

J. SMITH.

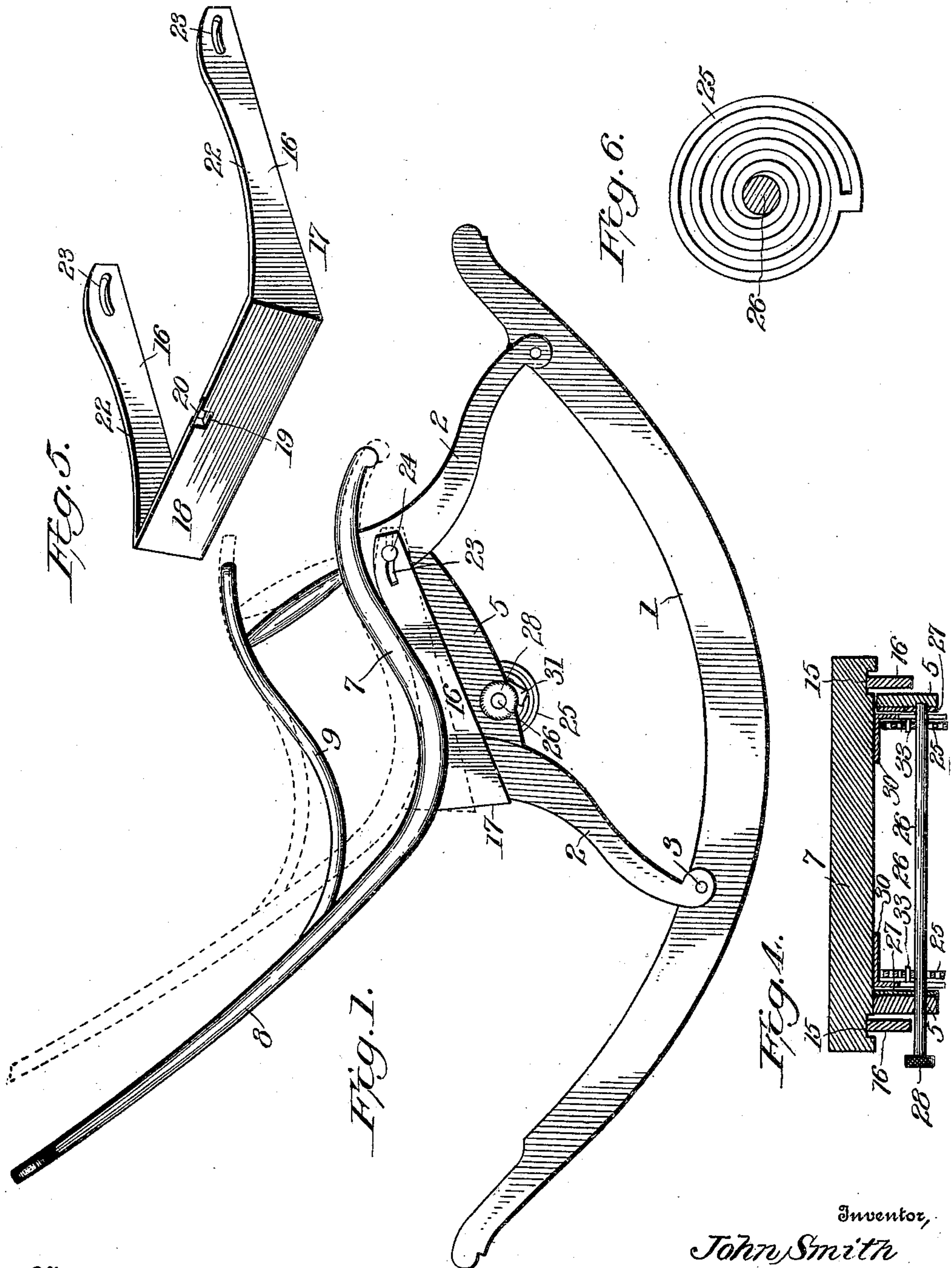
CHAIR.

APPLICATION FILED APR. 1, 1908.

921,905.

Patented May 18, 1909.

2 SHEETS—SHEET 1.



Witnesses
C. J. Walker
J. T. Walker

Inventor,
John Smith

By *E. E. Vrooman*,
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J. SMITH.

