No. 697,777. Patented Apr. 15, 1902.

A. P. BARNEY.

PARLOR CAR CHAIR.

(Application filed Dec. 2, 1901.)

(No Model.)

Fig. 1.

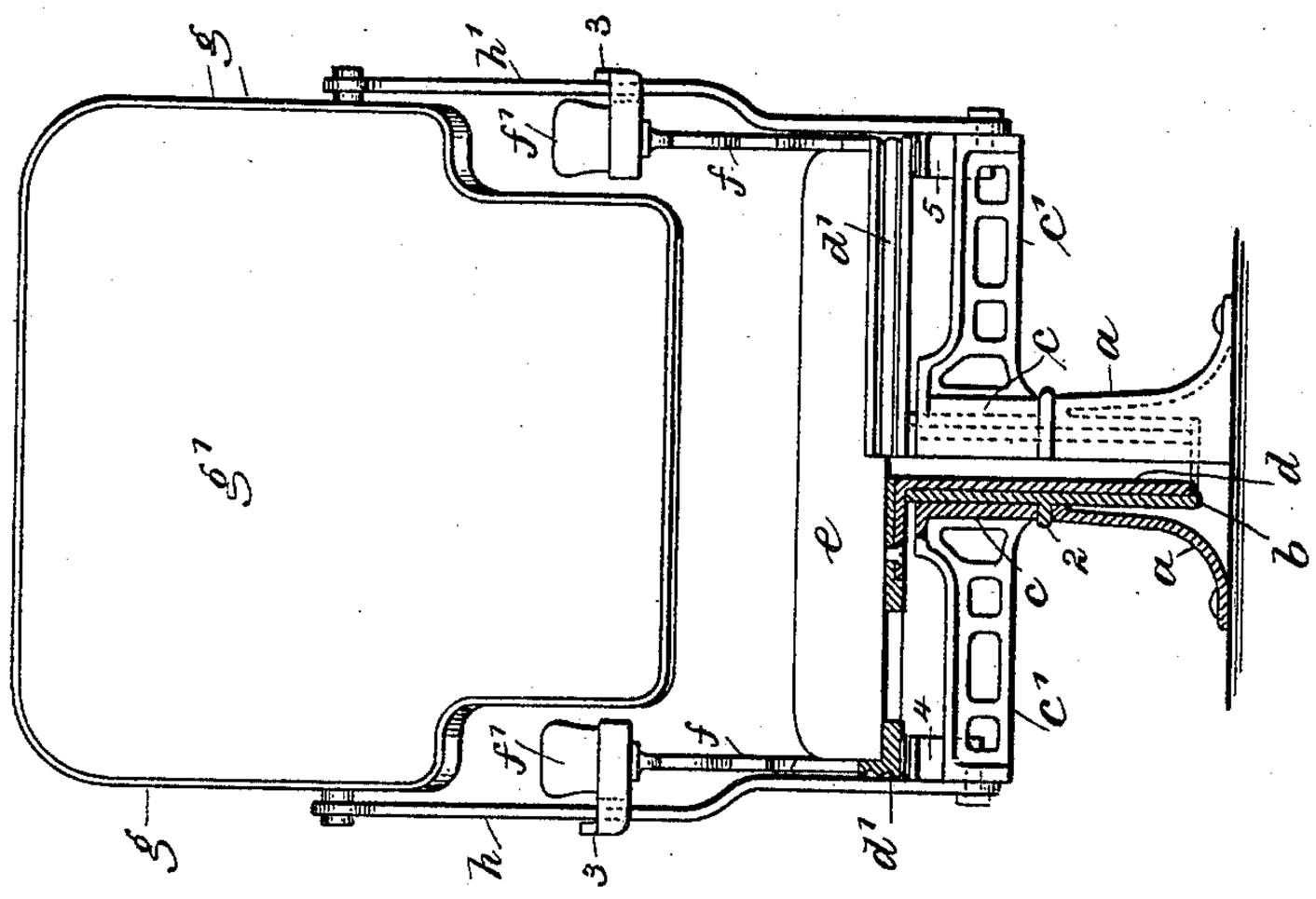
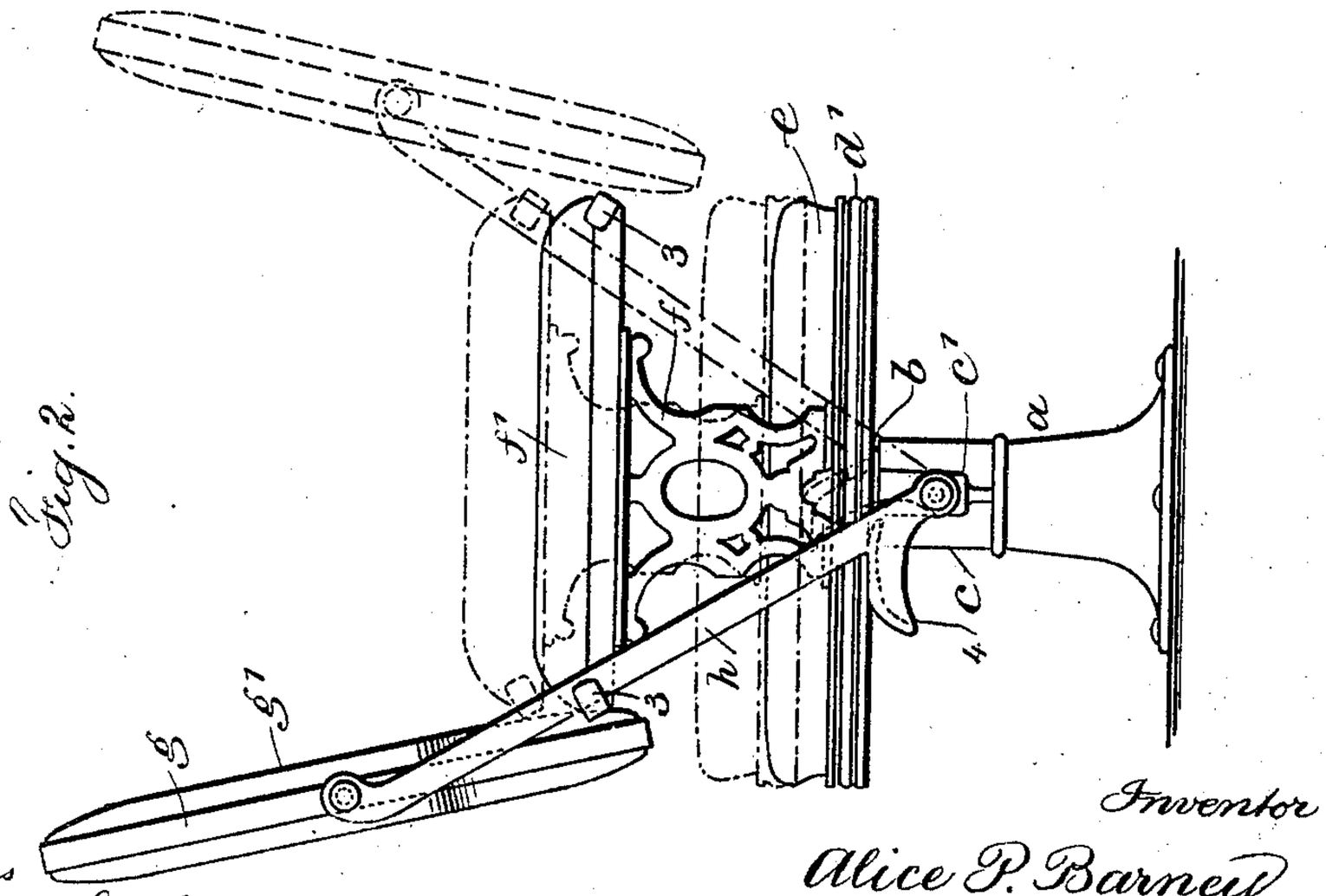


