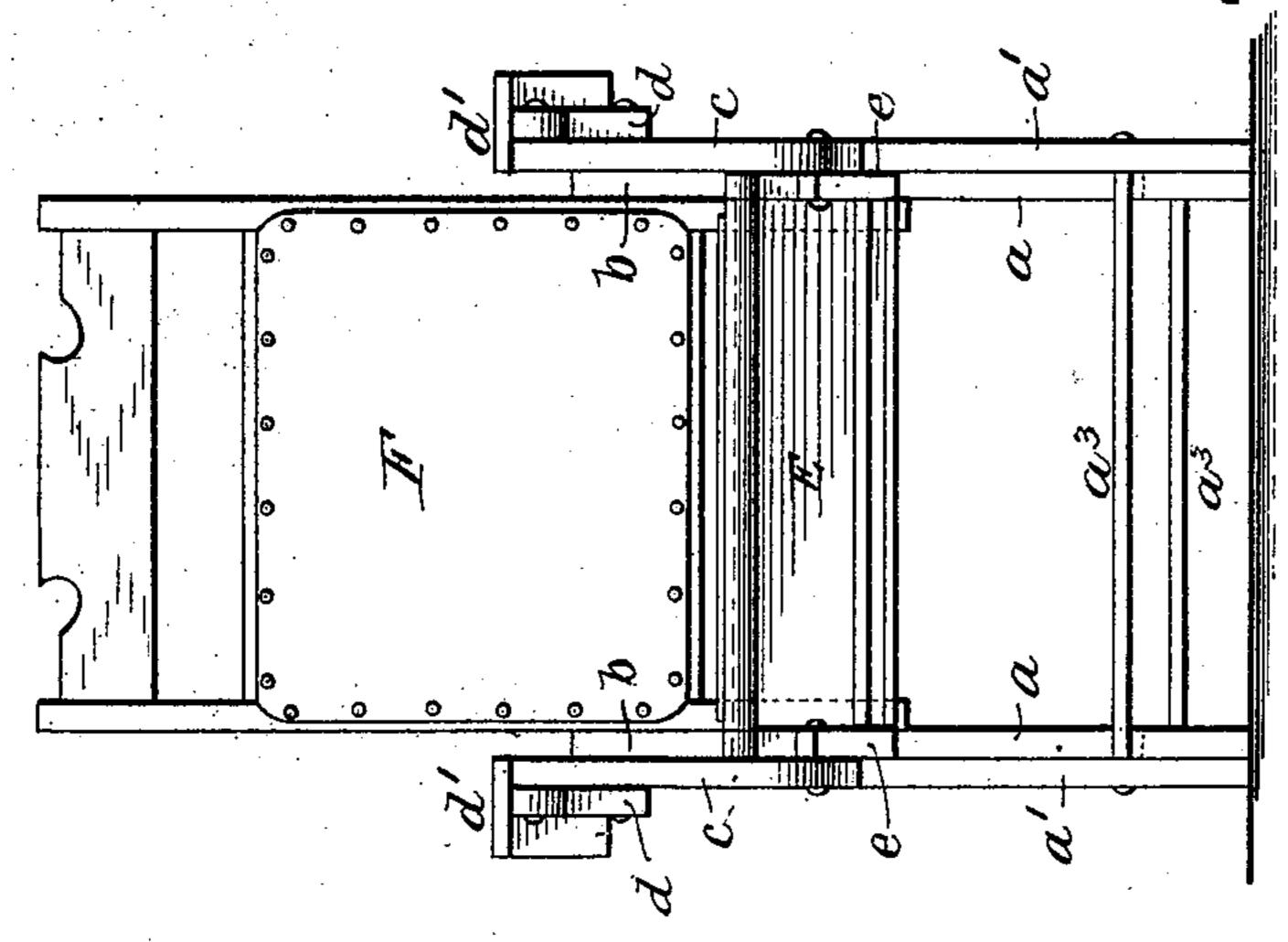
