(No Model.)

G. M. LEASE.

SWING.

No. 597,991. Patented Jan. 25, 1898.

Fig. 1.

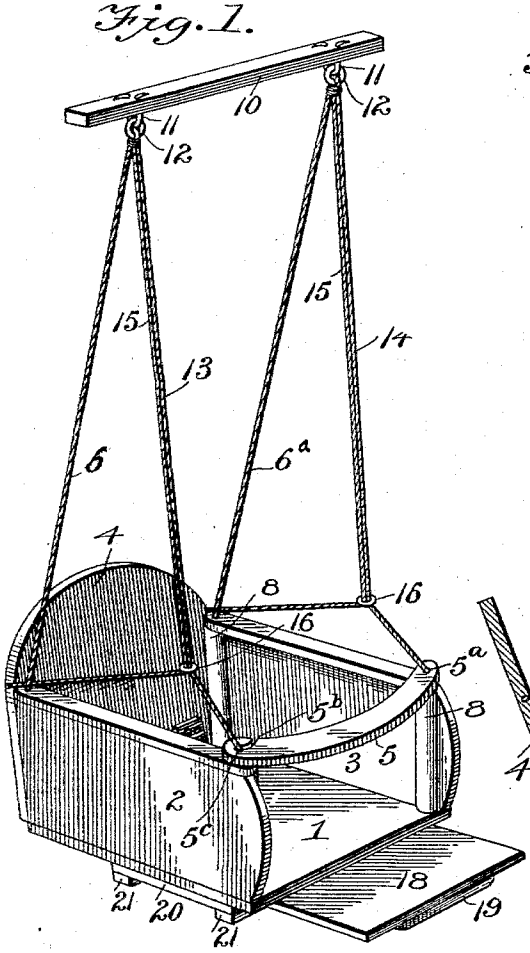


Fig. 2.

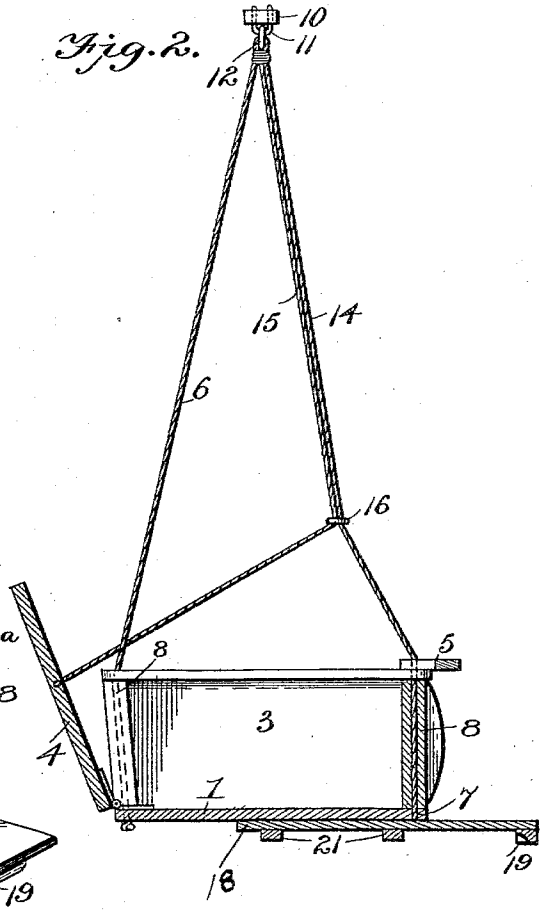


Fig. 3.

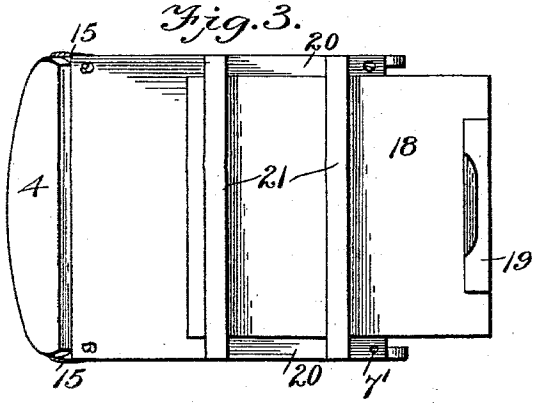
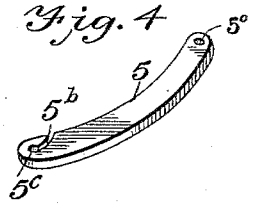


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE M. LEASE, OF SALEM, OREGON.

