

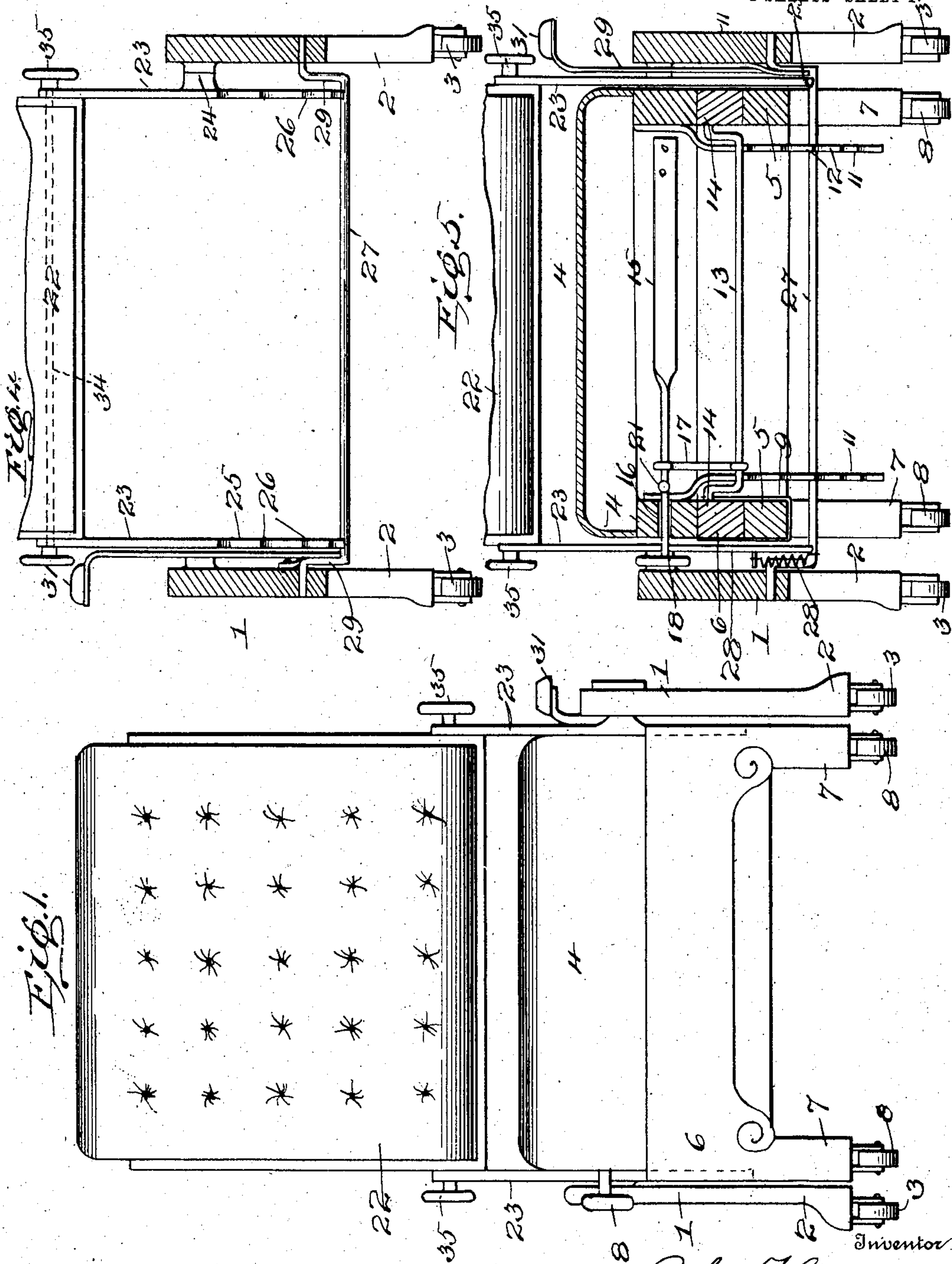
No. 834,285.

PATENTED OCT. 30, 1906.

J. FLINDALL.
CHAIR LOUNGE.

APPLICATION FILED JAN. 14, 1905.

