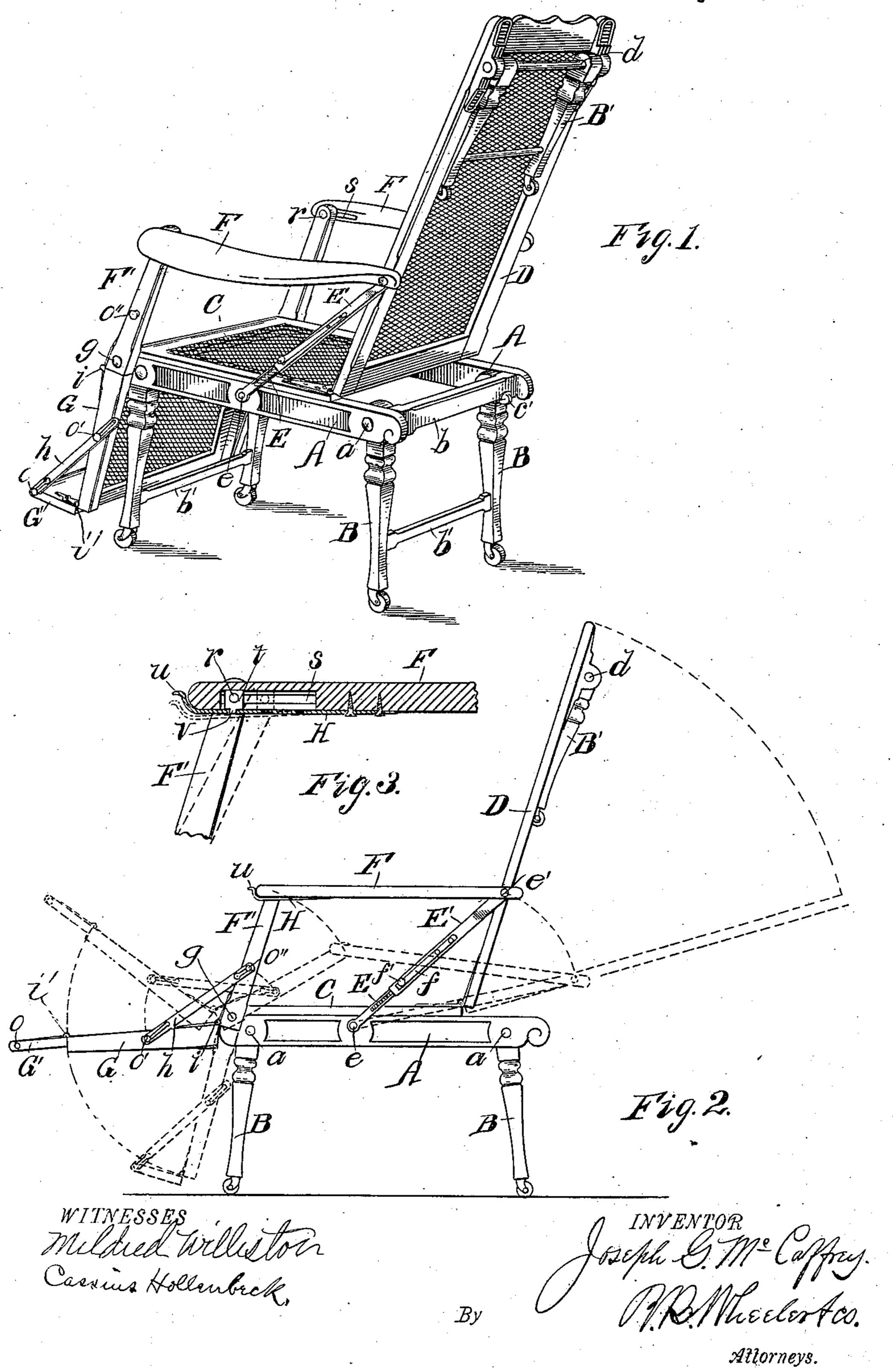
J. G. McCAFFREY. CONVERTIBLE CHAIR.

No. 564,253.

