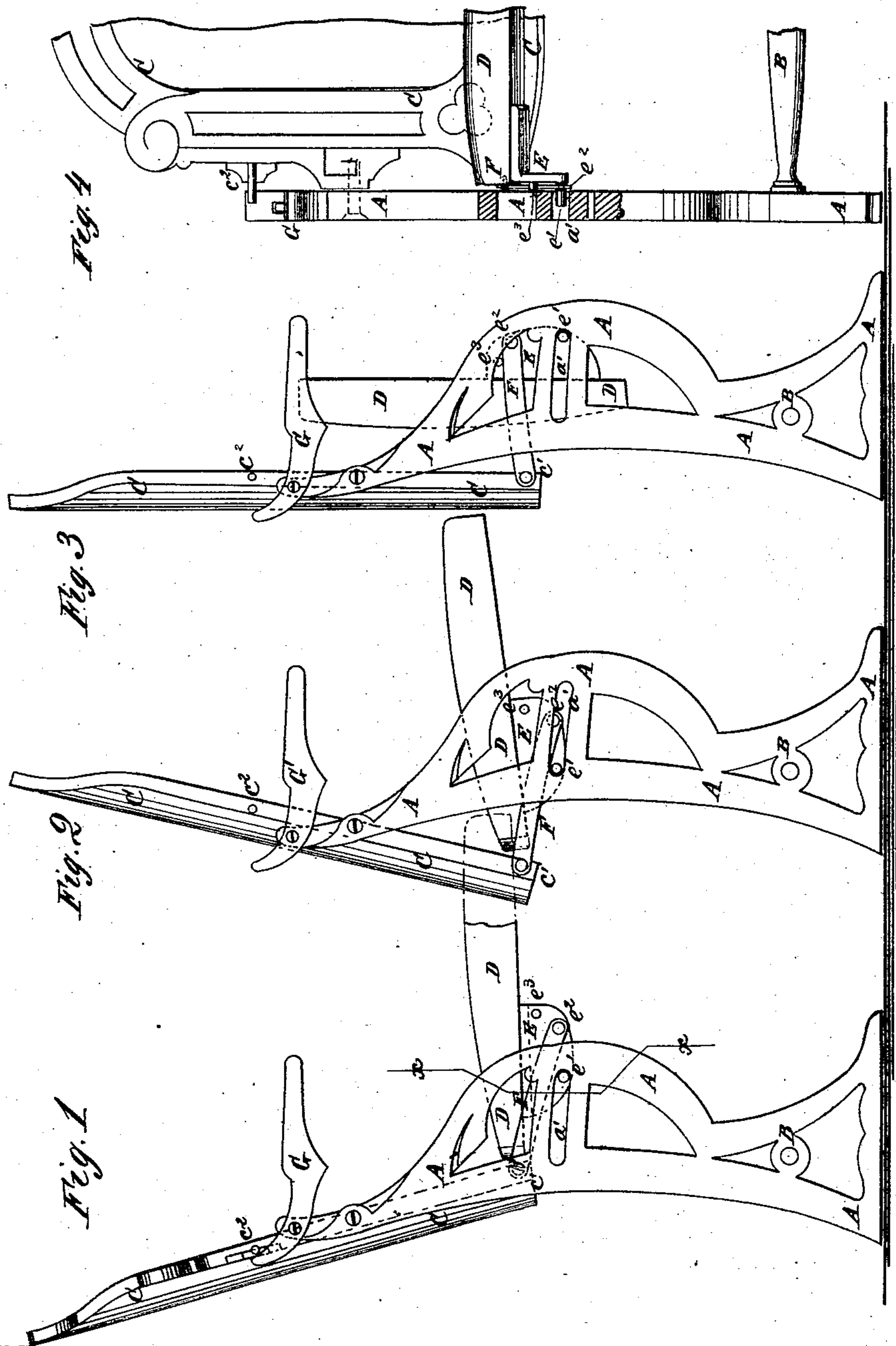


B. H. KOECHLING.

Opera-Chairs.

No. 155,452.

Patented Sept. 29, 1874.



WITNESSES:

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

IMPROVEMENT IN OPERA-CHAIRS.

Specification forming part of Letters Patent No. **155,452**, dated September 29, 1874; application filed March 7, 1874.

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 chairs arranged for use. Fig. 2 is the same view as Fig. 1, but showing the seat pushed back. Fig. 3 is the same view as Fig. 1, but showing the seat turned up. Fig. 4 is a front view of a portion of a chair, partly in section, through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described, and then pointed out in the claims.

A are the side frames of the chair, which are made narrow, and the lower parts of which are connected by a round, B, which serves as a foot-rest for the person sitting in the next chair in the rear. C are the chair-backs, which are pivoted at the middle part of their side edges to the upper parts of the side frames A. D are the chair-seats, to the side parts of the under sides of which, a little in the rear of their centers, are attached angle-irons E, to the downwardly-projecting parts of which are attached, or upon it are formed, three pins, $e^1 e^2 e^3$, the rear one, e^1 , of which is made of such a length as to enter a horizontal slot, a' , formed in the side frames A, and pass nearly half-way through said frame, as shown in Fig. 4, so as to pivot said seat to said side frames. To the lower forward pin e^2 is pivoted the forward end of the bar F, the rear end of which is pivoted to pins e^1 , formed upon the lower corners of the backs C. The bars F, when the seats D are turned up, push the lower ends of the backs C rearward, which moves their upper ends forward, and thus widens the passage-way along the rear of the chairs. When the seats D are turned down, the bars F rest upon the pivots e^1 and support the seat in proper position, as shown in Fig. 1, the great advantage of leverage thus obtained making the seats

firm and strong. The upper forward pins e^3 , when the seats D are turned up, rest upon the bars F, and serve as stops to prevent the seats from falling back against the backs C, as shown in Fig. 3.

By this construction it will be observed that, when the seats are turned up, the seats and backs become vertical and parallel with each other, so as to take up the least possible space, and the seats D are thrown back by the angle-irons E, so as to considerably widen the passage in front of the chairs, giving more room for a person to stand while another is passing. The slots a' in the side frames C, in which the pivots e^1 work, enable a person sitting in the chair to push the seat D back, as shown in Fig. 2, so as to allow a person to pass in front. To the tops of the side frames A are pivoted the arms G, which, when the chairs are arranged for use, are held extended by pins c^2 , attached to the side edges of the backs C, and which rest against the upper ends of the said arms G, as shown in Fig. 1. The pins c^2 project not quite half-way across the arm G, so as to leave space for the pin of the adjacent chair-back, the one side frame A and arm G serving for two adjacent chairs, so that the arm G will be held extended, unless both the adjacent seats are turned up, in which case the said arm will drop.

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

1. The combination, with pivoted seat D, pivoted back C, and slotted side frames A A, of the pivoted straps F F and angle-iron E, having side pins $e^1 e^2$, as and for the purpose described.

2. The combination, with pivoted back C, having pins c^2 , and stationary side frames A A, of the arms G', pivoted on top to the frames, and operated by the back pins, in the manner described.

BERNHARD H. KOECHLING.

Witnesses:

JAMES T. GRAHAM,
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