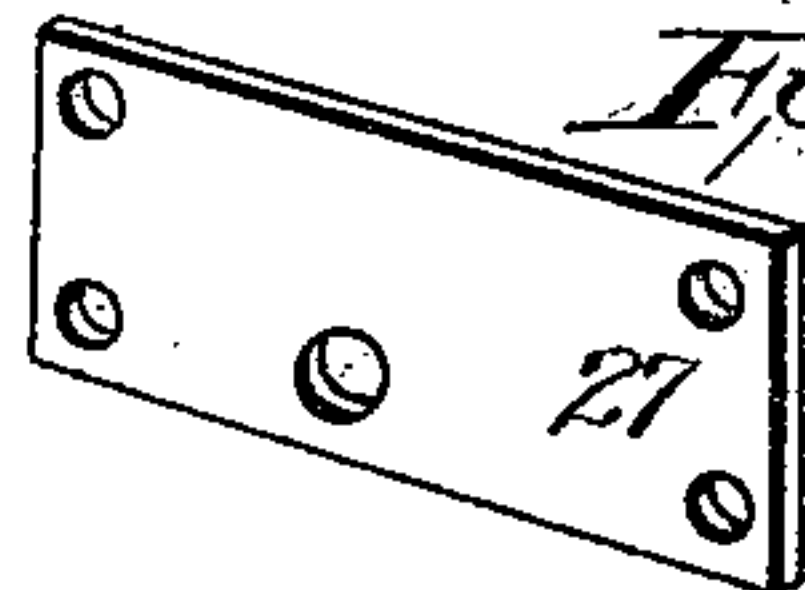
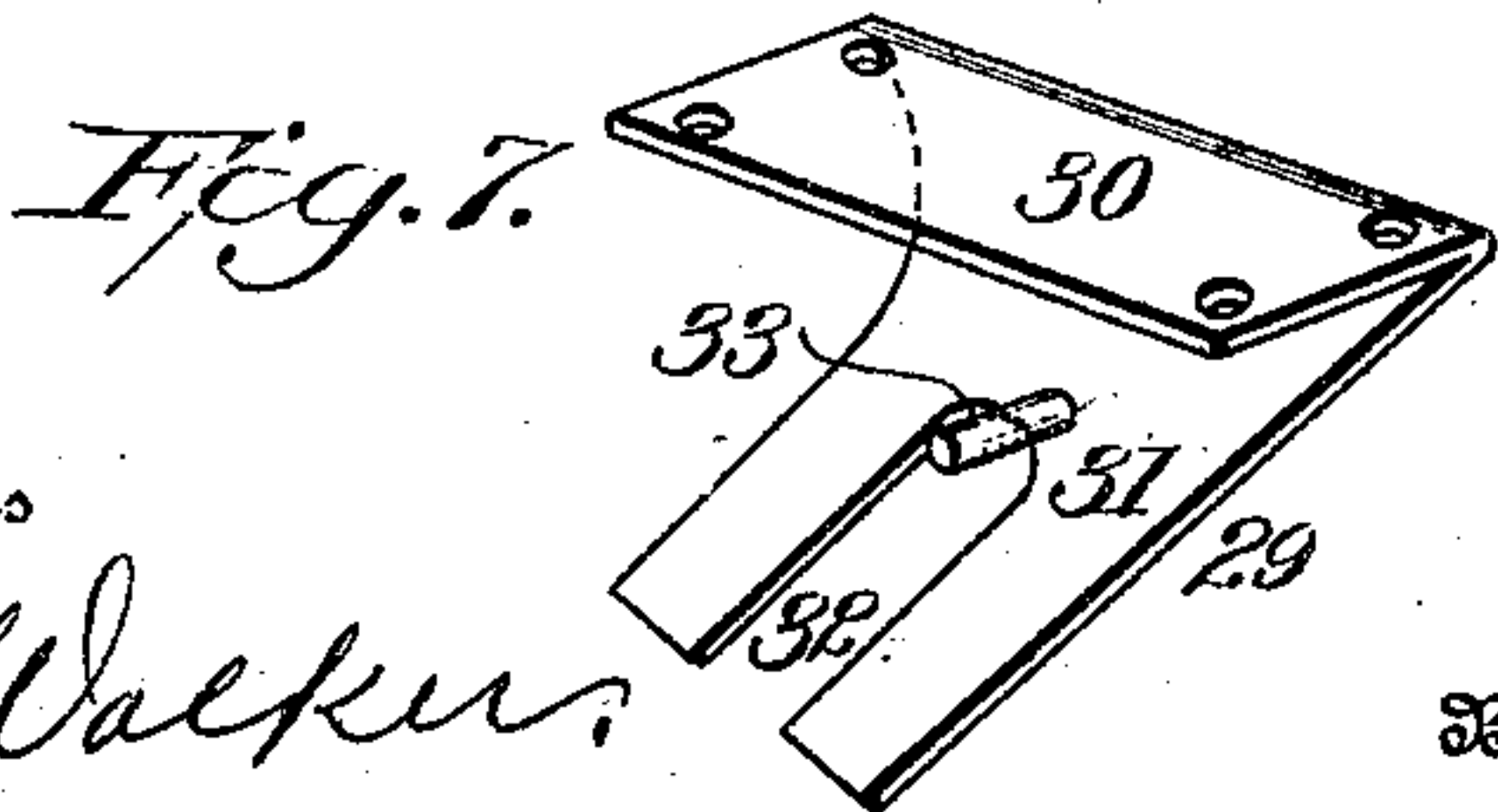
