

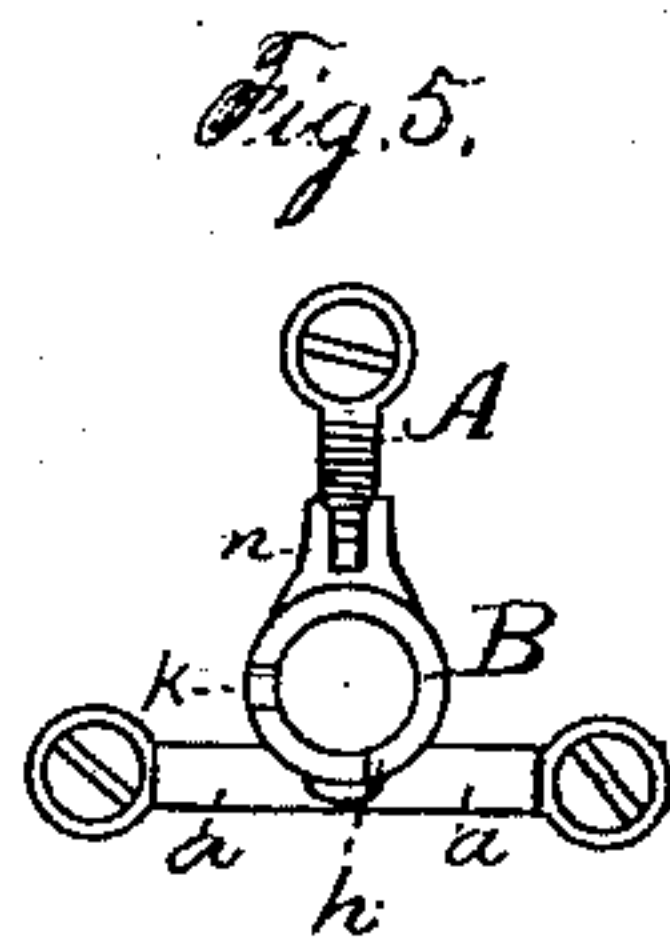