2 SHEETS—SHEET 1.



Witnesses
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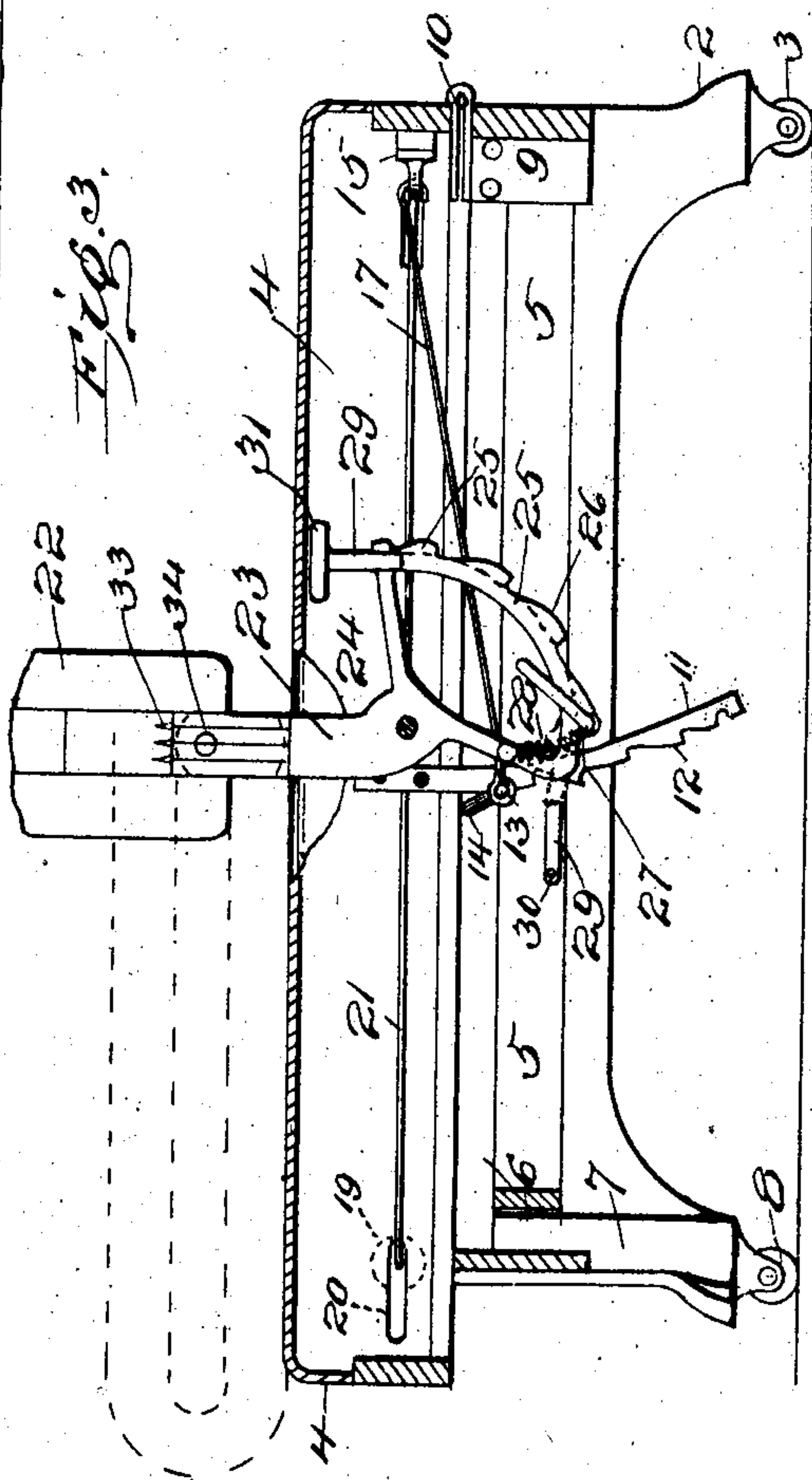
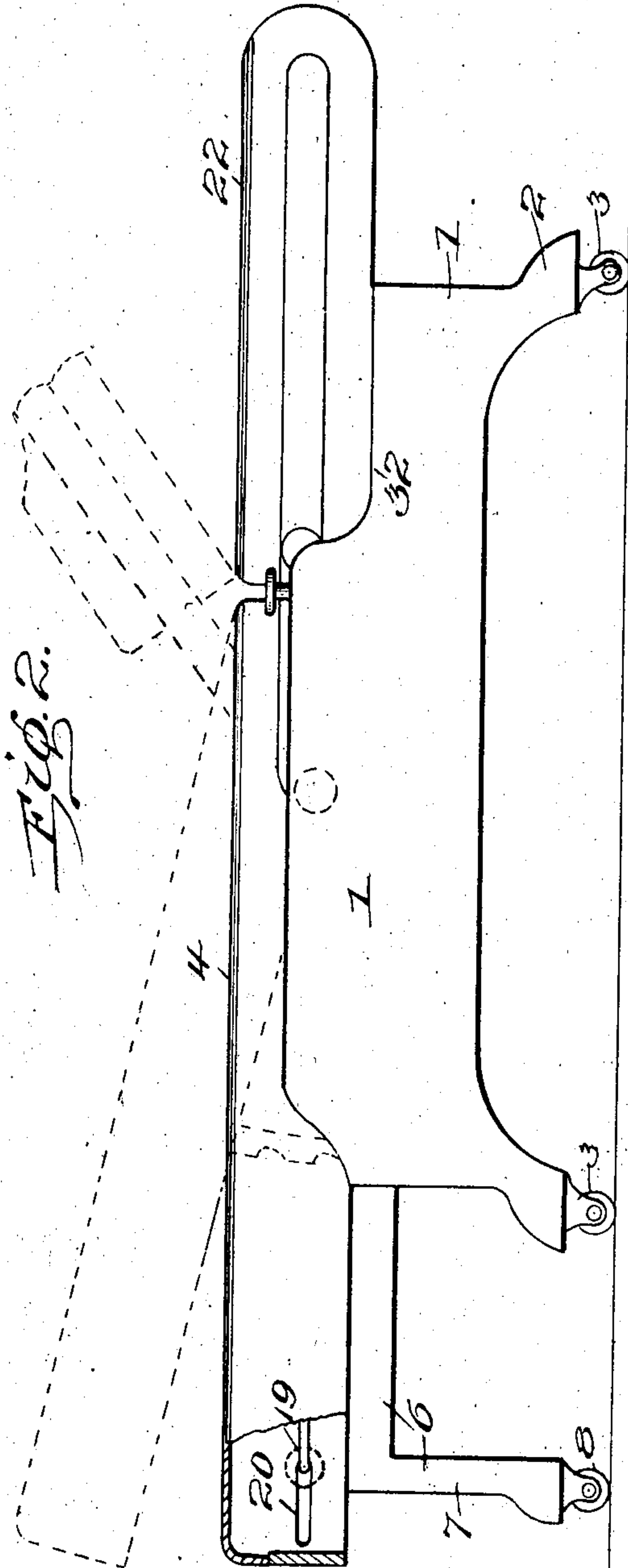
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UNITED STATES PATENT OFFICE.

