

No. 704,459.

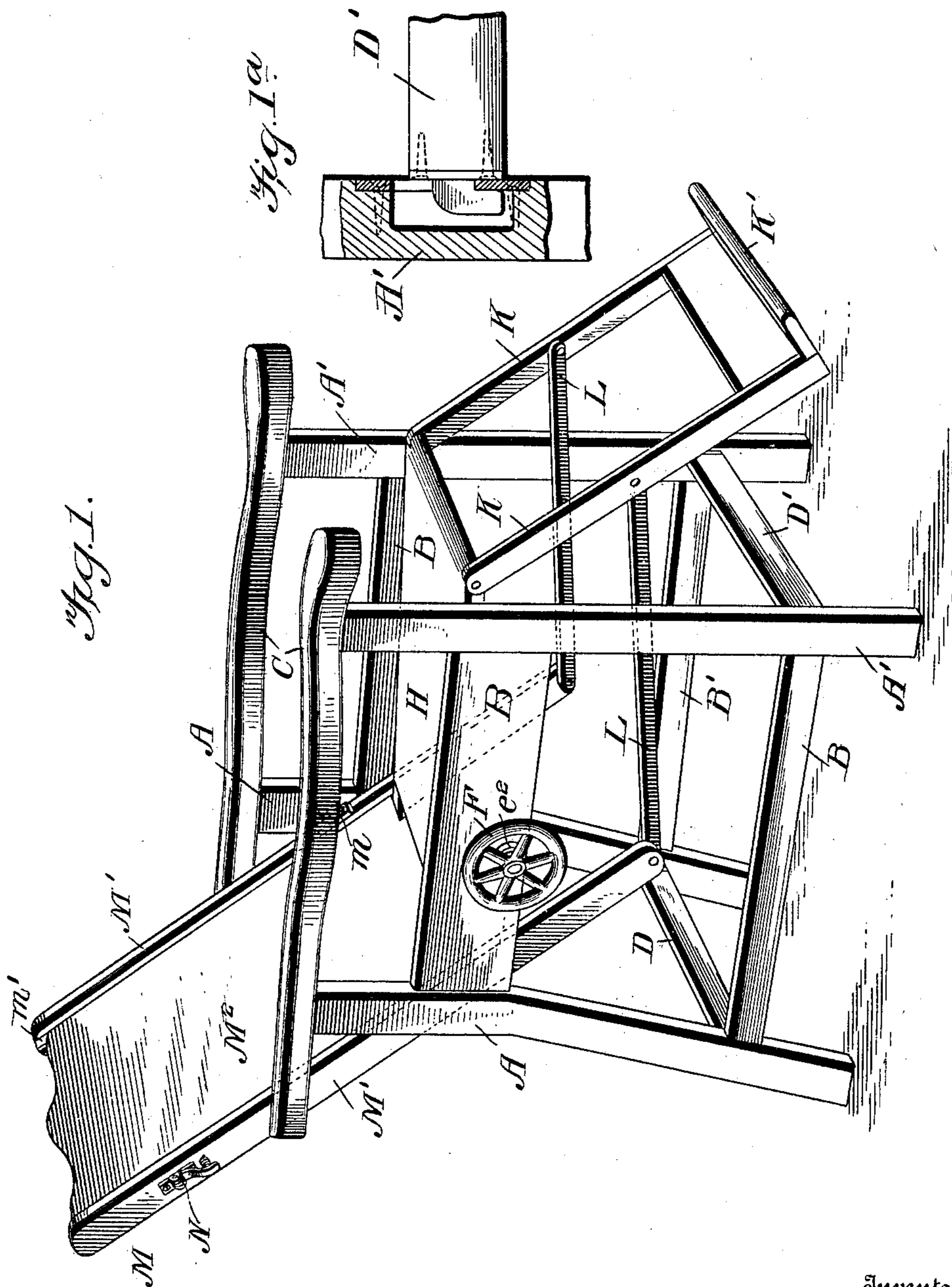
Patented July 8, 1902.

J. E. HANGER.  
ADJUSTABLE RECLINING CHAIR.

(Application filed Oct. 18, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses  
Geo. H. Pyne.  
Fred W. Engler.

