

No. 763,667.

PATENTED JUNE 28, 1904.

J. P. HOKANS.
ROCKING CHAIR.

APPLICATION FILED AUG. 28, 1903.

NO MODEL.

2 SHEETS—SHEET 2.

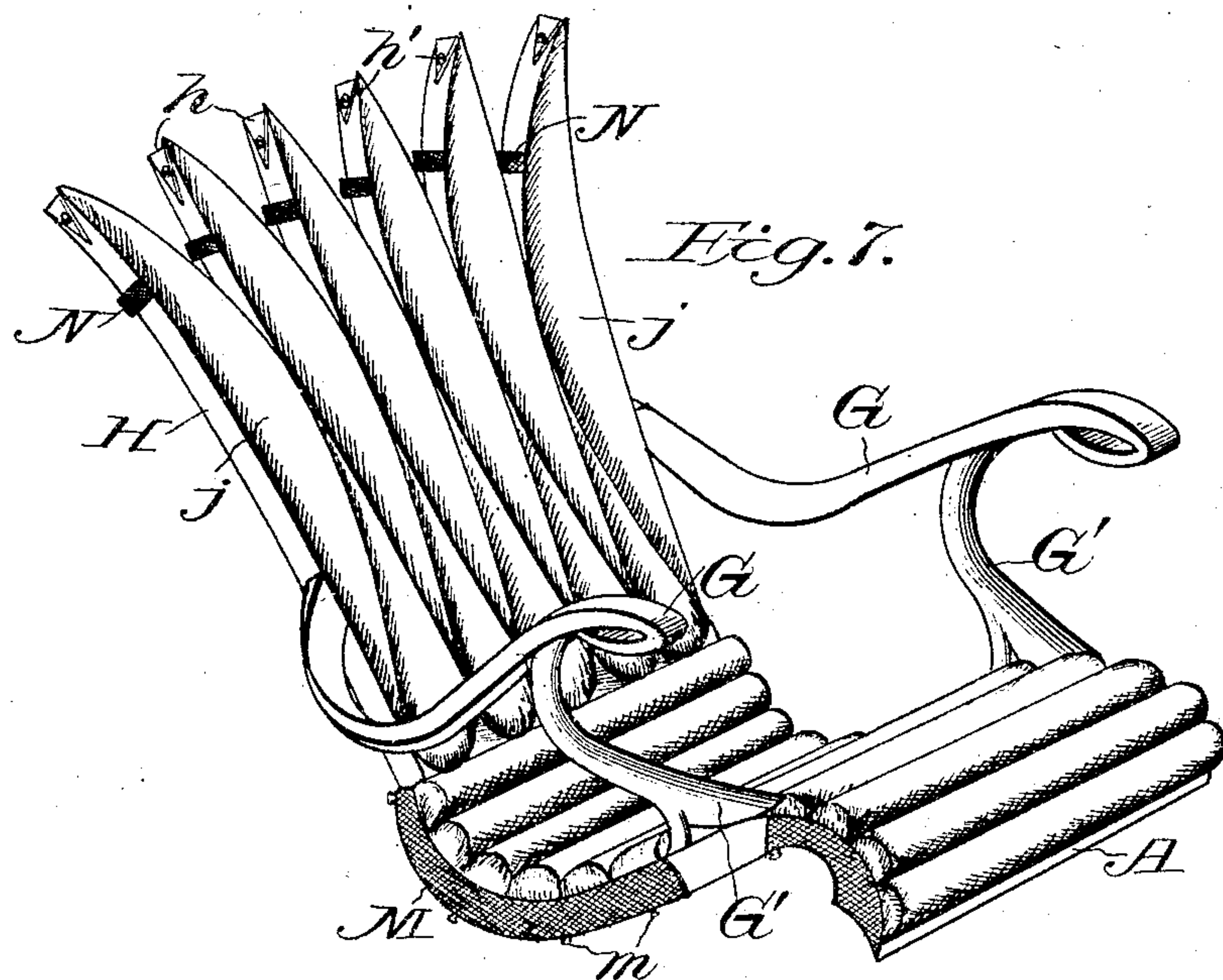
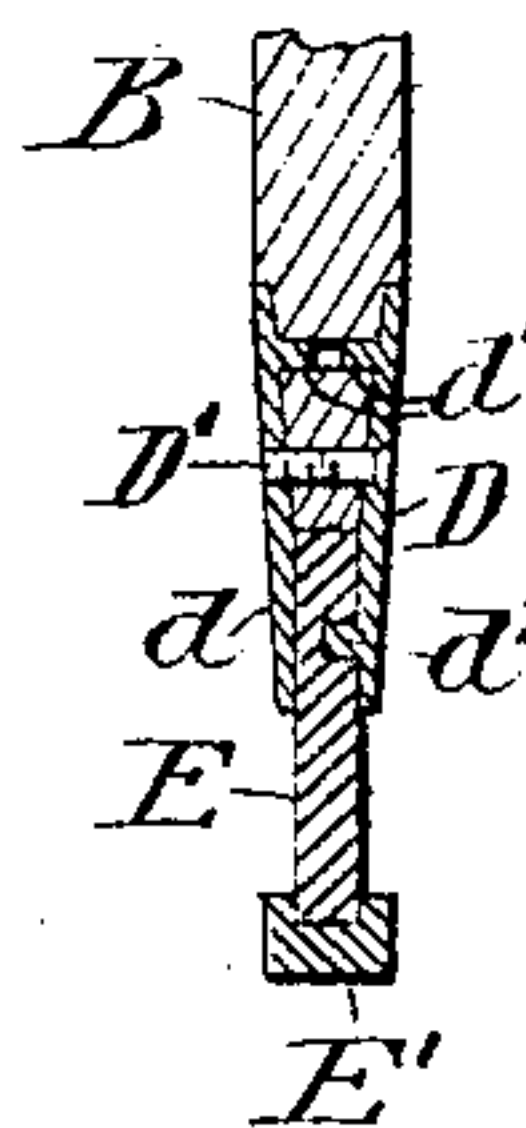