JOHN FLINDALL, OF CHICAGO, ILLINOIS.

CHAIR-LOUNGE.

No. 834,285.

Specification of Letters Patent.

Patented Oct. 30, 1906.

Application filed January 14, 1905. Serial No. 241,061.

To all whom it may concern:

Be it known that I, JOHN FLINDALL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Chair-Lounges; 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.

This invention relates to improvements in combined chairs and lounges, and has particular relation to devices of this character in which it is possible to convert the device from one to the other.

The invention comprises a combined chair and lounge including a base-frame, a sliding seat, a tilting back portion, and means for holding the seat at different inclinations, and means for holding the back at different angles with respect to the base.

The invention also consists in certain other novel constructions, combinations, and arrangements of parts as will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is an end elevation of my improved chair and lounge, the back being shown in its raised or elevated position. Fig. 2 is a side elevation of the mechanism, the back being folded in its horizontal position to complete the couch form of the apparatus. Fig. 3 is a longitudinal sectional view through the combined chair and couch, the means for holding the parts in their various positions being shown partially in section and partially in elevation. Fig. 4 is a detail sectional view taken transversely of the chair mechanism and showing the racks and pawl for holding the back in its different adjusted positions. Fig. 5 is a similar view, but also showing the means for holding the seat portion of the chair in its elevated or inclined positions.

