

L. Winston,

Swing.

No. 109,165.

Patented Nov. 8. 1870.

Fig. 1.

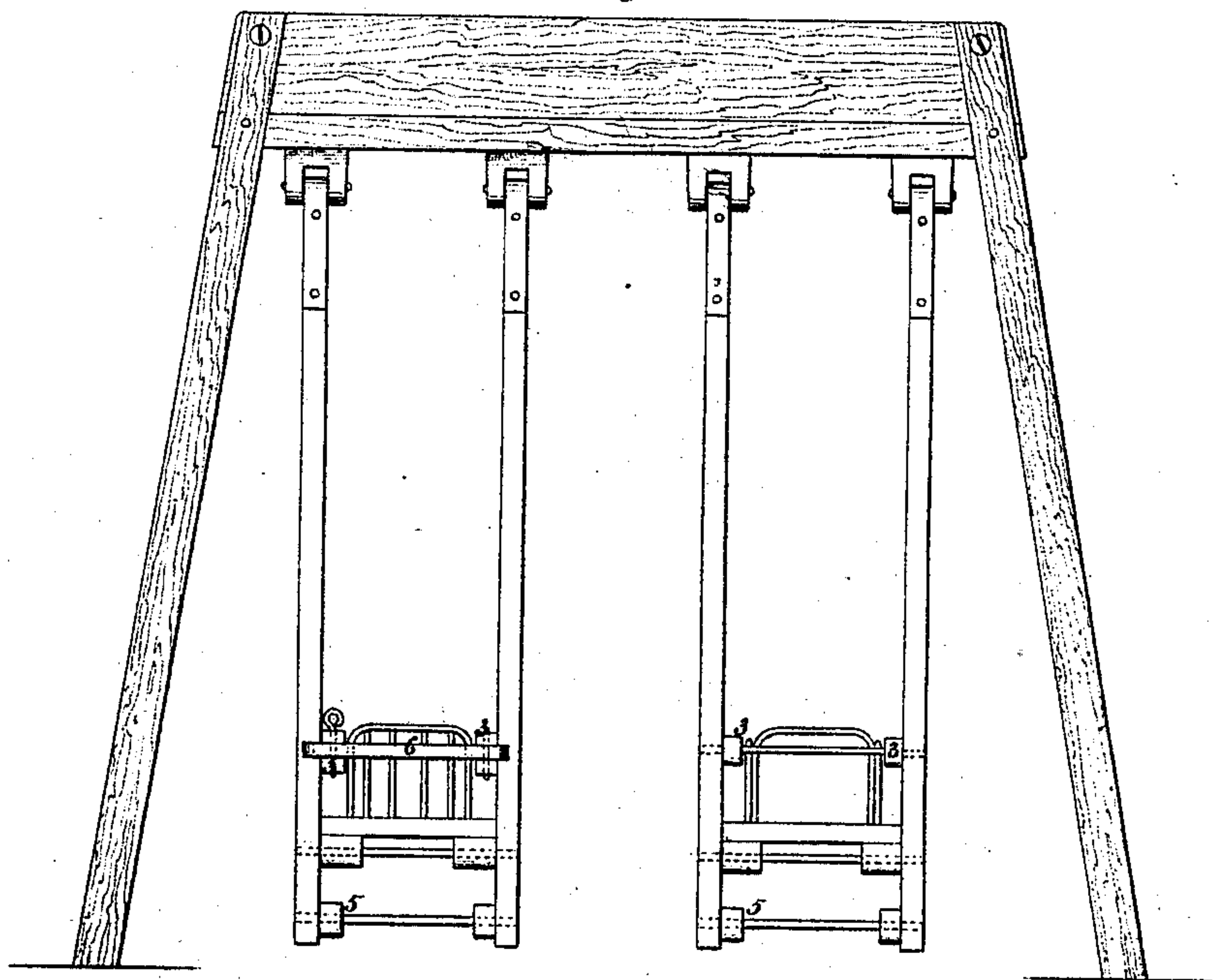