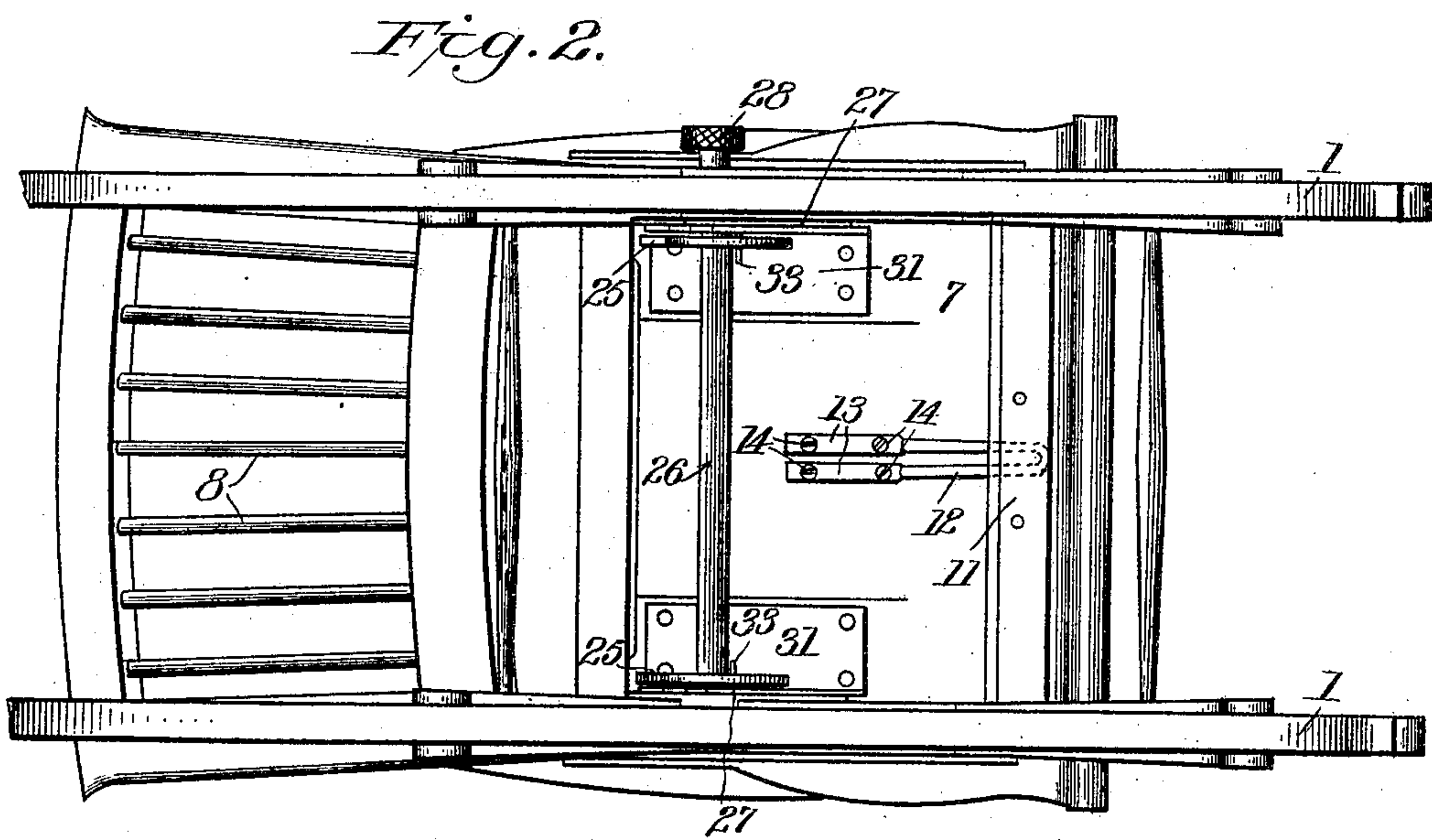
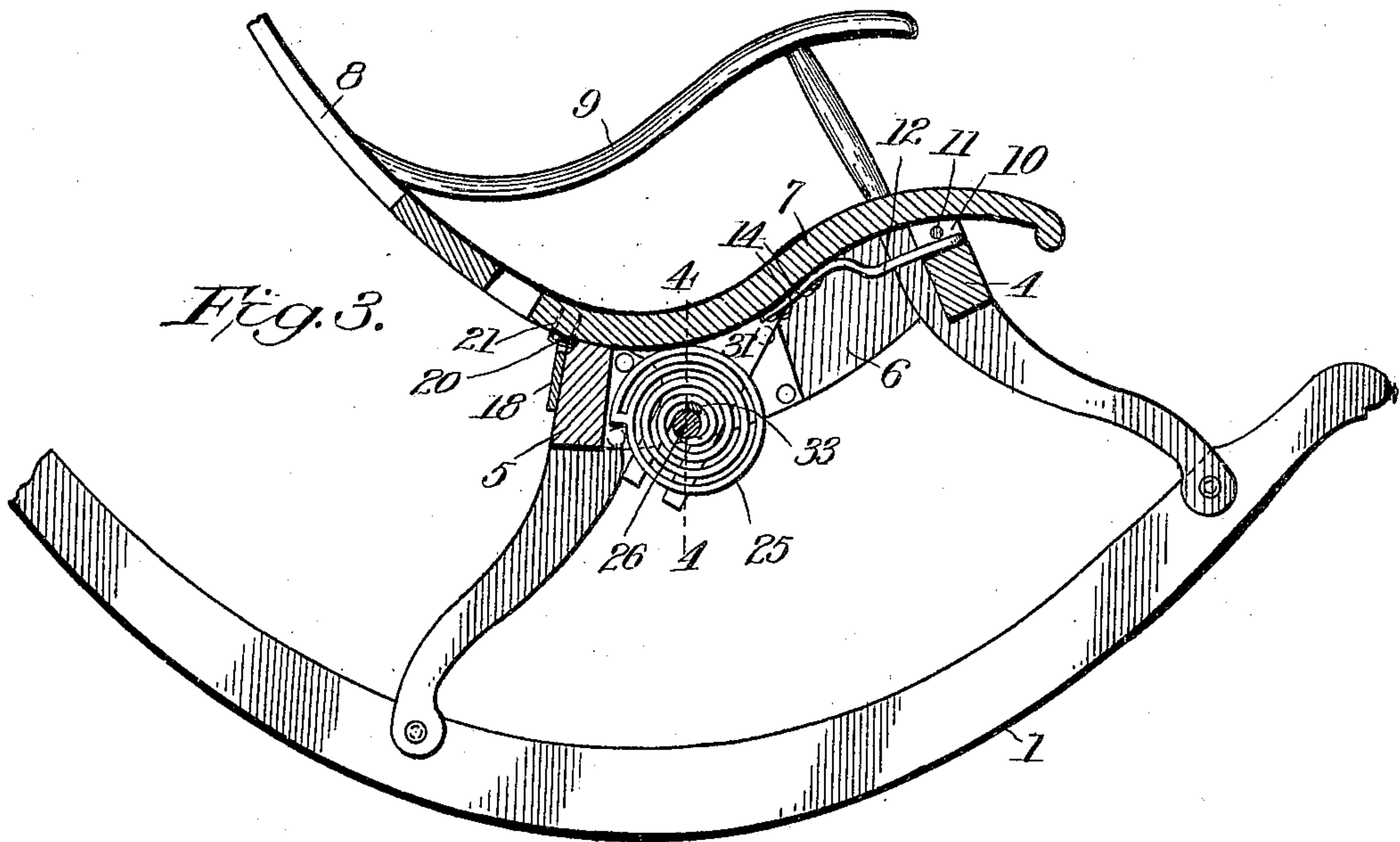
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

