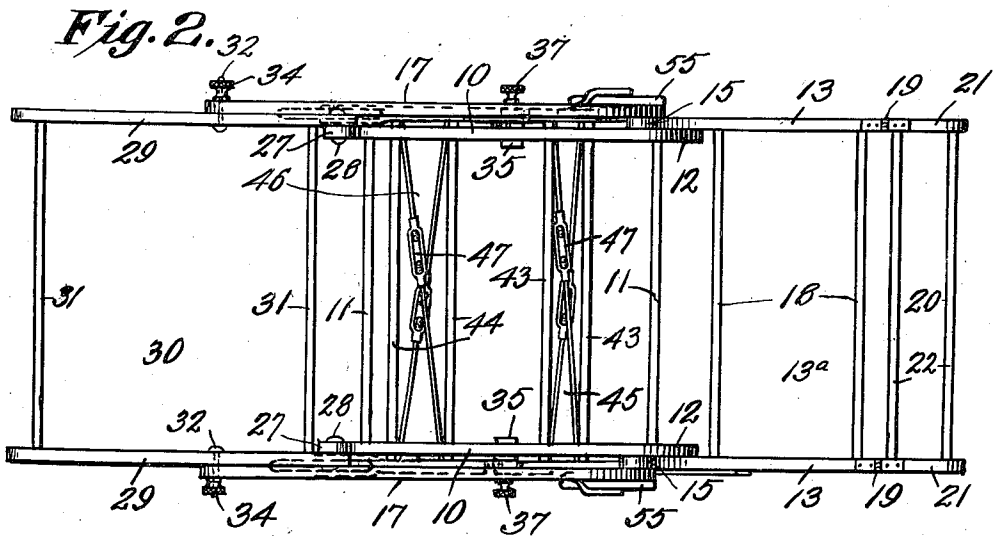
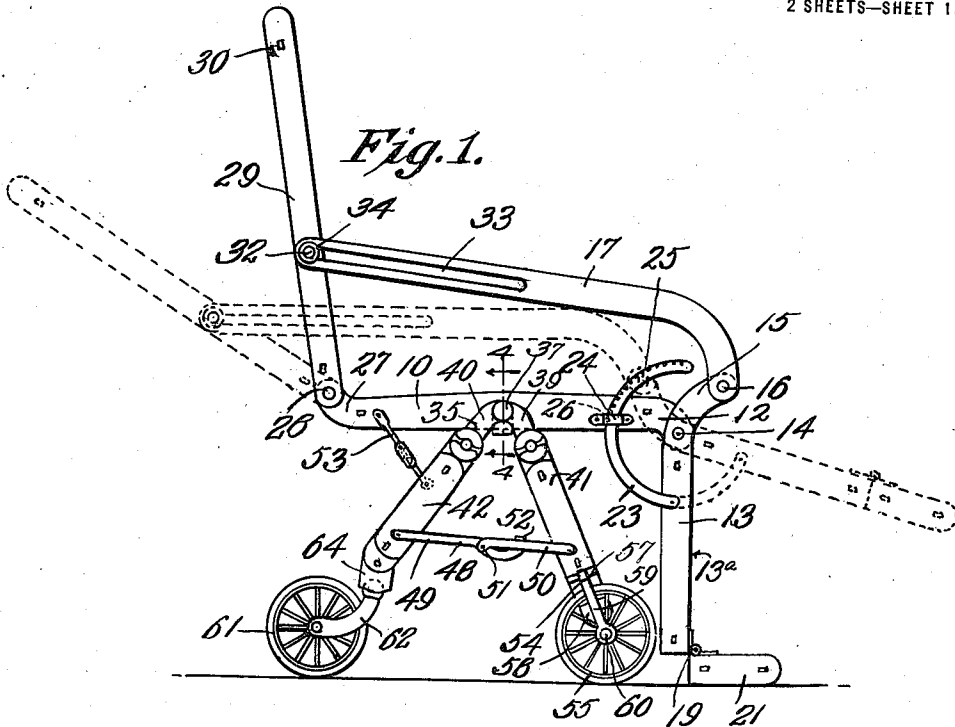


O. L. HOLMES.
FOLDING CHAIR.
APPLICATION FILED JUNE 19, 1918.

1,286,636.

Patented Dec. 3, 1918.

