Feb. 16, 1926. 1,573,357

J. PHOENIX

SWING

Filed August 11, 1924

Fig. 1.

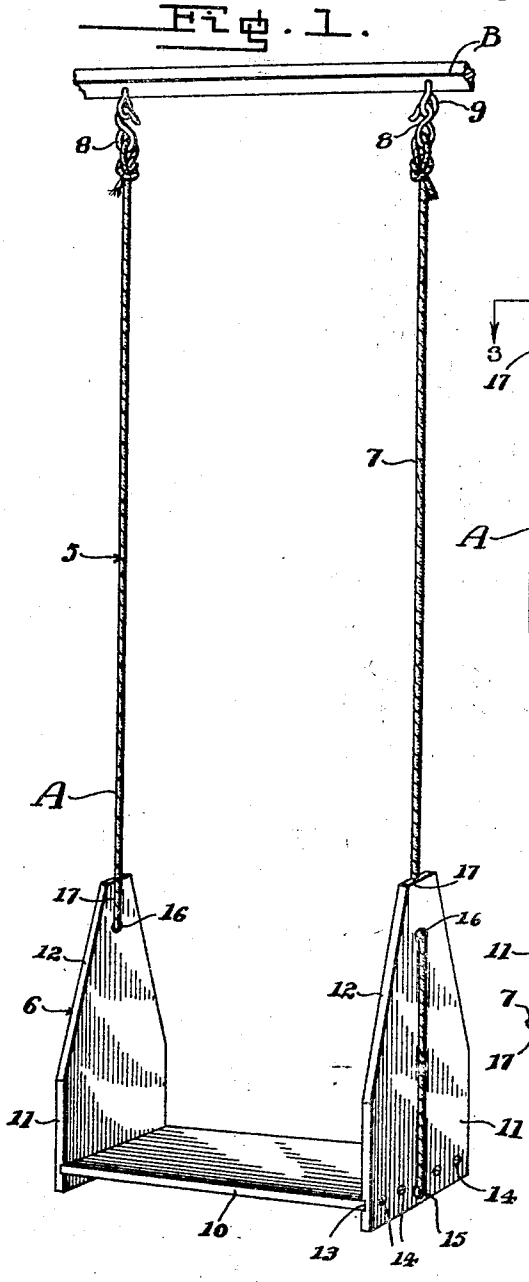


Fig. 2.

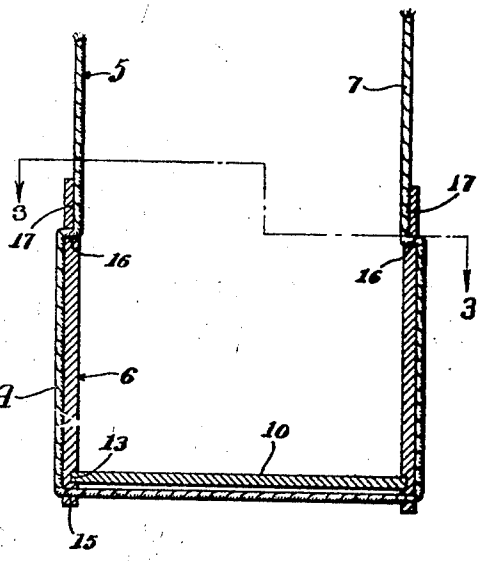
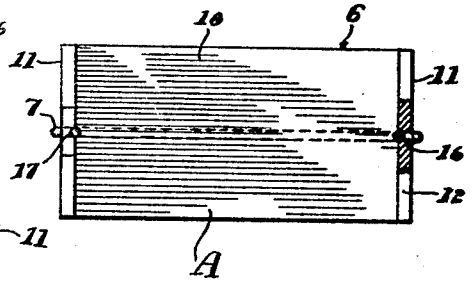


Fig. 3.



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Patented Feb. 16, 1926.

1,573,357

UNITED STATES PATENT OFFICE.

JOSEPH PHOENIX, OF ADAMS, MASSACHUSETTS.

SWING.

Application filed August 11, 1924. Serial No. 731,482.

To all whom it may concern:

Be it known that I, JOSEPH PHOENIX, a subject of the King of Great Britain, residing at Adams, in the county of Berkshire and State of Massachusetts, have invented certain new and useful Improvements in a Swing, of which the following is a specification.

My present invention relates to swings designed especially for the amusement of children, and has for its principal object to provide an improved pendent swing embodying novel features of construction for preventing tipping of the swing seat when the swing is being used.

A further object of the invention is to provide an improved pendent swing of the class described, wherein the seat portion of the swing is coupled to the suspension rope longitudinally thereof for a portion of its length.

A further object of the invention is the provision of a swing embodying a seat structure and a suspension rope, the suspension rope being so associated with the seat structure as to aid in retaining the seat structure in proper assembled relation, and also permitting of the ready leveling of the seat to a horizontal position.