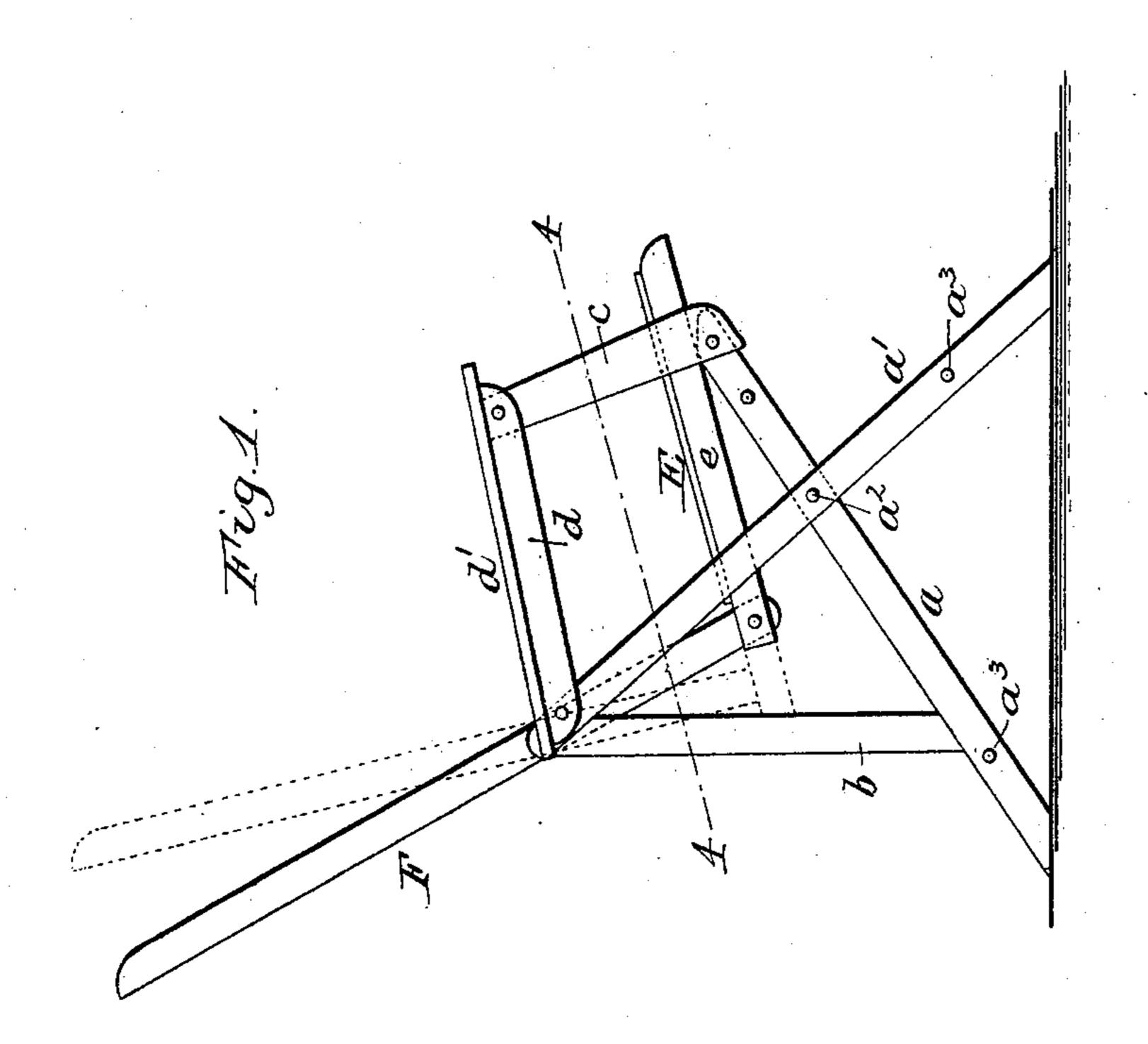
## H. F. RANKIN. RECLINING CHAIR.

