(No Model.)

2 Sheets—Sheet 1.

# N. THOMAS.

## SWING.

No. 587,022. Patented July 27, 1897.

Fig. 1.

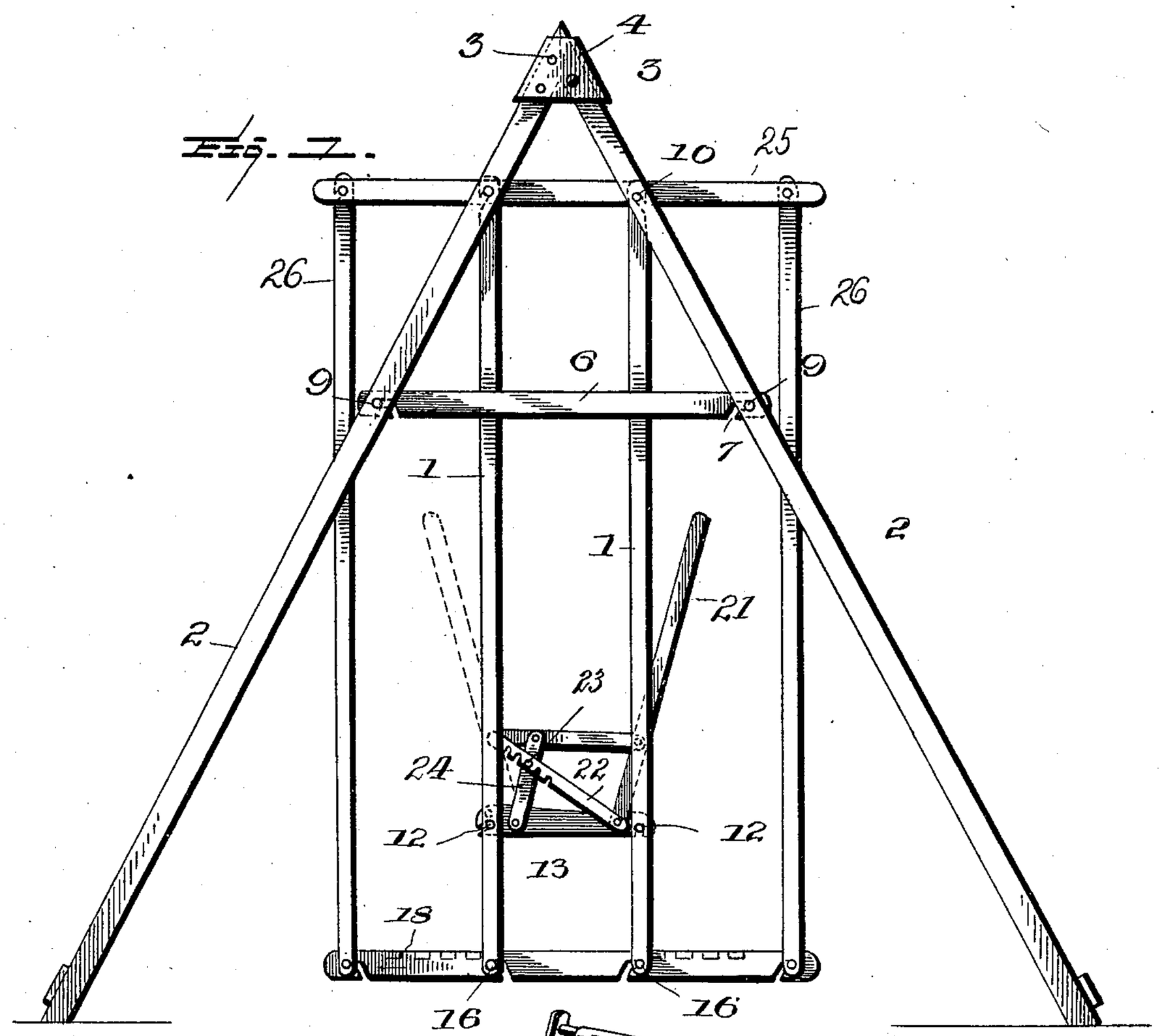


Fig. 5.

