

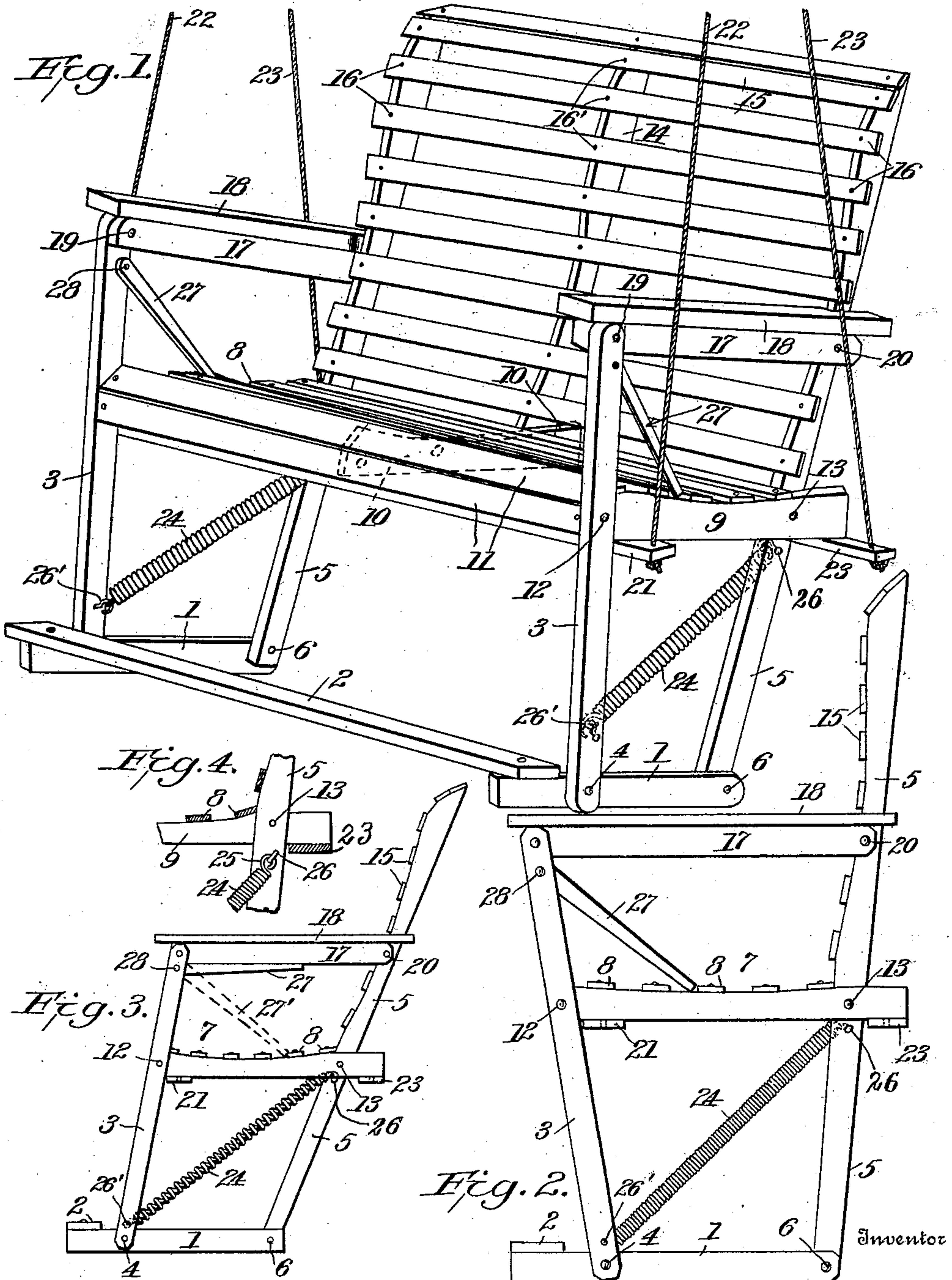
No. 886,974.

PATENTED MAY 5, 1908.

M. HATHAWAY.

SWING.

APPLICATION FILED NOV. 25, 1907.



Witnesses
C. N. Walker,
J. T. Walker.

Marian Hathaway.
By *E. E. Vrooman,*
his Attorney.

UNITED STATES PATENT OFFICE.

MARION HATHAWAY, OF MUNCIE, INDIANA.

SWING.

No. 886,974.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed November 25, 1907. Serial No. 403,744.

To all whom it may concern:

Be it known that I, MARION HATHAWAY, a citizen of the United States, residing at Muncie, in the county of Delaware and State of Indiana, have invented certain new and useful Improvements in Swings, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to an improvement in swings, and has for its object the provision of means for facilitating supporting a person in an upright or inclined sitting position.

Another object of the invention is the construction of a swing, which is provided with a minimum number of parts, is comparatively inexpensive to manufacture, and highly efficient in operation.

A further object of the invention is the construction of a swing, which is provided with means, easily in the reach of the operator, for securing the back in different inclined positions, irrespective of whether the swing is in movement.