2 SHEETS—SHEET 1.



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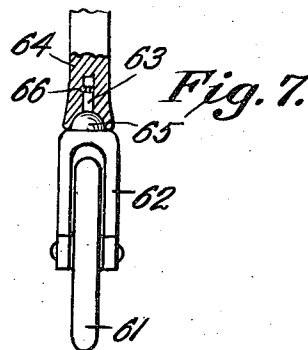
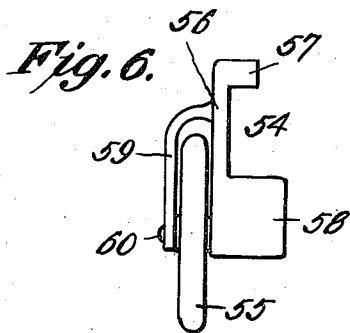
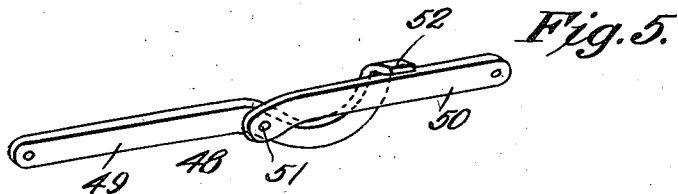
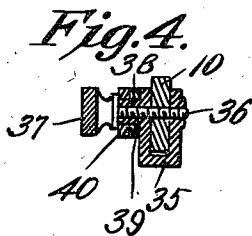
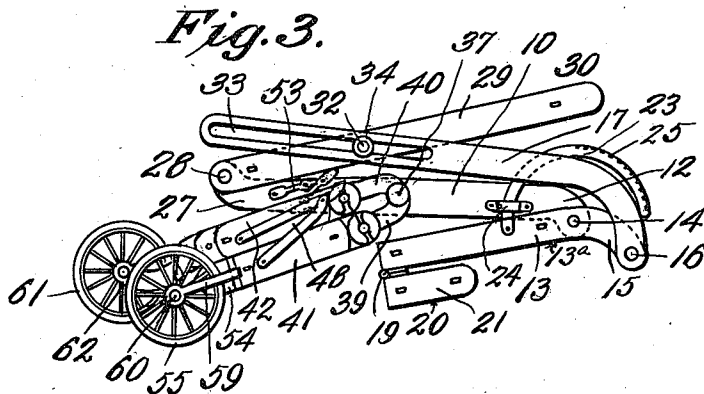
ATTORNEY

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2 SHEETS—SHEET 2.



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OSCAR L. HOLMES, OF HAYWARD, WISCONSIN.

FOLDING CHAIR.

1,286,636.

Specification of Letters Patent.

Patented Dec. 3, 1918.

Application filed June 19, 1918. Serial No. 240,812.

To all whom it may concern:

Be it known that I, OSCAR L. HOLMES, a citizen of the United States, residing at Hayward, in the county of Sawyer and State of Wisconsin, have invented certain new and useful Improvements in Folding Chairs, of which the following is a specification.

This invention relates to chairs, and particularly to folding chairs and has for its object to provide a chair of this type with means whereby it may be quickly adjusted for use as a seat or as a bed, or which may be folded and packed into small compass and stored away when not wanted; and further, to provide such a chair with wheels which will enable the same to be moved with great ease over the floor or ground and so permit the occupant to be transported without trouble from one place to another.

A still further object of the invention is to provide a folding chair made of few parts and which can be quickly and easily transformed into a bed or folded and stored away when not required, the chair comprising a few pivotally connected parts which do not require separation for any of its adjustments and which when set up for use, maintains its position under various conditions of adjustment.

With these objects in view, together with others which will appear as the description proceeds, the invention resides in the novel formation, combination and arrangement of parts, all as will be described more fully hereinafter, particularly pointed out in the claims and illustrated in the drawings, in which:

Figure 1 is a side elevation of the improved chair showing the same in full lines adjusted as a seat and in dotted lines opened out as a bed.

Fig. 2 is a top plan view of the chair in its open position.

Fig. 3 is a side elevation of the chair folded.

Fig. 4 is a detail cross sectional view on the line 4—4 of Fig. 1.

Fig. 5 is a perspective view of the brace for holding the legs of the chair at the proper angle when the chair is set up for use.

Fig. 6 is a detail view of one of the front wheels and its supporting bracket, and

Fig. 7 is a detail view of one of the rear

wheels and its bracket, the latter being shown partly in section.