The chair and couch forming the subject-matter of the present invention is so constructed that it is capable of several uses. It may be adjusted for facilitating the various uses for which it is designed, the back being capable of adjustment to a vertical or a horizontal position or to inclined positions between the two extremes. When the back is in a vertical position, a seat is afforded upon both sides thereof. The said back may, however, be inclined to form a reclin-

ing or lounging chair. When it is desired to form a lounge of considerable extent, the back is folded into its horizontal position, when it becomes flush with the upper surface of the seat portion, making an extended couch-surface lounge or bed.

In the accompanying drawings I have illustrated the preferable form of construction in making the said chair and lounge, and in the illustration 1 indicates a base frame or support which is provided with suitable feet or legs 2 and rollers or casters 3. Movably mounted upon the upper edge of the frame forming the base 1 is a seat portion 4. The said seat portion 4 rests at one end upon guides or supporting-bars 5, while at the other end the seat is supported by a frame 6, preferably provided with leg portions 7 and rollers or casters 8. The frame 6 makes it possible to extend the seat portion 4 to any desired degree with respect to the frame 1 and affords a support for the said seat portion no matter what its adjustment. One end of the frame 6 is provided with guiding loops or clips 9, which depend therefrom and which engage the guide-bars 5, preferably by inclosing them. The said loops or clips 9 engage the bars 5 with ample play between the parts for permitting of a sliding movement between the frame 6 and the supporting and guiding bars 5.

The upper portion of the seat 4 is preferably hinged, as at 10, to the movable supporting-frame 6, so that while the seat portion is so secured to the said frame 6 that it always moves longitudinally therewith it is capable of being raised at one end to various inclinations with respect to the frame 6 and the base 1. The hinges 10 of course support the seat at one end; but in order to support it in its elevated position at the other end segmental racks or bars 11 are used, which are secured at their upper ends to the framing of the seat 4. These segments 11 are notched or provided with teeth, as at 12, and the said teeth are adapted to be engaged by a pawl 13, which is mounted in the supporting-frames 6. While the pawl 13 may be formed in any desired manner, I prefer to make the same as shown in the drawings, the said pawl consisting of a rod or bar bent at its ends so as to have offset portions, the whole bar when completed being of the shape of a crank bar or pawl. The ends of the said

pawl are journaled, as at 14, in bearings formed in the supporting-frames 6. The sliding portion of the seat 4 also carries means for disconnecting the pawl 13 from the teeth 12 of the racks 11. This means comprises a bar 15, which is mounted at one end of the seat 4. The said bar is secured at one end only, the other end being free to vibrate. The bar is made sufficiently thin to have a spring action, and one end of the bar is preferably turned at an angle to the attaching portion thereof, so as to require only a narrow slot or opening 16 in the side of the seat 4, through which it passes. The free end of the bar is connected by means of a connecting-rod 17 with the pawl 13, as clearly illustrated in Figs. 3 and 5 of the drawings. The end of the bar 15 which projects from the seat 4 is provided with a knob or head 18, by which it may be moved for operating the pawl 13. In order to be able to move the said bar from either end of the couch, a second button or handle 19 is provided and arranged at the opposite end of the couch from the bar 15, the said button or handle extending inwardly through a slot 20 and being connected, by means of a rod 21, with the vibrating end of the bar 15. It will thus be evident that by the manipulation of either of the knobs or handles 18 or 19 the pawl 13 may be swung upon its bearings away from the racks 11, so as to release them and permit them to descend when the seat of the couch is depressed. The spring action of the bar 15 operates to hold the pawl normally against the racks 11, and when an inclination is to be given to the seat 4 it is only necessary to lift the free end thereof to the desired height, and the pawl 13 will automatically engage the proper set of teeth 12 upon the racks for maintaining the seat in its elevated positions.

