UNITED STATES PATENT OFFICE.

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REVOLVING AND RECLINING CHAIR.


To all whom it may concern:

Be it known that I, Hubert Witte, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Revolving and Reclining Chairs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a chair that is capable of being revolved and held from rotation by retaining means and also capable of being placed in reclining position.

Figure I is a side elevation of my chair. Fig. II is a side elevation of the chair looking at the opposite side from that shown in Fig. I. Fig. III is a vertical section taken through the chair-seat and its supporting members and showing the lower portion of the chair-back in elevation. Fig. IV is a horizontal section taken on line IV IV, Fig. II, with parts beneath said line shown in plan. Fig. V is an enlarged vertical section taken on line V V, Fig. II, with parts adjacent to said line shown in elevation. Fig. VI is an enlarged elevation of the upper end of the retaining-rod by which the chair is held from rotation, the parts in which the upper end of said rod is fitted being shown in vertical section. Fig. VII is an enlarged cross-section taken on line VII VII, Fig. IV, looking in the direction of the arrow crossing said line. 1 designates the seat of my chair, which is mounted upon a supporting-base 2, that is provided with a central apertured hub 3, extending downwardly from the seat-base. At the lower side of the seat-base and near its rear portion are ears 4.

5 is a revolving post, which is tapped into the seat-base hub and is held therein by a nut 6, as seen in Fig. III. The lower end of the post 5 is loosely seated in a pocket of a base-plate 7, which sets upon the floor. This base-plate is inclosed by a hood 8, secured to the floor. This hood is provided with a central aperture through which the post 5 passes, the post being confined by the hood through the medium of an annular rim 9, rigid with the post and occupying a position immediately beneath the central portion of the hood. Projecting upwardly from the top of the hood is a series of teeth 10, that are arranged in a circular course.

10 designates the chair-back, which is provided with arms 11, that are pivoted at 12 to the seat-base-carried ears 4. The back 10 is provided with a downwardly-extending and forwardly-curved arm 13, having an enlargement 14 at its extremity extending transversely of the arms and having at one end a gudgeon 15 (see Fig. I) and at the other end a gudgeon 16. (See Fig. II.)

17 represents arm rests pivoted at 18 to the chair-back 10 and extending forwardly from their points of pivotal connection to the back, and 19 represents arm-rest-supporting links pivoted at 170 to the arm-rest and at 171 to the seat-base 2. This construction permits free movement of the chair-back relative to the seat, so that it may be raised into substantially upright position and placed in reclining position while swinging on its pivotal point 12.

22 designates a rearwardly-extending foot-rest arm fixed to the seat-supporting post 5 above the hood 8 and having hinged thereto at 23 a folding foot-board 24, that is adapted to be extended to receive the feet of a person occupying a chair at the rear of the one to which said foot-rest arm is applied. At the forward end of the foot-rest arm 22 is a pair of separated eyes 25, (see Figs. I, II, IV, and VII,) the utility of which will be hereinafter specified.

26 designates a bifurcated reciprocating foot-rest frame, the arms of which are loosely seated in the eyes 25 of the fixed foot-rest arm 22.

27 is a folding foot-board, hinged at 28 to the arms of said foot-rest frame.

29 is a link provided with a longitudinal slot 30 and having its upper end pivoted at 31 to the seat-supporting hub 3 (see Fig. I) and its lower end pivoted at 32 to the rear end of one of the arms of the foot-rest frame 26. (See Fig. IV.) The slot 30 in the link 29 receives the gudgeon 15 at one end of the enlargement of the chair-back arm 13, as seen in Fig. I, so that said gudgeon may ride thereupon when the seat-back is lowered or raised, thereby causing the arm of the chair-back to rock the link 29 and reciprocate the foot-rest frame 26 to and fro. The foot-rest frame is therefore projected forwardly, as seen in dotted lines, Fig. I, when the chair-back is reclined, and is retracted into the position seen in full lines, Fig. I, when the seat-back is in raised position.

32 designates a rack-bar that serves to
hold the link 29 from movement and also to hold the chair-back 10 from movement, thereby providing for the retention of the chair-back and the reciprocating foot-rest frame 26 in set positions. One end of this rack-bar is loosely fitted to the gudgeon 16, carried by the enlargement of the chair-back arm 13. The rack-bar extends through a keeper 33, located at one side of the seat-base hub 3, and its teeth are adapted to engage a cross-pin 34 in said keeper. (See Figs. II and V.) The forward free end of the rack-bar is normally held depressed by a spring 35, secured to the seat-base 2 and resting upon said rack-bar, as seen in Fig. II, whereby the teeth of the rack-bar are maintained in engagement with the cross-pin 34 to hold the rack-bar from accidental movement.

