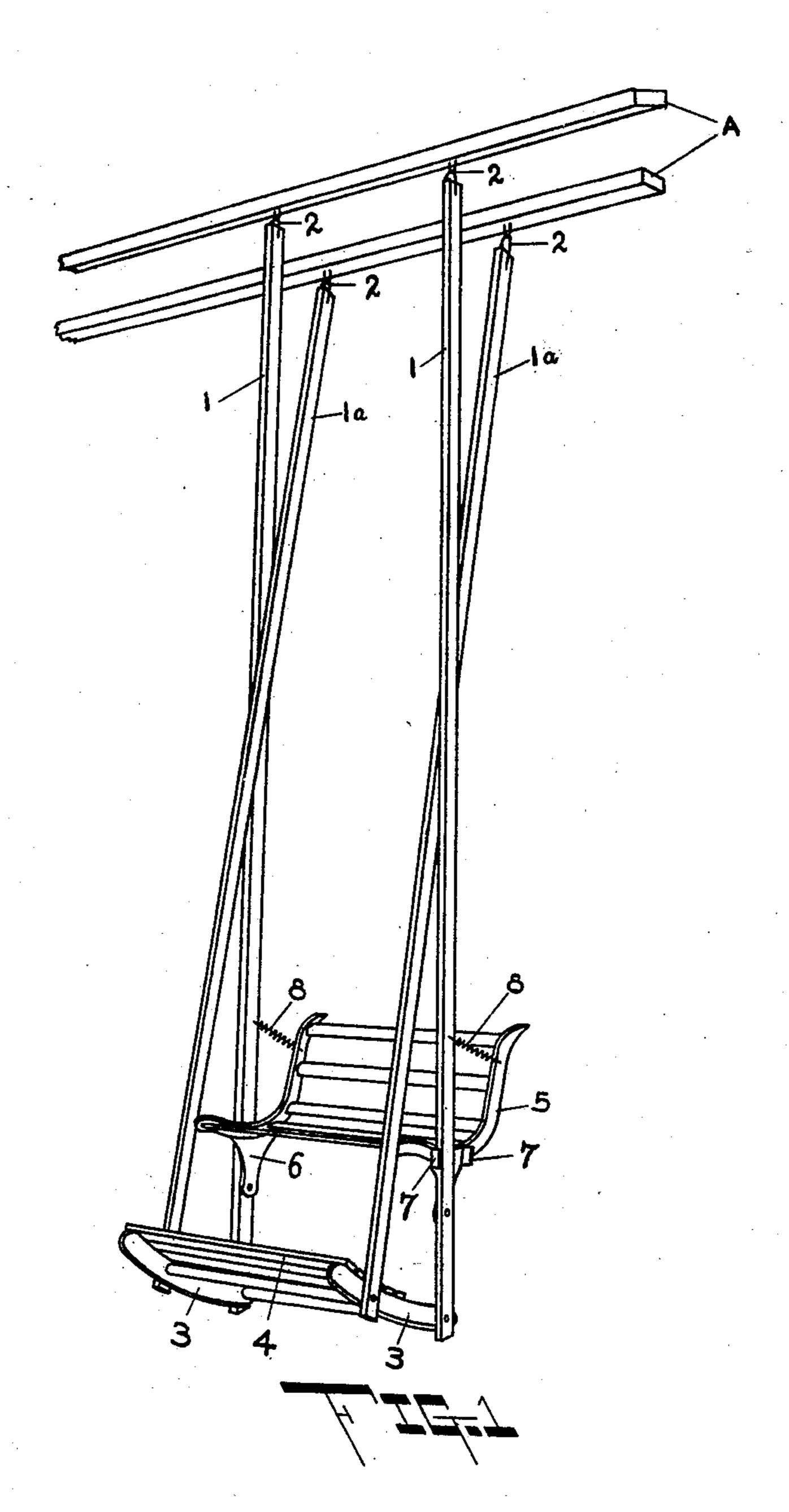
## J. F. GERTHOFFER. SWING.

APPLICATION FILED FEB. 16, 1907.