No. 602,197.

Patented Apr. 12, 1898.

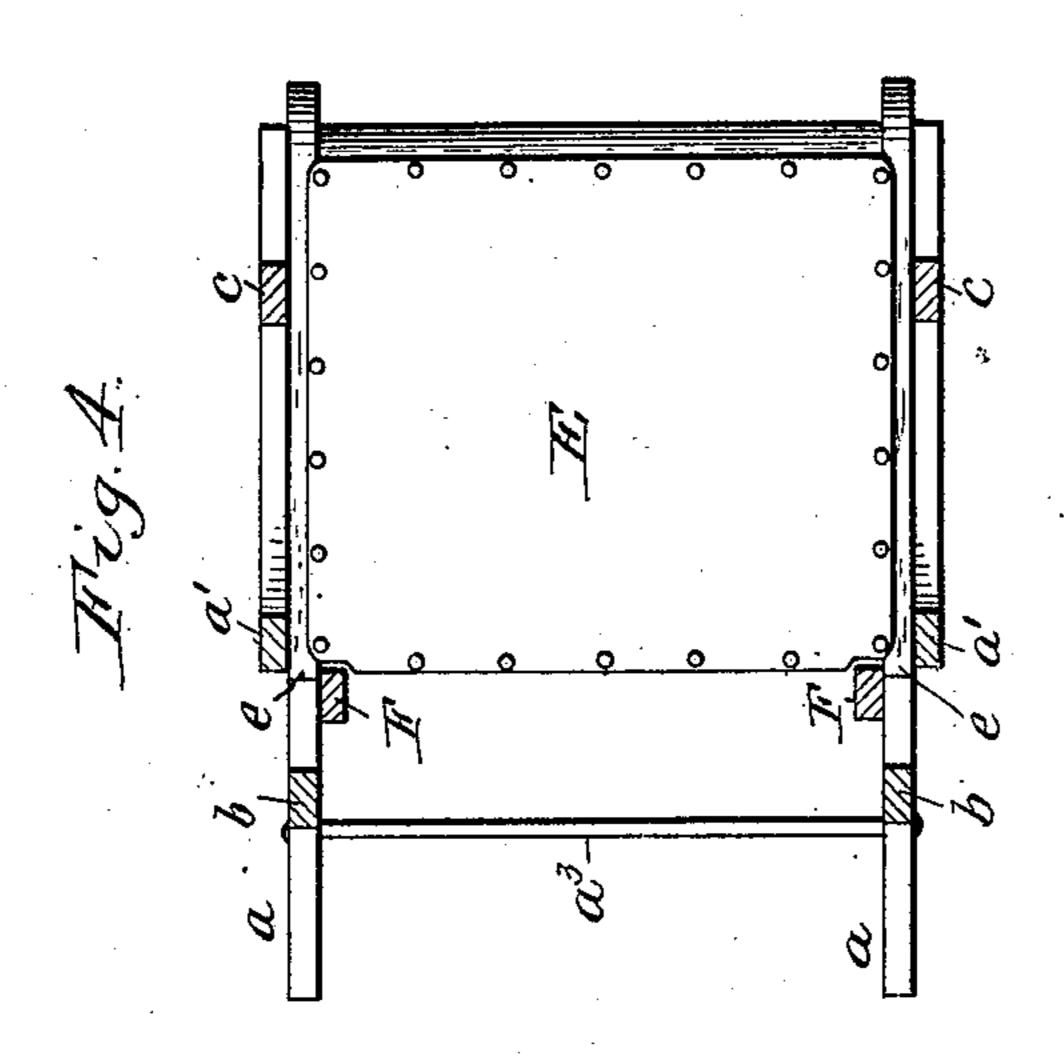


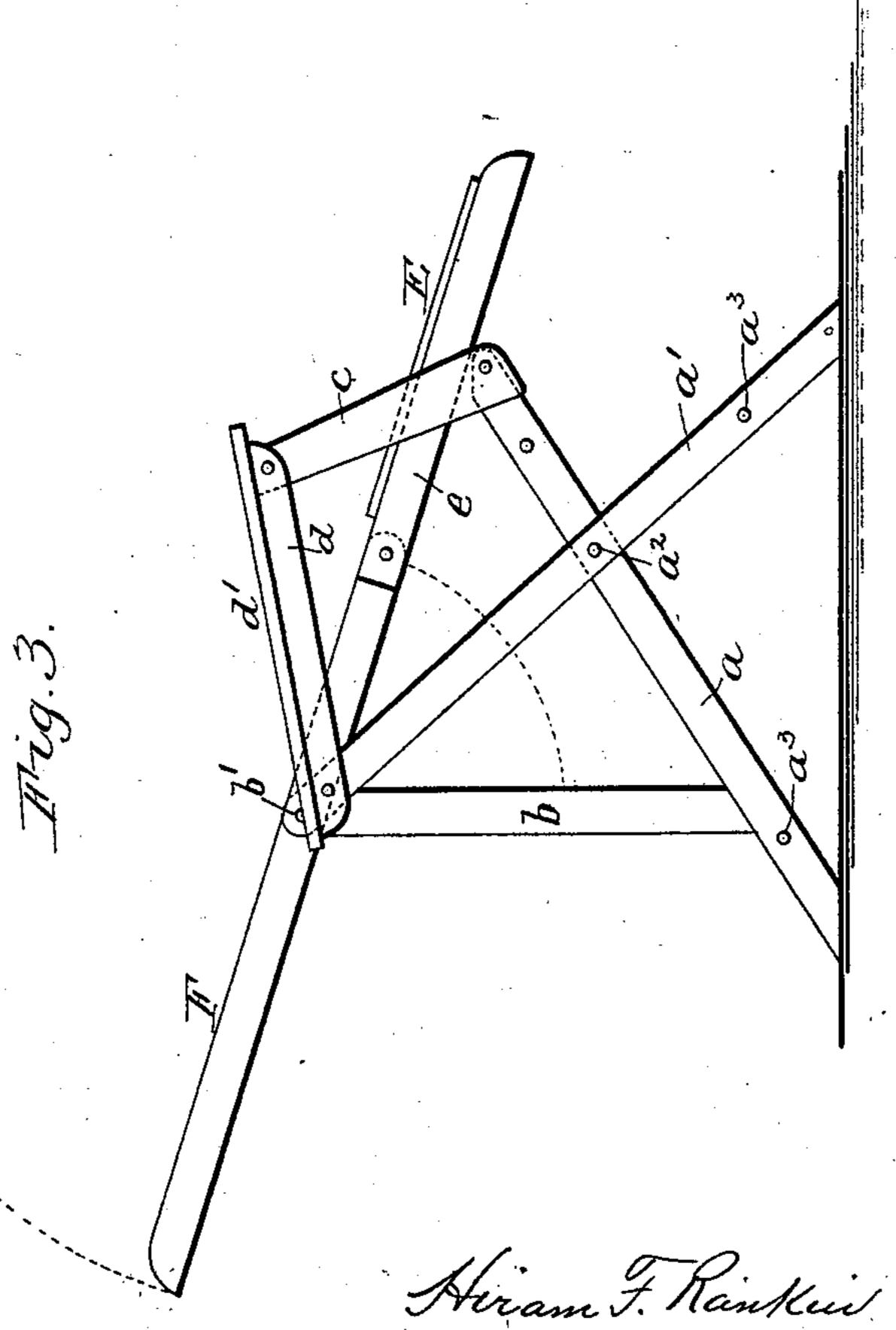


Witnesses: Henry L. Deck. Chas. F. Murkhardh. Heram F. Ranken Inventor. By Wilhelm of Found. Attorneys. H. F. RANKIN. RECLINING CHAIR.

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Witnesses:

Henry L. Deck! Chas. F. Burthardh

Airam J. Ranken Inventor.

By Wilhelm Brund

Attorneys.

## UNITED STATES PATENT OFFICE.

HIRAM F. RANKIN, OF OTTAWA, CANADA, ASSIGNOR OF ONE-HALF TO THOMAS W. A. LINDSAY, OF SAME PLACE.

## RECLINING-CHAIR.

SPECIFICATION forming part of Letters Patent No. 602,197, dated April 12, 1898.

Application filed November 20, 1897. Serial No. 659,221. (No model.)

To all whom it may concern:

Be it known that I, HIRAM F. RANKIN, a subject of the Queen of Great Britain, residing at Ottawa, in the Province of Ontario, in the Dominion of Canada, have invented a new and useful Improvement in Reclining-Chairs, of which the following is a specification.