In the drawings, 10, 10, indicates two bars forming the sides of the chair seat 10^a, these bars being held apart a suitable distance and rigidly framed by cross rods 11, one being at the front of the seat and the other at the rear thereof. The forward ends of the bars 10 are preferably curved or bent downwardly as shown in Fig. 1 to form ears 12 to each of which on its outer side is pivoted the side bar 13 of the leg support 13^a, the bolt or other pivotal connection 14 passing through the side bar 13 near its upper end. Each side bar 13 above the pivot 14 is curved forwardly as at 15, and to the upper end is pivotally connected by means of a bolt 16, a rearwardly extending arm rest and brace 17. The side bars 13 of the leg support are framed together by upper and lower cross rods 18 and to the lower end of each side bar of the leg support, there is hinged at 19 a foot piece 20 comprising side members 21 connected by cross rods 22. Pivotaly connected at one end to one of the side bars 13 is an arcuate plate 23 curving rearwardly from said side bar concentrically with the axis of the pivot bolt 14 and passing through a guide loop 24 secured to the side bar 10 of the seat. The outer or convex edge of the arcuate plate 23 is formed with a number of teeth 25, which are designed to cooperate with a lug 26 within the guide loop 24 for the purpose of holding the leg support 13^a at various angles of elevation. If found desirable, there may be an arcuate plate 23 on each side of the chair.

The rear ends of the side bars 10 are bent or curved upwardly, to each of which is hinged by a bolt 28, a side bar 29 of the chair back 30. The chair back comprises the two side bars 29 and cross rods 31, the whole forming a rectangular frame upon which may be supported a cushion, a mattress or other covering. Intermediate the ends of each side bar 29 there projects from its outer side, a bolt 32 with which engages a longitudinally extending slot 33 formed in the rear end of the arm rest or brace 17. These slots enable the back 30 and arm rests 17 to be folded, as in Fig. 3, when the chair is to be stored away. For the purpose of holding the back and arm in proper relation to each other a hand nut 34 is threaded

on each bolt 32 and when screwed tightly against the arm rests 17, firmly secure said arm rests and the back into such relative position as they may have been moved.

Intermediate the ends of each side bar 10 of the seat there is a U-shaped bracket 35 that extends under the side bar and is held in place thereon by a bolt 36 passing through the bracket and through the side bar. The bolt 36 is provided on one end with a hand nut 37 for the purpose of tightening or loosening the bolt. Projecting from the outer side of each bracket 35 is a boss 38 through which the bolt 36 passes, said boss forming the pivotal support for the upper ends of two brackets 39 and 40. The lower end of each bracket 39 is connected to the upper end of a front leg 41 of the chair, while the like ends of the brackets 40 are secured to the upper ends of the rear legs 42. The two front legs 41 are rigidly connected by cross members 43 for strength and to insure unity of movement and the rear legs 42 are similarly joined by cross members 44. Further rigidity between the legs is provided by diagonal braces 45 between the forward legs and similar braces 46 between the rear legs. These braces are formed of metal rods extending from the upper end of the leg on one side to the lower end of the leg on the opposite side and are made in two parts connected by a turn buckle 47 by means of which the braces are properly tensioned.

The legs on each side of the chair are pivoted, as shown, to studs 38 and extend angularly therefrom, resembling in this respect the letter A, the distance between the front and rear leg, or their angular separation, is limited by a folding brace member 48 formed of two plates 49 and 50 pivotally connected together and to the respective legs. One of said plates as 49 projects a short distance beyond the pivot 51 joining the plates and at its end is turned laterally to form a finger 52 which overlies the other plate 50 and serves as a stop to hold the brace in a straight line and the front and rear legs properly separated. A second brace 53 somewhat similar to that described extends between a rear leg 42 and the chair seat side bar 10 and holds the chair seat in proper relation to the legs, but which can be folded when the chair is to be stored away. Preferably though not necessary there will be a brace 48 and a brace 53 on each side of the chair, thus insuring greater rigidity between the parts without lessening the ease with which it may be folded.

On the lower end of each leg 41 is fastened a bracket member 54 in which is journaled a small wheel 55. The bracket member 54 is formed of a plate 56 that lies against the outer side of the leg and has a clip 57 at its upper end which extends

around the leg. On the lower end of the plate 56, and preferably integral therewith, is a cup 58 in which the lower end of the leg 41 is seated. Projecting outwardly and then downwardly from the side of the bracket 54 is an arm 59 through the lower end of which is formed a perforation to receive one end of the axle 60 of the wheel 55, the other end of the axle being supported by the lower end of the cup 58, the wheel itself rotating between the arm and the bracket.

The rear legs 42 are also carried upon wheels 61 that rotate in forks 62, each being fitted at its outer end with a pin 63 rotatable in a socket in the depending end of a bracket 64 secured to the lower end of the rear leg. At the base of the pin 63 when it joins the fork is a hemispherical bearing 65 that turns in a suitably shaped seat in the bottom of the bracket 64, and serves to sustain the weight of the chair. Any suitable means may be provided for holding the fork 62 in the bracket, while permitting its rotation, one such means being shown as a pin 66, extending through the bracket 64 and within a groove formed in the upper end of the pin 63.

