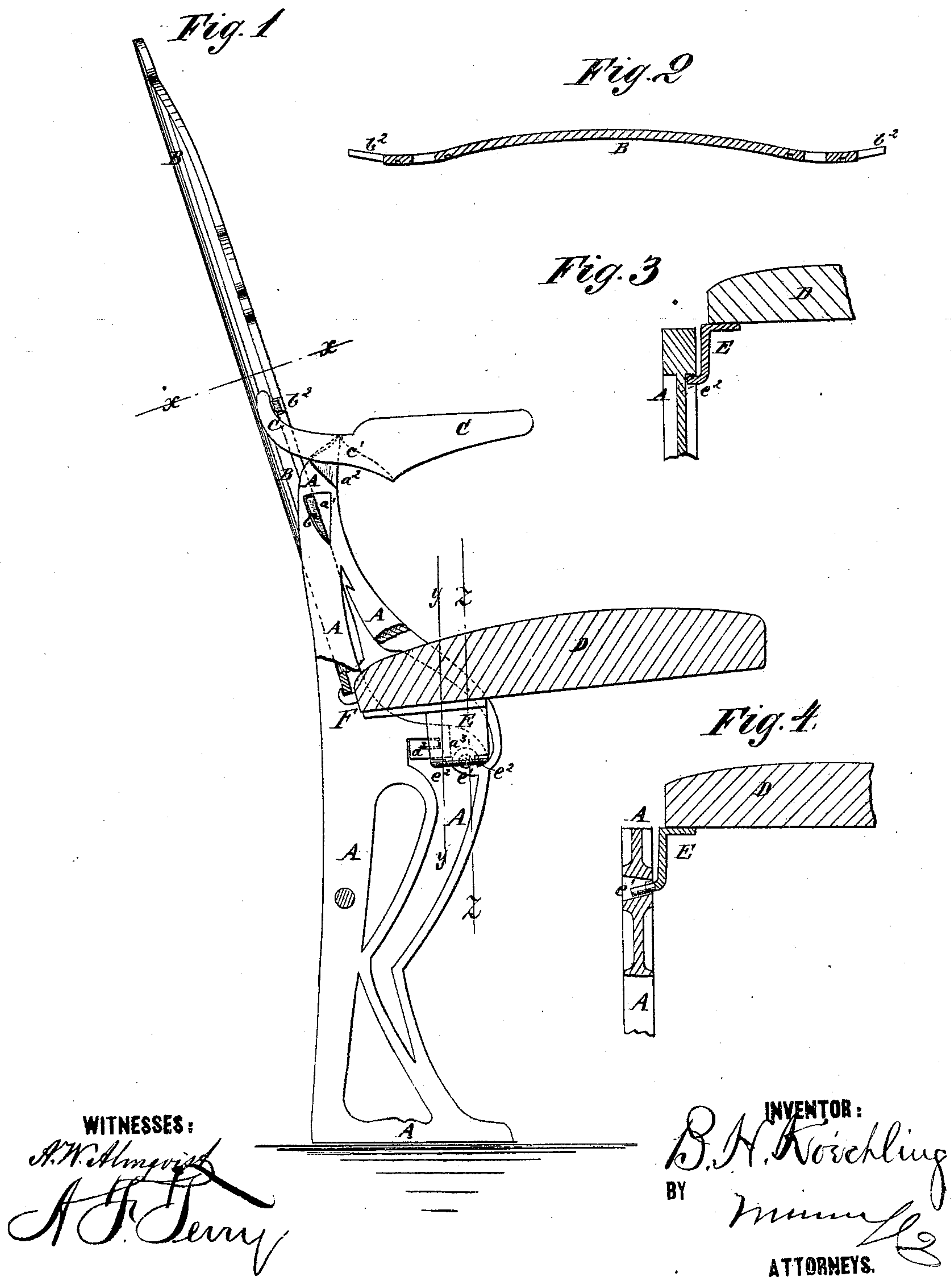


B. H. KOECHLING.

OPERA CHAIR.

No. 179,481.

Patented July 4, 1876.



