

(No Model.)

W. GARDNER.
REVERSIBLE SEAT.

No. 250,435.

Patented Dec. 6, 1881.

Fig. 1.

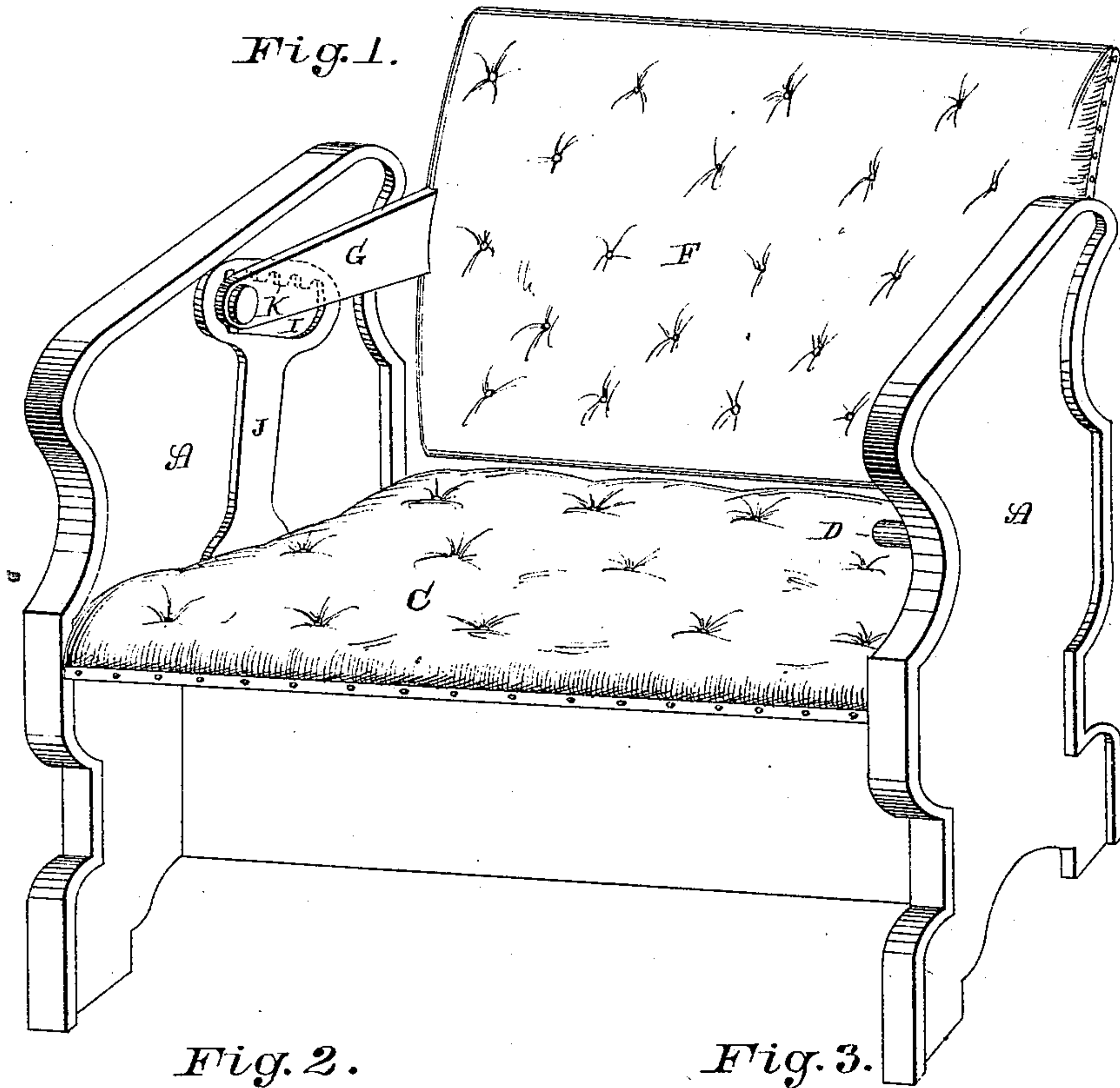


Fig. 2.

