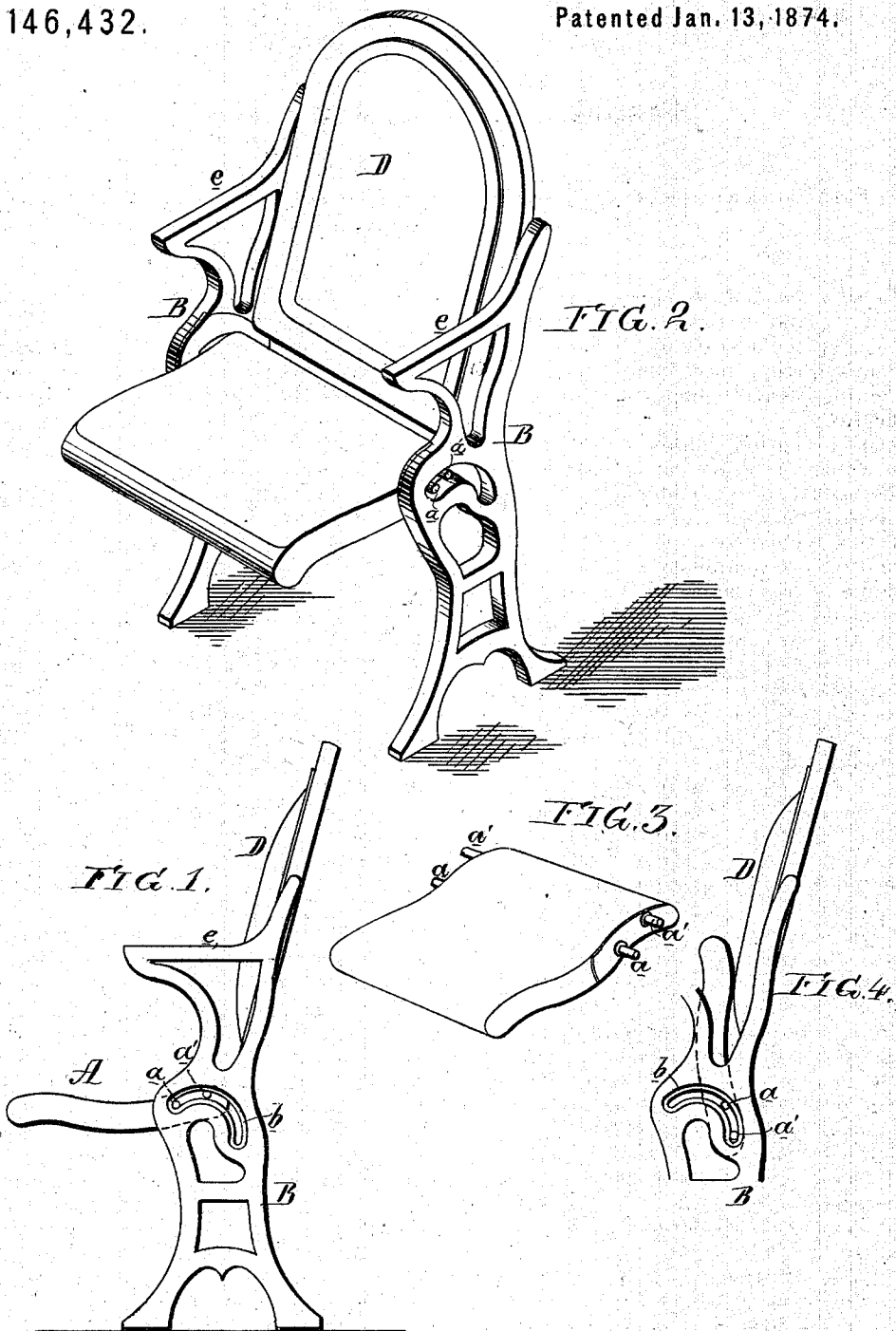


**T. J. CLOSE.**  
**Folding Opera-Chairs.**

No. 146,432.

Patented Jan. 13, 1874.



