

M. HARDMAN.
OPERA CHAIR.
APPLICATION FILED MAR. 2, 1921.

1,418,709.

Patented June 6, 1922.

2 SHEETS—SHEET 1.

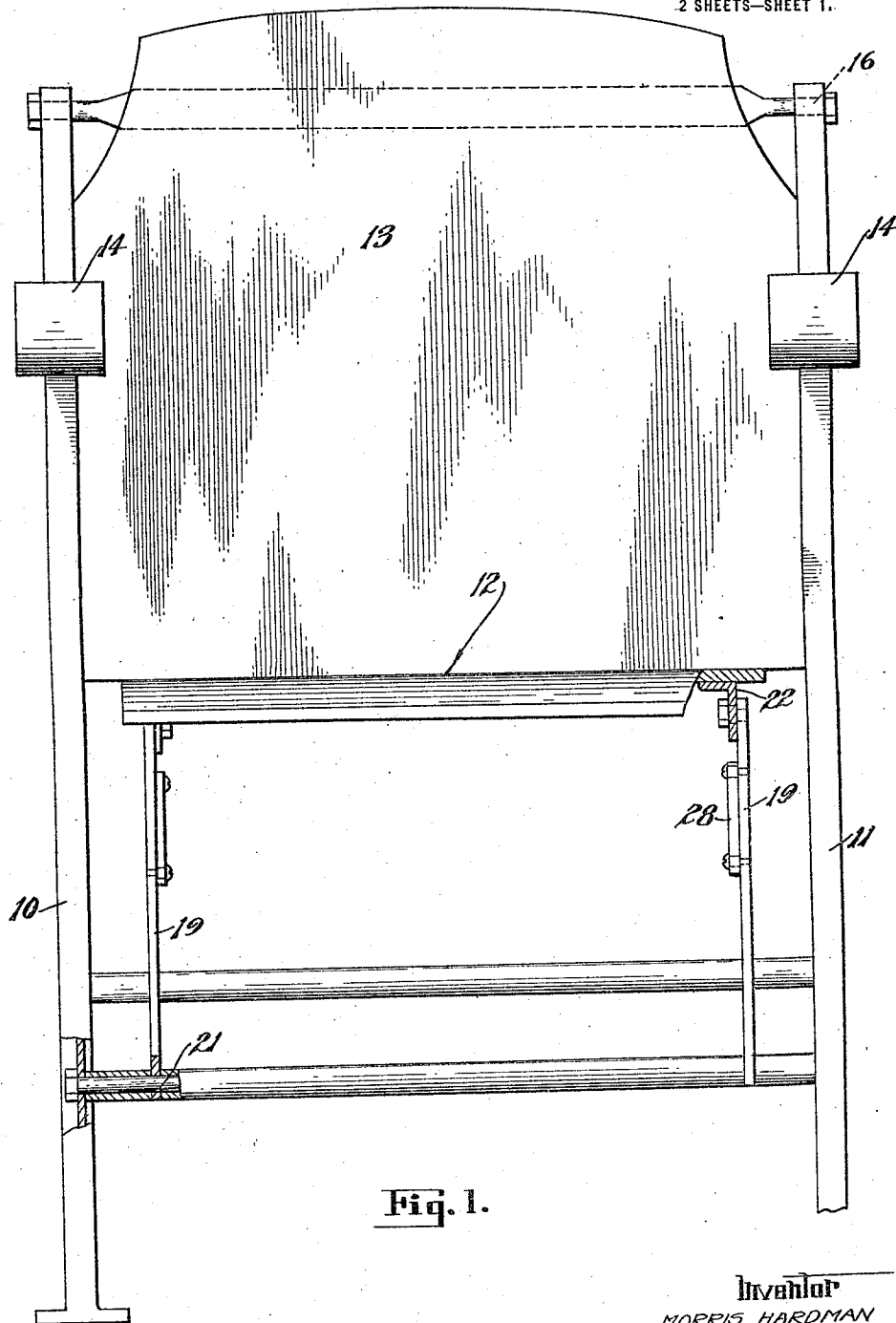


Fig. 1.

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Att'y.