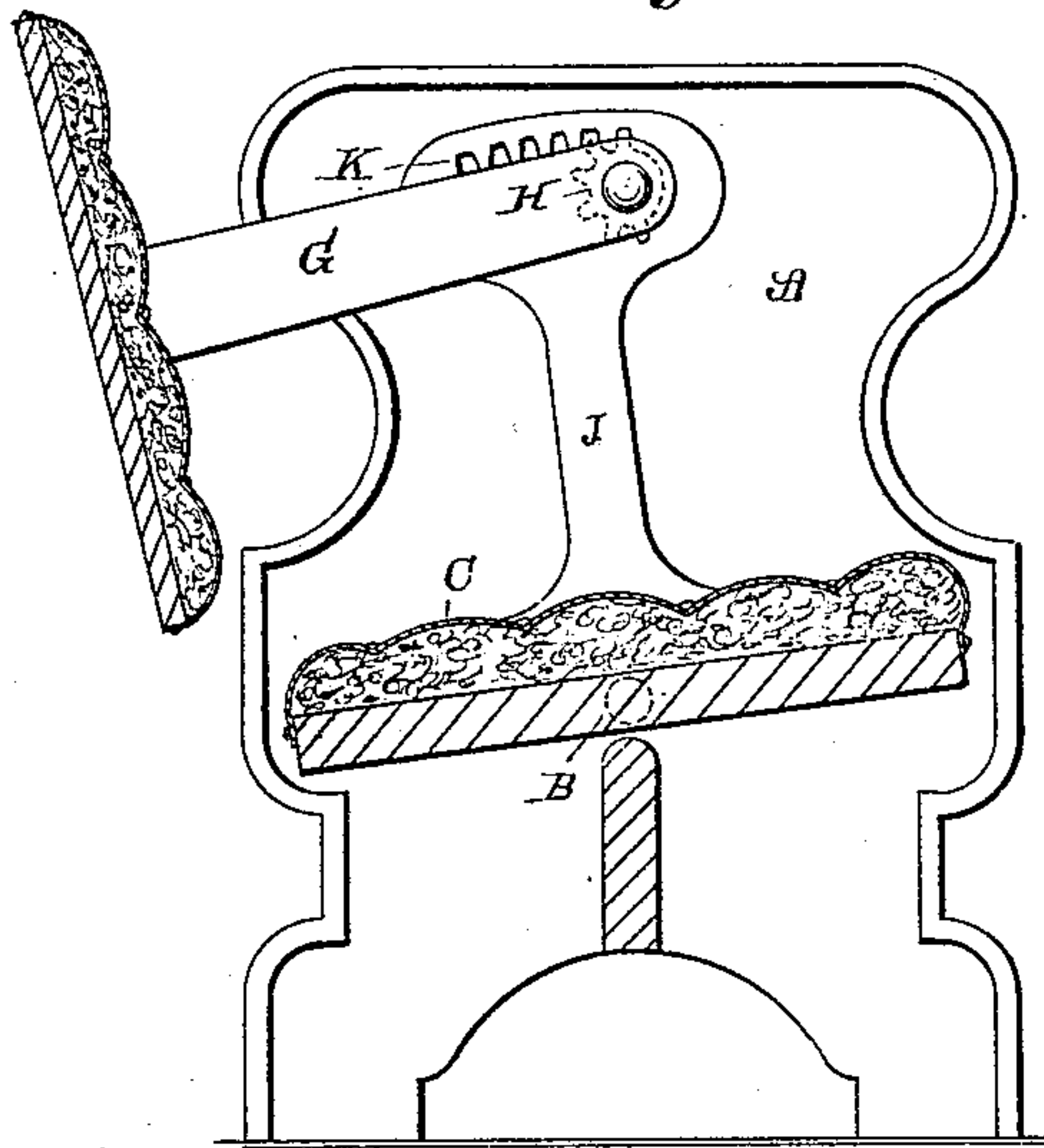


Fig. 3.

