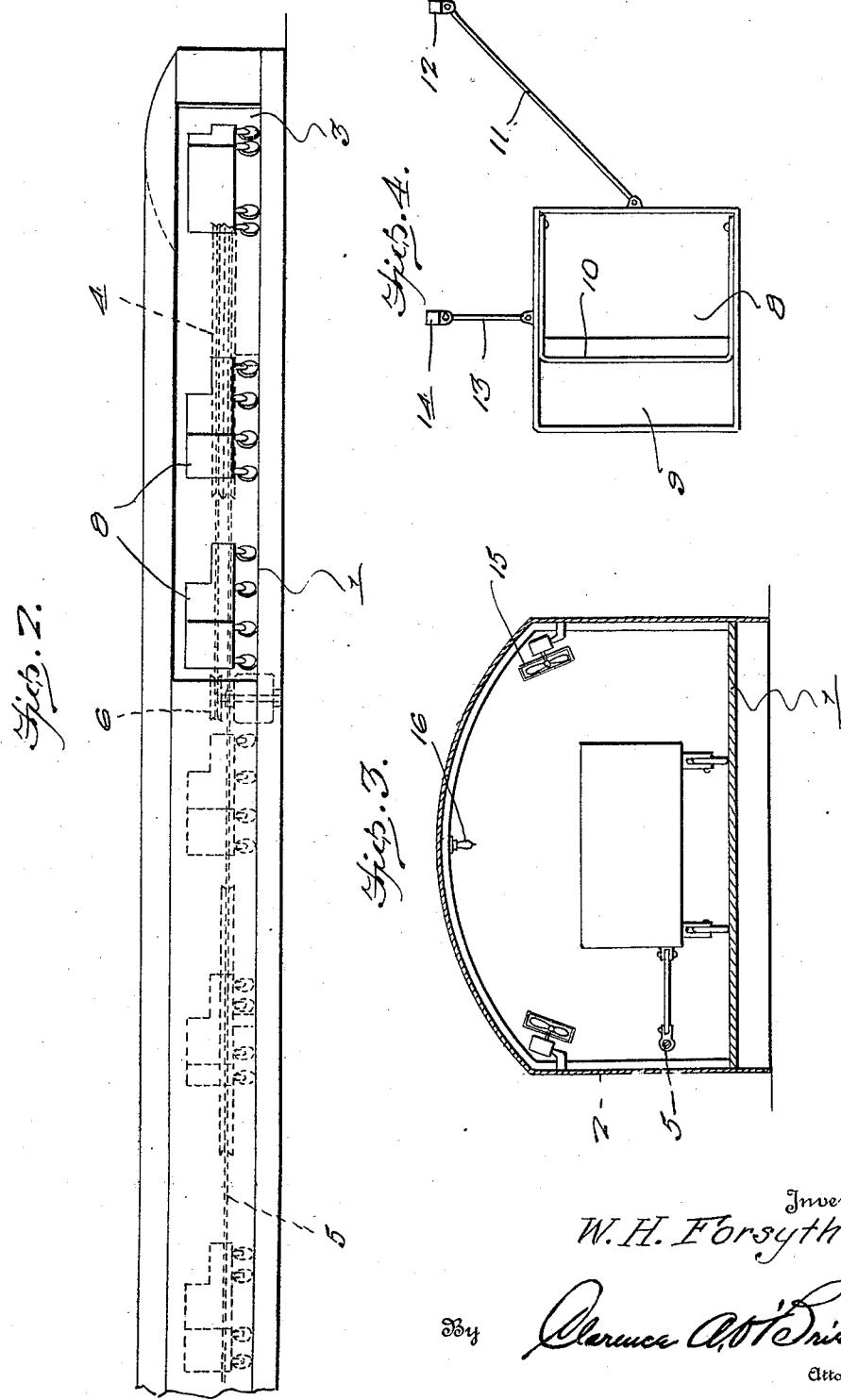
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## UNITED STATES PATENT OFFICE.

WILLIAM HUSTON FORSYTHE, OF FORT COLLINS, COLORADO.

## AMUSEMENT STRUCTURE.

Application filed June 16, 1924. Serial No. 720,377.

*To all whom it may concern:*

Be it known that I, WILLIAM HUSTON FORSYTHE, a citizen of the United States, residing at Fort Collins, in the county of 5 Larimer and State of Colorado, have invented certain new and useful Improvements in Amusement Structures, of which the following is a specification.

This invention relates to amusement structures and it consists in the novel features hereinafter described and claimed:

An object of the invention is to provide a structure including a building representing a tunnel which is substantially diamond shaped in plan; there being grooved pulleys journaled at the inner angles of the corners of the tunnel and an endless cable trained around the pulleys and located within the tunnel. An engine or motor is mounted 10 between the inner walls of the tunnel and is operatively connected with one of the pulleys for rotating the same whereby the cable is caused to move in an orbit within the tunnel. The apparatus also includes a series of carriages having wheels adapted to travel upon the floor of the tunnel. These carriages are pivotally connected with the cable by means of tow rods and spacing rods are connected with the carriages and the 15 cable for holding the carriages properly spaced from the cable.