JOHN SMITH, OF BINGHAM CANYON, UTAH.

CHAIR.

No. 921,905.

Specification of Letters Patent.

Patented May 18, 1909.

Application filed April 1, 1908. Serial No. 424,616.

To all whom it may concern:

Be it known that I, JOHN SMITH, a citizen of the United States, residing at the town of Bingham Canyon, in the county of Salt Lake and State of Utah, have invented certain new and useful Improvements in Chairs, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to improvements in rocking chairs, and particularly to peculiarly-constructed means for adjusting the seat and back of a chair, preferably, a rocking chair.

The object of the invention is the provision of means for facilitating the adjusting of the seat and back of a chair.

Another object of the invention is the peculiar construction of a rocking chair, the seat and back of which can be quickly adjusted for accommodating a tall or short person, by means of a manually-operated device carried by the frame of the chair and cooperating with the seat for raising and lowering the same.

A further object of the invention is the peculiar construction of a rocking chair provided with means for adjusting the seat thereof, and which chair comprises a minimum number of parts, is efficient in operation, and comparatively simple to construct or manufacture.

With these and other objects in view, the invention consists of certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

In the drawings: Figure 1 is a view, in side elevation, of a rocking chair constructed in accordance with the present invention. Fig. 2 is an inverted plan view of the chair depicted in Fig. 1. Fig. 3 is a vertical, longitudinal sectional view of the chair depicted in Fig. 1. Fig. 4 is a transverse, sectional view taken on line 4, 4, Fig. 3. Fig. 5 is a perspective view of the filler-frame. Fig. 6 is a view in side elevation of one of the cam-members. Fig. 7 is a perspective view of one of the guide brackets. Fig. 8 is a perspective view of one of the bracket plates.

Referring to the drawings by numerals, 1 designates the rockers, to which are secured outwardly-curved legs 2; each leg is provided with a lower, bifurcated end surrounding portions of a rocker, as at 3. The

bifurcated, lower end of each leg is fixedly secured, by any suitable fastening means, to a rocker. By reason of the bifurcating of the lower end of each leg 2, a very durable structure is produced.

The frame of the chair comprises front and rear ends 4 and 5, respectively, and sides 6. The movable seat 7 is provided with a back 8, and with arms 9.

The front end 4 of the frame is notched or cut-out as at 10, and extending across this notched or cut-out portion is a horizontal pin 11, below which is positioned a guide-member 12. The guide-member 12 is, preferably, formed from a single piece of wire or material, and is bent downwardly, at its front end, and is slidably positioned between said pin 11 and the bottom of the cut-out portion 10, so that when the seat 7 is slid forward and backward upon the frame, the guide-member 12 will slide in the cut-out portion 10 and will be prevented from accidental displacement by means of pin 11. The guide member 12 is bent intermediate its ends, and is provided with a rear portion 13, which is secured, by any suitable fastening means, as for instance, screws 14, to the bottom of the seat 7.