Inventor  
James E. Hanger,  
By Wilkinson & Fisher,  
Attorneys

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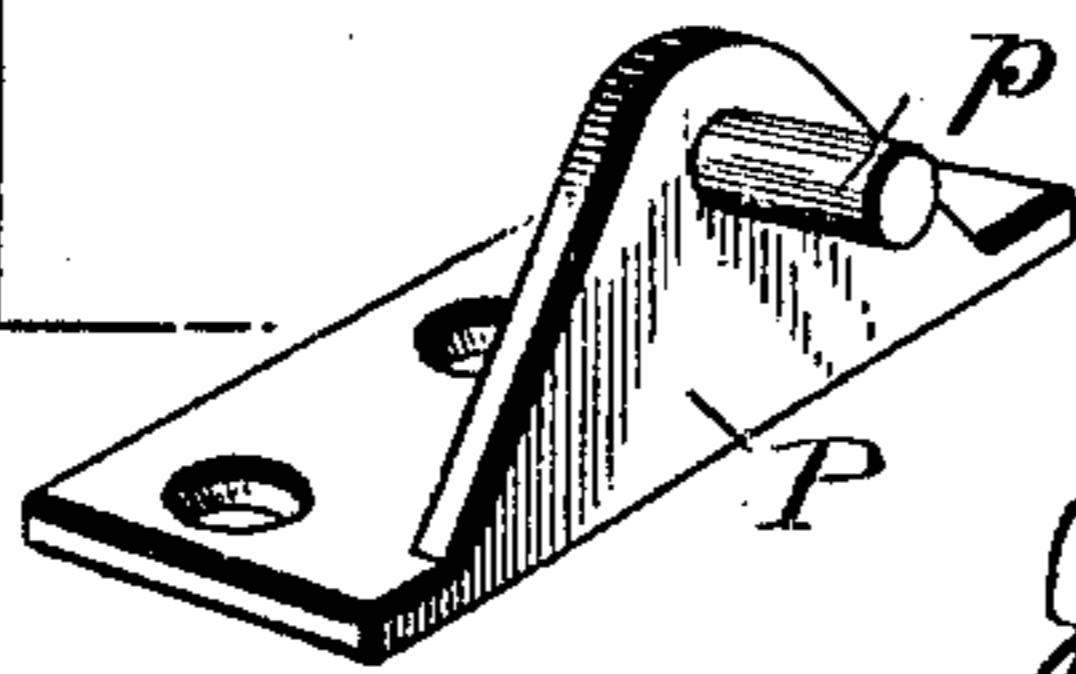
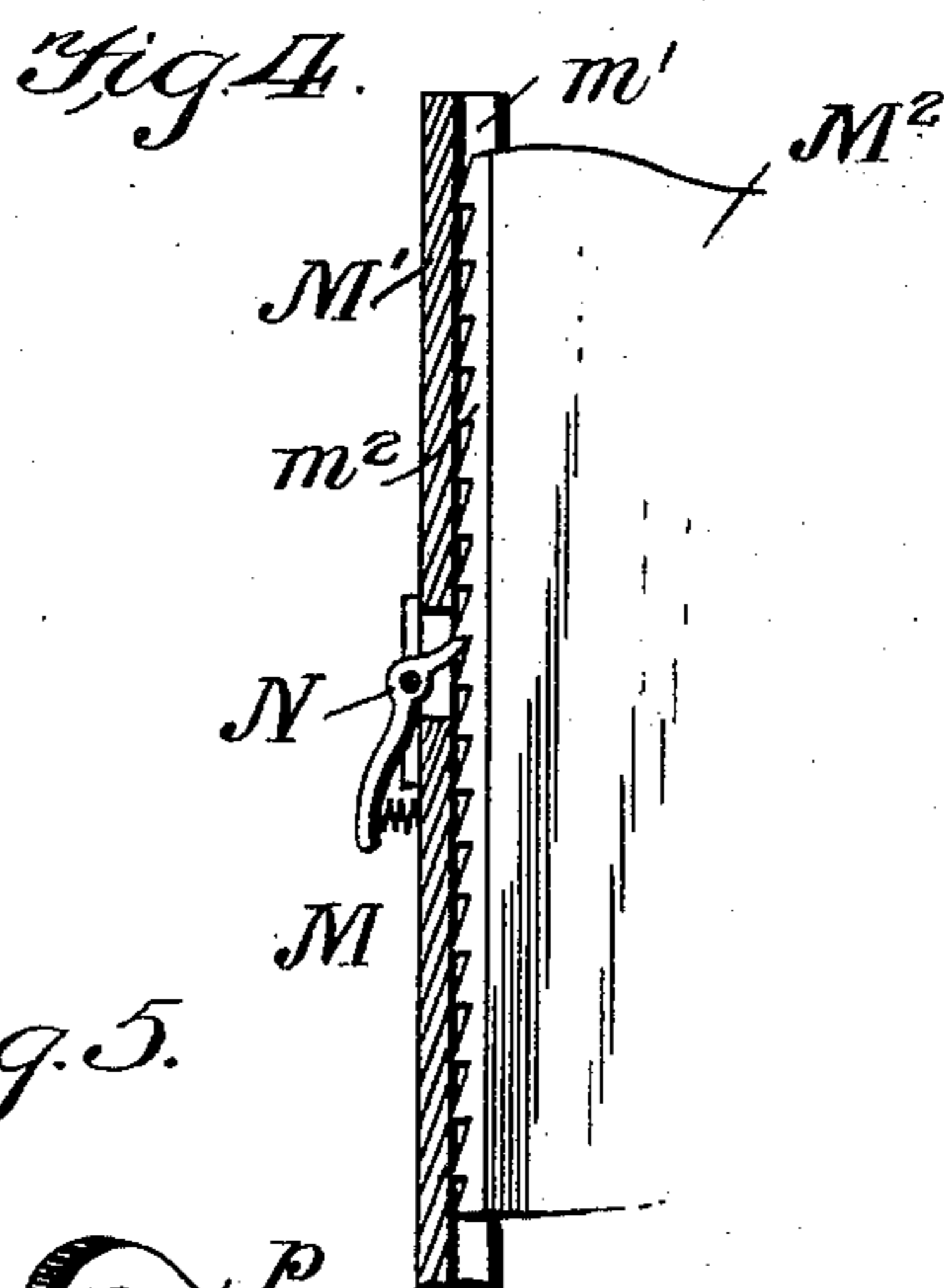
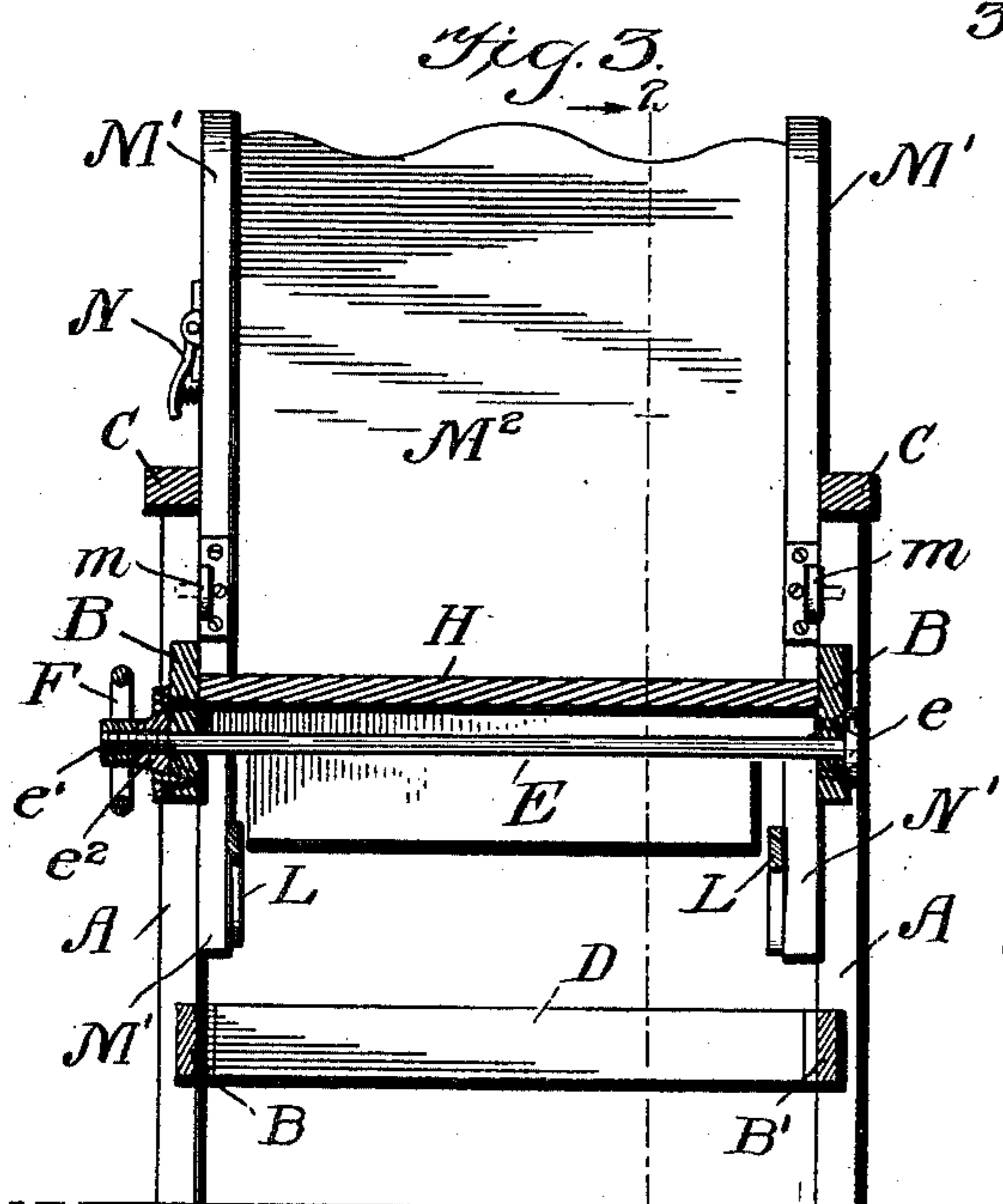
