No. 608,010. Patented July 26, 1898.

E. J. SMITH.

CHAIR.

(No Model.) (Application filed June 14, 1897.)

Fig. 1.

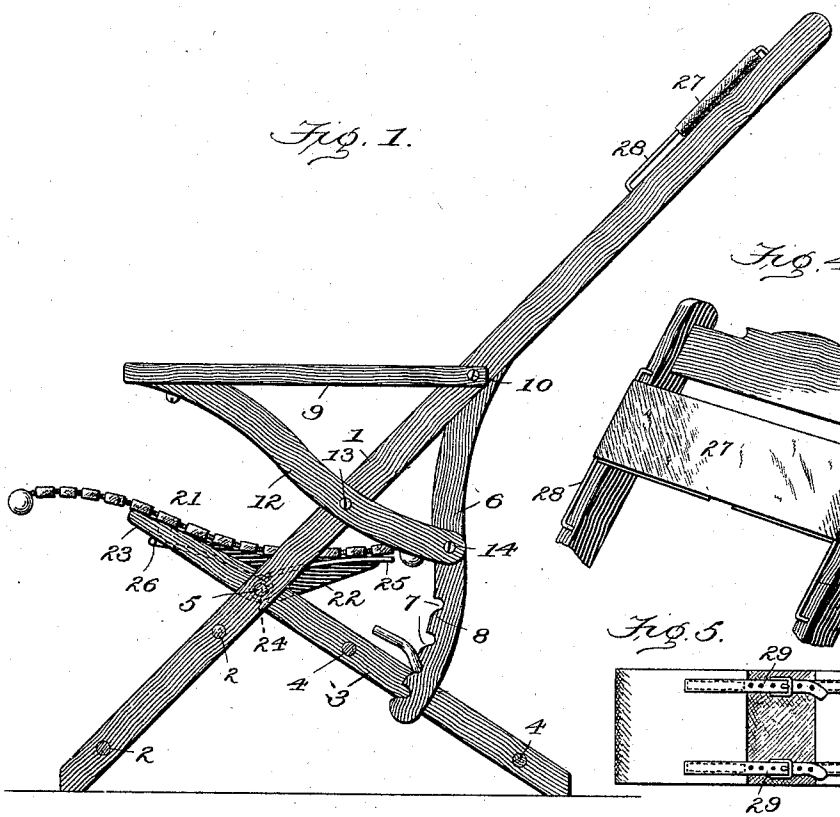


Fig. 4.

Fig. 5.

Fig. 2.

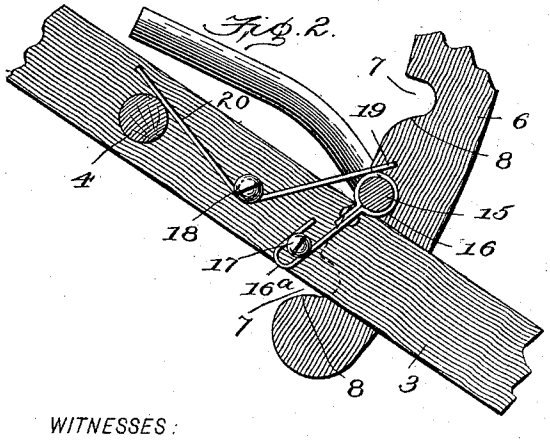
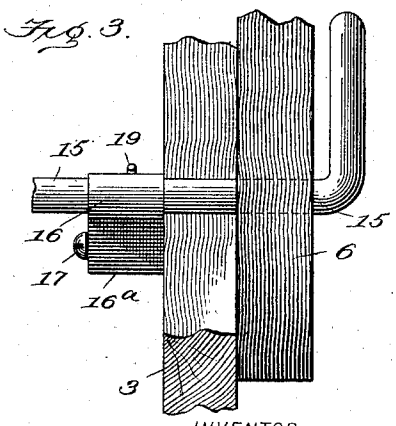


Fig. 3.



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CHAIR.

SPECIFICATION forming part of Letters Patent No. 608,010, dated July 26, 1898.

Application filed June 14, 1897. Serial No. 640,620. (No model.)