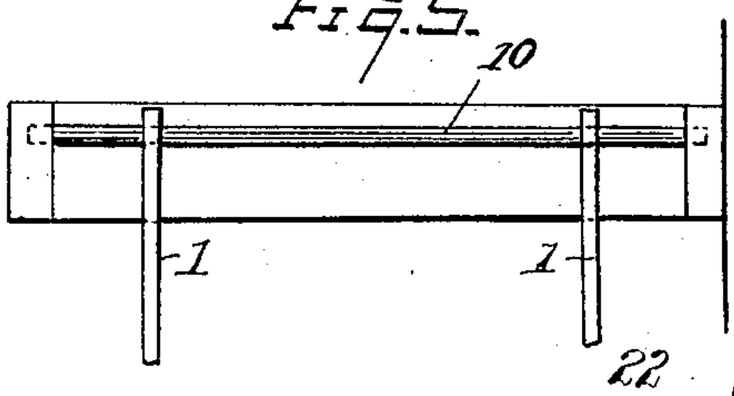


Fig. 2.




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(No Model.) 2 Sheets—Sheet 2.

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## SWING.

No. 587,022. Patented July 27, 1897.

Fig. 1.

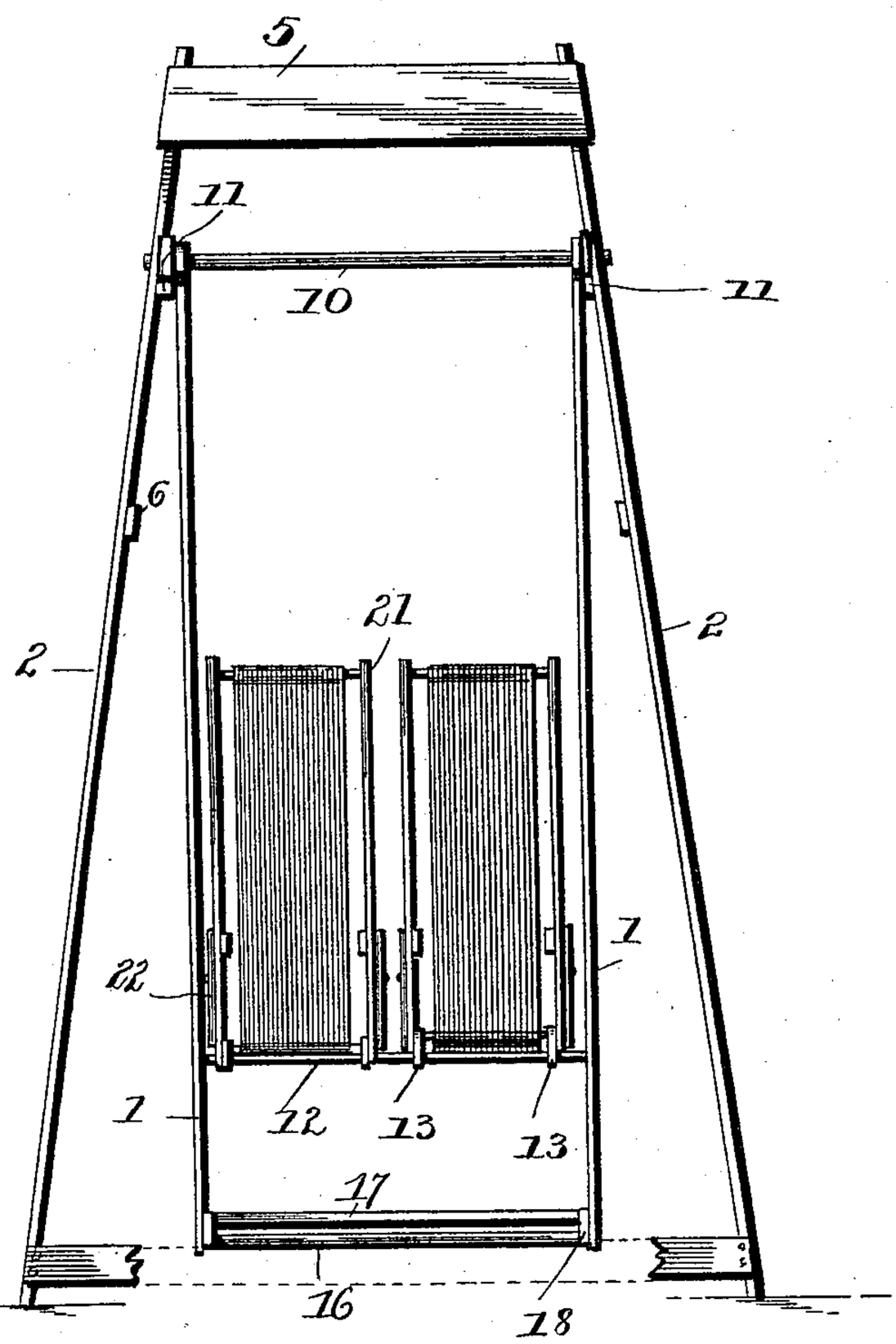
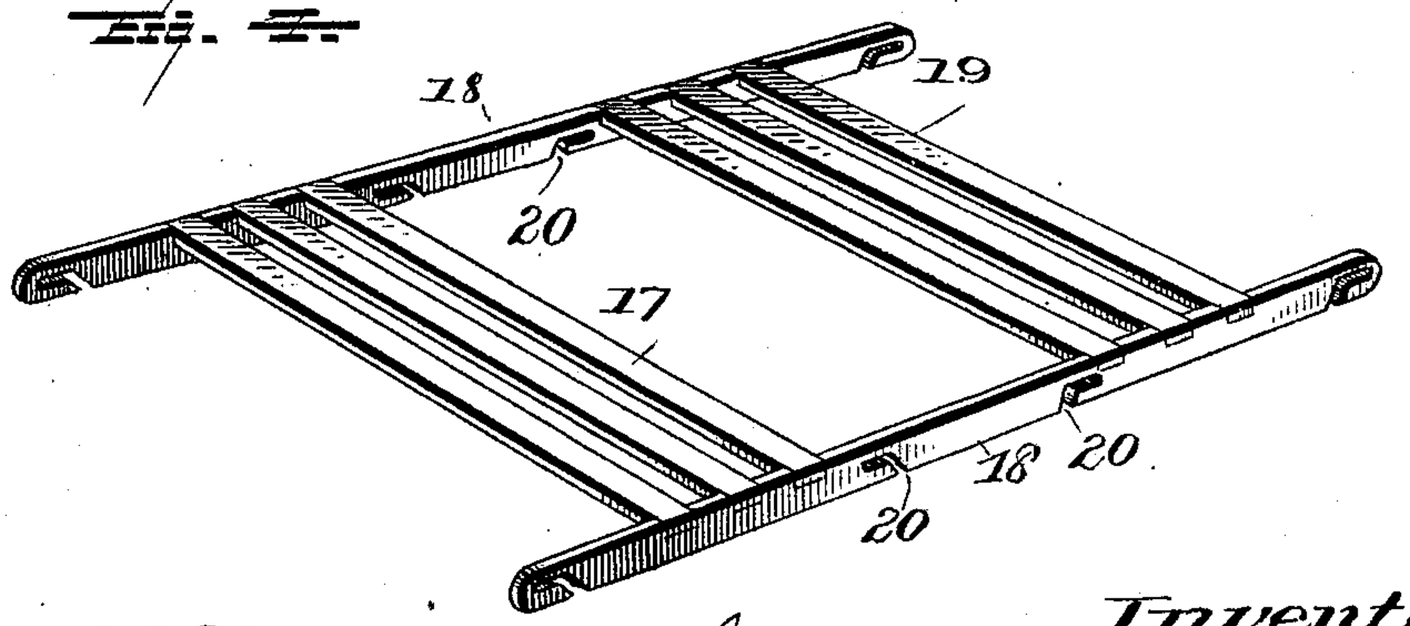



Fig. 2.




Witnesses:
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Inventor:
Nicholas Thomas,
by Wm. E. Henderson, Attorney.

# UNITED STATES PATENT OFFICE.

NICHOLAS THOMAS, OF BURLINGTON, WISCONSIN.

## SWING.

SPECIFICATION forming part of Letters Patent No. 587,022, dated July 27, 1897.

Application filed September 29, 1896. Serial No. 607,331. (No model.)

*To all whom it may concern:*

Be it known that I, NICHOLAS THOMAS, a citizen of the United States, residing at Burlington, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Swings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to swings, more particularly to that class of swings which are provided with chairs or seats above a foot-rest or platform.