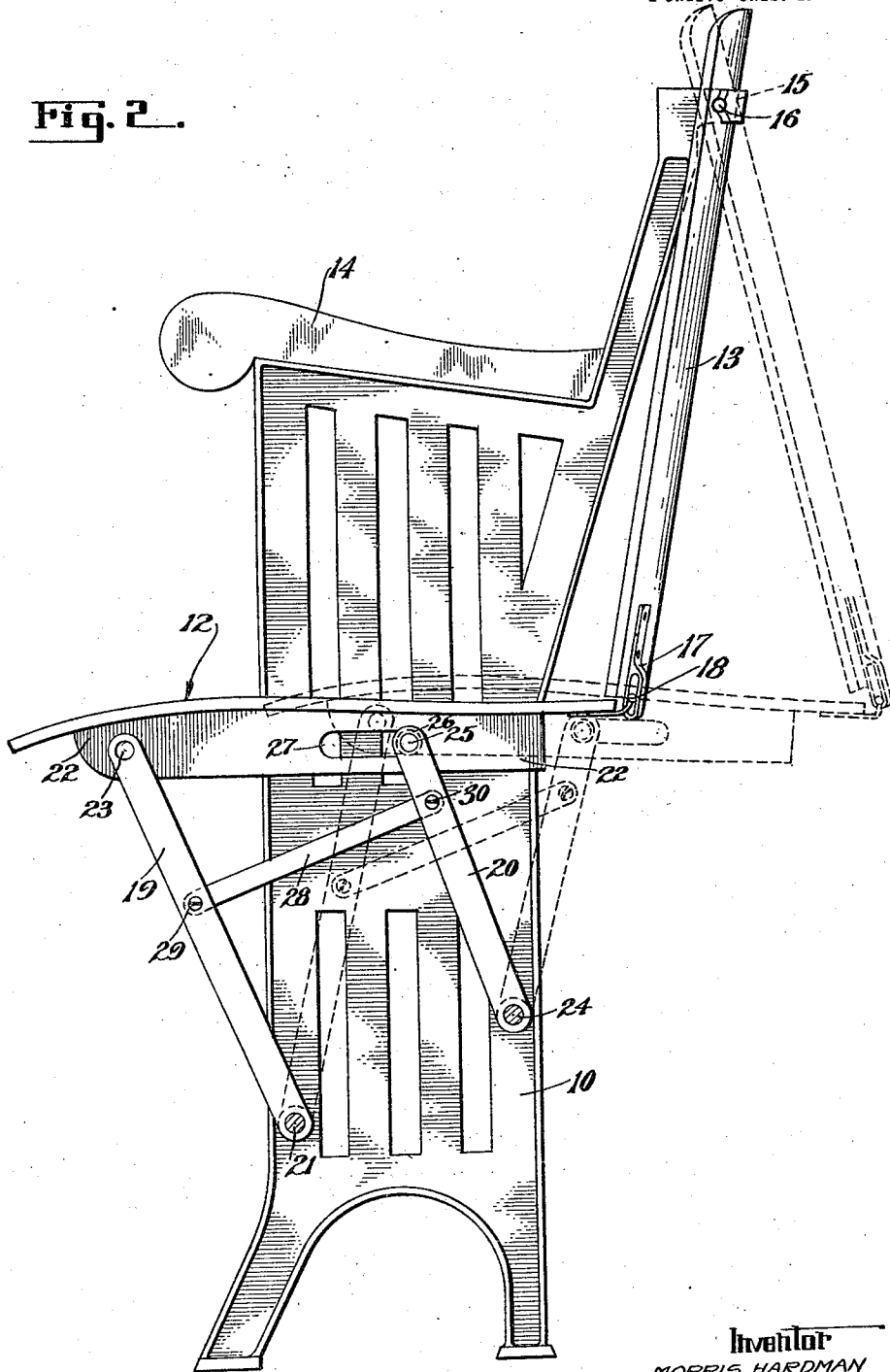
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2 SHEETS—SHEET 2.

Fig. 2.



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UNITED STATES PATENT OFFICE.

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OPERA CHAIR.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MORRIS HARDMAN, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Opera Chairs, of which the following is a specification.

This invention relates to a chair, and particularly pertains to a theater chair.

Considerable inconvenience is experienced by persons passing between the rows of seats in theaters and other auditoriums, due to the limited knee room provided, thus making it necessary for those occupying seats to arise while persons pass in front of them.

It is the principal object of the present invention to provide a seat structure adapted to allow the persons occupying seats to move without arising, and at the same time accommodate those passing along the rows.