In using the chair for seating purposes the parts are adjusted to the position shown in full lines in Fig. 1. If greater or less inclination to the back be desired, the hand nuts 34 are loosened and the back adjusted to the proper angle, or if the leg support 13^a does not hang at a comfortable angle this may also be rectified by loosening the hand nuts 34 and after disengaging the arcuate plate or plates 33 from the lugs 26 in the loops 24, the support may be swung into any desired position without changing the position of the back. To convert the chair into a bed, the nuts 34 are loosened, the arcuate plate disengaged and the back and leg supports swung into the position indicated in dotted lines in Fig. 1, after which the nuts are tightened and the arcuate plate once more permitted to engage the lug 26. In this position of the parts, the foot piece 20 will swing on its hinges 19 into line with the leg support 13^a and so increase the length of the bed. When the chair is to be folded and stored away, the hand nuts 34 are loosened and the back 30 swung forwardly to its full extent over the chair seat and the braces 48 and 53 folded so that both front and rear legs can swing backwardly as in Fig. 3, the leg support 13^a is then in turn folded under the seat and the chair is in position to be stored away.

The foregoing description and the drawings have reference to what may be considered the preferred, or approved form of my invention. It is to be understood that I may make such changes in construction and arrangement and combination of parts, materials, dimensions, et cetera, as may prove

expedient and fall within the scope of the appended claims.

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

1. A folding chair comprising a seat, a back pivoted to the rear of the seat and adapted to swing forwardly and rearwardly thereon, a leg support pivoted to the front of the seat and adapted to swing downwardly and substantially in line with the seat, a foot rest hinged to the lower end of the leg support, arm rests pivoted to the leg support, disengageable and adjustable connections between the arm rests and the chair back, chair supporting legs pivotally connected at their upper ends to the chair seat on each side thereof in a common transverse axis and foldable rearwardly on the seat, foldable braces on the front and rear legs and between the rear legs and the chair seat, and a wheel mounted on the lower end of each of said legs.

2. A folding chair comprising a seat, a back and a leg support pivoted to said seat, front and rear supporting legs for the chair on each side thereof, a pivotal member mounted on the chair seat on each side for engagement with the upper ends of the front and rear legs of the same side, foldable brace members between the front and rear legs of each side and between the rear legs and the chair seat, a wheel on the lower end of each front leg, and a swiveled wheel carried by the lower end of each rear leg.

3. A folding chair comprising a seat, a back pivoted to the rear of the seat, a leg support pivoted to the front of the seat, said back and leg support adapted to be swung into substantial alinement with said seat to form a bed, arm rests pivoted to the leg support and each having a longitudinal slot in its rear end, a disengageable and adjustable connection between the chair back and the slot in each of said arm rests, locking means carried by the leg support for maintaining it in any desired position of angular adjustment with relation to the chair seat, and a foot support hinged to said leg support and adapted to swing into alinement therewith.

4. A folding chair comprising a seat, a back pivoted to the rear of the seat, a leg support also pivoted to the seat at the front thereof, arm rests pivoted to the leg sup-

port and adjustably connected to the chair back, a bracket mounted on the chair seat at each side thereof, a boss projecting outwardly from each of said brackets, a pair of supporting legs for the chair on each side, each pair being pivotally mounted at their upper ends on the boss at the side of the chair seat, and a manually operable screw bolt connecting each bracket to the chair seat and serving to hold the supporting legs of the chair on the boss.

5. A folding chair comprising a seat, a back pivoted to the rear of the seat, a leg support also pivoted to the seat at the front thereof, arm rests pivoted to the leg support and adjustably connected to the chair back, U-shaped brackets arranged to embrace the chair seat, on each side thereof in transverse alinement, a boss projecting outwardly from each of said brackets, a pair of supporting legs for the chair on each side thereof pivotally connected at their upper ends on said boss, a manually operable screw bolt extending through the chair seat on each side, the U-shaped bracket and the boss on said bracket for holding the bracket to the chair seat and the supporting legs on said boss, a foldable brace between a pair of supporting legs on one side of the chair, and a similar brace between one of said legs and the chair seat.

6. A folding chair including a seat, a bracket secured to each side of said seat, a boss extending horizontally from each bracket, said bosses being in alinement, front and rear supporting legs for said chair on each side thereof, two legs of each side being pivotally mounted on the horizontal boss on the same side of the chair seat, rigid connecting means between the two front legs and also between the two rear legs, folding connecting means between the front and the rear legs to permit them to swing to and from each other, and folding connecting means between the rear legs and the chair seat to permit the legs of the chair to be swung rearwardly on the chair seat when the chair is folded.

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

OSCAR L. HOLMES.

Witnesses:

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G. F. RYD.