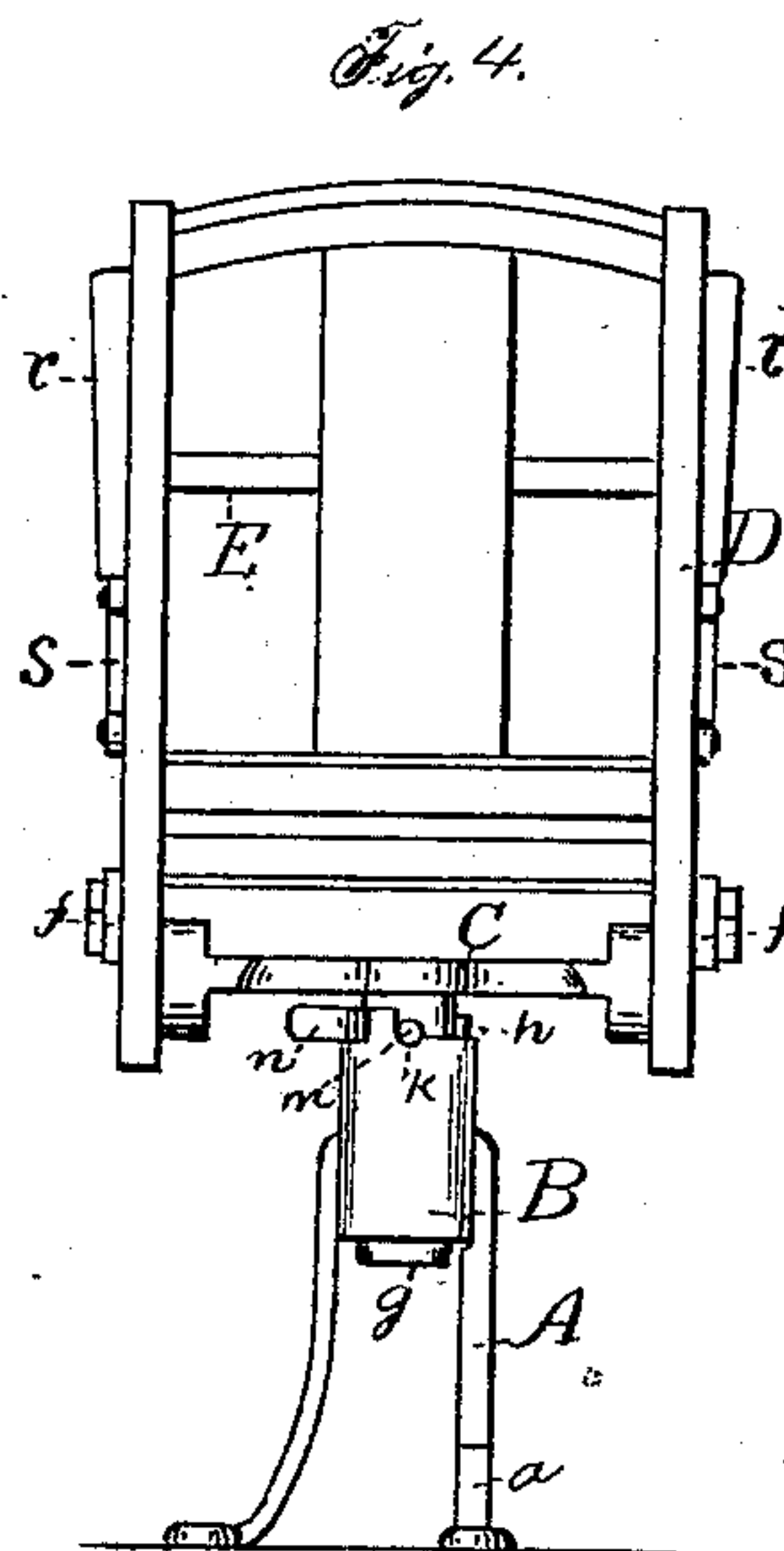
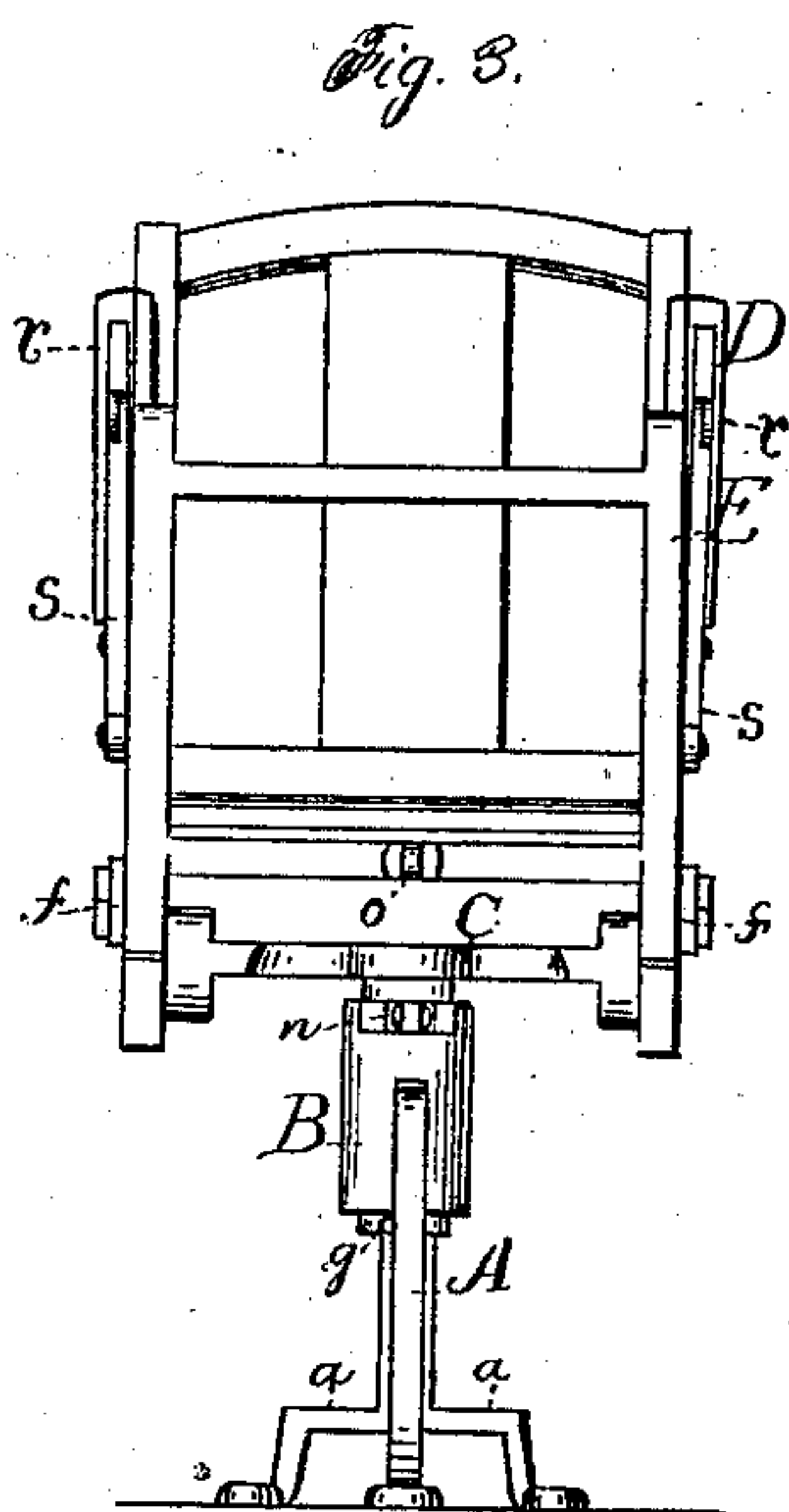