Further objects of the invention are to provide swings which are neat in appearance, swings which may be readily moved from one support to another, and swings which may be manufactured at a relatively low cost.

Other objects and advantages of the invention will appear in the following detailed description, taken in connection with the accompanying drawing, forming a part of this specification, and in which drawing:—

Figure 1 is a perspective view of a swing constructed in accordance with my invention;

Figure 2 is a central vertical section of the seat portion and showing the manner in which the suspension rope is trained therethrough; and,

Figure 3 is a horizontal sectional view taken on line 3—3 of Figure 2.

In the drawing, wherein similar reference characters designate corresponding parts throughout the several views, the letter A may generally designate the improved swing, embodying a suspension means 5 for pendently supporting a seat structure 6 as from any suitable overhead support as designated at B.

Referring to the suspension means 5, the same preferably consists of a rope 7 being provided at each of its ends with a suspending hook 8 for permitting of the ready suspending of the swing from eyes or other suitable supporting elements 9 secured to the support B.

The seat structure 6 comprises a seat 10 being preferably rectangular shaped in plan, and to the opposite ends of which are secured upwardly extending parallel side arms 11. These side arms 11 are preferably of a width equal to that of the seat 10 at their lower portions, and have their upper portions tapered as at 12 in order that the side arms will not interfere with the arms of an occupant when using the swing. Provided in the confronting faces of the arms 11, and disposed at a point relatively near the bottoms thereof, are transversely extending grooves 13 of a size for receiving the end portions of the seat 10. Fastening elements such as screws or the like 14, may be passed from the outer faces of the arms 11 into engagement with ends of the seat for holding the arms and seat in assembled relation. By so providing the grooves 13 for receiving the end portions of the seat, very little downward strain will be imparted to the screws 14 when a child or other occupant is seated in the swing.

Horizontally extending apertures 15 provided centrally of the lower portions of the side arms 11, at a point directly below the transversely extending grooves 13, are adapted to be in vertical alignment with horizontally extending apertures 16 provided adjacent the upper ends of the arms. Extending upwardly from the grooves 16, and disposed at the inner or confronting faces of the side arms 11, are vertically extending semi-circular shaped grooves 17 opening at the upper marginal edges of the arms. These grooves 17, and apertures 15 and 16, provide means for coupling the seat structure to the suspension rope longitudinally thereof for a portion of its length. It can be seen that, by so coupling the seat structure to the suspension rope, that the seat will be retained in a substantially straight line of action with the suspension rope, and therefore prevent all liability of

the seat tipping as when an occupant is seated therein.

It will be observed from Figure 2, that the rope 7 is first passed outwardly through one of the apertures 16, then extends downwardly in contacting relation with the outer face of the side arm, then inwardly through the lower corresponding aperture 15 in parallel relation below the seat 10; outwardly through the oppositely disposed aperture 15, and then upwardly and in through the corresponding aperture 16, thereby coupling the seat to the rope longitudinally thereof for a portion of its length. By so having the lower ends of the vertical grooves 7 terminating in the apertures 16, the suspension rope 7 will be held against riding out of the grooves when the swing is being used. These grooves also prevent flexing of the rope at the apertures 16 where the strands of the rope are materially distorted, and permit of the rope to flex at the upper ends of the side arms where the stands of the rope are in a normal condition.

By so continuing the suspension rope 7 below the seat 10, it can be seen that when a strain is brought upon the rope due to an occupant being seated in the swing, that the lower ends of the side arms will be drawn into binding engagement with the ends of the seat 10 and prevent the seat from riding downwardly out of the grooves 13.

From the foregoing description of this invention, it is obvious that a swing has been provided embodying novel features of construction, and possessing practical merit, in that the same will afford a safe form of amusement for children, without liability of the seat tilting when the swing is being used.

Various changes in the shape, size and arrangement of parts may be made to the form of the invention herein shown and described, without departing from the spirit of the invention or the scope of the claims.

I claim:

1. A pendent swing comprising a suspension rope having suspension hooks provided at each end thereof, a seat portion comprising vertically extending side arms having horizontally aligned apertures provided adjacent their upper and lower ends centrally of the side arms, and having vertically extending grooves provided in their confronting faces extending from the upper apertures of the arms to the upper marginal edges thereof, said grooves to receive longitudinal portions of the suspension rope for retaining the seat portion in an equal line of action with the suspension rope, and a seat secured between the side arms at a point directly above the lower apertures in said arms.

2. A seat structure for pendent swings comprising a pair of side arms provided with horizontally aligned apertures disposed adjacent the upper and lower ends thereof, and having the upper portions of the arms tapering toward the tops thereof, a semi-circular shaped groove provided in the confronting faces of the arms and extending from the upper apertures to the upper marginal edges of the arms, transversely extending grooves provided in the confronting faces of the arms at a point immediately above the lower apertures in the arms, a seat having its end portions fitting in said transverse grooves, and means for securing the side arms to said seat.

JOSEPH PHOENIX.