It has for its object to provide such a swing in which the seat and back of a chair will be kept in the same relative position to a horizontal line while the swing itself is passing through the arc of a circle in its back-and-forth movement and in which momentum to the swing will be imparted from pressure of the feet upon the foot-rest or platform forming a part of the swing.

It has, further, for its object to so construct and combine the swinging arms, the platform, and the chair that they can be readily put together and taken apart, and which when assembled will contribute to the strength of the parts and tend to prevent the parts from becoming accidentally separated.

It has, further, for its object to so construct the parts that two chairs or seats may be so connected and adjusted that two persons can face in the same direction or, if desired, can sit vis-à-vis by the simple adjustment of one of the seats or chairs.

To the accomplishment of the foregoing and such other objects as may hereinafter appear the invention consists in the construction and in the combination of parts hereinafter particularly described, and then sought to be specifically defined by the claims, reference being had to the accompanying drawings, forming a part hereof, and in which—

Figure 1 is a side elevation of one form of the invention. Fig. 2 is a perspective of the seat or chair, showing its manner of attachment to its supporting-rods. Fig. 3 is a front elevation in which the two chairs are illustrated as in position to enable the couple to sit vis-à-vis, and Fig. 4 is a perspective of the foot-rest or platform. Fig. 5 is a detail side view of a modified form of support for the swing.

In the drawings, the numeral 1 designates the swinging hangers which support the seat and platform and which are supported or suspended from any suitable form of framework.

In Figs. 1 and 3 of the drawings I have illustrated the framework as consisting of a tripod made up of the inclined legs or bars 2, which are formed in pairs and which may be pivoted at their apex by bolts 3 or otherwise, so that the pairs of legs can be folded together when to be transported or moved. In the drawings I have illustrated the bolts 3 as passing through the end plates 4 of a cross-piece 5, extending across one set of the legs or bars. Instead of this form of support, however, I may employ an ordinary rectangular or other shaped frame suitably sustained and designed to receive pintles or projecting ends of rods which will connect the upper ends of the swinging hangers, as indicated in Fig. 5 of the drawings.

The front and rear legs or rods of the tripod-support are illustrated as connected together by brace-bars 6, which extend from one leg to the other, as shown in Fig. 1 of the drawings, and provided at opposite ends with the L-shaped slots 7, adapted to engage pins or studs 9 on the legs, so as to securely brace the legs and prevent them from spreading or collapsing.

The swinging hangers 1 are suspended at their upper ends from cross-rods 10, which have their bearings in the tripod or other support, as illustrated. The upper ends of the swinging hangers may be formed with diagonal slots, as indicated clearly in Fig. 1 of the drawings, so that they may be slipped over the cross-rods 10, and for the purpose of insuring the hangers swinging in a proper line bearing-blocks 11 may be inserted between the hangers and the legs 2 of the tripod, as illustrated in Fig. 3.

Each pair of the swinging hangers is connected together toward their lower ends by cross-rods 12, which will constitute supports

for the chair or seat of the swing and with which rods the chair or seat will have a loose or pivotal connection, so that the seat and back of the chair will maintain their relative positions to a horizontal line as the two sets of hangers describe an arc of a circle in their swinging movements. It will be observed that the two pairs of swinging hangers are in such near relation to each other that the seat-bars 13 of the chair will extend from one of the supporting-rods 12 to the other, as shown clearly in Figs. 1 and 2, thereby affording a support for the chair at both its front and rear. By pivotally connecting the seat-arms 13 to the rods 12, as before described, the horizontal position of the chair is not disturbed in the oscillation of the hangers.

It will be observed that the rear under side of the seat-bars 13 of the chairs are formed with slots or recesses 14 and the forward ends of said seat-bars formed with slots or recesses 15, the slots 14 and 15 being so formed that the seat-bars of the chairs can be slipped over the rods 12, so as to find a support thereon for the chair and so that the chair will be held to its place in the oscillation of the hangers. This manner of attaching the chairs to the rods enables the chairs to be readily detached and again attached so that they may be in such position that two persons occupying the swing will face in the same direction, or, if desired, one chair can be detached and replaced so that the two occupants of the swing will sit vis-à-vis, such position of the chairs being indicated in Figs. 1 and 3 of the drawings.

