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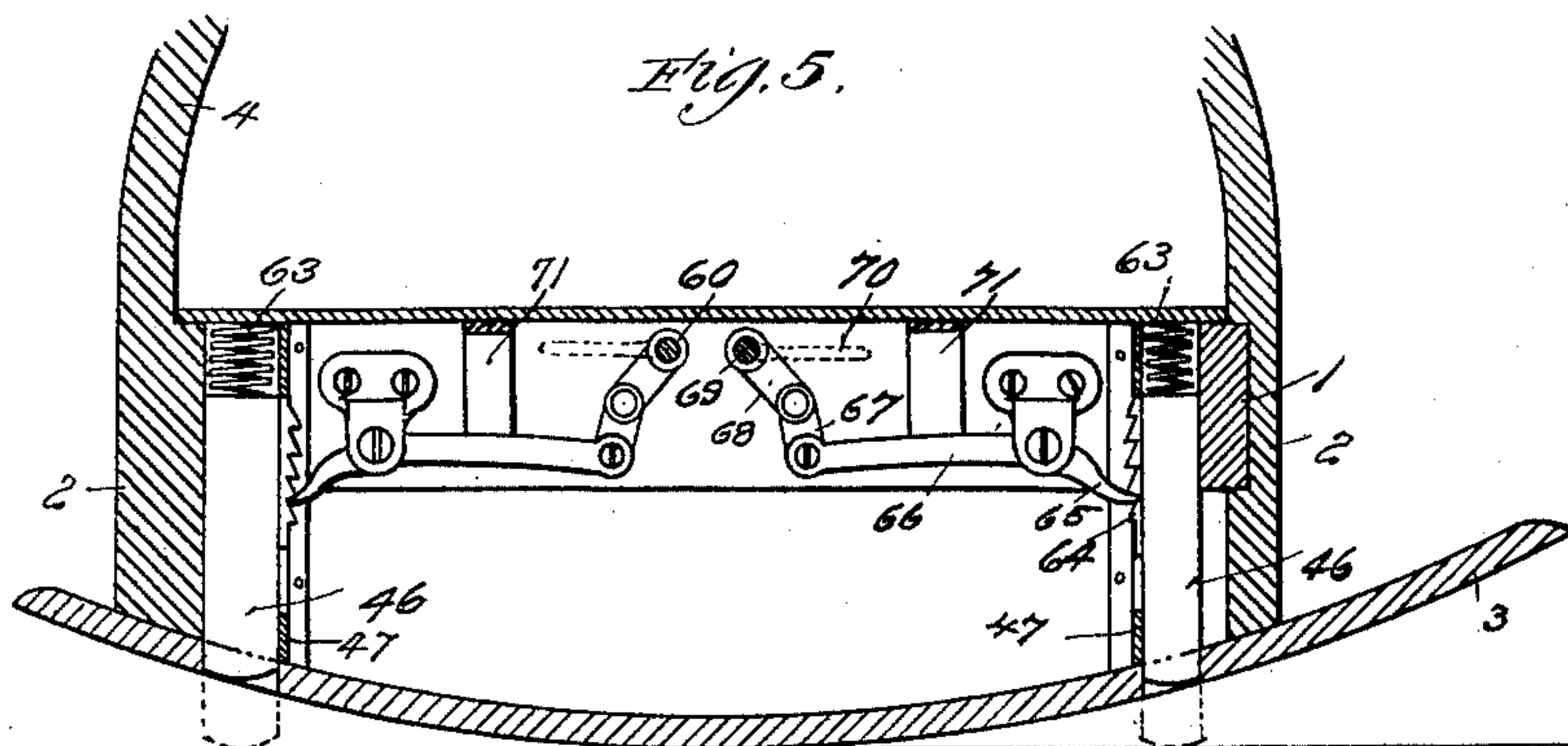
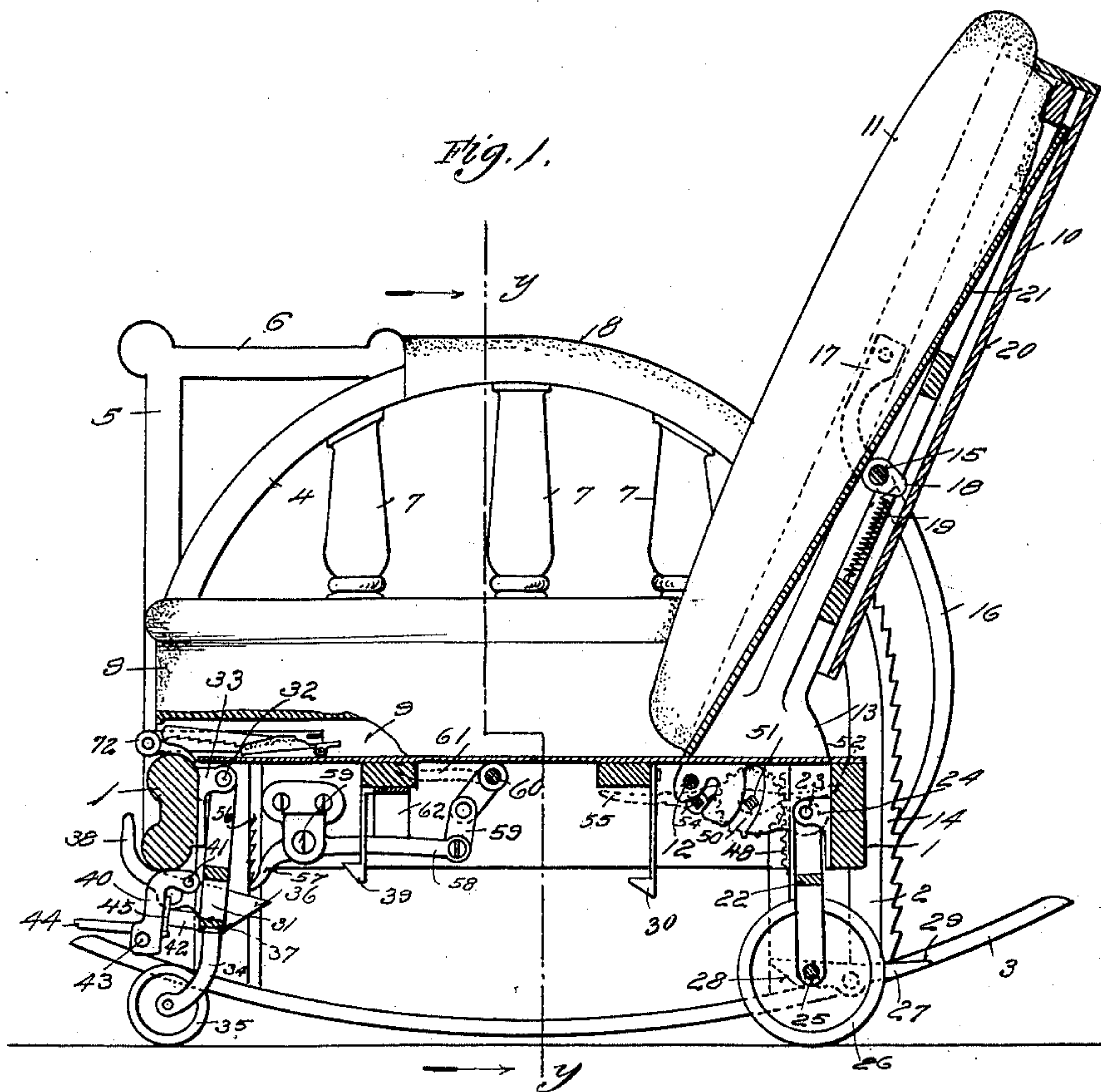
PATENTED APR. 5, 1904.