Formed in the bottom and contiguous to the sides are longitudinally - extending grooves 15, in which is normally positioned the upper edges of the sides 16 of the filler-frame 17. The frame 17 constitutes a continuation of the frame secured to the legs, as said seat is adjusted, for said filler-frame is raised and lowered synchronously with the seat 8. Secured at the rear end of the sides 16 is back 18 of the movable frame 17, which back is provided with a notched or cut-out portion, as at 19, having a staple 20 positioned therein. A staple 21, Fig. 3, straddles the staple 20, and said staple 21 is secured to the seat. The staples 20 and 21 constitute fastening means for movably connecting the rear end of the filler-frame to the seat, so that when said seat is raised or lowered, the filler or auxiliary frame will be also raised and lowered. Each side 16 is beveled, as at 22, whereby the sides conform to the contour of the under face of the seat or of the groove 15, which curves according to the curvature of the seat. Each side 16 is provided, near its front end, with a curved, elongated slot 23, through which extends a fastening means, as for instance, a nail 24, for slidably connecting the front ends of frame 17 to the sides of the primary frame carried

by the legs. I have found, by actual experience, that, as seat 7 is raised and lowered, the same will slide forward upon the primary frame supported by the legs, drawing the filler-frame upward and slightly forward also, so that when the seat is adjusted to its highest position, the frame 17 will be in position as shown in dotted lines, Fig. 1, and resembling in appearance, a part or continuation of the primary frame, thereby obviating any open space or unsightly construction, which would otherwise be involved when the seat is raised off of the supporting or primary frame 5.

The seat is raised or lowered upon the primary or supporting frame, through the medium of spring cam-members 25, fixedly secured to a rotatable shaft 26. I, preferably, form said cam-members 25 from a coiled piece of strong wire, and secure the inner end of the wire in a fixed position to shaft 26. The shaft 26 is journaled, at one end, in a bracket-plate 27, which plate 27 is secured, by any suitable fastening means, to the inner face of one of the sides, and the shaft extends through another bracket-plate 27, near its other end and also through one of the sides and terminates at its outer end in a knob or grip 28, which can be quickly engaged by the operator for rotating said shaft 26 and imparting rotary movement to the spring cams, for the purpose hereinafter specified.

A pair of guide-brackets 29 is secured to the bottom of the seat 7, by any suitable fastening means, and each bracket comprises a horizontal base 30, and a rearwardly-extending, inclined side portion 31, which is bifurcated, as at 32, Fig. 7, at its lower end for straddling the shaft 26; contiguous to the inner end of the bifurcated portion 32 of each bracket 29, is a horizontally-extending lug or projection 33, which is fixedly secured, at its inner end, to the outer face of the bracket, and each lug or pin 33 extends through a portion of the spring cam-member 25.

It is to be noted that I have provided a peculiarly-constructed cam, or cams, carried by a rotatable shaft, which cooperate with peculiarly-constructed means secured to the bottom of an adjustable seat for raising or lowering the seat, as the shaft is rotated. Furthermore, it must be borne in mind that owing to the inclined bodies 31 of the brackets 29 and the inclined walls of the bifurcated portions, as the cams raise the seat, the same is guided or pushed forward for placing the seat in more of an inclined position than its normal position, Fig. 1, for accommodating a person with short legs. This vertical and sliding, forward movement is accomplished by my peculiarly-constructed device, and the same is also guided in this movement by means of the substantially horizontal guide-

bracket 12, hereinbefore described. Upon reversing the movement of the cams by rotating the shaft in an opposite direction, after the seat has been adjusted to its fullest height, the seat will be drawn gradually downward and rearward, and, at the same time, the filler or auxiliary frame 17 will slide down into position as shown in Fig. 1.

I have constructed a rocking chair provided with comparatively long rockers for permitting a person to rock freely without danger of being upset, and I have also produced a very durable structure by the forwardly-curved or extending feet carrying the supporting-frame. Furthermore, it is to be understood that by my peculiar means, hereinbefore described, the seat can be slid forwardly for throwing the front end downward near the floor or support carrying the chair, and at the same time, the rear end of the seat will be raised and, when it is desired to lower the seat, the same can be quickly done by placing the seat back in its normal position.

While I have, preferably, shown the seat and back supported upon the frame of a rocker, still I do not limit myself necessarily to a chair having rockers, for in some cases, it might be desirable to employ the raising and lowering means on a chair having legs in engagement direct with the floor, and, therefore, I do not limit myself to a rocking chair, but claim that my invention is clearly adapted to an ordinary chair only provided with legs, or a chair, the legs of which are attached to rockers.

What I claim is:

1. A device of the character described, comprising legs provided with a supporting-frame, an adjustable seat carried by said supporting-frame, a bracket formed from a single-piece and provided with substantially parallel portions having their rear ends secured to the bottom of the seat and their front ends bent downwardly and extending between portions of said frame, a pin positioned above said parallel portions and extending across said front ends, said pin fastened at its ends to the frame, and means for adjusting said seat upon said supporting-frame.

