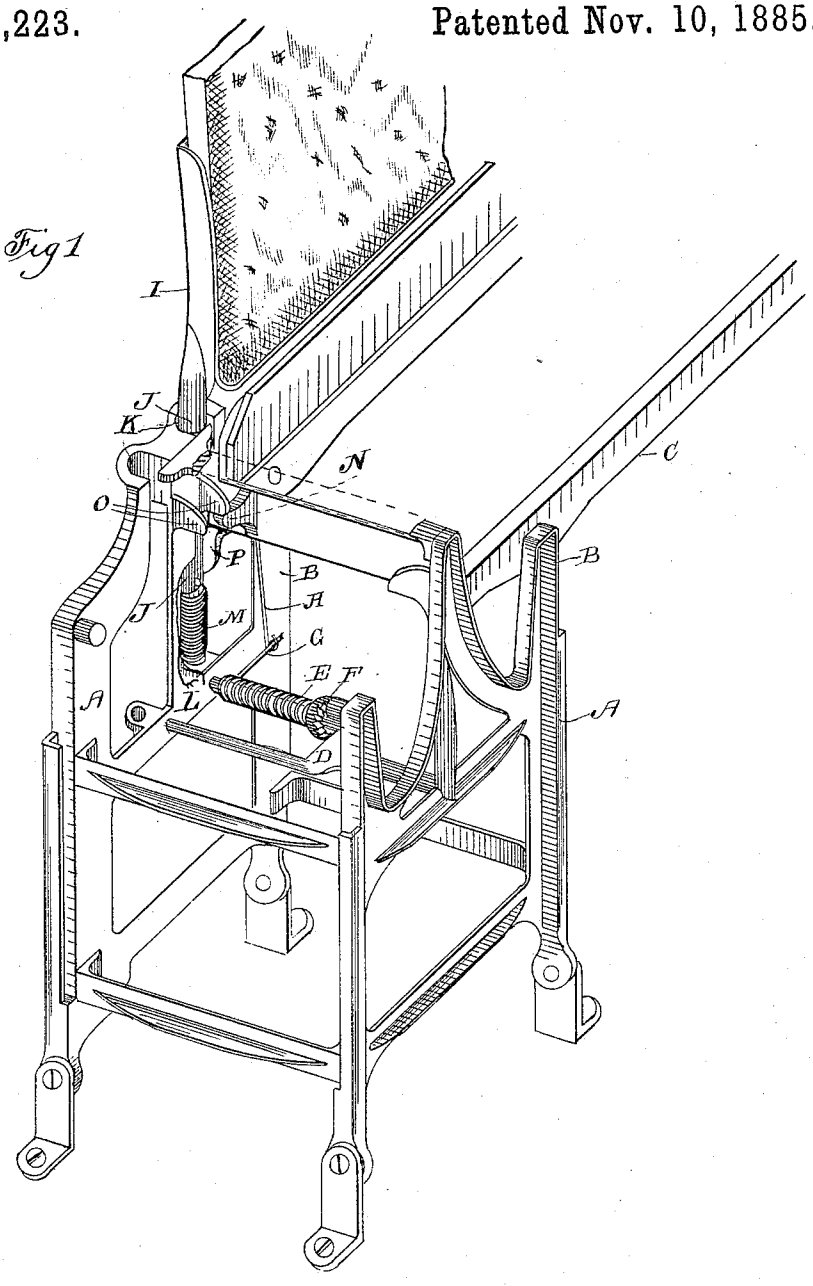
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E. L. GAYLORD.

FOLDING CHAIR.

No. 330,223. Patented Nov. 10, 1885.