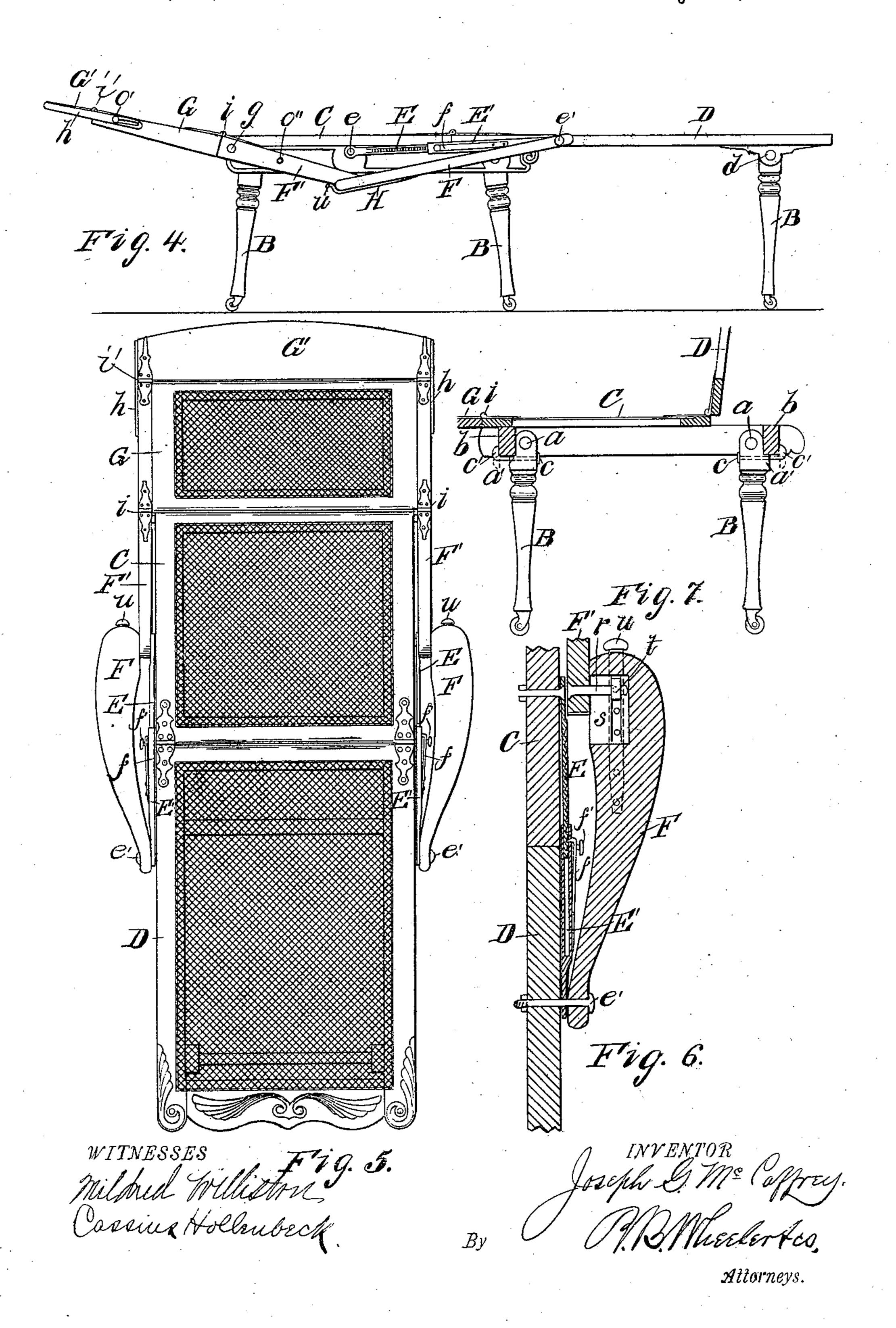
Patented July 21, 1896.



J. G. McCAFFREY. CONVERTIBLE CHAIR.

No. 564,253.

Patented July 21, 1896.



United States Patent Office.

JOSEPH G. McCAFFREY, OF DETROIT, MICHIGAN, ASSIGNOR TO ANNIE D. LEUTY, OF SAME PLACE.

CONVERTIBLE CHAIR.

SPECIFICATION forming part of Letters Patent No. 564,253, dated July 21, 1896.