Fig. 2.



Witnesses
Chas. A. Smith
J. Staib

Inventor
Alice P. Barney
by L. W. Serrell & Son
Attys

UNITED STATES PATENT OFFICE.

ALICE P. BARNEY, OF WASHINGTON, DISTRICT OF COLUMBIA.

PARLOR-CAR CHAIR.

SPECIFICATION forming part of Letters Patent No. 697,777, dated April 15, 1902.

Application filed December 2, 1901. Serial No. 84,312. (No model.)

To all whom it may concern:

Be it known that I, ALICE P. BARNEY, a citizen of the United States, residing at the city of Washington, in the District of Columbia, have invented an Improvement in Parlor-Car Chairs, of which the following is a specification.

As heretofore constructed parlor-car chairs have been revoluble upon a pedestal or base, and in some instances part of the back has been adapted to swing to more readily conform to the back of the person occupying the chair; but it has not been possible to vertically adjust the height of the seat of the chair or to change the depth of the seat, so as to cause the seat to be comfortable to the user. In ordinary railway-cars the backs of the seats have been made to swing, so as to change the seat according to the direction of the movement of the car; but even in this case the seats have been stationary.

My invention relates to a seat that is revoluble upon a pedestal or support and where the seat may be raised and lowered, so as to change the height from the floor and the depth of the seat, and also in which the back is movable from one position to another.

I provide a pedestal, preferably of two-part form, which is adapted to be secured to the floor of the car. This supports a sleeve having radial oppositely-placed arms. A guide-post is received within the pedestal, and the same carries a frame to which is secured the seat-frame and the arm-frame and arms. This seat-frame and the parts connected therewith are adapted to rotate in the pedestal, and the aforesaid arms connected to the sleeve have pivoted to them arms carrying the swinging back, and also devices, such as cam-arms, coming beneath the seat-frame and which support the weight of the seat-frame and raise and lower the same as the back and the arms carrying the same are shifted from one position to another. I prefer to so proportion the parts that when the seat is at its highest point the back is rearward of or in a plane passing vertically through the back edge of the seat, and when the seat is at its lowest point the back is appreciably forward of a plane passing vertically through the back edge of the seat. This latter position has the effect of shortening up the depth of the seat, and coupled with its lower position causes the same to be better adapted for the sitting form of short persons, and in this position there is a space between the seat and lower edge of the back for a lady's dress.

In the drawings, Figure 1 is a vertical section and partial elevation representing my improvement. Fig. 2 is a side elevation, the parts in one position being shown in full lines and in the opposite position in dotted lines.

The circular pedestal is preferably composed of outer and inner parts *a b*, the outer part being downwardly flaring, with a flange to be bolted to the floor, and the inner part being tubular, with a flange 2 resting upon the upper edge of the outer part and forming a support. I provide a sleeve *c* around the part *b* and resting upon and being supported by the flange 2 of the inner part. This sleeve *c* is made with opposite radial arms *c'*, preferably integral therewith and of any desired ornamental form. Within the inner part *b* is a guide-post *d*, preferably tubular, and which post is made with an integral flange, and *d'* represents the seat-frame, secured to and preferably fitting upon the flange forming part of the guide-post. The seat *e* is received and held by the seat-frame *d'*, and the arm-frames *f* are secured to the seat-frame *d'* at opposite sides and extend vertically therefrom and support the arms *f'*, and the said frames *f* are advantageously provided with lugs 3, forming stops upon the opposite ends of the frame.

I provide a swinging back-frame *g*, receiving the back *g'* and to which said back is secured, and arms *h h'*, pivoted at their upper ends to the frame *g* and at their lower ends to the ends of the arms *c'*, and these arms are provided with cam-arms 4 5 near their lower ends and extending out from one side of the said arms *h h'* and bearing upon their upper edge or surface on the under side of the seat-frame *d'*. The seat *e* and the back *g g'* may be of any desired character and are preferably removable to change from winter upholstering to summer cane seat and back.

In Fig. 2 the full lines represent the seat and back in their lowermost position and in dotted lines in their raised position, the rais-

ing of the seat being effected by swinging the back from the full-line to the dotted-line position, this movement swinging the arms *h h'* on their pivotal connection to the arms *c'* and swinging the cam-arms 4 5 from a substantially horizontal to a raised position, the cam-arms bodily lifting the entire guide-post and frame, seat-frame and seat, the arm-frames and arms from the full to the dotted position, the arms *h h'*, the back-frame, and the back possessing sufficient weight to insure the said parts remaining in an elevated position and the stops 3 on the arm-frames receiving and limiting the movement in opposite directions of the arms *h h'*.