36 designates a lift-lever having a free end that is positioned beneath the forward free end of the rack-bar. This lift-lever is pivoted to ears 37, depending from the seat-base, and it has an upright portion provided with a button 38, which may be pressed downwardly to rock the free end of the lever in an upward direction for the purpose of lifting the rack-bar against the action of the spring 36 to free it from the cross-pin 34, so that the parts contained trolleyed by said rack-bar may be moved.

39 designates a lock-rod through the medium of which the rotatable members of my chair, including the post 5 and the parts supported thereby, are held from rotation. This lock-rod extends loosely through the forward end of the foot-rest arm 22 to seat between pairs of the teeth 9, surrounding the base-plate hood 8. The upper end of the lock-rod is seated and guided in its vertical movement in an aperture 2 in the seat-base 2. (See Fig. VI.)

41 is a lift-lever rockingly mounted in ears 42, depending from the seat-base 2. This lift-lever has an upright portion that is provided with a button 43, against which pressure may be exerted to rock the lever. The forward end of the lift-lever 41 is provided with a fork 44, that receives the lock-rod 39. Upon the lock-rod, immediately above the fork of the lift-lever, is a collar 40, against which the lock-rod fork bears, and above this collar on the lock-rod is a spring 45, that serves to hold the lock-rod depressed and in engagement with the teeth 9 of the base-plate hood.

When in the use of my chair it is desired to put it in condition for a reclining chair, it is only necessary to rock the lift-lever 36 by pressure upon its button 38, and the lever will act to elevate the rack-bar 32, thereby releasing the rack-bar from the cross-pin 34.

The chair-back 10 may then be moved into the desired reclined position, and as it is so moved the rack-bar 32 will travel in the keeper 33 until the chair-back is brought to the desired position, when the lift-lever having been released the rack-bar will again engage the cross-pin 34 to be held from movement. As the chair-back is moved the gudgeon 15, carried by the chair-back arm 13, travels in the slot 30 of the link 29 in the arc of a circle, thereby rocking said link and causing it to impart reciprocation to the foot-rest frame 26, so that said foot-rest frame is projected in a forward direction, as seen in dotted lines, Fig. I, and its foot-board 27 is properly placed to receive the feet of the occupant of the chair while in a reclined position. Whenever it is desired to revolve the chair, the lift-lever 41 is rocked by pressure upon its button 43, and the lock-rod 39 is elevated to disengage its free end from the teeth 9, thereby freeing the revolving parts of the chair to permit of their rotation with the supporting-post.

I claim as my invention—

1. In a chair of the character described, the combination of a seat, a post by which said seat is supported, a swingingly-supported chair-back, a foot-rest arm fixed to said post, and a reciprocating foot-rest member loosely connected to said chair-back and operating in said foot-rest arm, substantially as set forth.

2. In a chair of the character described, the combination of a seat, a post by which said seat is supported, a chair-back swingingly supported, a link having pivotal connection with said seat and loosely fitted to said chair-back, a foot-rest arm fixed to said post and provided with eyes, and a reciprocating foot-rest member loosely connected to said link and operating in the eyes of said foot-rest, substantially as set forth.

3. In a chair of the character described, the combination of a seat, a post by which said seat is supported, a chair-back swingingly supported, a link having pivotal connection with said seat and loosely fitted to said chair-back, a foot-rest arm fixed to said post and provided with eyes, and a reciprocating foot-rest member loosely connected to said link and operating in said foot-rest arm, substantially as set forth.

4. In a chair of the character described, the combination of a seat, a post by which said seat is supported, a chair-back swingingly supported, a link having pivotal connection with said seat and loosely fitted to said chair-back, a foot-rest arm fixed to said post, a reciprocating foot-rest member loosely connected to said link and operating in said foot-rest arm, and means for retaining said chair-back and link in adjusted positions, substantially as set forth.

5. In a chair of the character described, the combination of a seat, a post by which said seat is supported, a chair-back swingingly supported, a link having pivotal connection with said seat and loosely fitted to said chair-back, a foot-rest arm fixed to said post, a reciprocating foot-rest member loosely con-
nected to said link and operating in said foot-
rest arm, and a rack-bar connected to said
chair-back and arranged to hold said back
and link from movement, substantially as
set forth.

6. In a chair of the character described,
the combination of a seat, a chair-back swing-
ingly connected to said seat, a slotted link
having pivotal connection with said seat,
and a reciprocating foot-rest member pivoted
to said link, said chair-back being provided
with an arm having a gudgeon operating in
the slot in said link, substantially as set forth.

7. In a chair of the character described,
the combination of a seat, a chair-back swing-
ingly connected to said seat, a slotted link
having pivotal connection with said seat, a
reciprocating foot-rest member pivoted to
said link, said chair-back arm and arranged to hold
it from movement, substantially as set forth.

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In presence of—
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