(No Model.)

W. E. MARTIN & P. WALRAD.

RECLINING CHAIR.

No. 491,246. Patented Feb. 7, 1893.

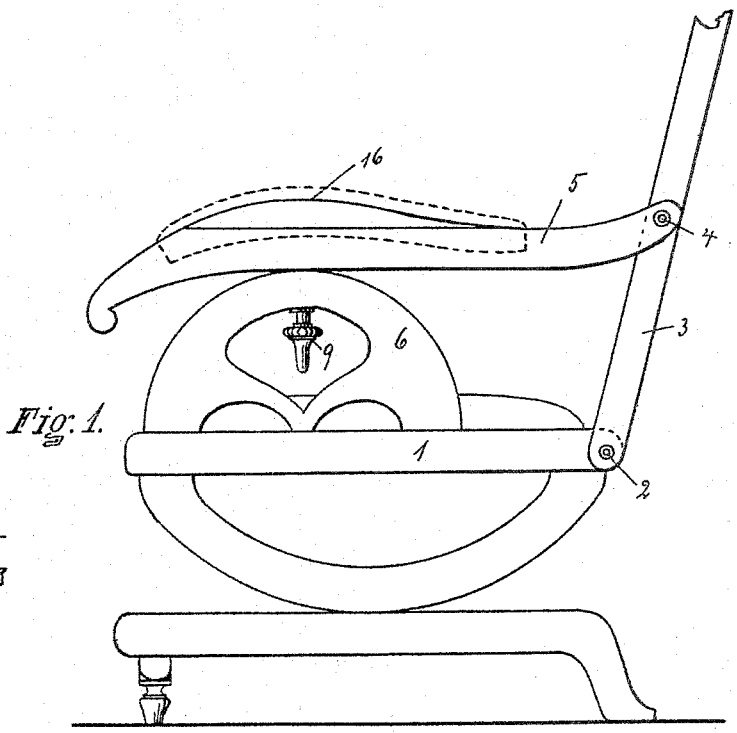

Fig. 1.

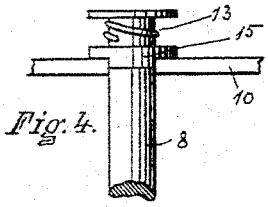

Fig. 4.

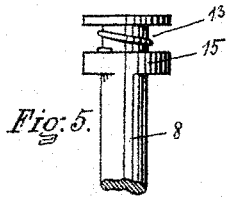

Fig. 5.

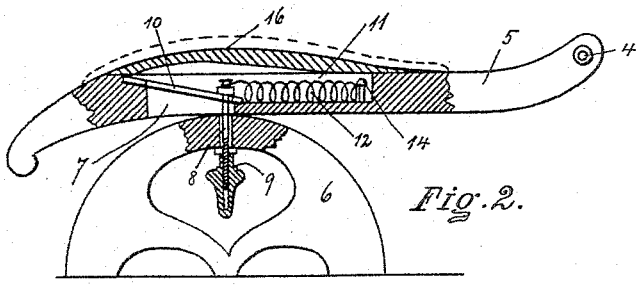

Fig. 2.

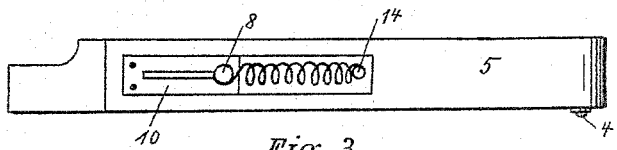

Fig. 3.

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UNITED STATES PATENT OFFICE.

WILLARD E. MARTIN AND PETER WALRAD, OF HERKIMER, NEW YORK.

RECLINING-CHAIR.

SPECIFICATION forming part of Letters Patent No. 491,246, dated February 7, 1893.

Application filed May 21, 1892. Serial No. 433,818. (No model.)

To all whom it may concern:

Be it known that we, WILLARD E. MARTIN and PETER WALRAD, both of Herkimer, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in Reclining-Chairs; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the numerals of reference marked thereon, which form part of this specification.

