

(No Model.)

E. G. DURANT & E. SHUPE.

OPERA CHAIR.

No. 293,724.

Patented Feb. 19, 1884.

Fig. 2.

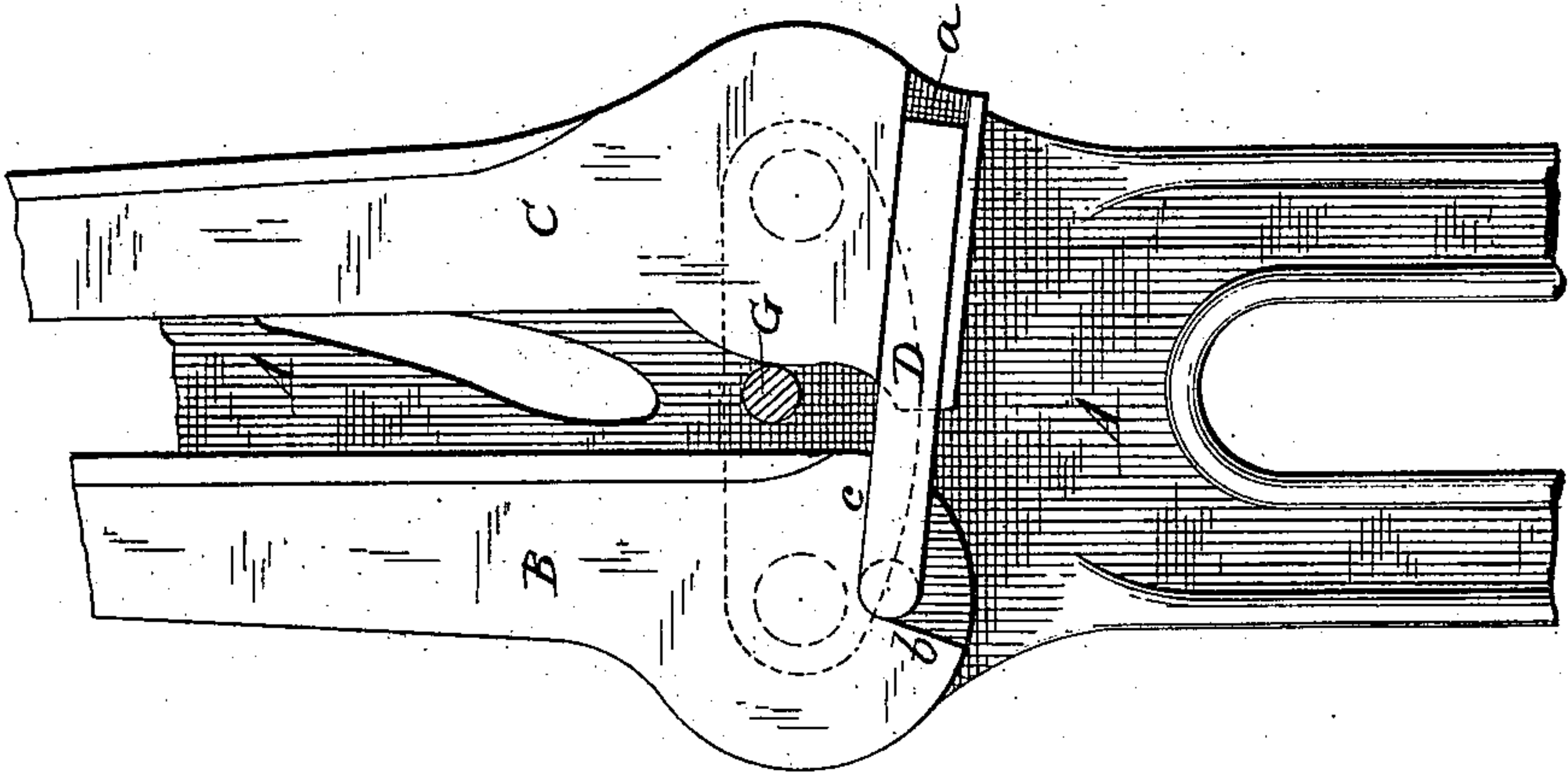


Fig. 1.