With these and other objects in view, the invention consists of certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

In the drawings: Figure 1 is a perspective view of a swing constructed in accordance with the present invention. Fig. 2 is an end-view, in side elevation, of the swing depicted in Fig. 1. Fig. 3 is an end view of the swing, showing the back in an inclined or tilted position. Fig. 4 is a fragmentary view in side elevation of the swing.

Referring to the drawings, 1 designates the parallel base cleats or members. The horizontal foot member 2 is secured to the upper edges of the horizontal base members 1 near their front ends. The front standards 3 are pivotally connected, at 4, to the outer faces of the base members 1, and near the foot-rest or horizontal member 2. Rear standards 5 are pivotally connected to the inner face of the base members 1, at 6; it is to be noted that while the rear standards 5 are connected to the inner sides or faces of the base standards 1 at their rear ends, the front standards 3 are connected intermediate the ends of the base-members 1 and upon their outer face, thereby permitting the back 5 to swing or tilt rearwardly without the front standards 3 interfering with the horizontal slats 8 of the seat.

The seat 7 comprises slats 8, which slats are secured to, preferably, end-cleats or members 9, and an intermediate seat member 10. The front edge of the seat is, preferably, rounded by the angular positioning of slats 11, Fig. 1. The slats 11, as well as the slats 8, are secured to the end-cleats 9 and the intermediate cleat or seat-member 10. Each of the end-cleats is secured, near its front end, to the inner face of a front standard, at 12, and near its rear end to the outer face of a rear standard, at 13. The end-cleats 9, as well as the intermediate or central seat-member or cleat 10 projects rearwardly beyond the rear edges of the rear standards 5; the central member 10 also projects beyond the rear edge of the intermediate or auxiliary standard 14, to which standard 14 the seat member or cleat 10 is pivotally secured.

The back of my swing comprises the slats 15 secured near their ends to the rear standards 5, at 16, and near the middle, to the auxiliary standard 14, at 16'. It will, therefore, be noted that the front standards 3 can swing rearwardly upon the end-cleats 9, without interfering with the slats of the seat; the seat and back being pivotally connected, as described.

The arm-rests comprise horizontal pieces or boards 17 and 18. Each piece or board 17 is pivotally connected, at 19, to the upper end of a front standard, and at 20 to a rear standard 5. Each board or horizontal member 18 is secured to the upper edge of the board 17, and, it will, therefore, be noted that arm-rests are pivotally connected at their ends to the vertical or upright standards 3 and 5.

The front supporting member 21 is positioned between the front and rear standards and is fixedly secured to the lower edge of the end-pieces or members 9 and the intermediate cleat or member 10. The front supporting member 21 projects, at its ends, beyond the outer sides of the end-pieces or members 9, and in fact, slightly beyond the ends of the seat and the arm-rests. Each supporting member 21 is provided near its ends with apertures, in which is secured the front suspending means or ropes 22, and the rear suspending means or ropes 23 are likewise positioned in apertures near the outer ends of the rear, horizontal, supporting member 23; the rear supporting member 23 being secured to the under edges of the end members 9 and the

intermediate member 10, outside of the rear standards 5 and the intermediate or auxiliary standards 14, whereby the rear movement of the back is not limited, although these supporting members 21 and 23 are the means by which the swing is suspended from a suitable support.

The front supporting member 21 constitutes a stop for limiting the forward pivotal movement of the back, after the back has moved to its normal vertical position, Fig. 2, for the reason that the front edge of the supporting member 21 will come in engagement with the rear edges of the front standards 3, thereby stopping pivotal movement. It will be noted that the front supporting member performs two functions, to wit: provides a peculiar means for attaching the front cables or ropes to the swing, and also limits the forward movement of the back, preventing the same from swinging too far forward.

The back is, preferably retained in a vertical position by means of coil springs or yieldable members 24. These springs are arranged in an inclined position, and are peculiarly attached to the front and rear standards, for the reason that it is desired to have the same normally exert a pull upon the rear standards 5, thereby tending to normally swing said standards forwardly upon pivot 6, at all times. The peculiar attachment consists in securing the upper end 25 of each spring or yieldable member 24 to, preferably, an eye-bolt or hook 26 carried by the standard 5 (Fig. 4) contiguous to the pivot 13. The lower end of each spring is secured, preferably, to a hook or eye-bolt 26' secured to the front standard near its lower end. It is to be noted, that as the back of the swing is swung rearward a greater strain is exerted upon the springs, and as soon as the strain upon the back or seat is removed, the springs will draw the back to its normal, vertical position, Fig. 2.