L. N. SHOEMAKER.
CONVERTIBLE CHAIR.

APPLICATION FILED JULY 3, 1902.

NO MODEL.

3 SHEETS—SHEET 1,



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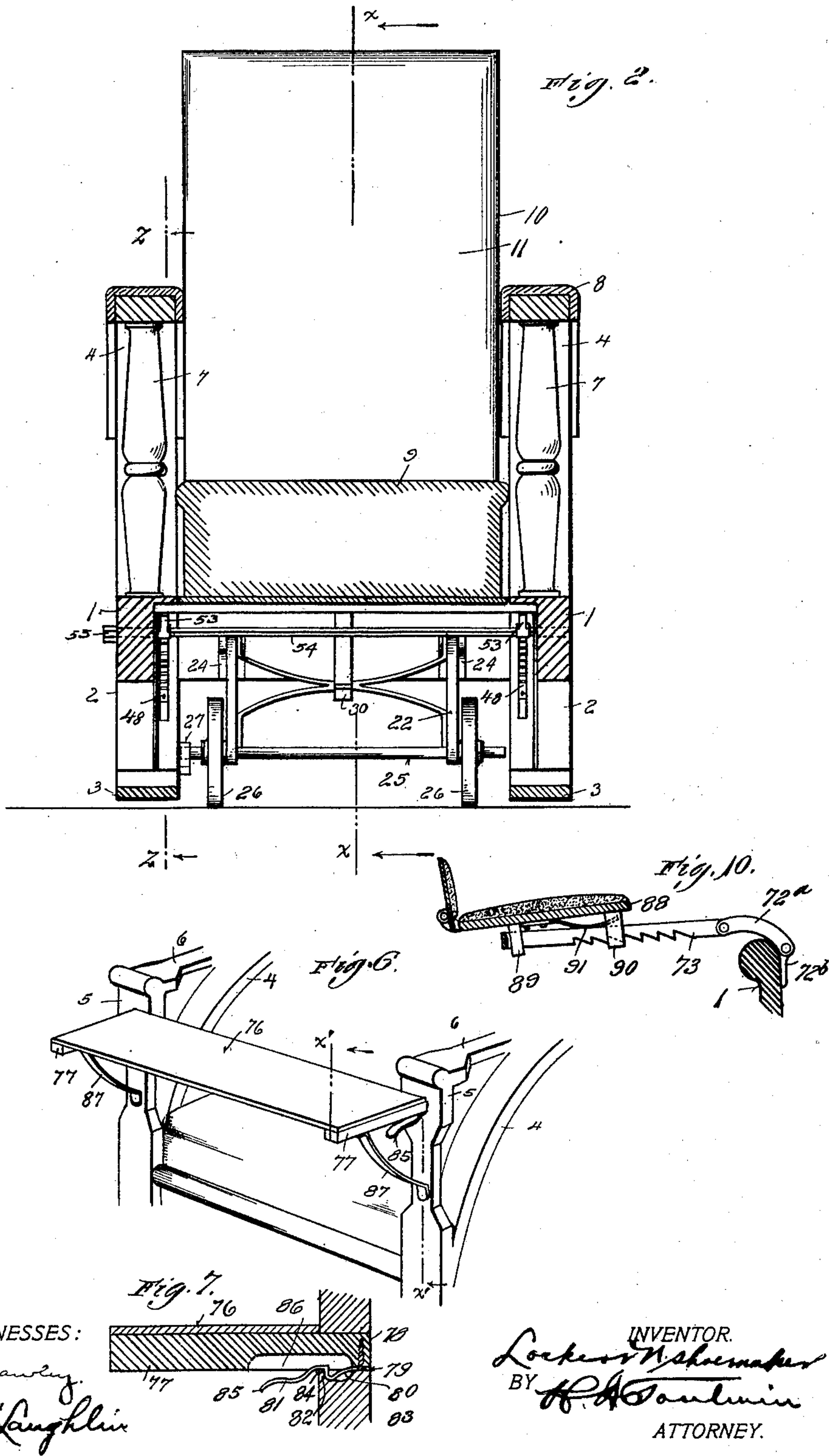
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