Each pair of hangers is provided at the lower end with cross-rods 16, extending from one hanger to the other, so as to constitute a support for the foot-rest or platform 17 to the swing. This platform is composed of the side pieces 18 and cross-strips 19, the side pieces 18 being formed with the L-shaped slots 20, adapted to fit down over the cross-bars 16, whereby the platform has a pivotal connection to the cross-rods and at the same time serves to aid in holding the two pairs of hangers in proper position in relation to each other. The L-shaped slots in the side pieces 18 also prevent the platform or foot-rest becoming accidentally disconnected from its supporting-rods.

By having both the chair-seat and the foot-rest or platform pivotally connected to the oscillating or swinging hangers a person occupying the seat of the swing can, by pressure of the feet upon the foot-rest, give momentum to the hangers so that they will swing back and forth, the chair-seat at the same time maintaining its relative position to a horizontal line notwithstanding the oscillation of the hangers in the arc or circle. This manner of attaching the foot-rest or platform and also the chairs to the hangers enables the several parts to be readily put together and taken apart when to be moved from place to place.

The chair may be provided with a canvas bottom and back, as indicated in Fig. 2, and the back will have its bars 21 pivoted at their lower ends to the seat-bars 13, so that the back can be adjusted to any inclination desired and be held to such adjustment by means of the pivoted notched bars 22 engaging pins 23, which will project from the upright bars 24 of the side arms to the chair.

The swing formed as described will be comparatively inexpensive to construct. It can be folded and packed into a small space for purposes of transportation. It can be readily set up at any place desired, and as readily taken to pieces. Its two chairs can be quickly adjusted, so that two persons can either face the same direction or vis-à-vis, as desired. There is no liability of the chairs becoming accidentally detached, and they will maintain their same relative position to a horizontal line in the oscillation of the hangers, thus avoiding the disagreeable sensation experienced when the chair or seat is allowed to tilt or follow the arc of a circle in the movement of the swing, and the occupant can with ease impart momentum to the hangers by a light pressure of the feet on the platform or foot-rest, which is so pivoted that it will always maintain the same position relative to the seat of the chair.

If desired, I may have cross-bars 25 supported on the cross-rods 10 and have hangers 26 extend downward from these bars and be connected at their lower ends to the platform side pieces 18, the hangers 26 being attached to their connections in the same manner as the hangers 1.

I have illustrated and described the preferred details of construction and arrangement of the several parts; but it is obvious that changes can be made therein without departing from the essential features of the invention.

Having described my invention and set forth its merits, what I claim is—

1. In a swing, the combination of the two pairs of oscillating hangers, the foot-rest or platform having a pivotal connection with the lower portion of both pairs of hangers, the rods extending transversely from one hanger to the other of each pair of oscillating hangers at a point above the foot-rest or platform, and the chairs having their seat-bars formed with recesses to receive the rods which extend transversely from one hanger to the other of both pairs of hangers so as to permit the chairs to be adjusted to enable two persons to face in the same direction or vis-à-vis as desired, substantially as and for the purposes described.

2. In a swing, the combination with the two pairs of oscillating hangers, of the seat or chair supporting rods connecting the two hangers at each pair of hangers, and the chair or seat having its seat-bars formed with recesses in their lower faces at one end to receive one of the seat-supporting rods and with

recesses in the front of the opposite ends formed at an angle to the recesses in the lower faces and adapted to receive the other rod, substantially as and for the purposes described.

3. In a swing, the combination with a suitable support comprising inclined legs pivotally connected at their upper ends and provided at a point below their top with studs or projections, and with transversely-extending cross-rods, brace-bars connecting the front and rear legs and having L-shaped slots receiving the studs or projections on said legs, oscillating hangers provided with connecting cross-rods and having slots at their upper ends which receive cross-rods connected to the front and rear legs, a foot-rest or platform formed with L-shaped slots receiving cross-rods which connect the hangers, and a seat or chair whose seat-bars connect the two pairs of oscillating hangers and are supported by the rods which connect the hangers of each pair of hangers substantially as and for the purposes described.

4. In a swing, the combination of a suitable support with oscillating hangers supporting at their lower end a foot-rest or platform and at a distance above the platform with reversible chairs side by side and supported by the hangers at both the front and rear of the chairs, substantially as and for the purposes described.

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

NICHOLAS THOMAS.

Witnesses:
A. F. RANSOM,
JNO. REYNOLDS.