SWING.

SPECIFICATION forming part of Letters Patent No. 597,991, dated January 25, 1898.

Application filed June 26, 1897. Serial No. 642,439. (No model.)

To all whom it may concern:

Be it known that I, GEORGE M. LEASE, a citizen of the United States, residing at Salem, in the county of Marion and State of Oregon, have invented a new and useful Swing, of which the following is a specification.

My invention relates to improvements in swings of that class wherein the several parts are held in their proper operative positions by the tension of the suspending-cords when the swing is occupied; and the object that I have in view is to provide a simple construction especially adapted for use by children in which the parts are arranged for adjustment to permit the child to lie down when it falls asleep and to prevent it from accidentally falling out of the structure.

With these ends in view my invention consists in the novel combination of elements and in the peculiar construction and arrangement of parts, as will be hereinafter fully described and claimed.

To enable others to understand my invention, I have illustrated the preferred embodiment thereof in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective view of a swing or swinging chair constructed in accordance with my invention. Fig. 2 is a vertical transverse sectional elevation showing the back or head section adjusted at an inclined position to the bottom. Fig. 3 is an inverted or bottom plan view showing the guides on the bottom for the extensible foot-section. Fig. 4 is a detail view of the adjustable guard.

Like numerals of reference denote corresponding parts in all the figures of the drawings, referring to which—

1 designates the bottom of the swing or swing-chair. 2 and 3 are the sides thereof.

4 is the adjustable back or head section, and 5 is the adjustable guard.

In my improved swing the sides 2 and 3 are not attached directly to the bottom 1, but the suspending-cords 6 and 6^a are connected to the sides 2 and 3 and to the bottom, so as to be utilized as the means for attaching the sides to the bottom, whereby the parts of the chair may be folded compactly one upon the other when the chair is to be stored away or transported. The bottom 1 is provided at its corners with the vertical apertures 7 7′ and the sides are provided at their ends with the hollow vertical guides 8 8, said sides being arranged to have their guides 8 in vertical alinement with the apertures in the bottom 1.

10 is the suspension rail or bar, fastened in any suitable way to a beam, ceiling, or other overhead support. This suspension-bar is provided at the ends with the eyebolts or staples 11, to which are connected the suspension-rings 12. These suspension-rings provide convenient means for the attachment of the suspension-cords 13 and 14 and for the adjusting-cords 15 15, the latter being provided for holding the back or head section 4 at the desired position. The suspension-cords 13 and 14 are suitably attached to the suspension-rings 12, from which they diverge toward the ends of the sides 2 and 3, and the said cords pass through the vertical guides 8 8 of the sides and the apertures 7 7′ of the bottom, the lower extremities of said cords being knotted or otherwise fastened in place beneath the bottom 1 of the swing.

The adjusting-cords 15 are attached to the suspension-rings 12 and to the back or head section 4 in a suitable way, and to shorten or lengthen the adjusting-cords I provide the adjustable slides 16, each of which is arranged to embrace one of the adjusting-cords and one of the suspension-cords. When the swing is adjusted for service, the slides may be moved upward on the cords toward the suspension-bar, so as to lengthen the adjusting-cords 15 and allow the back-section 4 to turn backward and downward either to a substantially horizontal position in alinement with the bottom 1 or to a vertically-inclined position with relation to said bottom 1; but when the slides are drawn downward they operate to shorten the adjusting-cords and to draw the back-section 4 to a substantially vertical position and at right angles to the bottom 1.

The back-section 4 is hinged at one edge directly to the back edge of the bottom 1, and, as has been stated, it may be adjusted to any desired position thereon.