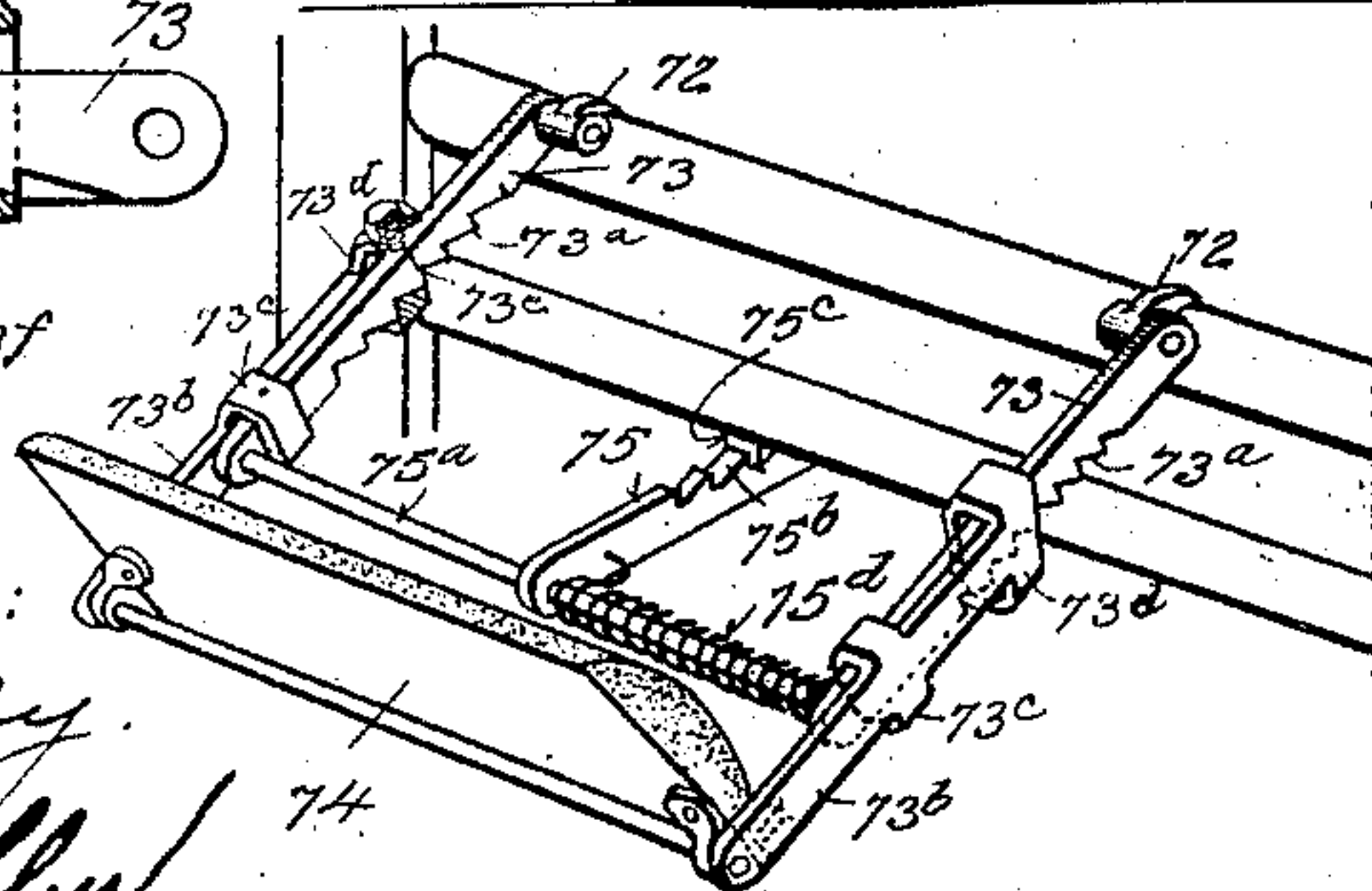
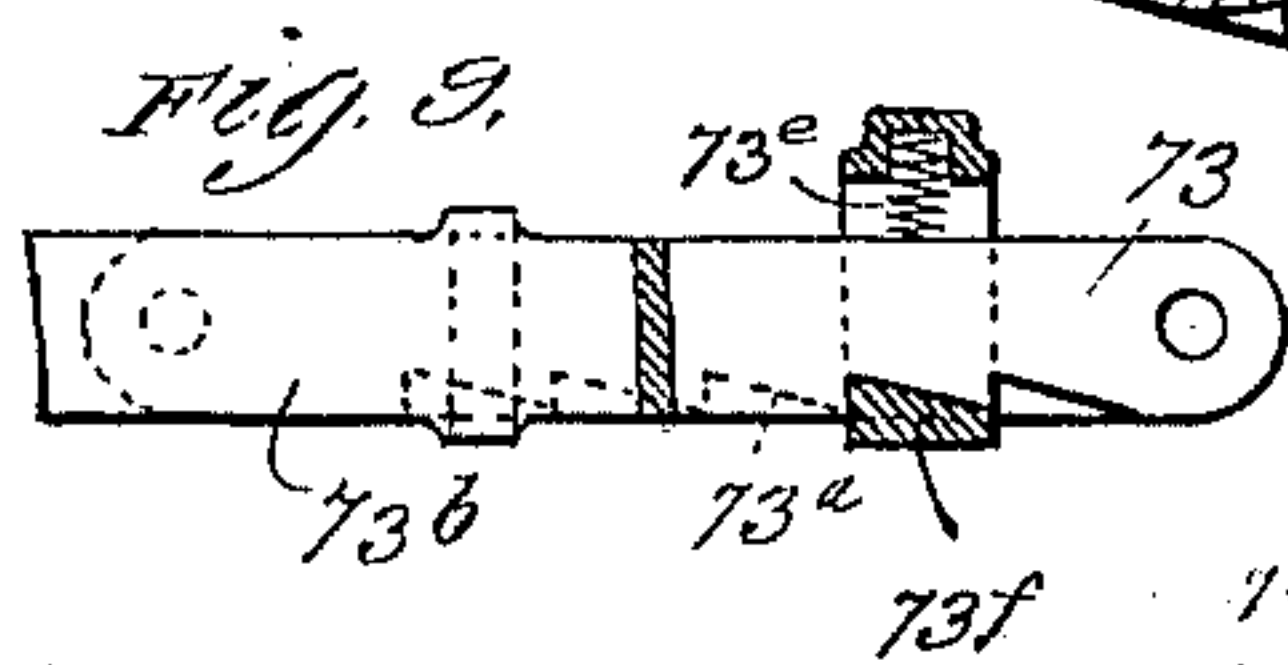
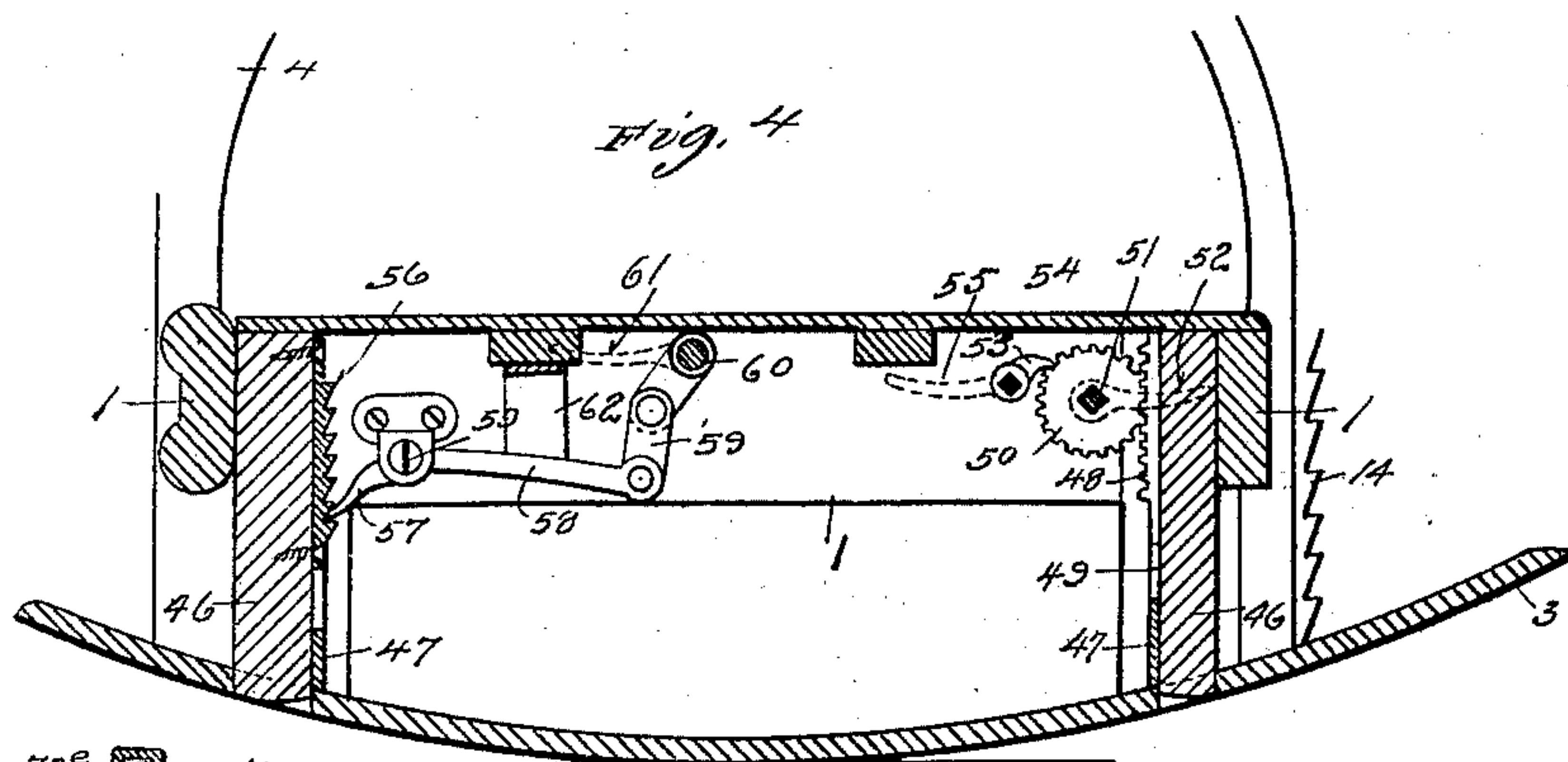