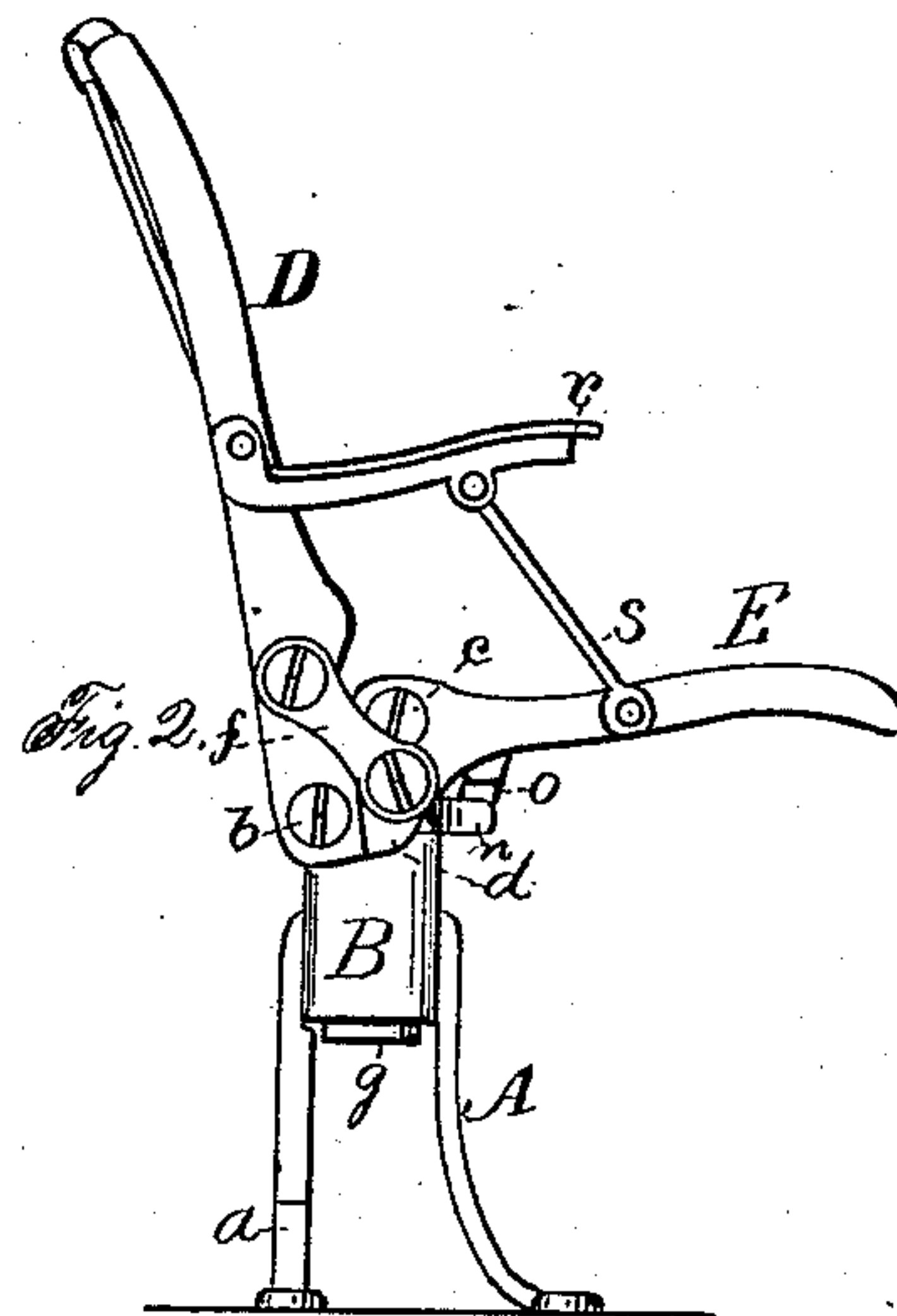