The present invention contemplates the use of a seat supported for horizontal movement from its frame, said supporting means being entirely disposed below the seat, and adapted to be easily operated to shift the seat structure rearwardly in a manner to allow the occupant to move clear of the aisle.

The invention is illustrated by way of example in the accompanying drawings, in which:

Fig. 1 is a view in front elevation, showing one form of the invention.

Fig. 2 is a view in side elevation, showing the construction of one form of the invention, indicating the extreme positions of the parts.

Referring more particularly to the drawings, 10 and 11 indicate upright frame members, by which a seat structure 12 and a back 13 are supported. These frame members are formed with legs which rest upon the floor, and are also designed to support the chair arms 14. In the form of the invention shown in Fig. 2, a rearwardly extending lug 15 is formed at the upper end of each of the frame members. This lug receives a pivot bolt 16, to which the upper end of the chair back 13 is secured. The lower end of the chair back is provided with slotted brackets 17 receiving sliding pins 18. These pins extend horizontally as supported from the rear edge of the seat, and may move vertically in the slots of the brackets.

The seat 12 is adapted to float, that is, it

is supported so that it may freely move horizontally between the frame members, without any material vertical movement. The supporting mechanism for this seat is disposed entirely therebeneath, which eliminates the possibility of injury when the seat is moved, or the entanglement of the clothing therewith. The support comprises long links 19 and short links 20. Two of each are provided, and are arranged parallel to each other. The long links are secured upon pivots 21 at the forward edge of the frame and near the floor. The upper ends of these links extend outwardly beneath the front of the seat and are secured to the rails 22 thereof by pivot pins 23. The lower ends of the short links 20 are mounted upon pivot pins 24 near the rear edge of the seat frames and at a distance somewhat higher than the lower pivots 21 of the long links. The upper ends of these links are provided with pins 25 carrying bushings 26. These pins and their bushings extend through horizontal slots 27 in the seat rails 22. The pins 25 normally stand in the rear ends of the slots 27. The pairs of links comprising a short link 20 and a long link 19 are held in parallel relation to each other by a connecting bar 28. This bar is secured by pivot screws 29 and 30, to the links and normally stands with its longitudinal axis at right angles to the longitudinal axes of the two links.

In operation of the form of the invention shown in Figs. 1 and 2, and when a person passes along the row between the seats and in front of occupied seats, the occupants thereof merely remain seated while placing their feet on the floor, shift their hips rearwardly, at the same time causing the seat of the chair to move rearwardly in a horizontal plane until the dotted line position is assumed by the chair. At the same time the back 13 swings from its pivot 16. After the person has passed, the seat may then be moved forwardly to its original position by reverse movement.

It will thus be seen that the chairs here disclosed are provided with simple means by which they may be actuated to produce clearance between rows of chairs.

While I have shown the preferred form of my invention, as now known to me it will be understood that various changes might be made in the combination, construction, and

arrangement of parts by those skilled in the art, without departing from the spirit of the invention, as claimed.

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

1. A chair comprising a frame, a seat, rails disposed beneath the seat and secured thereto, links pivotally connected to the seat
10 adjacent the forward end thereof, second links pivoted at one end of the frame at the rear thereof, slotted openings in the rails, the second links provided with projections entering within the openings in the rails,
15 a crossbar connecting the respective pairs of links for holding the same in parallel relation to each other whereby the seat will be supported for horizontal shifting movement.

20 2. A chair supporting mechanism comprising a frame, a back, a seat connected to the back, rails disposed beneath and secured to the seat, a pair of links pivotally connected to the forward ends of the rails and frame,
25 a second pair of links pivoted at one end to the frame adjacent the rear end thereof, a

slot in the rails, a projection on the opposite end of the second pair of links entering within the slot in the rails and means for limiting the rearward shifting movement of
30 the seat when the same is horizontally shifted.

3. A chair comprising side frame members, a back hinged at its upper end to the top of said members, a seat articulately con-
35 nected by its rear edge to the lower edge of the back, horizontal rails secured beneath the seat, long links pivotally secured to the forward ends of said rails and extending downwardly to be pivotally secured to the
40 forward edges of the frames, horizontally extended slotted openings in each of said rails, short links provided with pins projecting within said openings, and being pivoted to the rear edge of the frames at their lower
45 ends, and a cross bar holding said short and long links in parallel relation to each other, whereby the seat will be supported for horizontal shifting movement and the back will
50 simultaneously be caused to swing rearwardly at its lower end.

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