Our invention relates to an improvement in chairs having adjustable reclining backs.

In the drawings which accompany and form a part of this specification and in which similar numerals of reference refer to corresponding parts in the several figures. Figure 1, shows a side elevation of a chair, having our improvements. Fig. 2, shows the details of construction partially in sections. Fig. 3, shows a plan view of a portion of the arm carrying the adjusting mechanism. Fig. 4, shows in enlarged detail the head of the adjusting bolt. Fig. 5, shows the head of the same bolt from another point of view.

Referring more particularly to the reference numerals marked on the drawings 1, indicates the chair seat which is mounted upon any suitable base. To the rear end of the seat is hinged or pivoted at 2, the adjustable back 3. Pivoted to the back at 4, above the seat is arm 5, which rests at its forward end upon a rigid projection 6, from the seat. At the point of engagement of the arm with the projection 6, the arm is slotted on its under side, as shown at 7, to receive the adjusting bolt 8, which bolt 8, passes through an opening in 6, which is of a size to permit the bolt to be moved lengthwise of the opening, but will hold it substantially stationary in other directions. On the lower end of the bolt is provided a nut 9, working on a screw thread and which is preferably incased within a suitable knob or drop in the shape of an ornamental fixture of the chair. Over the slot opening 7, in the arm is provided an inclined slot plate 10, fixed to the arm. The bolt 8, passes through the slot in the plate. In the recess 11, in the arm on the side toward the back is provided a spring 12, which is secured at one end in groove top 13, of bolt 8, and at the other end is secured at 14, to the arm. The bolt 8, has a portion of its head formed to engage in the slot of the plate, 10, as shown at 15 in Fig. 4, so that the bolt will also be held from rotating, thus enabling the nut to be tightened or loosened on the bolt. It will be understood that the arm may be upholstered entirely concealing the removable cover or piece 16, which incloses the chamber containing the adjusting mechanisms.

The operation of the device is substantially as follows: With the nut set up in the position shown in Figs. 1 and 2, to tightly bind the arm 5 to the fixed projection 6, the back is secured in its forward and normal position. A person occupying the chair by rotating the nuts 9 to run the nut off from the bolt will allow the inclined piece 10, to play through under the head of the bolt toward the back, and the back will be adjusted to a position determined by the amount that the nut 9 is operated. It will of course be understood that one of these adjusting arms is placed on each side of the chair seat. By removing the pressure from against the back and slightly relieving nut 9, the springs 12, will retract the back to its normal position, when the nuts 9 may be run on to secure it in that position. It is evident that the construction may be modified in several particulars without departing from the equivalence of our invention.

What we claim as new and desire to secure by Letters Patent is:

1. The combination in a chair of a seat and back pivoted to the rear of the seat, an arm pivoted to the back above the seat and having a slot bolt opening in its forward end, an inclined slot plate 10. located over the slot opening in the arm and inclined from the front downwardly toward the rear and adjusting bolt mounted in a fixture on the seat, passing through the slot in the arm and engaging in the slotted plate 10, and a spring 12, secured at one end to the end of the bolt 8, and at the other end to the arm substantially as set forth.

2. In a reclining chair, a seat, a swinging back pivoted to the seat, and a rigid projection 6 projecting from the upper face of the seat, an arm pivoted to the back above the

pivotal point at the seat and sliding at its forward end on the projection 6, an inclined slotted plate 10 inclining from the front downward toward the rear of the chair, and contained within a chamber within the arm, a bolt 8 passing through the opening in the projection 6 and through the slotted opening in plate 10 and having its head contained in the chamber in the arm, a nut 9 provided on the bolt 8, and a righting spring 12 secured at one end to the head of the bolt adjacent to the inclined plate, and at the other end to the arm on the side toward the back, the spring being contained in the chamber in the arm, all combined substantially as set forth.

In witness whereof we have affixed our signatures in presence of two witnesses.

WILLARD E. MARTIN.
PETER WALRAD.

Witnesses:
MICHAEL N. DOYNIHAN,
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