Fig. 8.



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UNITED STATES PATENT OFFICE.

JOHN P. HOKANS, OF WASHINGTON, DISTRICT OF COLUMBIA.

ROCKING-CHAIR.

SPECIFICATION forming part of Letters Patent No. 763,667, dated June 28, 1904.

Application filed August 28, 1903. Serial No. 171,131. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. HOKANS, of Washington, in the District of Columbia, have invented certain new and useful Improvements in Rocking-Chairs; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention is an improvement in rocking-chairs; and its objects are to improve the mechanical construction of such chairs by providing a new rocker structure, a new back formation, a new adjustable seat and rocker connection or adjustable leg, and to provide other novel features of construction and combination of parts by which I produce a balanced rocking-chair in which the occupant may rest at ease, rock with least exertion, and stop in any position of the chair desired and which will not turn over, the chair combining in itself the advantages of a rocker and swing with that of a reclining or tilting chair.

The invention therefore consists in the novel construction and combination of parts hereinafter described and claimed and which is illustrated in the accompanying drawings, in which

Figure 1 is a perspective view of the complete chair without upholstery. Fig. 2 is a detail view of the arm-support; Fig. 3, a section through one of the adjustable-leg connections; Fig. 4, a detail section on line 4-4, Fig. 3; Fig. 5, a perspective view of parts of an adjustable leg detached. Fig. 6 is a detail view of part of a rocker. Fig. 7 is a perspective view of the upper part of chair upholstered. Fig. 8 is a detail section showing the connection of the legs to the rockers.

The seat A of the chair may be of any suitable kind. It is shown as a curved wood seat of comfortable formation and supported on two front legs B B and two rear legs, each of which is composed of two main members C C', adjustably connected together by means of a bolt c tapped into the lower portion of part C and passing through a vertical slot c' near the upper end of part C. To prevent the parts turning upon the bolt, the part C' has a metal rib c² in its under side above the bolt, which

engages a corresponding slot c³ in the upper end of part C. This construction provides for ready shortening or lengthening of the rear legs, and consequently the elevation of the rear part of the seat relatively to the front portion thereof. The lower ends of the several legs are attached to the rockers E by similar means. Each leg rests upon the upper edge of the rocker and is provided with metal clamp-plates D d, said plates being fastened to the leg and to each other by the screws D', and each plate has a stud d' on its inner face and inner end, engaging a corresponding socket in the leg to hold the plates firmly in place when the bolt is tightened. Plate d also has a lug d² on its inner face and lower end adapted to engage a corresponding socket or slot in the rocker, so as to confine the latter securely to the leg. (See Fig. 12.)