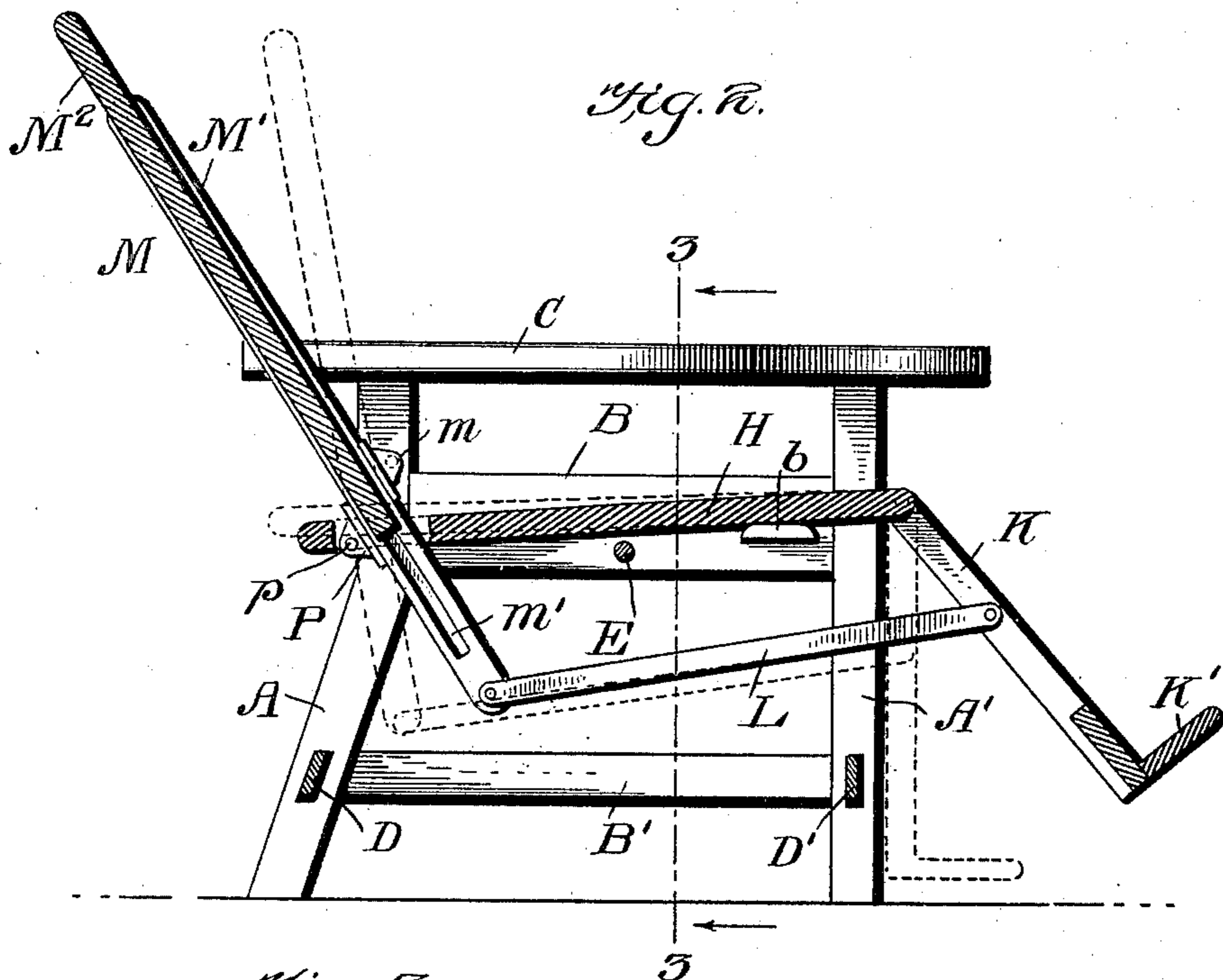
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Geo. F. Byrne.  
Fred W. Engler.