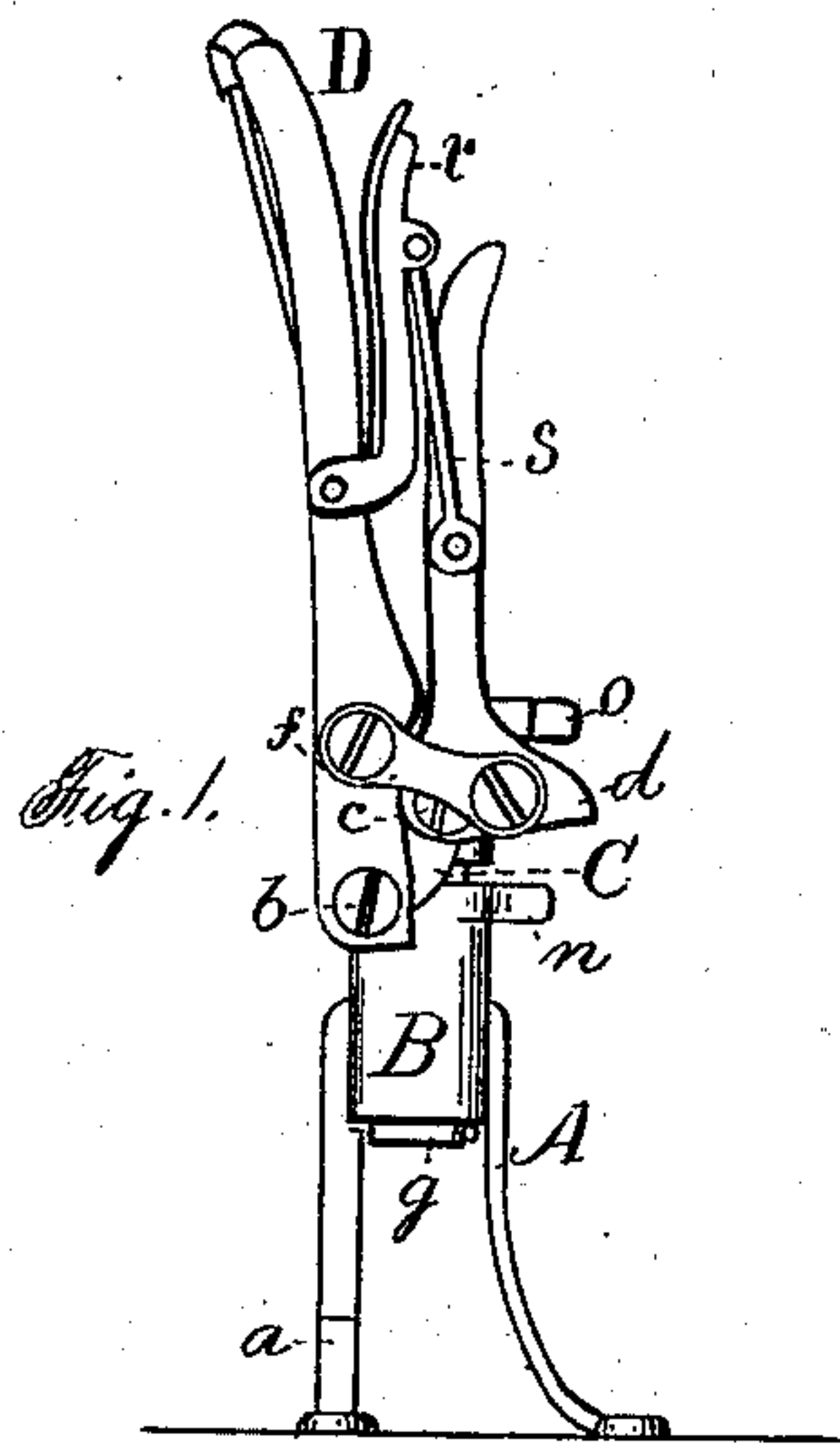
(No Model.)