The back 22 is made in any desired form and is preferably provided with a framing which is secured at its side edge to supporting bars or arms 23. Each of the bars 23 extends downwardly from the back outside the edge of the seat portion 4, but inside the side walls of the frame 1. The said bars are pivotally secured at 24 to the frame 1, so that the back is capable of movement upon said frame. The bars 23 carry segments 25, which are provided with teeth 26, forming racks, and the said racks are engaged by transversely-arranged crank-pawl 27, similar to the crank-pawl 13. The pawl 27 is normally held against the racks 25 by means of one or more springs 28. By means of the engagement of said pawl with the teeth 26 of the rack or racks 25 the back 22 is maintained in a vertical or an inclined position, as the case may be. In order to be able to control the engagement of the pawl with the said racks, I employ a pivoted bar 29, which is curved for the greater portion of its length,

so as to be approximately of the same shape as the racks 25. The said bar 29 is so pivoted upon the frame as to lie in the line of an arc which coincides with the arc of the racks 25. The said bar 29 is pivoted, as at 30, at its lower end, while its upper end is free and extends upwardly to a point adjacent to the seat 4 and above the upper edge of the frame 1. The end of said bar, which I will term a "release-bar" is provided with a handle or knob 31, which extends laterally from the bar, so as to be easily reached by the hand of the operator. The said release-bar 29 normally rests upon or against the crank-pawl 27, and when the said release-bar is pressed downwardly it will force the crank-pawl 27 downwardly against the action of the spring 28 and disengage it from the teeth of the racks 25. When thus disengaged, the racks are free to move, and the back may be adjusted to different positions with respect to the seat. By having the upper end of the release-bar 31 adjusted to the side of the seat portion 4 it can be easily reached by an occupant of the chair or couch for the adjusting of the back without the necessity of the operator rising from the seat or couch.

The racks 25 are made of a sufficient length to permit of the back being moved from a vertical position to a horizontal position and to rest upon the base or frame from which the seat portion has been longitudinally removed. The bringing of the back to a horizontal position makes it possible to extend the surface of the couch to a considerable extent when it is desired for use only as a couch. As shown in Fig. 2, the couch is produced by the moving of the seat portion outwardly from the frame 1, which is effected by simply drawing out the supporting-frame 6, after which the back 22 is released by the operation of the release-bar 29, and the said back is then turned downwardly to the position indicated in Fig. 2 to rest upon the frame. If preferred, the framing of the base 1 may be cut away to a greater extent at one end, as at 32, to receive the back 22. Such a construction is not, however, necessary, unless some portion of the back is made to project beyond the walls of the base.

It is always advantageous to so mount the back 22 upon the carrying-bars 23 that it may be folded in either direction and also may be folded so as to rest upon the upper surface of the seat portion 4 instead of flush with the same, as shown in Fig. 2. Such a position is indicated in dotted lines in Fig. 3, and this adjustment is permitted by the manner of mounting the back between the ends of the arms or bars 23. The upper ends of the said bars 23 are preferably corrugated or formed with ribs or projections upon its inner surface which match with and fit into corresponding grooves formed by corrugations at 33 in the edge of the back frame. A

clamping means is provided for drawing the ends of the bars 23 tightly against the framing of the back, and such means preferably consists in a clamping rod or bolt 34, which
 5 extends entirely through the lower edge of the back and is engaged at its ends by thumb-nuts 35, which are threaded upon said rod or bar. When the nuts 35 are tightened, the back is rigidly secured to the bars 23 and will
 10 move therewith. If it is necessary, however, to turn the back downwardly upon the seat 4, the thumb-nuts 35 are loosened until the corrugated portions of the bars 23 may be sprung from their engagements with the cor-
 15 rugated back-framing sufficiently to permit of the back being turned downwardly to the dotted position indicated in Fig. 3. The rod or shaft 34 acts as a pivot for supporting the back in this adjustment. The capability of
 20 folding the back in this manner upon the seat 4 makes it possible to pack the reclining chair and couch in the best form for shipment or for moving from place to place.

The seat may be provided with any suitable surface or upholstery, as found most desirable, and the back 22 is preferably upholstered upon both faces. This is desirable, since when the back occupies its vertical position over the seat 4 a double chair or seat is
 25 provided, one upon each side of the said back.