Fig 1



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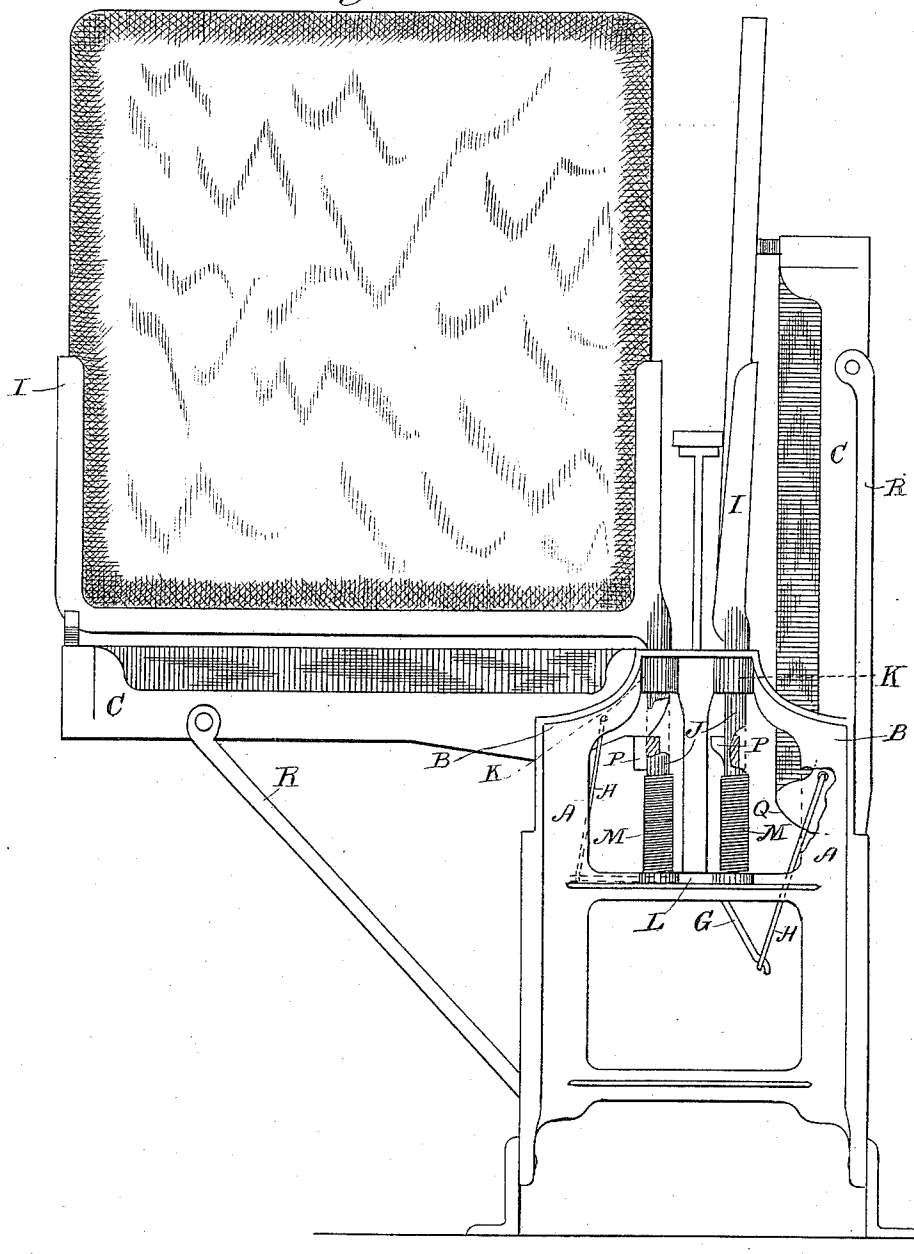
N. PETERS, Photo-Lithographer, Washington, D. C.

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FOLDING CHAIR.

No. 330,223. Fig 2 Patented Nov. 10, 1885.