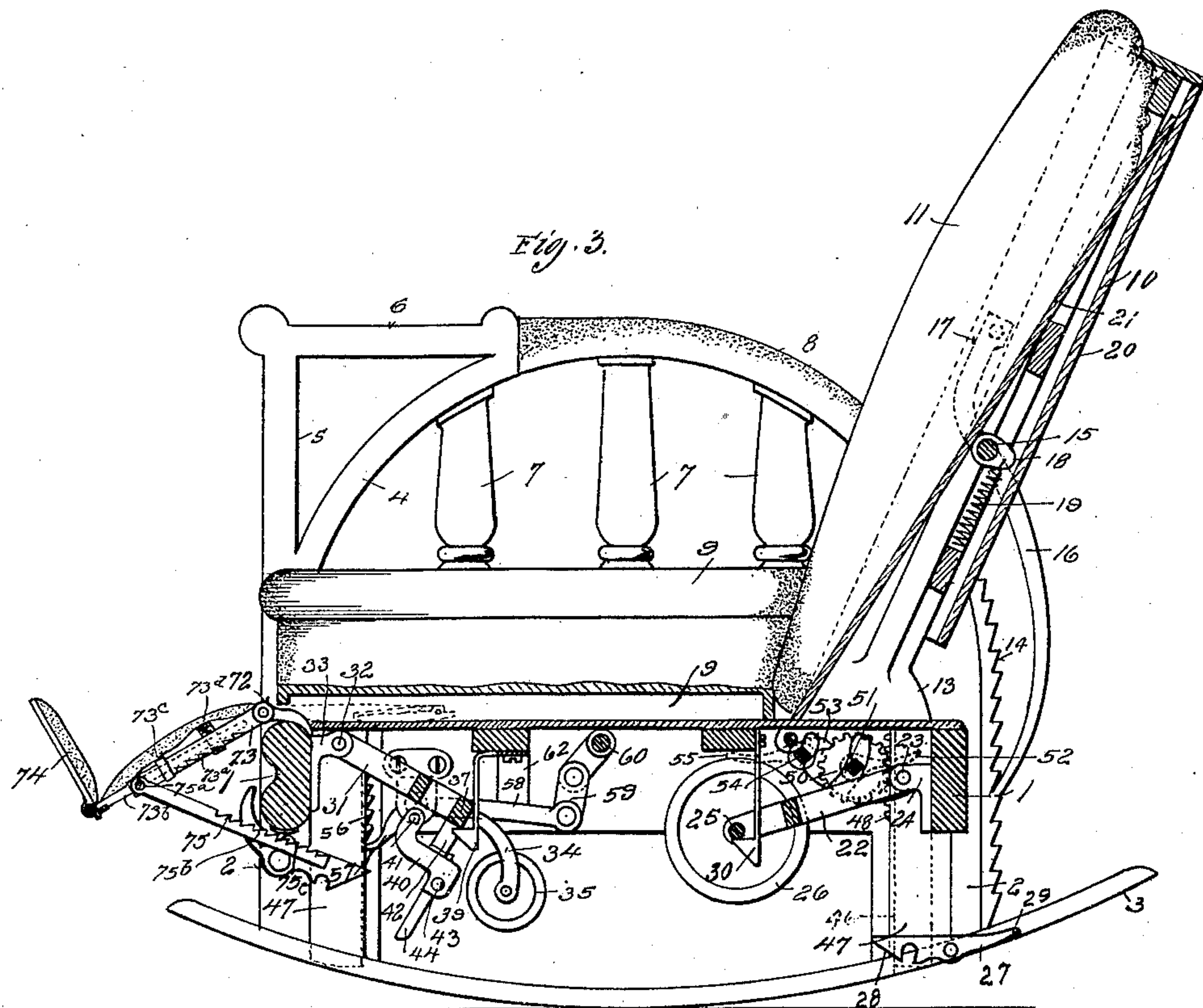
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APPLICATION FILED JULY 3, 1902.