The device above described is capable of use both as a chair or double seat, as when the back is vertical, or as a reclining-chair when the back is set at an angle to the seat, as indicated in dotted lines, Fig. 2, or as a flat or inclined couch, as also indicated in full and dotted lines in said Fig. 2. When it is employed as a couch, the seat 4 is pulled outwardly from the base 1 and the back lowered to its horizontal position opposite end of
 35 said seat, when the seat is pushed snugly against the edge of the back. This forms a continuous couch-surface along the top of the mechanism. A slight incline may be given to the seat portion of the couch when a reclining
 40 couch is desired by elevating the seat portion, as indicated in dotted lines in Fig. 2. Such elevation of course is permitted by the action of the racks 11 and the supporting crank-pawl 13.

While I have shown and described the back as provided with a plurality of racks 25, it will be apparent that only one rack may be used, if preferred, the said rack being located
 55 upon one side of the edge of the back only. Of course it is preferable to employ two such racks, since it affords greater stability in supporting the back in its different positions. A plurality of release-bars 29 may also be used
 60 within the spirit of the invention, so that the pawl 27 may be operated from each side of the chair or couch. Other minor changes in the details of construction I also consider within the scope of the invention.

65 Having now described my invention, what

I claim as new, and desire to secure by Letters Patent, is as follows:

1. A reclining chair and couch comprising a base, an adjustable back secured thereon, an adjustable seat capable of extension so as
 70 to project beyond the back in each direction below the same, and movable from beneath the back to one side thereof, means carried by the back permitting it to lie in the same plane with the seat and form an extension
 75 thereon.

2. A rest or support comprising a base, a longitudinally-sliding seat mounted within the same, means for adjusting the seat to different angles of inclination, an adjustable
 80 back secured to the base, and means capable of independently holding the back in the same or in different planes with respect to the base, the said back resting upon the base when in a horizontal position. 85

3. A combined chair and couch having a base and a longitudinally-adjustable portion, a seat carried thereby capable of adjustment to different angles of inclination, a pivotally-mounted back on said base and capable of
 90 extending above the seat and also capable of independent adjustment to different angles with respect to the seat or to the same plane therewith, the said back when in the latter position resting upon the frame of the com-
 95 bined chair and couch.

4. A chair and couch, comprising a seat portion and a back, the seat portion having a base-frame, an upper seat portion hinged thereto, racks secured to the upper hinged
 100 portion, a pawl for engaging the same, a bar connected with the pawl for withdrawing it from its engagement with the rack, and means for operating the said bar.

5. In a chair and couch, combination, with
 105 a base-frame, of a seat portion hinged thereon, racks carried by the seat portion, a pawl for engaging the same, means for operating the pawl comprising a spring-bar secured to the seat and projecting through the side
 110 thereof, a rod connecting the bar with the pawl and an operating knob or handle at the opposite end of the seat from the bar, said bar being operable either directly or through the agency of said handle and connecting-
 115 rod.

6. A chair and couch, comprising a seat portion, a hinged back mounted above the same, racks secured to the back and projecting below the surface of the seat, a trans-
 120 versely-arranged crank rod or pawl arranged to engage the said racks, a spring for normally holding the pawl in engagement with the rack and a releasing mechanism for disengaging the pawl from the said racks. 125

7. A chair and couch, comprising a seat portion, a hinged back extending above the seat and having depending bars provided with segmental racks, a pawl engaging the
 130 said racks, a spring for holding the pawl

4
against the racks; and a pivoted release-bar approximating the shape of the racks, the depression of the free end of the said release-bar operating to free the racks from the said
5 pawl.

8. A seat and chair, comprising a seat portion, a hinged back, pivoted bars supporting said back and formed with corrugated ends, corresponding corrugations or projections
10 formed upon the back, and means for clamp-

ing the ends of the bars against the corrugations, for maintaining the seat rigidly, with respect to the bars.

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

JOHN FLINDALL.

Witnesses:

GEORGE E. WISSLER,
LADISLAV A. KAPSA.