This invention relates to self-adjusting reclining-chairs, and has for its object to provide a comfortable chair of this kind which shall be strong and simple in construction and which can be cheaply manufactured.

In the accompanying drawings, Figure 1 is a side elevation of my improved chair in its ordinary form. Fig. 2 is a front view of the chair. Fig. 3 is a side elevation thereof, showing the back tilted in alinement with the seat. Fig. 4 is a horizontal section in line 4 4, Fig. 1.

Like letters of reference refer to like parts

in the several figures.

The sides or side frames of the chair consist of crossed legs a a'. The legs of each pair are connected at their intersection by a transverse bolt or other fastening  $a^2$ , and the two sides are connected by rounds or stretchers  $a^3$ . The rearwardly-inclined legs a are arranged on the inner side of the forwardly-inclined legs a'.

which extend upwardly from the lower portions of the rearwardly-inclined legs a to the upper ends of the forwardly-inclined legs a' and which are rigidly secured to the latter by horizontal bolts b'. The lower ends of these struts are preferably flush with the rearwardly-inclined legs, while their upper ends are arranged on the inner side of the for-

wardly-inclined legs.

cured at their lower ends to the upper ends of the rearwardly-inclined legs a on the outer sides of the latter and extending upward slightly above the upper ends of the long struts b.

d represents inclined bars which connect the upper ends of the front struts c with the upper ends of the forwardly-inclined legs and which are arranged on the outer sides of said parts, and d' are arm-rests secured to the upper sides of said connecting-bars. The crossed

legs, together with the struts b c, bars d, and arm-rests d', form a rigid structure, upon which the seat E and back F are supported. The back is arranged between the rear struts 55 b and provided with side bars which are pivoted at a short distance from their lower ends to the upper ends of said struts, preferably by the same bolts or pins b' which secure said struts to the forwardly-inclined legs, so that 60 the back is capable of assuming a more or less inclined position or a horizontal position. The seat is arranged between the front struts and provided with side rails e, which are pivoted at their rear ends to the lower ends of 65 the side bars of the back, the rails being arranged on the outer sides of said side bars. The free front portion of the seat rests loosely upon the upper ends of the rearwardly-inclined legs and is free to slide forward and 70 backward thereon as the back is tilted to a more or less recumbent position by the occupant of the chair. By pivoting the seat directly to the back the rear portion of the seat is raised slightly as the back is tilted 75 rearwardly, thus inclining the seat more or less in accordance with the inclination of the back and rendering the chair comfortable in all positions of the back and seat.

The rearward movement of the seat is lim- 80 ited by the rear ends of its side rails coming in contact with the front sides of the rear struts b, as shown by dotted lines in Fig. 2. These struts thus perform the additional function of back-stops for the seat.

If desired, the back may be tilted backward and downward in alinement with the seat for forming a bed or couch, as shown in Fig. 3.

I claim as my invention—

1. In a reclining-chair, the combination 90 with the crossed legs forming the sides of the chair, of upright stop-bars connecting the rear portions of each pair of legs, a back pivoted near its lower end to the upper portions of said stop-bars, and a sliding seat having 95 its rear edge pivotally connected with the lower end of the back and having its front portion loosely supported upon the upper portions of the rearwardly-inclined legs, the rear portion of the seat being arranged to abut 100 against said stop-bars in the normal rearward position of the seat, substantially as set forth.

2. In a reclining-chair, the combination with the crossed legs forming the sides of the chair, front struts or standards extending upwardly from the upper ends of the rearwardly-inclined legs, arm-rests connecting the upper ends of said standards with the upper ends of the forwardly-inclined legs, upright stopbars connecting the upper and lower rear members of the crossed legs, a back pivoted near its lower end to the upper end of said stop-bars, and a seat pivoted at its rear edge

to the lower end of the back and resting upon the upper front portions of the cross-legs, and arranged to abut against said stop-bars in the rearmost position of the seat, substantially as 15 set forth.

Witness my hand this 9th day of November, 1897.

H. F. RANKIN.

Witnesses:
GEO. A. WAULESS,
KATIE KEARNS.