NO MODEL.

3 SHEETS—SHEET 3.



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LOCKERT N. SHOEMAKER, OF GREENFIELD, OHIO.

CONVERTIBLE CHAIR.

SPECIFICATION forming part of Letters Patent No. 756,419, dated April 5, 1904.

Application filed July 3, 1902. Serial No. 114,193. (No model.)

To all whom it may concern:

Be it known that I, LOCKERT N. SHOEMAKER, a citizen of the United States, residing at Greenfield, in the county of Highland and State of Ohio, have invented certain new and useful Improvements in Convertible Chairs, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to convertible chairs, and has for its object to provide a chair comprising a structure such that it may be used as an ordinary chair of the type known as a "Morris" chair, as a rocking-chair, or as a
15 wheeled or invalid chair, being readily convertible from one form to the other, as desired.

To this and other ends my invention consists in certain novel features, which I will
20 now proceed to describe and will then particularly point out in the claims.

In the accompanying drawings, Figure 1 is a vertical sectional view taken on the line xx of Fig. 2 and looking in the direction of the
25 arrows, showing a chair embodying my invention arranged for use as a wheeled chair or invalid-chair. Fig. 2 is a sectional view of the same taken on the line yy of Fig. 1 and looking in the direction of the arrows. Fig. 3 is
30 a view similar to Fig. 1, showing the chair when arranged for use as a rocking-chair. Fig. 4 is a detail sectional view taken on the line zz of Fig. 2 and looking in the direction of the arrows. Fig. 5 is a view similar to Fig.
35 4, illustrating a modified form of my invention. Fig. 6 is a detail perspective view illustrating a table or shelf attachment. Fig. 7 is a detail sectional view taken on the line $x'x'$ of Fig. 6 and looking in the direction of the
40 arrows. Fig. 8 is a detail perspective view illustrating the auxiliary foot-rest. Fig. 9 is an enlarged detail view, partly in section, of a portion of the foot-rest; and Fig. 10 is a detail sectional view of a modified form of the
45 foot-rest shown more particularly in Figs. 8 and 9.

In the said drawings, 1 indicates the seat-frame, composed of the usual front, back, and side members and supported by uprights 2, to
50 which are attached the rockers 3. The front

rear portions of the uprights are preferably continued in the form of an arch 4 to form the arms of the chair, which are completed at the front by means of vertical extensions 5 and horizontal pieces 6. The arch may be sup-
55 ported by pillars 7 and upholstered, as shown at 8, and the seat is provided with a suitable cushion 9, which is preferably removable.

10 indicates the back, which is provided with a suitable upholstering or cushion 11 and
60 which is hinged upon a shaft 12, mounted in the seat-frame. The frame of the back is provided at its sides with quadrant-shaped pieces 13 to fill in the space between the rear member of the seat-frame and the shaft 12 at the
65 sides of the chair. Each of the rear uprights 2 and the adjacent portion of the arch 4 is provided at the back with a ratchet-bar 14, and there is mounted in the back, within the frame thereof, a rock-shaft 15, projecting from the
70 back at each side thereof and carrying on each projecting end a pawl or locking-arm 16, adapted to engage the corresponding rack-bar 14. The ends of each locking-arm 16 extend up-
75 ward, as shown at 17 in dotted lines in Figs. 1 and 3, within convenient reach of the occupant of the chair, so that the rock-shaft 15 may be operated from either side of the chair, and said pawls or locking-arms are held nor-
80 mally in engagement with their ratchet-bars by spring-pressure. This is preferably provided by securing on the rock-shaft 15 an arm 18, to which is connected one end of a spring 19, the other end of which is connected to the
85 frame of the back. This spring and arm are located within the frame of the back between the outer covering or panel 20 at the back thereof and the support 21 of the cushion or upholstering 11.

The chair as thus constructed is a rocking-
90 chair with an adjustable back and may be so used when the parts are in the position shown in Fig. 3.

In order to convert the chair into a wheeled chair or invalid-chair I, provide wheeled sup-
95 ports, which are hinged under the seat and which may be swung down to support the chair and lift the rockers from the ground. The rear support, which is indicated at 22, consists of a frame extending transversely of
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the chair and pivoted at its upper edge, as indicated at 23, to lugs 24, extending inward from the inner face of the rear cross-piece 1 of the seat-frame. This rear support 22 is provided at its lower end with an axle 25, on which are mounted supporting-wheels 26, one at each end. This rear wheel-support when lowered, as shown in Fig. 1, is held in position by means of a detent 27, pivoted to the inner side of the rocker 3 and having a hooked end 28 to engage the axle 25 or other suitable part of the wheel-support 22, the other or rear end projecting, as shown at 29, so as to be in reach of the operator, who by depressing the same may disengage the detent and free the support to permit it to be swung upward into the position shown in Fig. 3. The support is held in this latter position by means of a spring-catch 30, adapted to engage the axle 25 or some other suitable part of the support.