To all whom it may concern:

Be it known that I, ELDRIDGE J. SMITH, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Chairs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention relates to improvements in easy-chairs, and more particularly to that class of chairs having adjustable backs.

It is the purpose and aim of this invention to materially simplify and improve the construction of chairs of this general type, so that they will be strong and durable, easy of adjustment, and very cheap in manufacture.

It is a further purpose of my present invention to provide an improved "head-rest" for chairs which will be of simple construction and which can be readily applied to ordinary "high-back" chairs with little expense and trouble.

Briefly stated, my invention consists in an easy-chair comprising the crossing foot members, which are pivoted together, and one of which members is formed with a back extension, to which the arms of the chair are secured. The said back extension is further provided with downwardly-extending notched arms, which are arranged to support the said back-section in various positions of adjustment by having their notched portions engage with a cross rod or bar, said rod or bar being easily unlocked from its engagement with the said notched arms by means of a foot-lever, whereby the reclining position of the back of the chair may be changed at will.

To these and other ends the invention consists in the novel features of construction and new combination and arrangement of parts hereinafter more definitely described and then particularly pointed out in the claims which conclude this specification.

In order to enable others skilled in the art to which my invention appertains to make, use, and construct the same, I will now proceed to describe my improved chair in detail, reference being had for this purpose to the accompanying drawings, in which—

Figure 1 is a side elevation of a chair constructed in accordance with my invention. Fig. 2 is an enlarged detail view showing in side elevation the mechanism for retaining the chair-back in its adjusted positions. Fig. 3 is a rear view of the same. Fig. 4 is a perspective view of the upper portion of a chair-back, showing one of my improved head-rests attached thereto. Fig. 5 is a detail view looking at the reverse side of the fabric comprising the head-rest and showing the manner of tightening the same.

Referring now to the drawings, the reference-numeral 1 designates the rearwardly-inclined upright standards, of which there are two, joined by cross-rails 2, as will be readily understood, and which at their lower ends form the front feet of the chair and at their upper portions form the supports for the chair-back proper, said back being made preferably of flexible independent slats, such as set forth in my former patent, No. 538,708, dated May 7, 1895. The rear feet of the chair comprise a pair of forwardly-inclined short standards 3, connected together by cross-rails 4, as usual, and which short standards are loosely pivoted near their upper ends to the inclined standards 1 by a rod or bolt 5, as shown. Extending downward from the rear side of each rearwardly-inclined upright standard is a rigid curved supporting-arm 6, the lower ends of which arms are provided with a number of notches or recesses 7, having their lower edges or faces beveled off, as at 8. The arm-rests 9 of the chair are secured to the upright standards at 10 and are rigidly attached at their forward ends to the downwardly-curved bracing-pieces 12, which latter are in turn secured to the upright standards and supporting-arms at 13 and 14, respectively, by suitable connecting-bolts, so that these parts always assume the same position relative to each other when adjusting the chair.

The improved mechanism for retaining the chair-back or upright standards in various reclining positions consists of a transversely-arranged rocking rod 15, preferably of metal, which is connected to the said upright standards by means of swinging brackets 16, each of which are connected to or surround the

rod at their outer ends and have their lower or opposite ends provided with loops or hooks 16^a, which take over retaining pins or bolts 17, as shown. The opposite ends of the said rocking rod 15 are cranked to form a foot lever or levers, as shown, so as to be easily operated by the foot or hand of a person to throw it out of engagement with the notches in the supporting-arms 6 whenever it is desired to lower the back of the chair. In raising the upright standards to bring the chair-back in a nearer vertical position it is not necessary to manipulate the transverse rod 15 by the foot, since the said rod will be shifted automatically by means of the arms 6 and beveled edges 8 of the notches 7. In order to insure and assist the transverse rod 15 in finding its way into and being retained in the said notches 7, I have provided a suitable spring or springs, each of which is coiled intermediate its ends around a pin or screw 18, secured to the forwardly-inclined standard 3 and having its rear end 19 bearing upon said rod 15 and its forward end 20 supported by one of the cross-rails 4 of the chair. While I have here shown but one spring, it is obvious that two may be used, and in practice I prefer to employ this number. It will be understood from the foregoing that the transverse rod 15, together with any downward weight or force applied to the chair-back through the supporting-arms 6, will be entirely supported by the forwardly-inclined short standards 3, since the said rod 15 rests upon the upper edge of the said standards, and with this construction the weight is removed from the brackets 16.