The adjustable guard 5 is arranged to be placed in position across the swing at the front side thereof, and this guard is especially useful when the swing is to be used by a child, because it tends to prevent the occupant from falling out of the chair. The guard con-

sists of a rail, preferably curved in the direction of its length and provided at one end with the vertical aperture 5^a and near its other end with a curved or inclined slot 5^b, which extends inwardly from one edge of the guard and terminates in an eye or aperture 5^c. One of the suspending-cords at the front of the swing passes through the vertical aperture in one end of the guard and the latter is thus connected to the chair-suspension means in a manner to turn thereon into and out of position across the front of the chair. The kerf or slot 5^b of the guard enables its other end to be readily fitted to or detached from the other suspending-cord at the front of the chair, and thus the guard is arranged to be securely held in position on the suspension-cords across the front of the chair or to be swung horizontally out of position.

I provide the swing or chair with an extensible foot-section 18, which is slidably connected to the bottom 1 and is arranged to be slid beneath the bottom out of the way or to be extended beyond the bottom into position for service. This foot-section consists of a suitable board or frame, which is provided at its front edge with a pendent lip or flange 19 by which it may be conveniently drawn out or shoved beneath the bottom 1. To the lower face or side of the bottom is attached the guide-rails 20, between which the foot-section 18 is fitted, and these side rails are connected by the cross rails or bars 21, which are attached to the side rails and which serve to keep the foot-section 18 in position beneath the bottom 1 of the swing.

It will be noted that I have provided a simple and inexpensive construction of swing or chair in which the elements are arranged to be folded compactly when the structure is not in service. The weight of the occupant of the chair places the suspension-cords under tension to hold the elements of the chair in proper relation. If the chair is occupied by a child, the front guard 5 may be adjusted and the back-section 4 may be raised to prevent the occupant from falling out of the chair. Should the occupant fall asleep in the chair, the foot-section 18 may be drawn out and the back-section adjusted at an angle to enable the occupant to comfortably recline in the chair.

I am aware that changes in the form and proportion of parts and in the details of construction may be made by a skilled mechanic without departing from the spirit or sacrificing the advantages of my invention.

I am aware that prior to my invention it was not new to provide a vertically-sliding block to engage with the front and back strands of the suspending-cords for a swinging chair and to employ back-adjusting cords which are attached to the back and the sliding block. Such prior device, however, is open to the objection that its adjustment on the suspending-cord tends to draw together the strands of the adjusting-cord when the block is lowered down toward the chair so as to limit the adjustment of the block by the drawing together of the strands, and when weight is imposed on the chair and the suspending-cords the block binds so tightly on the cords by reason of the fact that it is connected to both cords as to render it difficult to adjust the block when the chair is occupied. In my improvement I provide small sliding rings or clasps which engage with the adjusting-cord and with the front individual suspension-cords, thus leaving the rear cords free and unconfined, and by this arrangement and connection of the parts I am able to provide an improved chair in which the sliding rings or loops may readily be adjusted with ease and freedom when the chair is occupied as well as when empty. The sliding adjustment of the rings or loops is not interfered with by the drawing together of the strands of the suspension-cords, and the back-adjusting cords may be lengthened or shortened as may be required without hindrance from the suspension-cords.

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

1. The combination with a chair-frame, and a hinged back therefor, of the pairs of suspension-cords fastened to an overhead support and to the chair-frame, the adjusting-cords fastened at their upper ends to said overhead support and having their lower ends fastened to the adjustable back, and the sliding rings or loops which clasp the adjusting-cords and the individual front lengths of the suspension-cords and leave the rear suspension-cords free and unconfined, whereby the sliding rings may be adjusted on the front suspension-cords and the adjusting-cords without being limited by the rear suspension-cords.

2. In a swinging chair, a bottom, the continuous side walls each provided at its ends with the vertical hollow enlargements 8, and the back hinged to the rear edge of the bottom, in combination with the overhead support, the front and rear suspension-cords attached to the overhead support and passing through the enlargements 8 and the bottom to have the lower knotted ends of said cords bear directly against the bottom, the adjusting-cords attached to the overhead support and to the back, and the sliding loops or wings which clasp the adjusting-cords and the front strands of the suspension-cords to make the two cords lie alongside each other from the points where the sliding loops or rings engage therewith up to the overhead support, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE M. LEASE.

Witnesses:
A. W. JOHNSON,
WYLIE A. MOORES.