No. 708,911. Patented Sept. 9, 1902.

J. O'CONNOR.

CHAIR.

Application filed Nov. 14, 1901.

(No Model.)

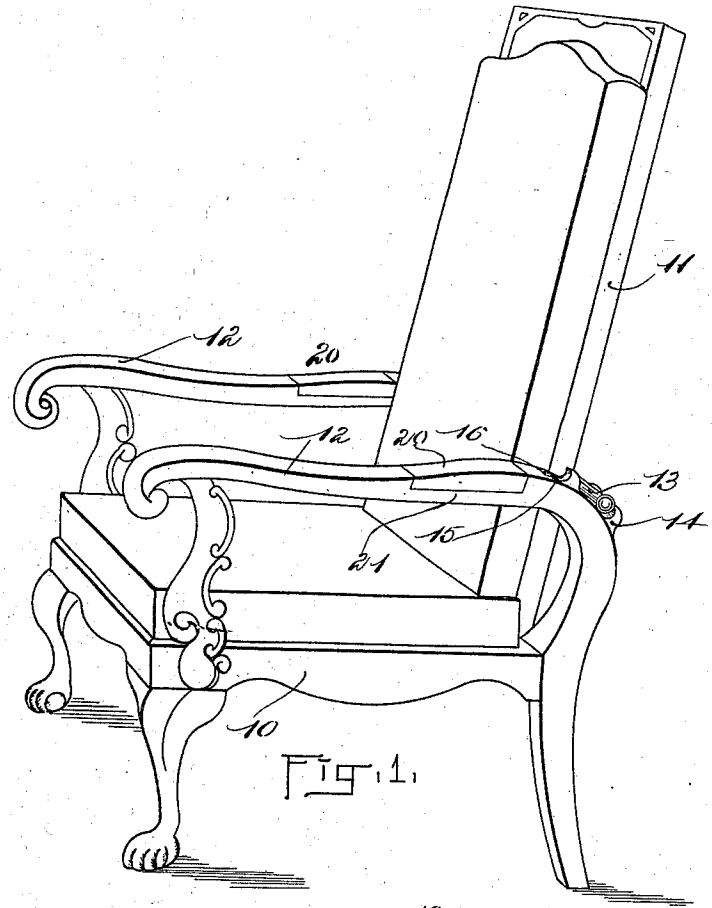


Fig. 1.

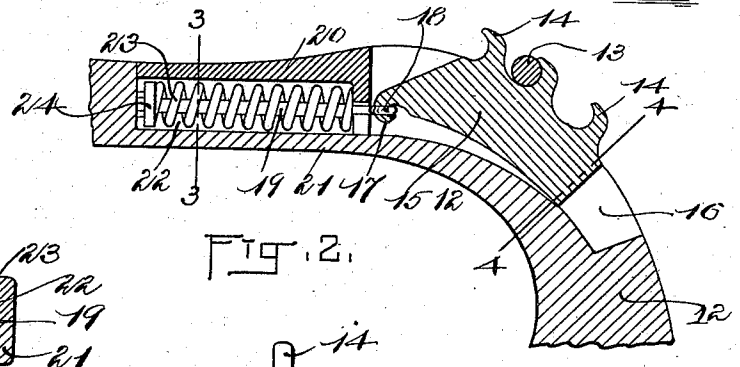


Fig. 2.

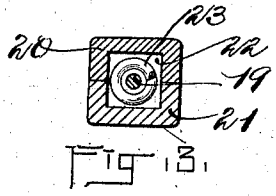


Fig. 3.

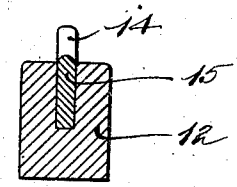


Fig. 4.

Witnesses:
William H. Forrest.
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UNITED STATES PATENT OFFICE.

JAMES O'CONNOR, OF EAST CAMBRIDGE, MASSACHUSETTS.

CHAIR.

SPECIFICATION forming part of Letters Patent No. 708,911, dated September 9, 1902.

Application filed November 14, 1901. Serial No. 82,208. (No model.)

To all whom it may concern:

Be it known that I, JAMES O'CONNOR, a citizen of the United States, residing at East Cambridge, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Chairs, of which the following is a specification.