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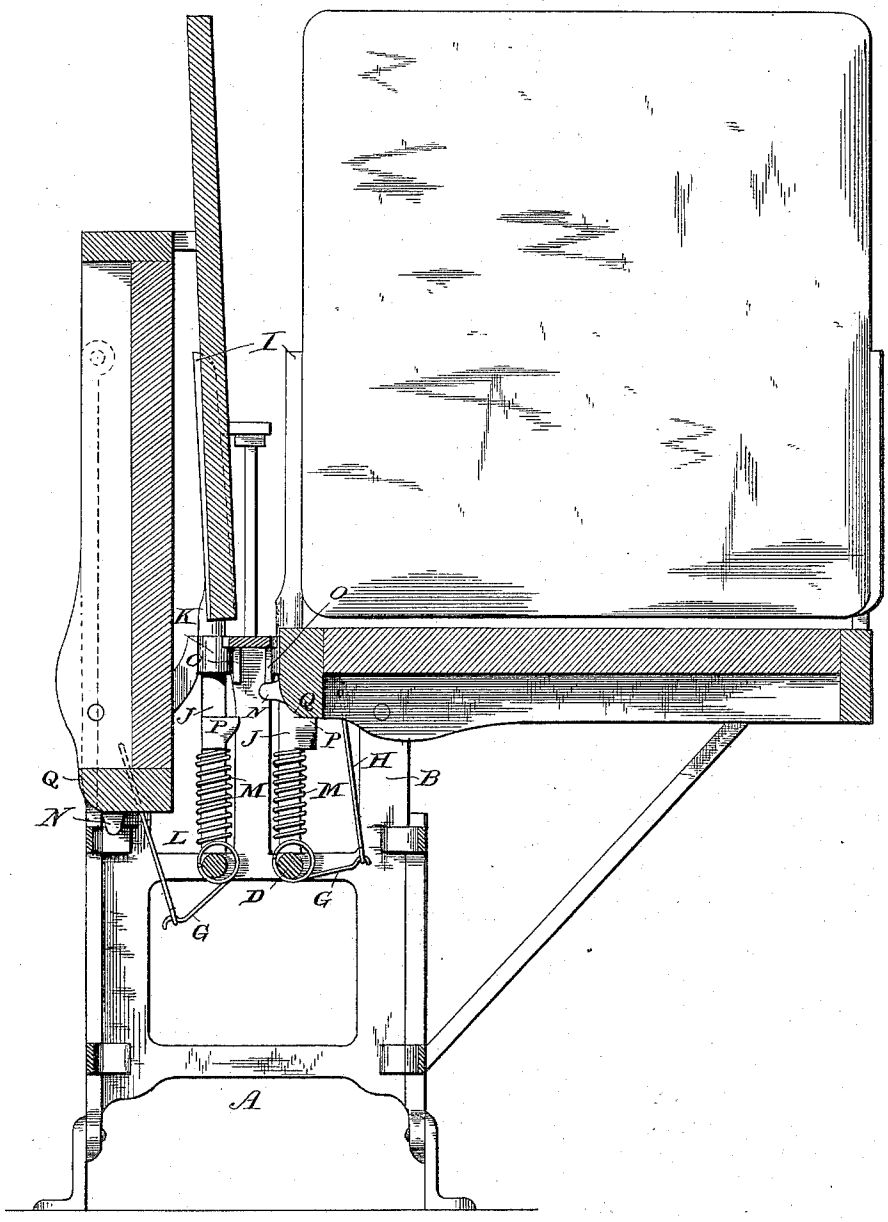
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E. L. GAYLORD.

FOLDING CHAIR.

No. 330,223. Patented Nov. 10, 1885.

Fig. 3.



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UNITED STATES PATENT OFFICE.

EDWARD L. GAYLORD, OF BRIDGEPORT, CONNECTICUT.

FOLDING CHAIR.

SPECIFICATION forming part of Letters Patent No. 330,223, dated November 10, 1885.

Application filed February 6, 1885. Serial No. 155,060. (Model.)

To all whom it may concern:

Be it known that I, EDWARD L. GAYLORD, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Folding Chairs; and I do hereby 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.

My invention relates to certain novel and useful improvements in folding chairs, and has for its object to provide a chair especially adapted for theaters, public halls, &c., which shall be mainly automatic in its folding, and, furthermore, by said folding to open a free passage around the chairs; and with these ends in view my invention consists in the details of construction and combination of elements hereinafter fully explained, and then specifically designated by the claims.

In order that those skilled in the art to which my invention appertains may more fully understand its construction, I will proceed to describe the same in detail, referring by letter to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of my improvements, showing one chair mounted, and with the seat thereof removed; and Fig. 2, a back view with one of the chairs in a folded position. Fig. 3 is a vertical sectional view, looking from the front, one of the chairs being shown in a folded position.