2 SHEETS-SHEET 1.



WITNESSES:

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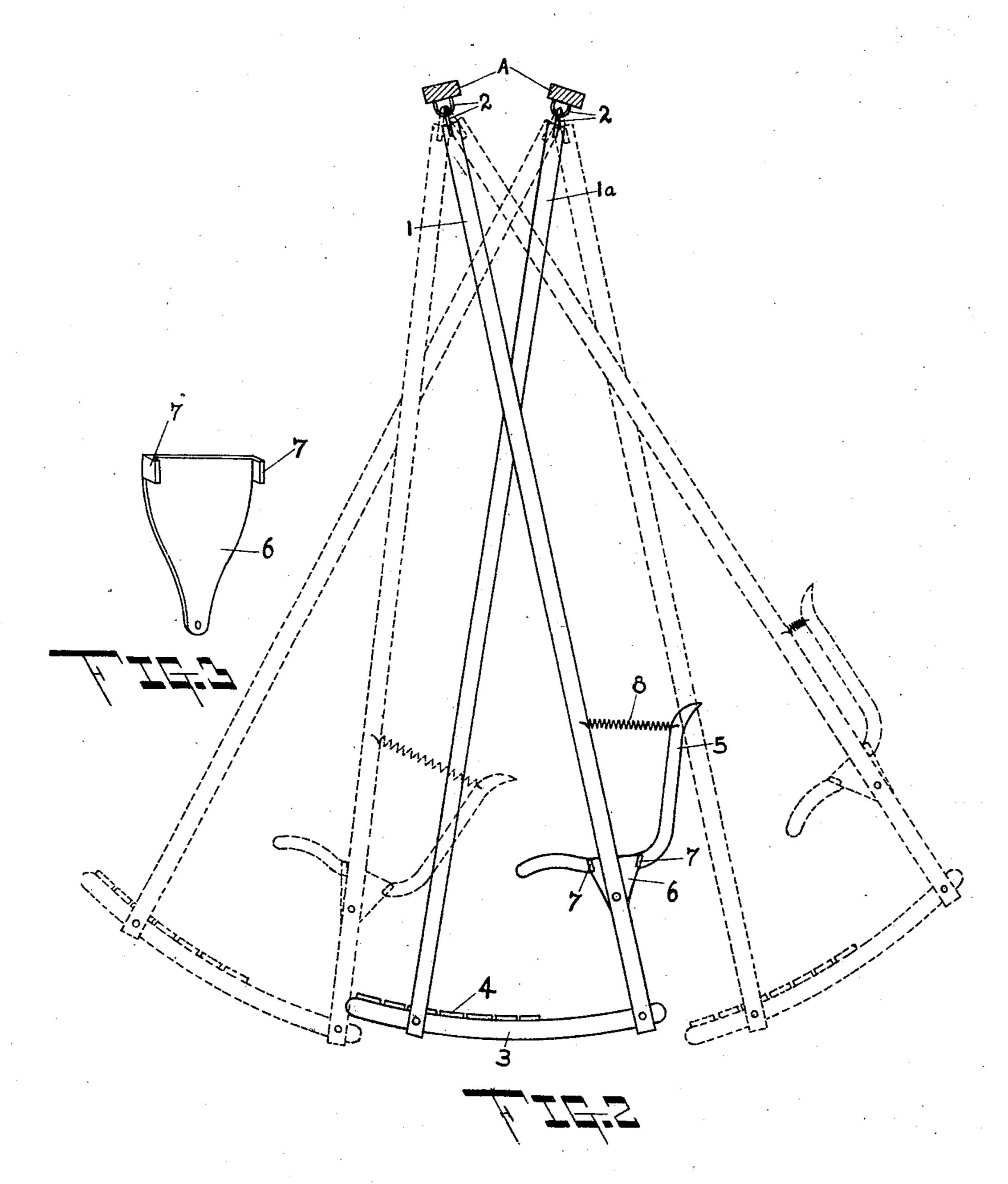
No. 859,212.

PATENTED JULY 9, 1907.

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APPLICATION FILED FEB. 16, 1907.

2 SHEETS-SHEET 2.



WITNESSES:

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## UNITED STATES PATENT OFFICE.