The lugs d² on rear leg-plates engage slots e² in the rockers, said slots permitting the adjustment of the legs without binding or straining after bolts D' are slightly loosened.

The rockers E are of peculiar form and construction. They are preferably and ordinarily from six to seven feet long and approximately straight from their front ends to and slightly beyond the front legs. Then they curve on a long arc of approximately ninety degrees down to the rear legs and on up for a distance beyond said legs, and their rear ends are approximately straight and almost parallel with the back of the chair. These straight portions of the rockers effectually prevent the chair turning over either forwardly or backwardly. The curvature of the rockers is calculated so that when the legs are properly adjusted the center of gravity of the chair when occupied will be approximately at the center of the circle on which the rockers are curved, and the rear legs are connected to the rockers at approximately the central parts of their bends. The chair when properly adjusted can remain stationary in any position desired when occupied and at same time can be caused to move or rock by a slight movement of the hand or foot of the occupant just sufficient to disturb the center of gravity. Obviously, however, the chair must be adjusted to suit the user and in this respect is

an "individual" chair, for while it can be used by any one it will not operate exactly as described, except for the party whom it was adjusted to suit, although it is always more easily rocked and more comfortable and has a longer swinging motion than an ordinary rocking-chair.

A feature of the invention is the construction of the rockers. Owing to their length and curvature, they cannot be cut in one piece from ordinary planks, and therefore in order to obtain strength and lightness I build up the rockers out of segments, as indicated in Figs. 1 and 6. These segments e are cut approximately diamond-shaped, and the joints therebetween are oblique to the curvature of the rockers, and adjoining segments are fastened together by gluing and by top and bottom screws e' e'' , said screws passing through the narrow end of one segment into the thick end of the other. It will also be observed that the joints of the segments, owing to the peculiar cut of the segments, overlap—that is, as will be seen by reference to Figs. 1 and 6, the upper end of one joint projects beyond or overlaps the lower end of the next joint. This peculiar cut brings the pressure almost broadside on the joints rather than parallel therewith and makes a much stronger and durable rocker than would be the case if the segments were cut on radial lines. The particular number of segments is not material; but they are preferably cut so that the grain of the wood runs longitudinally of the greatest length of the segment. It will be observed by reference to Fig. 1 of the drawings that the segments in the central or more shapely curved portions of the rocker are much smaller than those at the ends thereof, the segments increasing in size from center toward both ends. The reason of this construction is to give the greatest strength to the rocker where it is subjected naturally to most strain and use. It will also be observed that the bases or lower edges of the segments are of greater extent than their tops or upper edges, which imparts the desired curvature to the rocker, while maintaining the desired overlapping relation of the segments. To further strengthen the rockers and firmly unite the segments and present a uniform wearing-surface, I preferably shoe the rockers with a bent wood runner or strip E' , extending from one end of the rocker to the other and secured thereto by glue and nails or screws.

The legs of the chair are fastened to the seat by means of bolts, as indicated in Figs. 3 and 4. These bolts F are threaded at each end. Their upper ends are screwed into nuts f , concealed in sockets a in the seat, said sockets being cut laterally into the seat and closed by plugs a'' . The nuts f may have dovetailed ends to facilitate their removal from the sockets, if necessary, by a suitable tool after the plugs a'' are removed. The

lower ends of bolts F pass through openings in the upper ends of the legs, which latter are secured thereto by nuts F' , as shown.

The chair may be provided with arms G , attached to the back and supported at front on the seat by the arm-standards G' . (Shown clearly in Figs. 1 and 2.) The back of the chair is also of novel construction. It is formed of end pieces or bars H , which are preferably provided with tenons on their lower ends fitted into corresponding sockets in the seat. Between the side pieces are a series of bent wood members H' , which are bent themselves and are arranged side by side. The upper ends of adjacent members H' are fitted together and secured by metallic straps h and screws h' , giving an ornamental finish thereto, while the lower bends of the members are fastened to the rear end of the seat A by screws h'' . This makes a firm and substantial attachment of back to seat, and the construction, as shown in Fig. 1, affords a pleasing ornamental appearance. The members H' may be properly spaced and braced by metal loops H'' , interposed between them, as shown in Fig. 1, and secured thereto by screws or rivets.