When it is desired to move the back to an inclined position, it is necessary that the lower end of pawls 27 be raised by the operator for disengaging said ends from the slats 8; the pawls 27 being mounted at 28 upon the front standards 3 will permit the raising of the same so that the occupant of the swing can swing standards 3 and 5 back and forth upon the base members 1. In order to hold the back of the swing in an inclined position, it is necessary, at all times, to have the back of the occupant against the same. As each pawl 27 is pivoted, at 28, near its upper end, upon the inner face of the front standard 3, the operator can easily grasp the pawls with his hand and raise their lower ends, so that a free movement of the back and seat is permitted. By dropping the lower ends of the pawls, the same will engage the end cleats between the two contiguous slats and will hold the back from moving

backward, until the lower ends of said pawls are raised, Fig. 3, unless, of course, the back has already moved to its furthest forward position, Fig. 2. In Fig. 3, I have shown, in dotted lines 27, the position of the pawls, when the back is tilted or is in an inclined position. While the back may be swung or oscillated, the seat is retained, at all times, in a horizontal plane, by reason of the peculiar positioning of the front standards outside of the end pieces 9 and the rear standards within or between the end-pieces 9.

In as much as the springs are placed beneath the seat and arranged in the position specified, they normally exert a pull for bringing the back to an upright position. It is to be noted that the supporting members 21 and 23 are fixedly secured to the end cleats 9 and the intermediate cleats, thereby producing a rigid seat, which obviates any lateral tilting or strain upon the swing at any time, whereby a very durable and efficient structure is produced, although the back is permitted to have a swinging or rearwardly tilting movement; the slats 8 and 11 upon one side and the supporting members 21 and 23 upon the other side of the transverse cleats, forming the frame of the seat, produce a double reinforced structure.

What I claim is:

1. In a swing, the combination of front and rear standards, a seat pivotally secured to said front and rear standards, said seat comprising end cleats and spaced slats, pawls pivotally secured to the front standards and adapted to engage the slats for holding the back in an adjusted position, and means connecting each two of the front and rear standards and adapted to normally exert a forward pull upon the rear standards.

2. In a swing, the combination of base members, front and rear standards connected to said base members, a seat pivotally mounted upon said front and rear standards, inclined springs secured at their inner ends to said rear standards near said seat and at their front ends to the front standards near said base members for normally exerting a forward pull upon the rear standard, means carried by the bottom of said seat and adapted to engage the front standards and forming a stop for said back against pivotal movement, and means secured to said stop for attaching said swing to a support.

3. In a swing, the combination with front and rear standards, of a seat pivotally secured to said front and rear standards, said seat comprising end-cleats and spaced slats fixedly secured to the top edge of said end-cleats, pawls pivotally secured to the front standards and adapted to engage the end-cleats between two contiguous slats for limiting pivotal movement of the standards in one direction, inclined springs fixedly secured to the rear standards near said seat and

secured to the front standards near their lower end, horizontal supporting members secured to the bottom edge of said end-cleats, one of said members positioned between the front and rear standards and contiguous to the front standards, and the other supporting member secured to the extended rear ends of the end-cleats behind and contiguous to the rear standards, said supporting-members provided with vertical apertures outside of the end-cleats, cables or suspending means threaded through said apertures, and one of said supporting members adapted to engage the front standards for limiting forward movement of the back.

4. In a swing, the combination with front and rear standards, of a rigid seat pivotally secured to said front and rear standards, said seat comprising end-cleats, slats secured to the upper portion of said end-cleats, movable means engaging the end-cleats between said slats for preventing pivotal movement of said back in one direction, horizontal supporting members in engagement with the end-cleats, said end-cleats projecting beyond the rear standards, one of said supporting members secured to the end-cleats behind the front standards, each of said supporting members provided with apertures near its ends, suspending means threaded through said apertures, and one of said supporting members adapted to engage the front standards and limit forward movement of the standards.

5. In a swing, the combination with standards provided with a seat, of a pair of horizontal supporting members fixedly secured to the bottom of said seat, said supporting members provided with ends extending beyond the sides of said seat, said extended ends provided with vertical apertures, suspending means threaded through said apertures, and said supporting members constituting stops for limiting forward movement of the standards.

6. In a swing, the combination of front and rear standards, a seat pivotally secured to said front and rear standards, said rear standards extending above said seat, said seat provided with a fixed intermediate cleat, said intermediate cleat having its rear end projecting beyond the seat, an auxiliary standard pivotally secured at its lower end to the projected rear-end of the intermediate cleat, slats fixedly secured to the auxiliary standard and to the rear standards above said seat, said seat provided with a supporting-member behind the rear standards, and the supporting member projecting beyond the ends of said seat, a supporting member secured to said seat between the front and rear standards, and contiguous to the front standards and being adapted to engage their rear vertical edges for limiting forward movement of the back, said supporting-members provided with apertures, and supporting means threaded through said apertures.

7. As a new article of manufacture, a swing, comprising front and rear standards, means pivotally connecting the lower ends of said front and rear standards, a seat provided with a central, intermediate cleat, pivotally secured to said front and rear standards, an auxiliary standard pivotally secured at its lower end to said central cleat, slats extended across the auxiliary and end standards and fixedly secured to their front edges, supporting members secured to the bottom of said seat and behind said front and rear standards, one of said members adapted to engage the rear edges of the front standards for limiting movement of said back in one direction, and suspending means engaging the ends of said supporting-members.

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

MARION HATHAWAY.

Witnesses:

F. D. PAULLUS,
HARRY GOCHENOUR.