The front support is indicated at 31 and consists of a similar frame extending transversely of the chair and pivoted at 32 to lugs 33 on the inner face of the front cross-piece 1 of the seat-frame. This front wheel-support has swiveled in its lower portion, near each end thereof, the yoke 34 of a caster-wheel 35, by which the front end of the chair is supported when the wheel-support 31 is depressed, as shown in Fig. 1. The support is held in this position by means of a detent 36, pivoted to the inside of both of the front uprights 2 and adapted to engage the lower cross-bar 37 or some other suitable part of the support 31. The outer end of this detent projects in front of the chair, as shown at 38, to permit the same to be readily operated to secure or release the support 31. When said support is released, it may be turned up into the position shown in Fig. 3 and held in that position by a spring-catch 39.

The front wheel-support 31 has attached thereto a foot-rest, comprising a frame 40, pivoted at 41 to the front of the support and adapted to fold upward, as shown in Fig. 3, being provided with a projection 42 at the back to bear against the cross-bar 37 and limit its downward movement. To said frame 40 there is pivoted, by means of a rod 43, a foot-plate or foot-rest proper, 44, which folds up against the said frame and which is provided with rearward extensions or stops 45, which abut against a suitable member of the frame 40—as, for instance, a cross-bar 45—and limit the downward movement of the foot-plate 44. When the parts are in the position shown in Fig. 1, the foot-rest as a whole is in the position shown, and the plate 44 serves to support the feet of the occupant. When the wheel-support at the front of the chair is swung back, the foot-rest swings back with it and may be folded up, as shown in Fig. 3, so as to be out of the way.

When the front and rear wheel-supports are in the position shown in Figs. 1 and 2, the en-

tire chair is supported on wheels and may be readily moved from place to place, serving as an invalid-chair. When it is desired to convert the chair into a rocker or Morris chair, the wheel-supports are folded up in the manner shown in Fig. 3, when they are out of the way and concealed from view under the seat of the chair.

In order to adapt the chair to be used as an ordinary Morris chair having complete stability, I provide legs 46, adapted to slide vertically in suitable ways in the uprights 2, in which they may be inclosed between the side and front portions of said uprights within casings or metallic covers 47. In the preferred form of this construction the rear legs 46 are each provided with a rack-bar 48, projecting through a slot 49 in the casing 47, said rack-bars meshing with pinions or gears 50 on a shaft 51, mounted in the seat-frame and projecting beyond the same at one side to receive an operating handle or crank 52. By this means the rear legs may be positively raised and lowered and there held in the position to which they are adjusted by means of pawls 53, engaging the pinions 50, said pawls being on a shaft 54, mounted in the seat-frame parallel to the shaft 51 and projecting beyond the same at one side to receive an operating-handle 55, by means of which the pawls may be disengaged to permit the adjustment of the rear legs. In the construction shown in Figs. 1 and 4, which, as I have stated, is the preferred construction, the front legs 46 are each provided with a ratchet-bar 56, with which engages the toe 57 of a lever 58, pivoted at 59 on the corresponding side member 1 of the seat-frame. The rear end of the lever 58 is connected by a link 59 with a rock-shaft 60, mounted in the seat-frame and provided externally thereof with an operating-handle 61. A spring 62 bears on each lever 58 in such a way as to hold the same normally in engagement with the rack-bar 56. By depressing the handle 61 the toes 57 of the levers 58 will be disengaged from the rack-bars 56 and the front legs 46 will drop to the supporting-surface on which the chair rests and may be locked in that position by releasing the lever 61. When the front and rear legs are thus lowered and locked, the chair is supported on said legs and on the rockers in such a way as to be stable, like an ordinary chair, and may then be used as a Morris chair. The legs may be readily raised by releasing the locking devices of the legs and rocking the chair in each direction. The rear legs of course may be positively raised by means of the provision made for that purpose.

In Fig. 5 I have shown a modified construction in which the legs 46, both at the front and rear, are normally depressed by springs 63, and in this case I have shown the rear legs as each provided with a ratchet-bar 64, engaged by the toe 65 of a lever 66, connected

by a link 67 with an arm 68 of a rock-shaft 69, similar to the rock-shaft 60, and provided with a similar operating-handle 70. A spring 71, similar to the spring 62, serves to hold the
 5 toe 65 normally in engagement with the rack 64. In this case the construction of the adjusting mechanism of the front and rear legs is the same, and both legs are automatically depressed by the springs 63 when the locking-
 10 levers are released and may be returned to their raised positions by rocking the chair forward and backward.