Inventor

James E. Hanger,

By Wilkinson & Fisher,

Attorneys

# UNITED STATES PATENT OFFICE.

JAMES E. HANGER, OF WASHINGTON, DISTRICT OF COLUMBIA.

## ADJUSTABLE RECLINING-CHAIR.

SPECIFICATION forming part of Letters Patent No. 704,459, dated July 8, 1902.

Application filed October 18, 1901. Serial No. 79,152. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES E. HANGER, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Adjustable Reclining-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 invention relates to improvements in adjustable reclining-chairs; and it is intended not only for household use, but for use by barbers, dentists, and others where an adjustable reclining-chair is desired.

My invention will be understood by reference to the accompanying drawings, in which the same parts are indicated by the same letters throughout the several views.

Figure 1 represents a perspective view of the improved chair with the sliding back in the lower position. Fig. 1<sup>a</sup> is a detail view showing the manner of connecting the tie-braces to the legs of the chair. Fig. 2 represents a vertical section along the line 2 2 of Fig. 3 and looking in the direction of the arrows. In this view the sliding back has been moved up somewhat. Fig. 3 represents a section along the line 3 3 of Fig. 2 and looking in the direction of the arrows. Fig. 4 is a detail view showing the ratchet-and-pawl arrangement for holding the sliding back of the chair in the desired position, and Fig. 5 is a perspective view of one of the adjustable pivot-plates used for pivoting the back of the chair to the side frames and to the bottom piece.

The frame of the chair is preferably made in two separable halves, consisting of the legs A and A', bound together by the longitudinal strips B and B' and the arm C. The two side pieces are then connected by the rungs D and D' and by the tie-bolt E, so that the two side frames may be removed when desired and parts of the chair knocked down for shipment or storage.

The tie-bolt E is provided with a suitable head *e* to engage one of the strips B, and the other end is screw-threaded, as at *e'*, and is provided with a washer *e*<sup>2</sup>. (See Fig. 3.) On this screw-threaded portion *e'* a clamp-nut is mounted, which is preferably in the form of a

hand-wheel F. This tie-bolt E should preferably be mounted about the longitudinal center of the chair, as shown in Fig. 2.