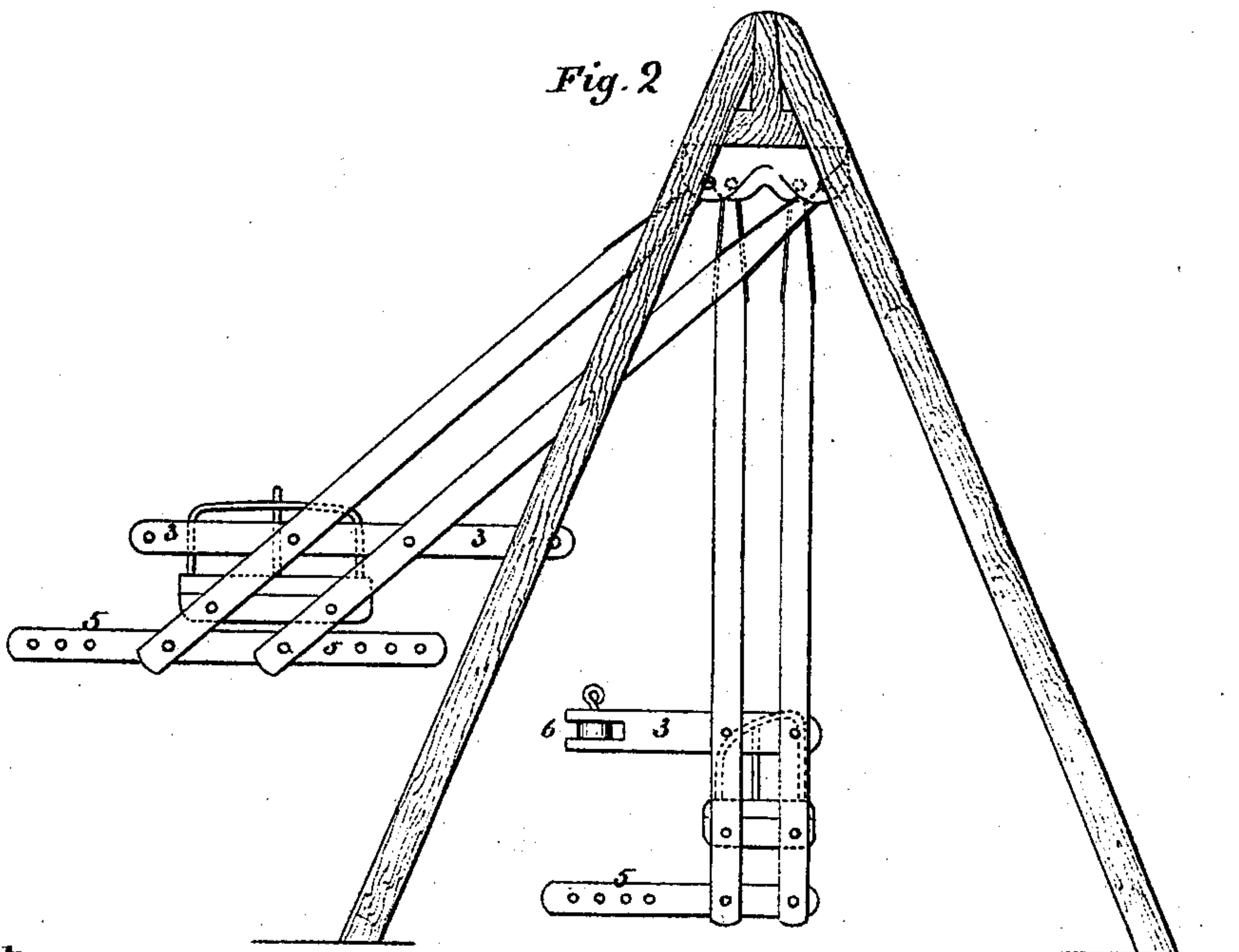


Fig. 2



Witnesses.
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UNITED STATES PATENT OFFICE.