In the accompanying drawings:—

Figure 1 is a top plan view of the amusement structure with parts broken away and parts shown in section,

Figure 2 is a fragmentary side elevation of the amusement structure,

Figure 3 is an enlarged transverse sectional view through the tunnel of the amusement structure,

Figure 4 is a top plan view of a carriage used in the amusement structure.

The amusement structure comprises a floor or platform 1 having a super-structure 2 in the form of a tunnel erected thereon. The tunnel is approximately diamond shaped in plan as best indicated in Figure 1 of the drawing and one section of the tunnel is provided at its outer side wall with an opening 3 through which the patrons of the amusement device may enter the tunnel or exit from the same.

Grooved pulleys 4 are journaled at the corner portions of the tunnel structure and have peripheral portions which pass through

the inner side walls of the tunnel structure and at the corners thereof. An endless cable 5 is trained around all of the pulleys 4 and is arranged to move in an orbit around the inner side walls of the tunnel structure. A motor 6 is mounted within the inner walls of the tunnel structure and its shaft is operatively connected by a belt 7 with one of the pulleys 4 by being trained around the said pulley and a pulley mounted upon the shaft of the motor 6.

The amusement apparatus also includes a number of carriages 8 each having a seat 9 and a guard frame 10 pivoted to the side of the carriage in advance of the seat and adapted to swing back toward the seat and hold the occupant upon the seat of the carriage when the carriage is in motion. A tow rod 11 is pivotally connected with each carriage at a point midway between its side edges and at its front end. The forward end of the tow rod 8 is pivotally connected with a collar 12 which is secured upon the cable 5. A spacing rod 13 is pivotally connected at one end with the side of the carriage 8 at a point between the front and rear ends thereof and the opposite end of the spacing rod 13 is pivotally connected with a collar 14. The collar 14 is secured to the cable 5 at a point behind and spaced from the collar 12 so that the spacing rod 13 stands out substantially at a right angle to the cable 5 and holds the carriage 8 spaced from the cable. Electric fans 15 are located at suitable intervals within the tunnel structure 2 and electric lights 16 are located within the tunnel and at suitable intervals along the roofs thereof.

In operation, the patrons enter the tunnel through the opening 3 and take their seats in the carriages while they are at a state of rest. The motor 6 is then started whereby the pulleys 4 are rotated and the cable 5 moved in an orbit within the tunnel structure. As the carriages 8 move around the corners of the tunnel structure they are subjected to a whipping action or movement. At suitable intervals the fans 15 may be set in motion and the said fans will direct blasts of air toward the occupants of the carriages. At suitable intervals the lamp bulbs 16 may be illuminated or darkened to give the impression that the carriages are moving through a darkened tunnel or an illuminated tunnel as may be desired.

Having described the invention what is claimed is:—

1. An amusement structure comprising a floor, a super-structure representing a tunnel mounted thereon the said tunnel having angularly disposed sections, pulleys journaled at the corners of the inner walls of the sections of the tunnel and having their peripheral portions passing through said walls, 10 a cable trained around the pulleys and arranged to move in an orbit through the tunnel, means for rotating one of the pulleys, and carriages connected at intervals with the cable.
- 15 2. An amusement structure comprising a floor, a super-structure in the form of a tunnel erected thereon, the said tunnel being composed of sections which are disposed in the form of a diamond, pulleys journaled for rotation at the corner portions of the tunnel and having peripheral portions which pass through the inner walls of the sections of the tunnel, a cable trained around the pulleys and arranged to move in an orbit 20 through the tunnel, means for rotating one of the pulleys and wheel mounted carriages connected at intervals to the cable and ar-

ranged to move through the tunnel and upon the floor.

3. An amusement structure comprising a floor, a super-structure in the form of a tunnel erected thereon, said tunnel having angularly disposed sections, pulleys journaled for rotation at the corners between the angularly disposed sections of the tunnel and having peripheral portions which pass through the inner side walls of the tunnel, a cable trained around the pulleys, means for rotating one of the pulleys, a wheel mounted carriage arranged to move through 35 the tunnel and upon the floor, a tow rod pivotally connected at one end with the carriage at the forward end thereof and at a point between the sides thereof and pivotally connected at its other end with the cable 40 and a spacing rod pivotally connected at one end with the side of the carriage and pivotally connected at its other end with the cable at a point spaced from the point of connection between the tow rod and the 45 cable.

In testimony whereof I affix my signature.

WILLIAM HUSTON FORSYTHE.