It will be noticed that the arm-frames *f* are longest at one side of the vertical central line and that the ends of the arms *h h'* are bent over at their places of connection with the back-frame *g*. This construction effects a shortening of the depth of the seat when the seat is in the depressed position, which will be apparent from the full and dotted lines of the drawings. When the seat is raised, it comes nearer the back-frame *g*, the arms *h h'* are supported by the stops 3 farther from the vertical center, and the form of the upper ends of the arms *h h'* carries the back rearward of or into a plane passing vertically through the back edge of the seat, whereas when the seat is in the lower position the arms *h h'* are held by stops 3 nearer the vertical center of the chair, and this and the changed position of the curved ends of the arms *h h'* brings the back appreciably forward of a plane passing vertically through the back edge of the seat. Consequently the depth of the seat is shortened and the available seat-room lessened and better adapted to a short person. Furthermore, in this latter position an appreciable space is created between the seat and lower edge of the back-frame convenient for a lady's dress and reducing the liability of creasing the same.

The extent of elevation of the seat is advantageously about three inches in the actual device. This provides for the comfort of passengers, as it is a well-known fact that a short person is uncomfortable on a high seat and a tall person uncomfortable on a low seat, and the raising and lowering of the seat provides for the height of the seat from the floor in proportion to the height of the person that may be using the seat, it being only necessary in changing the height to swing the back from one position to the other. It is furthermore apparent that all of the parts around and above the pedestal may be rotated as one device about the pedestal.

I claim as my invention—

1. In a railway-car seat, the combination with the seat, the swinging back and a supporting-pedestal, of means for guiding the seat vertically and devices for raising and lowering the seat with and by the swinging movement of the back from one position to another, substantially as set forth.

2. In a railway-car seat, the combination with the seat, the swinging back and a supporting-pedestal, of means for guiding the seat vertically, devices for raising and lowering the seat with and by the swinging movement of the back from one position to another, and stops for limiting the movement of the back in both directions, substantially as set forth.

3. In a railway-car seat, the combination with the pedestal, of a seat and frame and a guide-post connected therewith and revoluble and vertically movable in the said pedestal, a back and swinging arms connected therewith and supports therefor adapted to rotate with the seat, and devices connected to and acting with said arms for raising and lowering the seat with the movement of the back, substantially as set forth.

4. In a railway-car seat, the combination with a circular pedestal, of a sleeve surrounding the upper part thereof and having radial opposite arms, arms pivotally connected to the aforesaid arms and a swinging back pivotally connected to their upper ends and cam-arms projecting from and preferably integral with the said pivoted arms near their lower ends, a guide-post turning in and vertically movable in said pedestal, a frame carried thereby, a seat-frame connected therewith, arm-frames connected to opposite sides of the seat-frame and rising therefrom and having stops or lugs at their respective ends adapted to engage the pivoted arms of the back, the guide-post, its frame, the seat-frame, seat and arm frames resting upon and being vertically movable by the said cam-arms, substantially in the manner and for the purposes set forth.

5. In a railway-car seat, the combination with the pedestal, of a seat and frame and a guide-post connected therewith and revoluble and vertically movable in the said pedestal, a back and swinging arms connected therewith, and supports therefor adapted to rotate with the seat, and cam-arms projecting from and preferably integral with the said swinging arms near their lower ends and acting with the movement of the said arms for raising and lowering the seat, substantially as set forth.

6. In a railway-car seat, the combination with the seat, the swinging back and a supporting-pedestal, of means for guiding the seat vertically, devices for raising and lowering the seat with and by the swinging movement of the back from one position to another, and stops for limiting the movement of the back in both directions, and devices substantially as specified for changing the relation of the back and seat in the raised and depressed positions of the seat to shorten the depth of the seat in the depressed position and increase the space between the back and seat, substantially as set forth.

7. In a railway-car seat, the combination with the seat, the swinging back and a sup-

porting-pedestal, of means for guiding the seat vertically, devices for raising and lowering the seat with and by the swinging movement of the back from one position to another, and stops for limiting the movement of the back in both directions, the stops at one side being farther from the vertical center than at the other side to cause the relative positions of the back and seat to one another to be changed with the change from the elevated to the depressed position to shorten the depth of the seat, substantially as specified.

Signed by me this 31st day of October, 1901.

ALICE P. BARNEY.

Witnesses:

EWELL A. DICK,

A. C. BARNEY.