The bottom of the chair H rests near its forward end on the lugs *b*, projecting inward from the side pieces B, and at its rear end is pivoted on the pins *p* of the pivot-plates P, fast to the side pieces M' of the back of the chair.

The foot-rest has its side pieces K pivoted to the front end of the bottom of the chair and is provided with a footboard K'. This foot-rest is connected by the links L to the lower ends of the frame of the back of the chair. The back of the chair is pivoted, as at *m*, to the side frames of the chair. I have shown this back as having pieces M', between which the adjustable back M<sup>2</sup> slides, as in the grooves *m'*. Projecting into these grooves and secured to the back M<sup>2</sup> is a rack *m*<sup>2</sup>, and N represents a spring-pawl for engaging this rack, and thus holding the back of the chair at the desired height. Any other suitable means of adjusting the height of the sliding piece M<sup>2</sup> of the back of the chair may be adopted, if desired, or, if preferred, this adjustment may be omitted, the back of the chair then being of a constant length, like an ordinary chair.

The general angle of the back and foot-rest is adjusted by means of the hand-wheel F. The occupant of the chair can at any time ease up on this wheel, and then by tilting the back of the chair backward or forward to the desired angle he can screw down on the hand-wheel and clamp the parts in the desired position.

The side pieces B bind against the bottom of the chair H when the hand-wheel F is screwed down, and thus firmly hold the chair in the desired position.

It will be seen that tilting the back of the chair backward will tilt the foot-rest upward, or vice versa, or that the occupant of the chair can readily adjust his position at any time without having to get out of the chair. Moreover, the particular form of the tie-bolt E may be made to clamp the seat in any desired position, allowing the greatest or the slightest change of adjustment with equal facility and doing away with any rattle or noise in making the adjustment. Thus it

will be seen that I provide a reclining-chair which may be readily "knocked down" and "set up," which may be adjusted in any desired position with great facility and without the necessity for its occupant to get out of the chair, and which is at the same time strong, cheap, and durable.

It will be obvious that various modifications may be made in the herein-described structure which could be used without departing from the spirit of my invention.

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

1. In a reclining-chair, the combination of two side frames capable of adjustment toward and from each other at the top, the back and seat pivoted between said frames and a combined tie-bolt and clamp-screw extending through said frames beneath the seat whereby the back and seat may be clamped in any desired position by means of said clamp-screw.
2. In a reclining-chair, the combination with two side frames detachably connected together, a combined tie-bolt and clamp-screw connecting said side frames, lugs projecting forwardly near the front end of said side frames, a back pivoted between said side frames and projecting downward beneath the seat, a seat pivoted to said back and resting at its forward end on said lugs, a foot-rest pivoted at the forward end of said seat, and links connecting the lower end of said back and said foot-rest, substantially as described.
3. In a reclining-chair, the combination with two side frames detachably connected together, a back comprising side pieces pivoted between said side frames and a sliding piece adjustably mounted between said side

pieces, a seat pivoted to said back at some distance from the lower end thereof, a foot-rest pivoted to the front end of said seat, and links connecting the lower ends of the side pieces of said back to the foot-rest, and means for clamping said side frames against said seat, substantially as and for the purposes described.

4. In a reclining-chair, the combination with two side frames provided with lugs for supporting the front end of the seat, the back and seat pivoted between said frames, a foot-rest pivoted to the front end of said seat, links connecting said foot-rest and the lower end of said back, a clamp-screw spanning said frames beneath said seat with a hand-wheel on said clamp-screw, substantially as described.

5. In a reclining-chair, the combination with two side frames detachably connected together, a combined tie-bolt and clamp-screw connecting said side frames, a hand-wheel on said clamp-screw, lugs projecting forwardly near the front end of said side frames, a back provided with side pieces pivoted between said side frames and projecting downward beneath the seat, and an adjustable sliding piece mounted between said side pieces, a seat pivoted to said back and resting at its forward end on said lugs, a foot-rest pivoted at the forward end of said seat, and links connecting the lower end of said back and said foot-rest, substantially as described.

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

JAMES E. HANGER.

Witnesses:

FRANK D. BLACKISTONE,  
GUSTAVE R. THOMPSON.