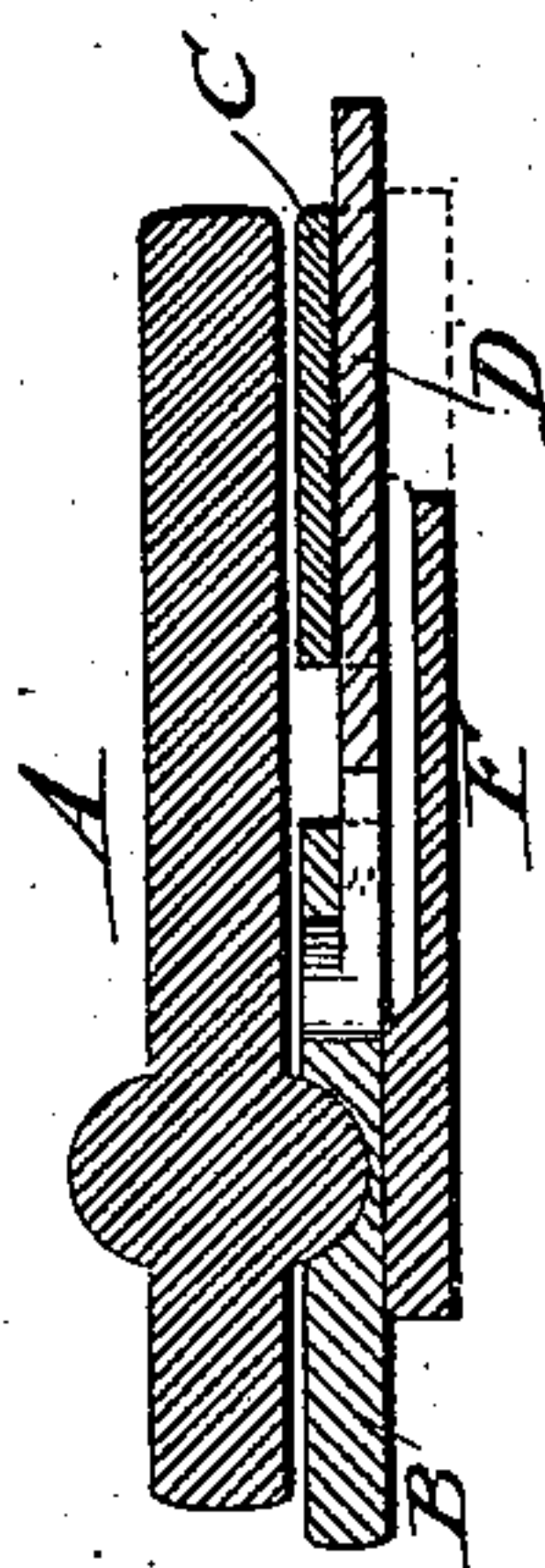