The complete chair (shown in Fig. 1) possesses all the advantages I have above referred to. The inclination of the seat on the rockers is regulable by adjusting the lengths of the rear legs, and the entire chair can be easily taken apart for transportation, if necessary, and as readily assembled.

The seat-cushion may be secured in place by means of side strips M fastened to the cushion and to buttons m beneath the seat. The back-cushions may be secured to the chair by suitable fastenings, bands N being shown attached to the points of the cushion and slipping over the corresponding points of the chair-back. (See Fig. 7.)

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

1. In a chair, the combination of the seat, the rockers, and the front legs fixedly attached to the seat and rockers, the rear legs connecting the seat and rockers, said rear legs being composed of two parts adjustably connected together, so as to be extensible longitudinally, the upper parts being fastened to the seat and the lower parts adjustably connected to the rockers, so as to be adjustable longitudinally thereof for the purpose and substantially as described.

2. In a rocking-chair, the combination of the rockers, a seat, front and rear legs attached to the seat, said rear legs being adjustable in length, and separable opposed clamping-plates D and d fastened to the lower ends and opposite sides of said legs and embracing the rockers and plates D being provided with lugs d' engaging holes in the rockers, and bolts uniting the plates, substantially as described.

3. A chair-back, composed of a series of members bent upon themselves to form a series of elongated ovals or bends and having their contiguous ends united.

5 4. A chair having a seat, and a back composed of side pieces fastened to the seat, and a series of interposed members bent upon themselves having their upper contiguous ends fastened together and their bends fastened to
10 the seat, substantially as and for the purpose described.

5. A rocking-chair having a seat, a back, front and rear legs, the latter legs being longitudinally adjustable, and rockers curved on
15 arcs of approximately ninety degrees, and extended rearward to prevent upsetting of the chair, the front legs being attached to the front part of the seat and the front ends of the rockers, and the rear legs being attached
20 to the rear part of the seat and adjustably attached to the rockers about midway of their length, substantially as and for the purpose described.

6. A rocking-chair having a seat, back, and
25 arms, front legs and extensible rear legs, and rockers curved on arcs of approximately ninety degrees, with their rear ends straight and extending upward substantially parallel with the back of the chair, so as to prevent
30 upsetting thereof, the front legs being attached to the rockers near their front ends, and the rear legs attached to the rockers about midway of their length said rear legs being adjustable longitudinally of the rockers, substan-
35 tially as and for the purpose described.

7. A rocker for rocking-chairs, composed of a longitudinal series of approximately diamond-shaped segments arranged edgewise and end to end and with their joints oblique to the

curve of the rocker, the central segments of 40 the series being smaller than the outer segments, for the purpose and substantially as described.

8. A rocking-chair rocker, composed of a series of overlapping segments having their 45 joints extending obliquely or diagonally of the curve of the rocker, and united edgewise, the central segments being smaller than the outer or end segments, and a shoe or runner underlying all the segments and fastened thereto, 50 substantially as and for the purpose described.

9. A rocker for rocking-chairs composed of a series of approximately diamond-shaped overlapping segments of varying sizes having 55 their joints arranged obliquely of the curve of the rocker and united edgewise, the central segments being smaller than the outer or end segments, and a shoe or runner underlying all the segments and fastened thereto, substan- 60 tially as and for the purpose described.

10. An adjustable leg for chairs, comprising a curved upper part and a lower part having an inwardly-projecting upper end overlapping the lower end of the upper part, a fastening- 65 bolt tapped into one part and passing through a longitudinal slot in the other part, and a central longitudinal rib in the curve of the upper part above the bolt engaging a centrally-located slot in the upper end of the lower part, substantially as and for the pur- 70 pose described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOHN P. HOKANS.

In presence of—

ARTHUR E. DOWELL,
JAMES R. MANSFIELD.