JOSEPH F. GERTHOFFER, OF ESSEXVILLE, MICHIGAN.

## SWING.

No. 859,212.

Specification of Letters Patent.

Patented July 9, 1907.

Application filed February 16, 1907. Serial No. 357,812.

To all whom it may concern:

Be it known that I, Joseph F. Gerthoffer, a citizen of the United States, residing at Essexville, in the county of Bay and State of Michigan, have invented 5 certain new and useful Improvements in Swings; and I do hereby 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.

My invention relates to swings, and more particularly to that class of devices having two suspension rods on each side, one pair supporting the seat and the remaining pair secured to a foot-rest near its forward end, one object being the provision of a device of this descrip-15 tion, simple in construction, inexpensive to manufacture and safe in use.

Another object is the provision of means for assisting the occupant in oscillating the swing.

A further object is the provision of means tending to 20 increase the comfort of the occupant of the swing. And a still further object is the provision of novel means for limiting the pivotal movement of the seat to prevent injury to the occupant.

To these and other ends, my invention consists in 25 certain novel features and combinations such as will be more fully described hereinafter and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a swing equipped with my invention, 30 Fig. 2 is a side view thereof and Fig. 3 is a detail view of the bracket.

(A) (A) indicate any suitable supports to which the suspension rods (1) (1a) are pivotally secured in any convenient manner, as by means of eye-bolts and 35 staples (2) (2), for instance. There are two pairs of suspension rods, one pair on each side of the swing, the rods being crossed, as illustrated, and at their lower ends, they are pivotally secured in any suitable manner to the rockers (3) (3) connected by the slats (4) (4) 40 to form a foot-rest or treadle. It will be noted that the suspension rods (1a) secured at their upper ends to the rear support (A) or rearwardly of the pivotal connection of the rods (1) (1) with the support, are connected at their lower ends some distance back of 45 the forward ends of the rockers (3) (3), thus causing the rods (1) (1a) to cross each other and also to permit the forward ends of the rockers to be raised at an angle or inclined relative to the seat, so that the feet of the occupant will rest squarely on the slats (4) (4). This

is found to be especially useful when the swing is out 50 of its vertical position shown in Fig. 2, the inclination of the foot-board relative to the seat remaining practically the same whether the swing is moving in one direction or the other. The position of the occupant is made more comfortable by attaching the rods (1a) 55 back from the forward ends of the rockers, as well as permitting the occupant to exert a greater pressure against the foot-board to oscillate the swing.

The rods (1) (1) support a seat (5) of any convenient type having a back, the seat being secured to the up- 60 per end of brackets (6) whose lower ends are pivotally secured to the rods (1) (1). The brackets are provided with lugs or other stops (7) (7) adapted to contact with one edge or the other of the suspension rods (1) to limit the rocking movement of the seat relative to the rods 65 and prevent the occupant from being dislodged from the seat by an excess pivotal movement in one direction or the other. Furthermore, in order to facilitate the comfort of the occupant as well as to increase the ease with which the swing may be oscillated, I prefer- 70 ably provide the springs (8) (8) connecting the back of the seat with the suspension rods (1) (1). These springs retain the seat in a normal position when the swing is idle, but when in operation, the occupant by pressing his feet against the foot-board causes the 75 swing to move backward, the springs serving to cushion the backward movement of the seat and brackets so that the stops (7) will not bring up abruptly against the edges of the suspension rods (1) and jar the occupant. The supports (A) (A) should be as close to- 80 gether as is possible without sacrificing too much power, as the closer the supports are to each other, the more comfortable is the swing.

Having thus fully disclosed my invention, what I claim as new is—

A swing comprising pairs of suitably supported crossed suspension rods, a single foot rest to which the lower ends of all the rods are pivotally secured, the lower ends of the forwardly extending rods being secured to the foot rest some distance back of the forward end thereof, a seat, 90 brackets carried by the seat, the brackets pivotally secured to the rearwardly extending rods, stops carried by the brackets and adapted to engage the rearwardly extending rods, and springs connecting the seat and rearwardly extending rods.

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

JOSEPH F. GERTHOFFER.

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Witnesses:

W. LEACH, RALPH S. WARFIELD.