2. A device of the character described, comprising legs provided with a supporting-frame, a movable seat carried by said supporting frame, a filler-frame, means securing said filler-frame at its back to said seat, and means slidably securing said filler-frame near its front to the sides of said supporting frame, and means for adjusting said seat and filler-frame upon said supporting-frame.

3. In a device of the character described, the combination with legs provided with a frame, of a vertically-movable and sliding seat carried by said frame, a filler-frame engaging said seat, said filler-frame comprising

sides and a back, fastening means pivotally connecting said back to said seat, means slidably connecting the sides of said filler-frame to the first-mentioned frame, and means for raising and lowering said filler-frame and seat synchronously.

4. A device of the character described, comprising legs provided with a supporting-frame, a vertically-adjustable and horizontally-slidable seat carried by said supporting-frame, a filler-frame comprising sides and a back, means securing the back to the seat, each side provided with an elongated aperture, fastening means extending through said apertures and slidably connecting the sides of the filler-frame to said supporting-frame, and means for raising and lowering and horizontally sliding said seat and filler-frame upon said supporting-frame.

5. In a device of the character described, the combination with a supporting-frame, of a seat provided with a bottom and having longitudinally-extending grooves, a filler or auxiliary frame engaging said seat, said filler-frame comprising sides and a back, each side provided with an upper, curved edge conforming to the curvature of the groove or seat, each side provided with an elongated slot or aperture, means extending through said slot or aperture and slidably securing the filler-frame to said supporting-frame, means fixedly securing the back to said seat, and means for adjusting said seat and filler-frame upon said supporting-frame.

6. In a device of the character described, the combination with legs provided with a supporting-frame, of an adjustable seat carried by said supporting-frame, depending brackets secured to said seat, each bracket provided with a rearwardly-extending, inclined slot, a shaft journaled in said supporting-frame and positioned in the slotted portion of said brackets, and means carried by said shaft and cooperating with said brackets for raising and lowering said seat and synchronously sliding the same forward and backward upon the supporting-frame.

7. A device of the character described, comprising legs provided with a supporting-frame, of a movable seat carried by said supporting-frame, a pair of brackets positioned within the supporting-frame and fixedly secured to the bottom of said seat, each bracket comprising a base and a vertical portion, the vertical portion provided with a bifurcated end constituting an inclined slot, a shaft

journaled upon said supporting-frame and extending through the slotted portions of said bracket, cam-members fixedly secured to said shaft and positioned contiguous to said brackets, means cooperating with said cam-members and with the brackets for raising and lowering the seat and sliding the same upon the supporting-frame, when said shaft is rotated.

8. A device of the character described, comprising a supporting-frame, of a seat movably mounted upon said supporting-frame, said seat provided with depending brackets, each bracket provided with an inclined slot, means positioned in said slots and provided with cam-means whereby, when said cam-means is rotated, said seat will be lowered or raised, and slid upon the supporting-frame.

9. A device of the character described, comprising a supporting-frame, of a seat movably mounted upon said supporting-frame, said seat provided with depending brackets, each bracket provided with an inclined slot, and rotatable means positioned in the slots of the brackets and movably connected to the sides of the brackets for moving said seat upon said supporting-frame.

10. A device of the character described, comprising a supporting-frame, of a movable seat mounted upon said supporting-frame, guide-brackets fixedly secured to said seat, a shaft journaled upon said supporting-frame and extending through said guide-brackets, and said shaft and brackets provided with means for bodily lifting and lowering the seat and moving the same forward and backward upon the supporting-frame.

11. A device of the character described, comprising a supporting-frame provided with sides and ends, of a seat movably mounted upon said supporting-frame, means for moving said seat upon said supporting-frame, of a filler-frame comprising a series of side-portions, positioned contiguous to said seat and the side-portions normally covering part of the sides of the supporting-frame, and means for slidably connecting said filler-frame to the supporting frame and means pivotally connecting the filler-frame to said seat.

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

JOHN SMITH.

Witnesses:

OSCAR DAMSTEN,
J. W. GRANT.