Similar letters denote like parts in all the figures of the drawings.

In chairs of this description it is more desirable to make them in pairs mounted on a single standard. I have therefore shown a standard adapted for two chairs.

A is the standard, and B are uprights projecting from said standard, and between these standards the chair-seat frames C are pivoted.

D is a forked rod, extending between the front and back of the standard, and E are coil-springs arranged around said forks.

F is a ratchet-wheel loosely attached to the forks, and within which the inner end of the coil-spring is secured, as in my above-mentioned application. The outer end, G, of the spring is connected to the seat-frame by means of the link H, which latter is loosely hooked within the frame and around the end G, so that it will be readily understood that the force of the coil-spring will tend to keep the chair-seat frame in a folded or elevated position, as shown in the drawings.

I is the chair-back frame, whose inner end has a spindle-extension, J, which latter passes through a housing, K, in the upper portion of the standard, and is swiveled to a cross-piece, L, so that it will be understood that the back-frame has a lateral swinging movement.

M is a coil-spring arranged around the spindle J, and with its extremities fastened to said spindle and cross-piece, respectively, so as to give the frame I a spring movement, as will be presently explained.

N O are lugs cast on the seat-frame and upright, respectively, the former being adapted to abut against the latter when the seat-frame is in a horizontal position, and thereby afford a firm support for the said seat-frame.

P is a toe, which projects laterally from the spindle and extends underneath the inner rear corner of the seat-frame when the latter is in a horizontal position, as shown at Fig. 1. When the chair is folded and it is desired to open the same, the seat-frame is thrown downward, the inner rear edge, Q, of the frame striking the toe and coming against the latter until the said frame has reached a horizontal position, when the edge Q will have passed above the toe, and the back frame will then be free to swing around and unfold by the action of the spring M. When the back frame is swung inward to fold the chair, the toe will of course revolve with the spindle, but the seat-frame is not free to swing upward by reason of its spring-connection until said toe shall have been carried beyond the edge of the seat-frame, and the position of the toe relative to the edge of the seat-frame is such that by the time said toe has been swung beyond the seat-frame the back frame will have reached its folded position, so that there will be no obstacle to the upward swing of the seat-frame.

In Fig. 2 I have shown an auxiliary brace, R, for the seat-frame, the upper ends of which are pivoted near the outer extremities of the seat-frame, and its lower ends adapted to slide

in ways along the standard; but my present improved chair may or may not be provided with this brace, since by actual test it has not been shown to be absolutely necessary.

My improved chair is very positive in its operation and simple in its manipulation, and, unlike some folding chairs, it may be operated when the occupants of chairs immediately behind are close to the back of the chair.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a pair of folding chairs the seat-frames pivoted to a single standard between uprights extending to the front and rear of said frames, in combination with spring mechanism adapted to throw said frames upward toward each other, back frames swiveled to the standard, spring mechanism adapted to swing the back frames outward and away from each other, the toe projecting from the inner rear portion of said back frame and adapted to control the movements of both the seat and back frames, and lugs projecting from the standard and the seat-frames and adapted to abut against each other when the said frames are in a horizontal position, substantially as and for the purpose set forth.

2. The combination, with the standard having lugs O, forked rod D, and cross-pieces L, of the chair-seat frames pivoted to the standard and provided with lugs N, coil-springs E, arranged as described, around said rod, links H, attached to the free ends of said springs and to the said frames, back frames I, having spindle-extensions J, swiveled to the standard, spring M, arranged around said spindle and screwed to the latter at one extremity and at the other to the standard, and toe P, projecting laterally from said spindle, substantially as set forth.

3. In a pair of folding chairs supported upon a single standard, the combination, with the swiveled back frames adapted to swing forward toward each other against the action of a spring, of the pivoted seat-frames adapted to be swung in a vertical plane toward each other by a spring action, means attached to the back frames for controlling and timing the automatic movements of both frames, and suitable stops projecting from the standard and the seat frames adapted to abut and thereby hold said frames in a horizontal position, all substantially as shown and described.

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

EDWARD L. GAYLORD.

Witnesses:

S. S. WILLIAMSON,

W. T. HAVILAND.