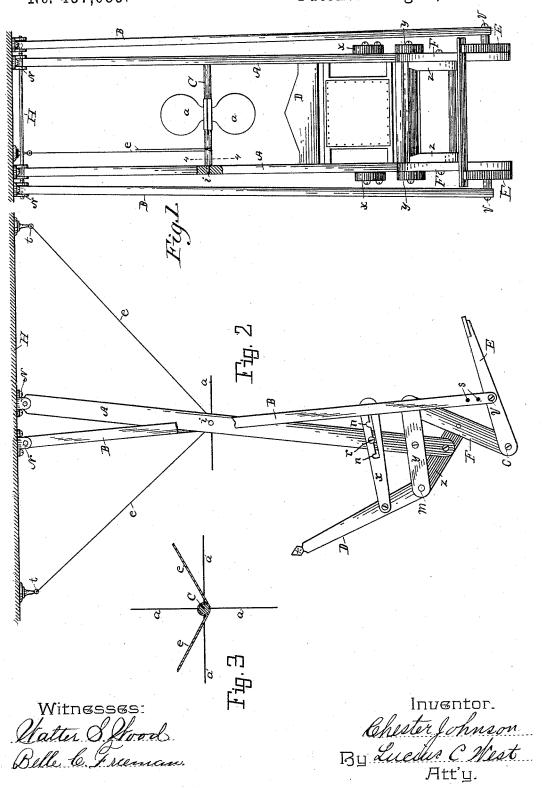
C. JOHNSON. SWINGING CHAIR.

No. 457,085.

Patented Aug. 4, 1891.



UNITED STATES PATENT OFFICE.

CHESTER JOHNSON, OF OTSEGO, ASSIGNOR OF ONE-HALF TO JOSEPH RICHMOND, OF KALAMAZOO, MICHIGAN.

SWINGING CHAIR.

SPECIFICATION forming part of Letters Patent No. 457,085, dated August 4, 1891.

Application filed August 21, 1890. Serial No. 362,643. (No model.)

To all whom it may concern:

Be it known that I, CHESTER JOHNSON, a citizen of the United States, residing at Otsego, county of Allegan, State of Michigan, have invented a new and useful Swinging Chair, of which the following is a specification.

This invention relates to that class of swinging chairs which have crossing suspend-

ing hangers.

The object of the invention consists in the peculiar construction and arrangement of parts in combination, substantially as below described and claimed.

In the drawings forming a part of this specification, Figure 1 is a front elevation looking from a point at the right of Fig. 2. Fig. 2 is a side elevation looking from a point at the left of Fig. 1. Fig. 3 is a section on line 44 in Fig. 1, enlarged, looking from a

20 point at the left.

Referring to the lettered parts of the drawings, H will serve to illustrate the upper ceiling of a room or the top of some frame-work constructed to support the chair and from 25 which the hangers A B are suspended. Both of these hangers A B on each side are hinged at N N to the ceiling or support H, as in Figs. 1 and 2. These hangers cross each other, as in Fig. 2, so that the lower ends of the forward of the rear hangers will be at the rear of the lower ends of the rear hangers will be forward of the lower ends of the front hangers. The lower ends of the hangers A are rigidly attached to the bottom 35 y or frame-work of the chair and to the brace z, which supports said bottom.

To the front side of the chair-bottom y are rigidly attached downwardly and rearwardly extending bars F, one on each side. To the lower ends of these bars F is pivotally attached at c c the rear end of the foot-board E. The lower ends of the hangers B are pivotally attached at v v to the foot-board E forward of the pivots c of said foot-board. The lower ends of the hangers B are provided with a series of holes s, so that the angle of the foot-board may be raised and lowered according to the height of the occupant of the chair. The back of the chair D is pivoted to the bottom y at m m, so that the angle of the

or forward and fastening it in the desired position. The chair-arms x are pivoted to the back of the chair above the bottom, and are adjustably attached to the hangers A by 55 means of the notches n n in said arms and the projections r r on said hangers A A, which engage the notches. By changing from one notch n to another the back of the chair is tilted forward or back and fixed in the de- 60 sired position. By means of this peculiar construction of crossing hangers, in connection with the chair and the pivoted footboard, which serves as a treadle, the occupant, by sitting in the chair and pressing his feet 65 down on the foot-board, owing to the peculiar leverage obtained, can throw the chair to the rearward, and then by releasing the pressure on the foot-board the chair will seek its normal position by gravity, and, owing to the 70 momentum it receives, will be thrown forward, and thus by continuing the operation the occupant of the chair can easily keep the same under a swinging motion. Above the chair is a transverse shaft C, having revolu- 75 ble bearings i in the hangers A A. This shaft is provided with fans a a, radiating therefrom like the paddles of a water-wheel,

as in Figs. 1 and 3.

At e is a cord or rope looped around the 80 shaft C, as in Figs. 1 and 3, and having its ends from thence diverging and extending upward to some suitable support—as, for instance, as here shown, to the support H—where the ends are attached thereto at t t. 85 By this means when the chair swings backward the fan will revolve backward, and when the chair swings forward the motion of the fan will be reversed. Thus the occupant, by the simple use of his feet, can swing and fan och inself at the same time by means of a very simple, cheaply-constructed, and easily-oper-

ated device.

Having thus described my invention, what I claim as new, and desire to secure by Letters 95 Patent of the United States, is—

a series of holes s, so that the angle of the foot-board may be raised and lowered according to the height of the occupant of the chair. The back of the chair D is pivoted to the bottom y at m m, so that the angle of the back D can be changed by swinging it back.

A swinging chair comprising the hangers, the bottom frame, the rearwardly-inclined bar pendent from the front side of said frame, the pivoted foot-board, to which the lower ends of the rear hangers are adjustably pivoted, the brace rigidly attached to the rear side of

the seat-frame at one end and to the pendent bar at the other end, the other hangers being rigidly attached to the bottom frame and to the braces, the back of the chair pivoted to the back side of the seat-frame, the arms above the seat pivoted to said back and adjustably attached to the hangers, substantially as set forth.

In testimony of the foregoing I have hereunto subscribed my name in presence of two to witnesses.

CHESTER JOHNSON.

Witnesses:
JOSEPH RICHMOND,
EUGENE SCOTT.