F. M. BAILEY & E. A. SCHADE.

OPERA CHAIR.

No. 264,216.

Patented Sept. 12, 1882.



Witnesses.
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Lyman S. Burr.

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UNITED STATES PATENT OFFICE.

FRANK M. BAILEY AND EDMUND A. SCHADE, OF NEW BRITAIN, CONNECTICUT; SAID BAILEY ASSIGNOR TO SAMUEL D. SARGENT, OF SAME PLACE.

OPERA-CHAIR.

SPECIFICATION forming part of Letters Patent No. 264,216, dated September 12, 1882.

Application filed September 30, 1881. (No model.)

To all whom it may concern:

Be it known that we, FRANK M. BAILEY and EDMUND A. SCHADE, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Opera-Chairs, of which the following is a specification.

Our invention relates to improvements in opera-chairs in which the pivoted seat and back are connected by a link, and mounted upon a frame having a vertical axis, and provided with stops and a lock to hold the seat in position; and the objects of our improvements are, first, to so hang the seat as to make it work smoothly, and when raised to stay up without the employment of springs; second, to lock the seat in position when it is turned down; and, third, to give it a quarter-turn on a vertical axis in order to facilitate passing to and from the seats. We attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation with the seat raised; Fig. 2, a side elevation with the seat turned down; Fig. 3, a front elevation with the seat raised; Fig. 4, a side elevation of the stand, with the seat and back turned a quarter-turn on the vertical axis; and Fig. 5, a detached plan view of the stand.

A designates the stand, which we prefer to make with three legs, two of which are of such form at *a a* as to form a foot-rest for the occupant of the seat immediately behind it. The upper part of this stand is in the form of a socket, B, to receive the vertical shaft to which the cross-head or frame C is secured. The back D is pivoted by screws *b* to this cross-head, and the seat E by screws *c*. The side pieces of the seat have a downwardly-extending arm, *d*, and the inner side of said arm and lower end of the back are so formed as to fit each other, and as the screw *c* is higher up than the screw *b* the latter, with the lower end of the back, acts as a stop for the arm *d*, and thereby holds the seat at the proper elevation. In order to hold the seat in position when raised, a link, *f*, is pivoted by its ends to the arm *d* at a point below the screw *c*, and to the back at a point above the screw *b*. When the seat is turned up, as represented in Fig. 1, this

link draws upon the seat and back on a line which is a little above the horizontal axis on which the seat is pivoted, and thereby holds the seat from falling, but allows it to be turned down by the application of a little force. The back has a slight forward movement on its pivot-screws when it is turned up. We also provide arms *r r*, which are pivoted to the back *d*, and connected by a link, *s*, to the seat E.