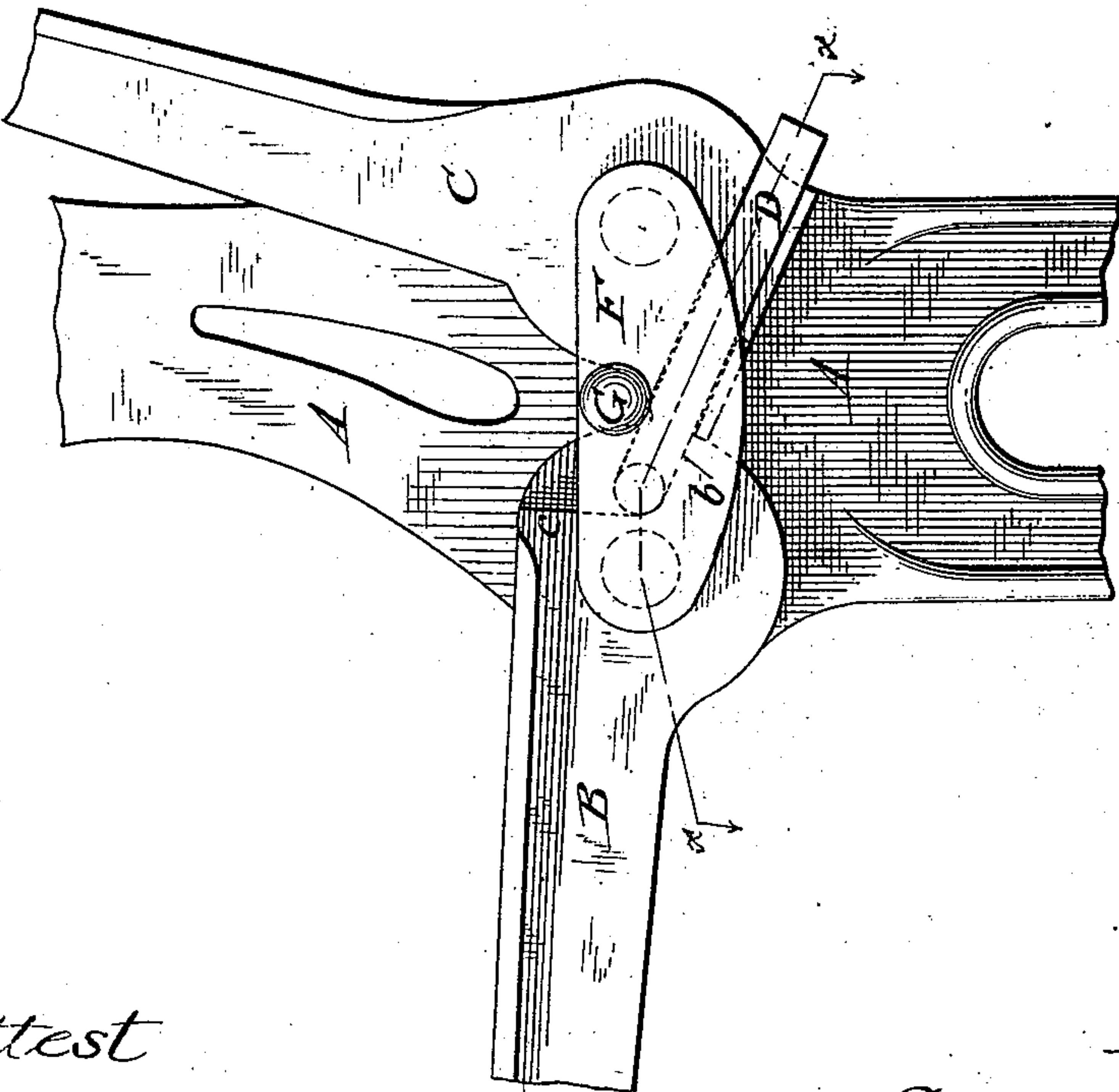