Application filed October 10, 1895. Serial No. 565,248. (No model.)

To all whom it may concern:

Be it known that I, Joseph G. McCaffrey, a citizen of the United States, residing at Detroit, in the county of Wayne, State of Michisan, have invented certain new and useful Improvements in Convertible Chairs; and I do 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, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to combined chairs and couches; and it consists in the construction and arrangement of parts as hereinafter fully set forth, and pointed out particularly in the claims.

The object of the invention is to provide a novel form of convertible chair which shall be simple, durable, and inexpensive. This object is attained by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing my improved device in position when serving as a chair. Fig. 2 is a side elevation of same, showing by solid lines the foot-rest extended and by dotted lines the various adjustments 30 of the foot-rest and back and connecting side arms. Fig. 3 is an enlarged detail in vertical longitudinal section through the side arm, showing the pin-and-slot connection between said arm and the pivoted support for the for-35 ward end thereof and means for locking the pin against longitudinal movement in the slot. Fig. 4 is a side elevation of the device when serving as a cot. Fig. 5 is a plan view of Fig. 4. Fig. 6 is an enlarged horizontal 40 section through the side arm, a portion of the frame of the back and seat of the chair, and the telescopic ratchet-brace connecting the back of the chair with the side rail of the frame. Fig. 7 is a detail partly in section, 45 showing the manner of locking the pivoted legs when extended.

Referring to the letters of reference, A designates the side rails and b the connecting cross-rails of a rectangular supporting-frame.

B designates the supporting-legs, which are pivoted at a to the inner face of the side rails A and are adapted, when the chair is not in use, to fold inward and lie between the ad-

jacent faces of said rails. Said legs have suitable casters, are connected by cross-rung b', 55 and have formed in their outer faces a shoulder a', which abuts against the cross-rails b, and serves to retain said legs at a slight outward inclination and to relieve the strain upon the pivot a thereof, said legs being securely locked, when in this position, by means of a rotative bolt c passing therethrough and having a right-angled head c', which is adapted to be turned upward to engage the outer face of the cross-rail b and securely lock said legs 65 in their extended position, as clearly shown in Fig. 7.

Mounted upon the forward end of the rectangular supporting-frame is the seat-frame C, having a covering of cane or other suitable 70 material. Pivoted to the rear edge of the seat-frame is the back of the chair D, provided at its outer or upper end with auxiliary legs B', which are mounted upon a round d, journaled to the back of the chair, and upon 75 which said legs are adapted to be swung outward at a right angle thereto to support said back in a horizontal position, as shown in Fig. 4.

Connecting the back of the chair on each 80 side with the side rails A is a telescopic ratchet connection, consisting of a rack-bar E, which is pivoted at e to the outer face of said rails, and a sleeve E', pivoted to the back and receiving said rack-bar, which is adapted 85 to slide longitudinally therein, said sleeve being provided with a spring-pawl f, which projects through an aperture in the side thereof and engages the teeth of said rack-bar, the angle of the teeth of said bar and of the en- 90 gaging pawl being such as to permit the bar to slide readily within the sleeve as the back of the chair is raised from a horizontal to a vertical position, but prevents said bar from drawing out of the sleeve until said pawl is 95 disengaged therefrom by springing it outward through the medium of the knob or button f', mounted thereon, whereby said back may be supported at any angle to the plane of the seat, or readily swung downward to a hori- 100 zontal position, when desired.

F designates the side arms of the chair, the rear ends of which are pivoted at e' to the back at the point of attachment of the sleeve E' thereto. The forward ends of said arms 105 are coupled by a pin-and-slot connection to

the upper ends of the vertical supports F', the lower ends of which are pivoted at g to the outer faces of the side rails A of the sup-

porting-frame.