The next part of our invention relates to the manner of mounting the seat and back on the stand A. The cross-head C, upon which the seat and back are mounted, is hung upon a vertical axis. In the particular form of vertical axis herein illustrated there is a swivel-shaft, *g*, rigidly connected to or made integral with said cross-head. This shaft *g* is fitted within the socket B, so as to turn therein. About one-fourth of the upper end of the socket is cut away, so as to form the stop-shoulder *h*, while at the other end of said cut-away portion there is a shallow notch, *k*, and in the upper end of the swivel-shaft *g* is a stop-pin, *m*. Upon the front side of the stand A is a notched arm, *n*, and upon the under side of the seat E there is a downwardly-projecting arm, *o*, which arms *n o* constitute the fastening mechanism by which to secure the seat against rotation when turned down. The stop-pin *m* limits the movement of the swivel-shaft to substantially one-quarter of a revolution, and the shoulder *h* is so located with reference to the arms *n* and *o* that the seat is stopped when the arm *o* is directly over the arm *n*, so that by lowering the seat the end of arm *o* enters the notch in end of arm *n* and fastens the seat against rotation on its vertical axis in either direction so long as the seat is turned down. In Figs. 1, 2, and 3 the stand and seat are represented in the position they occupy when the pin *m* is brought against the shoulder *h*, and it is intended to set the seats side by side in rows in said position for use. In order to facilitate passing to or from the seats, they may, when raised, be turned a quarter-turn on their vertical axis, when the stop-pin *m* will drop into the notch, as shown in Fig. 4, and hold the seats and backs at substantially right angles to the rows. The frame C is about as long as the seat is wide; but its width is materially

less than the dimensions of the seat from front to rear, so that a person may pass in or out between any two seats, and if all the seats are so turned there will be as many aisles formed running transversely to the rows of seats as there are spaces between the seats, thereby greatly facilitating the exit from the house.

The pivoted arms and seat, connected together by a link, so as to turn upward at one and the same time, are hereby disclaimed.

We claim as our invention—

1. The combination of the supporting-stand, the horizontally-swinging frame mounted on said stand by means of a vertical axle, said frame being of a width materially less than the dimensions of the seat from front to rear, the back mounted on said frame, the seat hung upon a horizontal axis, and with the back mounted on said frame, and the stops which limit the horizontal swinging movement of the frame to substantially a quarter-turn, as and for the purpose specified.

2. The back *D*, pivoted at its lower end, in combination with the seat pivoted on a fixed axis, and having the arm *d* and the link *j*, with one end of said link pivoted to the back at a point above the axis on which said back is hung, and its other end pivoted to the arm *d* at a point outside of the fixed axis on which the seat turns upward, substantially as described, and for the purpose specified.

3. The combination of the supporting-stand, the horizontally-swinging frame mounted on

said stand by means of a vertical axle, the seat and back both mounted upon said frame and hung upon horizontal axes, and the stops which limit the horizontal swinging movement of the frame to substantially a quarter-turn, as and for the purpose specified.

4. The seat and back mounted on one and the same frame, the seat being pivoted to turn upward, and having the arm *o*, in combination with the stand bearing the arm *n*, for engaging the arm *o* when the seat is turned down, and a vertical axle upon which the back and seat frame may turn when the seat is raised up, substantially as described, and for the purpose specified.

5. The combination of a back and seat hung to turn upward on a horizontal axis, a frame with said back and seat mounted thereon, a vertical axle and supporting-stand upon which said frame may turn horizontally, stops to limit the horizontal swinging movement to substantially a quarter-turn, and the fastening mechanism to secure the seat, when turned down, at the point where the swinging movement on the vertical axis is limited by one of said stops, substantially as described, and for the purpose specified.

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Witnesses:

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