Fig. 3.

Attest

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UNITED STATES PATENT OFFICE.

EDWARD G. DURANT AND ELI SHUPE, OF RACINE, WISCONSIN; SAID SHUPE
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OPERA-CHAIR.

SPECIFICATION forming part of Letters Patent No. 293,724, dated February 19, 1884.

Application filed July 6, 1883. (No model.)

To all whom it may concern:

Be it known that we, EDWARD G. DURANT and ELI SHUPE, of Racine, in the county of Racine and State of Wisconsin, have invented certain Improvements in Opera-Chairs and other Folding Seats, of which the following is a specification.

This invention relates to that class of opera-chairs and similar seats in which the back and the seat proper are hinged to a supporting-standard and connected with each other in such manner as to fold upward simultaneously out of the way when not required for use.

The invention consists in an improved connection between the parts of the pivoted arm and back, consisting in a bar pivoted to one of said members and arranged to slide endwise in a groove in the opposite member, as will be hereinafter more fully explained.

Referring to the accompanying drawings, Figure 1 represents a side elevation of a portion of a standard with the back and seat arms attached, said arms being in the position which they occupy when in use. Fig. 2 represents a similar view of the same parts, the arms being, however, in their folded position, and the plate by which they are held in place upon their trunnions being omitted to expose the part thereunder to view. Fig. 3 is a section on the line *x x*, Fig. 1.

A represents a standard or support, which may be made of any suitable form, and which will be secured rigidly in position upon the floor or other support.

B represents a seat-supporting arm, and C the arm by which the back is supported, the two arms having their adjacent ends connected to the standard by means of pivots or journals, as hereinafter more fully explained.

It is to be understood that, as in other chairs of this class, there will be a standard and pair of arms at each side of the chair, a seat and back proper being secured at opposite edges to the sustaining-arms. As a means for connecting the back and seat arms and insuring their simultaneous folding action, we pivot to the seat-arm B one end of a bar, D, the opposite end of which is mounted and arranged to slide freely in a groove, *a*, formed in the back-arm C. The bar D is connected with the two arms at such points in relation to their pivots

that upon turning the seat-arm upward to a vertical position it swings the forward end of the bar downward, at the same time causing it to slide endwise in the groove of the back-arm, and thereby turning the latter upward also to a vertical position. Inasmuch as the seat in folding is compelled to swing through an arc of substantially ninety degrees, while the back, having but slight inclination, swings through a smaller arc, the bar is connected with the back-arm at a greater distance from its pivot than from the pivot of the seat-arm, this arrangement insuring the proper relative motion of the two arms.

For the purpose of limiting the swinging motion of the arms in both directions, we provide the seat-arm B with shoulders *b* and *c*, adapted to encounter the opposite sides of the bar D, as represented in the drawings. The bar D may be made of a rectangular, round, or other suitable form in cross-section, and it may be connected to the seat-arm by means of a pivot-pin or journal of any suitable character. The preferred construction is that represented in the drawings, wherein the journal or pivot is formed upon the side of the bar D and inserted in the opening formed in the seat-arm, as plainly indicated in Fig. 3.

The journals upon which the arms are mounted may be cast upon the standard, and may be cylindrical, conical, or spheroidal in form, the spheroidal form shown in the drawings being preferred for reasons set forth in applications hitherto filed by me.

For the purpose of securing the arms in place upon their supporting-frames, we usually employ a plate, F, as represented in the drawings, this plate resting against the inner faces of the two arms and being secured in position by means of a central bolt, G, passed through the same into the standard. While it is preferred to pivot the link to the seat-arm, it is obvious that the arrangement of parts may be reversed and the link pivoted to the back-arm and arranged to slide in a slot or groove in the seat-arm.

The essential feature of the invention consists in connecting the two arms by means of a link pivoted to one and arranged to slide upon the other, and it is manifest that the form and arrangement of the details may be

modified without departing from the invention, provided the mode of action indicated is retained.

Having thus described the invention, what is claimed is—

5 1. In a folding seat, a supporting-standard, in combination with a pivoted back-arm and a pivoted seat-arm, one of said arms being provided with a recess, as set forth, and a bar piv-
10 oted to one of said arms and fitted to slide in the recess in the other arm, substantially as described and shown. a

2. In combination with the supporting-standard, the pivoted back-arm and the pivoted
15 seat-arm, the back-arm being provided with the groove or recess, as set forth, and the bar D, having its forward end pivoted to the seat-arm, and its opposite end fitted loosely in the groove or recess in the back-arm, as shown.

20 3. In combination with a supporting-stand-

ard, the pivoted back-arm provided with the groove, as set forth, the pivoted seat-arm provided with shoulders, as described, and the bar pivoted to the seat-arm and fitted loosely in the groove in the back-arm, as and for the pur- 25
pose described.

4. In combination with the standard and the pivoted seat-arm provided with the opening, as described, the pivoted back-arm provided with the open groove, as set forth, the bar D, 30
provided with the circular lug loosely seated in the opening in the seat-arm and fitted loosely in the groove of the back-arm, and the plate F, applied, as shown, to retain the bar in its proper relation to the back and seat arms.

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Witnesses:

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