LUCIUS WINSTON, OF PONTIAC, ILLINOIS.

IMPROVEMENT IN SWINGS.

Specification forming part of Letters Patent No. 109,165, dated November 8, 1870.

To all whom it may concern:

Be it known that I, LUCIUS WINSTON, of Pontiac, in the county of Livingston and State of Illinois, have invented new and valuable Improvements in Swings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a front view of the improved swing. Fig. 2 is a side view, with one of the swings elevated to show the position of the seat when in such position.

I construct the frame-work 1 of wood or other suitable material, and on the under side of the cross-beam securely fasten the slotted plates 7 7, in which the bars 2 2 play. From these plates hang perpendicularly the bars 2 2, held in position by bolt and eye, and working freely back and forth. Between these, and at a convenient height from the ground, is placed the seat, either single or double, as at 4 4, secured by rods passing from each couple of bars through the base of the seat from side to side. This method of securing the seat has the advantage over every other in present use, that the seat, not being immovably fixed to the bars, always remains in a horizontal position, no matter how high it may rise in the air. Its path, therefore, is on an inclined plane, and not on an arc of a circle, as is the case in all other suspended swings. Hence it follows that the motion is far more agreeable, especially if the party swinging is at all likely to be unpleasantly affected by the rapid, arc-like movement of ordinary swings in the air. The perpendicular bars being hung parallel to each other at right angles with the cross-beam, and at a distance equal to the width of the seat nearly, give greater strength to the swing, and each set acts as a check on the other two, and prevents the seat from occupying any but a horizontal position. This would not be the case if the bars hung at any other angle, or if the swing was constructed with two bars only instead of four. The application of this principle to swings I claim to be entirely new.

Below the seat, and parallel with it, at the proper distance, is the foot-rest and propeller 5, constructed of two bars placed at right an-

gles with the perpendicular bars joined together by rods of wood or metal, and extending several feet in front of the seat. This rest is secured between the bars in the same manner as the seat, and hence moves in a parallel plane with it when the swing is in motion. The rods upon which the feet rest are placed far enough apart to give the swinger's heel and foot a firm hold, both to propel the swing and prevent the possibility of accidentally falling out. At the same or other convenient distance above the seat, and parallel with it, is the frame-work 3 3, secured so as to move in the same manner as the seat and foot-rest, and joined by a fixed bar, as in the double-seat swing, or by a hinged bar and bolt, as in 6 in the single one. In the one case the swinger must stoop to enter the swing, in the other not. This frame-work not only serves to give additional strength to the swing, and, like the foot-rest, to prevent the rider from falling out, but its chief value lies in the fact that it serves as a means of propelling the swing by the hands of the swinger. This combination of the foot and hand propellers gives greater power than can be obtained in any other of the swings now before the public, because as the seat and propellers play in parallel planes and move together as if in one piece, the force of the swinger is equally exerted and applied throughout the whole motion of the swing back and forth. The swinger can also exert his power more fearlessly, because, the seat remaining always horizontal, he loses none of his strength to keep himself from falling out, as he would have to do if the seat swung on the arc of a circle, as other swings do.

I claim that swings constructed in the manner above described are superior to all others, in that they are safer, stronger, more comfortable to ride in, and easier of propulsion by the occupant.

What I claim and desire to secure by Letters Patent, is—

1. The parallel bars, in combination with the movable seat and hand-propeller, the said seat and propeller being arranged to always move in parallel planes with each other, substantially as set forth and described.

2. The parallel bars, in combination with the movable seat and foot-propeller, said seat

and propeller being arranged to always move in parallel planes, substantially as set forth and described.

3. The combination of the frame-work, slotted plates, bars, hinged bar, movable seat, and hand and foot propellers secured to move with the seat in parallel planes, substantially as set forth and described.

In testimony that I claim the above I hereunto subscribe my name in the presence of two witnesses.

LUCIUS WINSTON.

Witnesses:

JOSEPH H. CULVER,
BYRON PHELPS.