G designates the foot-rest, which is hinged by a knuckle-joint i to the uprights F' and normally depends therefrom in front of the chair, as shown in Fig. 1, said rest being provided at its bottom edge with a foot-piece G', ro which is hinged thereto by another knucklejoint i' and is normally supported in a plane at right angles to said rest by means of a bracerod h, which extends from the outer corners of said foot-piece to the vertical side of said 15 rest and is provided at each end with a slotted aperture communicating with a keyhole-opening adapted to engage the pins o o', respectively, of said parts, which permits of the adjustment of said foot-piece with respect to the 20 plane of said rest, as will be well understood. By this arrangement the tilting of the back rearwardly from a vertical position will cause the foot-rest to swing outward and stand at substantially the same degree of angle from 25 a vertical position as that of the back at any point in its radius of adjustment from a ver-

tical to a horizontal plane. The connection between the upper ends of the uprights F' and the outer ends of the side 30 arms of the chair consists of a pin r, passing through said uprights and journaled therein and extending into a horizontal slot s, formed in the inner edge of said arms. Fixed upon the end of said bolt which extends into the 35 slot is a square head t, (see Fig. 3,) which closely fills the diameter of said slot, but is adapted to slide longitudinally therein. Secured to the under face of the arm and forming the lower wall of the slot s is a flat spring 40 H, which extends forward and curves upward around the end of said arm, terminating in a rounded button u. Said spring, adjacent to the slot s, is provided with a series of aper-

is adapted to engage for the purpose of locking the pin r from longitudinal movement in said slot. By this arrangement, when the spring II is depressed by pressing upon the button u, so as to disengage it from the lug v, the head t and coupling-pin r will be permitted

tures, in which a $\log v$ of the square head t

to slide freely in said slot to permit the arms F and the connected uprights F' to lie in the same horizontal plane when the back of the chair is lowered to a horizontal position, at

55 the same time extending the foot-rest in the same plane with the back of the chair, and the seat portion thereof presenting a perfect horizontal surface, as shown in Fig. 5, in which position the device serves the purpose of a 60 couch.

To enable the foot-section to be slightly raised, as a couch-pillow, as shown in Fig. 4, provision is made for depressing the side arms F at their front ends below the horizontal plane of the cot, thereby swinging downward

the supporting-arms F', which are coupled thereto, and raising the foot-section to the de-

sired elevation, in which position it is securely locked when the parts are properly adjusted, by the engagement of the lug on the square 70 head t with an aperture in the spring II to prevent the sliding of the head in the slot s. Said parts are returned to their former position by depressing the springs II so as to disengage said heads, then swinging the side 75 arms upward above a horizontal line through their point of pivot, when the back of the chair may be raised and the parts again caused to assume the position shown in Fig. 1.

Should it be desirable to raise the foot-sec- 80 tion without at the same time inclining the back to an extreme angle from the vertical, the outer end of the brace-rods h may be disengaged from the pins o in the foot-section and said rods swung over and their free ends 85 engaged on the pins o'', extending from the sides of the uprights F', as shown in Fig. 2, in which position said foot-rest extends nearly horizontal, while the back is inclined but slightly from a vertical position. It will now 90 be understood that by the construction herein shown and described a reclining-chair is provided in which the back and foot-rest may be given any degree of inclination, and in which the arrangement is such as to enable it to be 95 readily converted into a couch, when desired.

Having thus fully set forth my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. In a convertible chair, the combination with the supporting-legs the seat-frame, the back-frame hinged thereto, and an adjustable connection between these two frames; of the arms pivoted at their rear ends to the back-frame and having longitudinal slots in their bodies, uprights pivoted to the front corners of the seat-frame and each having a pin passing outward into the slot in the adjacent arm, a square head at the outer end of the pin moving in said slot and having a dependent lug, and a flat spring secured beneath the arm with a button at its free forward end and having a series of apertures for engaging said lug, as and for the purpose set forth.

2. In a convertible chair, the combination with the supporting-legs, the seat-frame, the adjustable back, the arms, and the uprights pivoted to the front corners of the seat-frame and at their upper ends to said arms and having pins o'' in their outer faces; of the footrest G whose frame is connected by knucklejoints i to said uprights, pins o' in the outer sides of said frame, the foot-piece G' connected by knuckle-joints with the lower end of said foot-rest, pins o in its outer corners, and the brace-rods h having keyhole-slots in their bodies at their opposite ends and adapted for use as and for the purpose set forth.

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

JOSEPH G. McCAFFREY.

Witnesses:

E. S. WHEELER, HORACE R. WHEELER.