When the device is in use as a rocker or Morris chair, it is desirable to provide an
 15 auxiliary foot-rest to take the place of the foot-rest carried by the front wheel-support, which is then folded up out of the way. To this end I provide the front member of the seat-frame with brackets 72, to which are
 20 hinged the upper ends of rods 73, each provided on one side with a ratchet 73^a. Parallel with each rod 73 and forming an extension thereof is a rod 73^b, lying against the same and provided with loops 73^c and 73^d,
 25 which embrace the rod 73. The loop 73^c forms a guide merely; but the loop 73^d has an opening of greater height than the rod 73, which passes therethrough, and is provided on one side with a spring 73^e and on the other
 30 side with a tooth 73^f to engage the ratchet 74. These rods 73 and 73^b thus form the supporting-rods of the foot-rest 74, which is pivoted to the lower ends of the rod 73^b, so as to fold up when desired, as indicated in dotted lines
 35 in Figs. 1 and 3. By reason of the construction just described these supporting-rods are adjustable in length, so that the distance of the foot-rest proper, 74, from the seat of the chair may be adjusted as desired in an ob-
 40 vious manner. In order to adjust the angular position of the entire foot-rest, there is provided a ratchet-bar 75, carried by a rod 75^a, which is supported by the lower ends of the rod 73. The ratchet-bar 75 is pivotally
 45 mounted either by pivoting it on the rod 75^a or by pivoting said rod in the rods 73. The ratchet-bar 75 is provided on its upper edge with ratchet-teeth 75^b, which are adapted to engage with a projection 75^c on the under side
 50 of the front member of the seat-frame, being normally held in such engagement by a coiled spring 75^d, coiled around the rod 75^a and having one end secured to or connected with one of the supporting-rods, while its
 55 other end passes under the ratchet-bar 75. The entire auxiliary foot-rest may be folded up, as indicated in Figs. 1 and 3, and in order to form a space to receive the same the seat 9 is provided at each side underneath with
 60 longitudinal extensions or battens 9, which raise the seat sufficiently to provide the desired space. Both the foot-rest proper, 74, and the space between the supporting-rods there-
 65 of will be upholstered in practice, as indicated in Fig. 3, the upholstering being omit-

ted in the remaining figures in order to more clearly show the construction.

In Figs. 6 and 7 I have shown a table or shelf attachment adapted to be removably con-
 70 nected to the front of the chair. This consists of a shelf or table proper, 76, having at each end a cleat or batten 77, provided with a rearward extension or projection 78, adapted to enter a corresponding aperture 79 in the
 75 corresponding upright 5 at the front of the chair. The bottom wall of the aperture 79 is provided with a recess 80, and a spring-catch 81, secured to the under side of the projection 78, is provided with a shoulder 82 to
 80 lock against the front wall of the recess 80, and with an incline 83 to permit it to ride over the projection 84 in front of said recess. The spring-catch 81 has a forward por-
 85 tion 85, forming an operating-handle, and the cleat or batten 77 is provided with a recess 86, into which the spring-catch 81 may yield or recede. A brace or support 87 is secured to the under side of each cleat or batten 77,
 90 near the front end thereof, and extends downward, so as to bear against the front face of the member 5 of the chair when the table or shelf is in position. It will be seen that the shelf or table may be attached to the chair
 95 by simply inserting the projections 78 in the apertures 79, where they will be automatically locked by the spring-catch 81. The shelf or table may be as readily detached by press-
 100 ing upward on the projecting ends 85 of the spring-catch 81 and withdrawing the projections 78 from the recesses 79.

I do not wish to be understood as limiting myself to the precise details of construction herein-
 before described, and shown in the accompanying drawings, as these details may obviously
 105 be modified without departing from the principle of my invention. For instance, I have shown in Fig. 10 a modification of the foot-rest shown in detail in Figs. 8 and 9, in which
 110 the arms 73 are supported by links 72^a, pivoted to lugs 72^b on the back of the front member of the seat-frame, said links taking the place of the brackets 72 and folding back along with the remainder of the foot-rest.
 115 In this case the larger portion of the foot-rest, which constitutes the leg-rest and which is indicated by the reference-numeral 88, is provided on its under side with loops 89 and
 120 90 to embrace the rods 73, and instead of the spiral springs 73^e I employ the curved strap-springs 91, secured to the under side of the part 88 and bearing on top of the correspond-
 125 ing rods 73.

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

1. In a convertible chair, the combination, with a rocking-chair, of wheel-supports provided with supporting-wheels, said wheel-supports being located under the chair-seat and being constructed and arranged to fold
 130

up out of the way under the seat or be lowered to support the chair on their supporting-wheels, the front wheel-supports being provided with a folding foot-rest, substantially as described.

2. In a convertible chair, the combination, with a rocking-chair, of vertically-adjustable auxiliary legs constructed and arranged, when lowered, to give stability and support to the chair, and when raised to permit the chair to be used as a rocking-chair, and wheel-supports provided with supporting-wheels, said wheel-supports being located under the chair-seat and being constructed and arranged to fold up out of the way under the seat or be lowered to support the chair on their supporting-wheels, substantially as described.

3. In a convertible chair, the combination, with a rocking-chair provided with a hinged back adjustable to different angular relations with the chair-seat, and an adjustable folding foot-rest, of vertically-adjustable auxiliary legs constructed and arranged when lowered to give stability and support to the chair, and when raised to permit the chair to be used as a rocking-chair, and wheel-supports provided with supporting-wheels, said wheel-supports

being located under the chair-seat and being constructed and arranged to fold up out of the way under the seat or be lowered to support the chair on their supporting-wheels, the front wheel-support being provided with a folding foot-rest, substantially as described.

4. In a convertible chair, the combination, with a rocking-chair, of vertically-adjustable auxiliary legs arranged in pairs at the front and back of the chair, means for locking said legs in their raised or lowered positions, said legs being constructed and arranged to give stability and support to the chair when lowered, and to permit the chair to rock when raised, wheel-supports provided with supporting-wheels, said wheel-supports being pivoted to the chair so as to fold up out of the way or be lowered to support the chair on their supporting-wheels, and means for securing said seat-supports in either their raised or lowered positions, substantially as described.

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

LOCKERT N. SHOEMAKER.

Witnesses:

N. P. CLYBURN,
H. T. CLYBURN.