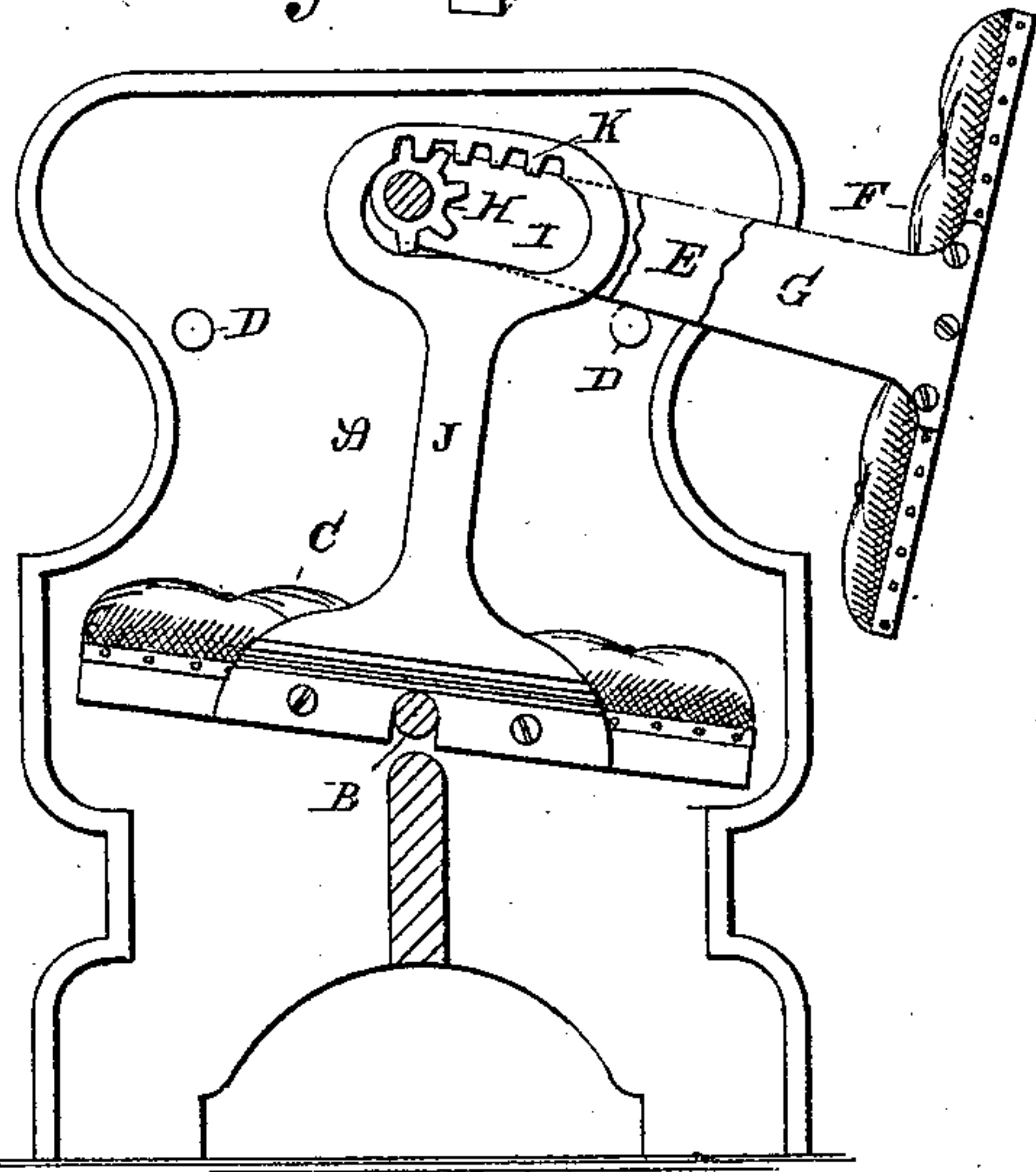
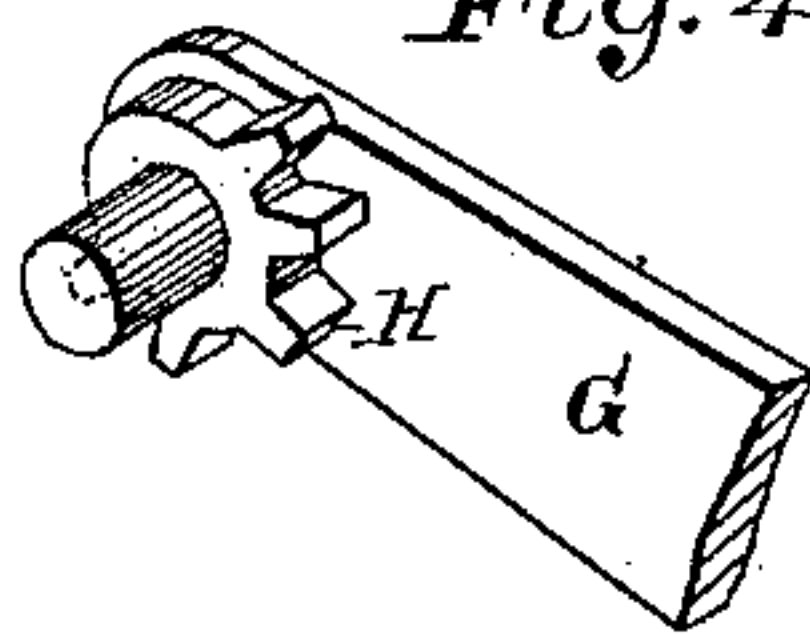