Witnesses *Harry Smith*  
*Thomas M. Shain*

*Thomas J. Close*  
 By *His Atty.*  
*Howes and Son,*

# UNITED STATES PATENT OFFICE.

THOMAS J. CLOSE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO  
ROBERT WOOD, OF SAME PLACE.

## IMPROVEMENT IN FOLDING OPERA-CHAIRS.

Specification forming part of Letters Patent No. **146,482**, dated January 13, 1874; application filed  
October 21, 1873.

*To all whom it may concern:*

Be it known that I, THOMAS J. CLOSE, of the city and county of Philadelphia, State of Pennsylvania, have invented an Improved Folding-Seat, of which the following is a specification:

My invention relates to that class of chairs in which the seats can be folded up against the backs, so as to increase the width of the passage between rows of chairs in theaters, lecture-rooms, &c.; and the objects of my invention are simplicity in the construction of chairs of this class, and the obtaining of more room between the rows of chairs, objects which I attain by connecting the seat A to the stand B, through the medium of two pins, *a a'*, attached to or cast on each edge of the seat, and adapted to a curved slot, *b*, in each stand, as shown in the side view, Figure 1, of the accompanying drawing.

The permanent or fixed portion of the chair is composed of two stands, B B, and the inclined back D, secured to the said stands, and serving to connect them together, as best observed in the perspective view, Fig. 2, an arm, *e*, being cast on and forming a part of each of the said stands. On each edge of the seat, near the rear end of the same, are the two pins *a a'*, referred to above, and best observed in the perspective view, Fig. 3, of the seat, the two pins on one edge of the seat projecting into the curved slot *b*, in one stand, B, and the two pins on the opposite edge of the seat projecting into a like curved slot in the opposite stand. These pins are, in conjunction with the said curved slots, the sole means of connecting the seat to the stand, and of maintaining the seat, either in the depressed or elevated position, to which it may be adjusted.

When the seat, for instance, is depressed, as shown in Fig. 1, the pins *a* bear against the front ends of the slots, which prevent any outward movement of the seat, while the pins *a'*, bearing against the upper edges of the slots, prevent its downward movement.

On elevating the seat, the pins will slide along the slots until the rear ends of the lat-

ter are nearly reached by the pins *a' a'*, when the seat will be folded against the back in the position shown in Fig. 4, where it will be retained by the pins *a a'*, the latter having passed the highest points of the slots, so that the seat will be self-sustaining in its elevated position, from which, however, it can be depressed, by a slight effort.

It should be understood that the slots must be depressed at the rear, and must be otherwise formed and arranged in the manner shown, in order that the above results may be attained.

Simultaneously with the elevation of the front of the seat, the rear, following the course of the slots, will recede, and consequently the seat, when elevated, will be closer to the back than the pivoted seats of ordinary chairs of this class, and hence the space between rows of the chairs is increased, this space being of especial importance in crowded theaters, as it permits the occupant of a chair, after raising the seat, to stand far enough back to permit the free passage to and fro of those who wish to leave or gain access to other seats.

In order to prevent disturbing noises, the pins *a a'* are so arranged that the seat will be in contact with the back when the said pins are at a distance from the rear ends of the slots. For the same purpose the front pins, when the seat is depressed, may come in contact with rubber pads fitted to the front ends of the slots.

One of the prominent advantages of my improved chair is the facility with which the seat can be elevated. The occupant of the seat, on rising, can, without using his hands, elevate the seat by a backward pressure of the legs against the front edge.

I do not claim, broadly, a seat having on its opposite edges two pins, adapted to slots in the frame, irrespective of the shape of the slots; but

I claim—

1. The combination of the seat A, having two pins, *a a'*, at its opposite edges, with stands or frames having slots curved in the

manner described, so that the seat can recede, as set forth.

2. The seat A and its pins, arranged in respect to the back B and to the slots in the frame, in the manner described, so that the upward movement of the seat shall be arrested by the back, and not by the slot.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOS. J. CLOSE.

Witnesses:

WM. A. STEEL,  
HARRY SMITH.