UNITED STATES PATENT OFFICE

BERNHARD H. KOECHLING, OF NEW YORK, N. Y.

IMPROVEMENT IN OPERA-CHAIRS.

Specification forming part of Letters Patent No. 179,481, dated July 4, 1876; application filed July 24, 1875.

To all whom it may concern:

Be it known that I, BERNHARD H. KOECHLING, of the city, county, and State of New York, have invented a new and useful Improvement in Opera-Chairs, of which the following is a specification:

Figure 1 is a side view of one of my improved opera-chairs, part being broken away to show the construction. Fig. 2 is a detail cross-section of the back of the chair taken through the line $x x$, Fig. 1. Fig. 3 is a detail section taken through the line $y y$, Fig. 1. Fig. 4 is a detail section taken through the line $z z$, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved opera-chair, which shall be so constructed that it may be folded into very narrow space, so that people can pass it readily, and may thus enable the greatest possible number of chairs to be placed in a given space, and which, when opened out for use, shall furnish a comfortable seat.

The invention consists in the wedge-shaped upper ends of the side frames, in combination with the wedge-shaped recesses formed in the lower sides of the arms for pivoting the said arms to the said frames; in the wedge-shaped pivots formed upon the side edges of the back, in combination with the V-shaped holes in the upper part of the side frames for pivoting said back to said side frames; in the downwardly-inclined pivots and the stops formed upon the outer edge of the angular plates attached to the seat, in combination with the flaring holes and the shoulders of the side frames, as hereinafter fully described.

A are the side frames of the chair, and in which, near their upper ends, are formed V-shaped holes to receive the wedge-shaped pivots b^1 , formed upon the side edges of the back B. The back B is concaved upon its forward side to form an easy resting-place for the back, and its side edges are bent back, so that its wedge-shaped pivots may project in line, or nearly in line, with each other.

This construction enables the back to be made with a comfortable concavity, and at the same time to require but little space.

The upper ends a^2 of the side frames A are made wedge-shaped, and enter a wedge-shaped cavity, c' , in the under side of the arms C. The cavity c' is made long, as shown in dotted lines in Fig. 1, so that the arm C may rock longitudinally upon the wedges a^2 . The rear end of the arm C curves upward, and passes around a lug, b^2 , formed upon the side edge of the back B, a little above the wedge-shaped lugs b^1 .

By this construction, the back B, when swung back into position for use, will hold the arms C extended, and, when moved forward in folding the chair, will allow the forward parts of the arms C to drop down out of the way.

The arms C are made wide, so that one arm may serve for two adjacent chairs.

D is the seat, to the rear side parts of the lower side of which are attached plates E, which are bent downward and then outward, as shown in Figs. 3 and 4. Upon the middle part of the outer edge of the angle-plates E is formed a pivot, e^1 , which inclines downward slightly, as shown in Fig. 4, and enters and works in a flaring hole in the side frames A.

By this construction, pressure upon the seat D will tend to draw the side frames A toward each other, and thus keep them in place.

Upon the outer edge of the angle-plates E, upon the opposite sides of the pivot e^1 , are formed stops or lugs e^2 , which, as the seat D moves upon its pivots, moves through recesses in the side frames A, and strike against shoulders a^3 , formed in said frames to limit the movements of said seat, both when turned up and when turned down. To the rear edge of the seat D is attached a hook, F, which hooks upon the lower edge of the back B, and prevents the upper end of said back from being pushed forward when the chair is opened out for use.

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

1. The side frames A, having wedge-shaped upper ends a^2 , in combination with the arms C, having wedge-shaped recesses c' in their lower sides, as and for the purpose described.
2. The back B, having wedge-shaped piv-

ots b^1 upon its side edges, in combination with side frames A, having V-shaped holes a^1 in their upper parts, as and for the purpose set forth.

3. The angular plates E, attached to seat D, having the downwardly-inclined pivots e^1 , and provided with stops e^2 , in combination

with the frames A, having flaring holes, and the shoulders a^3 , as and for the purpose specified.

BERNHARD H. KOECHLING.

Witnesses:

JAMES T. GRAHAM,
T. B. MOSHER.