Fig. 4.

Attest:

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UNITED STATES PATENT OFFICE.

WILLIAM GARDNER, OF NEW YORK, N. Y.

REVERSIBLE SEAT.

SPECIFICATION forming part of Letters Patent No. 250,435, dated December 6, 1881.

Application filed June 25, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GARDNER, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Reversible Seats; 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, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to reversible seats for railroad-cars or other purposes; and the novelty consists in the construction and arrangement of parts, as will be more fully hereinafter set forth, and specifically pointed out in the claims.

For convenience I will describe the invention as applied to railroad-cars; but it is obvious that the device is equally applicable to other seats, or, in fact, to any seat or chair having a reversible back.

In chairs of this class the great desideratum is to obtain such a relative conformation between the back and seat as will the nearest accommodate itself to the human form and allow the user to rest with comfort; and the great trouble in railroad-car chairs has been that, if the seat is thus comfortable in one direction, it is decidedly uncomfortable when the back is reversed, and the result has been a compromise, which makes it uncomfortable in both positions. To avoid this difficulty various devices have been designed.

My invention contemplates such a relative conformation of the back and seat that it will be comfortable in one position, and also contemplates such a construction and relative arrangement of novel features that the seat will automatically shift its position when the back is reversed in such a manner as to impart the same advantages in the other position. To this end I employ the mechanisms illustrated in the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view; Fig. 2, an end view, partially in section; Fig. 4, a detail view of one of the arms, and Fig. 3 a cross-

section, partly in elevation, showing both arms, one being partly broken away.

Referring to the drawings, A represents the seat-frame, having central inwardly-projecting pins, B, upon which the seat C is pivoted, and lugs D, which serve as stops for the back arm E of the reversible back F.

Rigid with the back-arm G is a toothed segment, H, which operates in a recess, I, formed in an upright, J, rigid with the pivoted seat, and having ratchets K in the upper portion. The segment H, as the back is turned, meshes in the ratchets K and forces the upright J toward the side to which the back is being turned, and this action moves the seat upon its pivots automatically until it reassumes its normal relative position with the back.

Modifications may be made in details of construction without departing from the principle or sacrificing the advantages of my invention, the essential feature of which is the automatically shifting the position of the seat as the back is reversed. For instance, I do not confine myself to the toothed segment and rack-bar, nor to the seat pivots and standards, as these features may be changed and others adapted for the same purpose and accomplish the same result, and these features are put forth in this application as suggestive of one way of accomplishing the same.

What I claim as new is—

1. The combination, substantially as described, of a reversible back having a toothed segment at the end of its pivoting-arm, and the pivoted seat provided with a rack-bar or ratchet to engage with said segment, whereby the seat is tilted simultaneously with the reversal of the back.

2. The combination of the frame A, having pins B and lugs D, the seat C, having rigid standard J, recessed and toothed at I K, the back F, arm E, and the arm G, carrying the rigid toothed segment H, as and for the purposes set forth.

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

WILLIAM GARDNER.

Witnesses:

JOS. R. EDSON,
ADOLPH KIENDL.