The chair-seat 21 is preferably comprised of the ordinary "slat-fabric" type heretofore patented by me, and said seat has attached to its under side two or more brackets or braces 22, having their upper faces curved, as shown, to give the proper shape to the seat. The connection of the seat with the chair-standards is made by means of the same transverse rods or bolts 5 heretofore mentioned, which pass through and connect the said upright standards 1 and 3, said bolts or rods also passing loosely through the brackets or braces 22, so as to allow the seat to have a slight backward swinging or oscillating movement. The side edges of the seat 21 at its front portion rest upon the upper ends 23 of the short standards 3, which ends are beveled off to suit the shape of the seat, and the said seat is normally held in contact with such ends 23 by means of a spring which is coiled at 24 around the rods or bolts 5 and has its rear end 25 acting upon the rear under side of the seat and its forward end 26 bent outward at a right angle to engage the under side of the forward end of the forwardly-inclined standard 3. It will be understood that two or more or of these springs may be employed, as desired. By this means I provide a very easy and comfortable rocking seat.

My improved head rest or support consists of a band or strip of any suitable fabric 27, which is tightly stretched over a pair of elongated supporting loops or wires 28, secured to the upright standards in any suitable manner. These loops are made of somewhat greater length than the width of the fabric 27, so that the latter may be adjusted up or down upon said loops to suit the position of the occupant of the chair. The flexible strip or band is connected by means of a strap-and-buckle connection 29, as shown in Fig. 5, so that the said head-rest may be drawn up tightly as desired.

From the foregoing it will appear that I provide an extremely simple and durable easy-chair that can be readily and easily adjusted to various reclining positions and which can be manufactured at a nominal cost.

Minor changes in the details herein shown and described may be made without departing from the spirit and essence of my invention.

What I claim as my invention is—

1. In an easy-chair, the combination with the rearwardly and forwardly projecting standards pivoted together, of the notched arms extending downward from said rearward standards, a rocking rod supported by the said forward-projecting standards and adapted to engage either of said notches, and a suitable seat for the chair, substantially as described.

2. In an easy-chair, the combination with the rearwardly and forwardly extending standards pivoted together intermediate their ends, of the notched supporting-arms extending downward from said rearward-extending standards, a rocking rod supported by the said forward-extending standards, a crank-arm at either end of said rod, a spring normally acting to force the rod toward the supporting-arms, and a suitable seat for the chair, substantially as described.

3. In an easy-chair, the combination with the rearwardly and forwardly extending pivoted standards, of the notched arms projecting downward from said rearward-extending standards, a rocking rod supported by one of the standards and adapted to engage either of the said notches, an arm-rest secured to each rearward-extending standard, bracing-pieces secured at their forward ends to the said arm-rests, and having their opposite end portions connected to the said rearward-extending standards and notched arms respectively, and a suitable seat for the chair, substantially as described.

4. In an easy-chair, the combination with the rear, inclined supporting-legs, of a pivoted back-section, notched arms depending from said back-section, a movable rod extending transversely across and resting upon said rear inclined legs, said rod being free to engage either of the notches in said depending arms to support the back-section in various positions of adjustment, swinging brackets loosely connected at one end to the rear inclined legs and having their opposite ends attached to

the movable rod, and a suitable seat for the chair.

5. In an easy-chair, the combination with the rearwardly and forwardly extending pivoted standards, of the notched arms depending from said rearwardly-extending standards, a rocking rod supported by the forwardly-extending standards and adapted to engage either of the notches in the depending arms, seat-braces 22, loosely mounted upon the pivotal connection of the standards, a slatted seat secured to said braces and having its front portion normally resting upon the front ends of the forwardly-extending standards, and spring-rods coiled intermediate their ends around the aforesaid pivots of the standards, the rear ends of said spring-rods acting upon the rear under side of the chair-seat, and their front ends bent laterally into engagement with the upper ends of the forward-extending standards.

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

ELDRIDGE J. SMITH.

Witnesses:
HUGH C. HAZARD,
NORMAN M. GIBBINS.