The object of this invention is to provide a chair having a spring-supported back, so that the same may yield to the body and stand at different angles with the chair-seat as the user assumes different positions.

The object of this invention is, further, to provide a chair having a spring-supported back which will be strong and durable and which will be of such inexpensive construction as to come within the means of the general public.

The invention consists, in a reclining-chair, of a back pivoted to the frame of said chair, a spring-controlled rod in each of the arms of said frame, a sliding plate pivotally connected to said rods and provided with projections to engage a back-rod, said back-rod extending transversely across and supporting the back of said chair.

The invention further consists in the combination and arrangement of parts set forth in the following specification and particularly pointed out in the claims thereof.

Referring to the drawings, Figure 1 is a perspective view of a chair of the style commonly known as the "Morris" chair, showing my improved spring-supported back attached thereto. Fig. 2 is a longitudinal vertical section through one arm of said chair, showing the construction of the slide-plate and the manner of connecting the same to the sliding rod and spring. Fig. 3 is a transverse section taken on line 3 3 of Fig. 2. Fig. 4 is a transverse section taken on line 4 4 of Fig. 2.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, 10 is the frame of the chair; 11, the back, pivoted to said frame, and 12 12 the arms thereof. The back 11 of the chair rests against a back-rod 13, which is supported upon each side of the chair upon hooked projections 14 integral with the curved slide-plate 15. The slide-plates 15 each slide in a groove 16, formed in the arms 12, and are provided with a hook 17, which engages an eye 18, formed upon the right-hand end of a rod 19. The slide-plates 15 do not need to fit with any nicety in the groove 16 and may be of cheap construction, an unfinished casting being sufficient for the purpose. It will be understood that as the slide-plates 15 are pushed backwardly and downwardly by the motion of the chair-back through the back-rod 13, as hereinafter described, they follow the groove 16, the lower corner of each of said plates resting upon the bottom of the groove 16. (See Fig. 2.) Each of the arms 12 is made in two parts 20 21, joined together, a recess 22 being provided in each of said arms to receive a spiral compression-spring 23, the right-hand end of which, Fig. 2, bears against a solid portion of the arm 12 and the other end thereof bears against a collar 24, fast to the rod 19.

It will be seen that when the back 11 is pushed toward the right, Fig. 1, the slide-plates 15 will move in the grooves 16 toward the right and at the same time downwardly, following the path of movement of the rod 13 and allowing said back to tilt freely upon its pivot. During this movement of the back of the chair the rods 25 will be moved toward the right through the hooked pivotal connection of the slide-plates 15 therewith, and the springs 23 will be compressed to allow of said movement. When the pressure upon the back is released by the movement of the occupant of the chair in changing his position, the springs 23 will expand and carry the same to the position shown in Fig. 1, thus making a very easy and comfortable chair-back, which accommodates itself to the different positions of the occupant of the chair.

Having thus described my invention, what I claim, and desire by Letters Patent to secure, is—

1. In a reclining-chair, a frame, a back pivoted to said frame, a spring-controlled rod in each of the arms of said chair, arranged to slide lengthwise thereof, a slide-plate in each of said arms located and guided in a groove formed therein and pivotally connected to said rod, projections upon each of said slides, and a back-rod engaging said projections and supporting said back.

2. In a reclining-chair, a frame, a back piv-

oted to said frame, a spring-controlled rod in each of the arms of said chair arranged to slide lengthwise thereof, a slide-plate in each of said arms located and guided in a groove formed therein, a hook formed upon each of said slides and engaging an eye formed upon each of said rods, projections upon each of said slides, and a back-rod engaging said projections and supporting said back.

3. In a reclining-chair, a frame, a back pivoted to said frame, a rod arranged to slide lengthwise of each of the arms of said chair, a spring contained in a recess provided in each of said arms encircling and controlling said rods, a slide-plate in each of said arms located and guided in a groove formed therein, a hook formed upon each of said slides and engaging an eye formed upon each of said rods, projections upon each of said slides, and a back-rod engaging said projections and supporting said back.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES O'CONNOR.

Witnesses:

CHARLES S. GOODING,

LOUIS A. JONES.