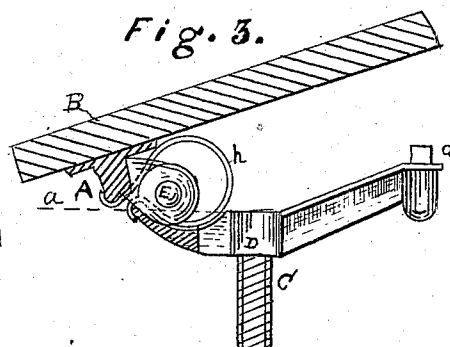
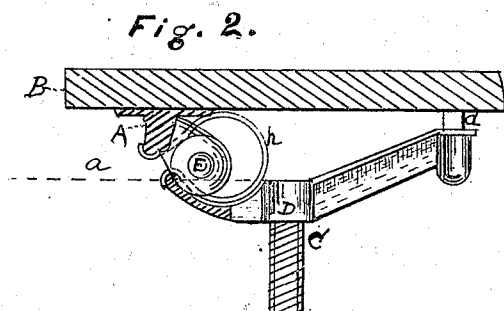
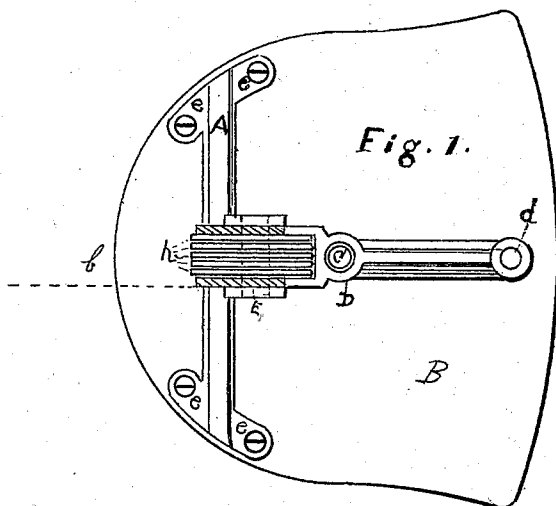


E. N. TUTTLE.
Tilting Chairs.

No. 138,544.

Patented May 6, 1873.



WITNESSES

H. Colburn
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INVENTOR

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UNITED STATES PATENT OFFICE.

EDWIN N. TUTTLE, OF FITCHBURG, MASSACHUSETTS.

IMPROVEMENT IN TILTING CHAIRS.

Specification forming part of Letters Patent No. **138,544**, dated May 6, 1873; application filed February 12, 1873.

To all whom it may concern:

Be it known that I, EDWIN N. TUTTLE, of Fitchburg, in the county of Worcester and State of Massachusetts, have invented certain Improvements in Tilting Chairs, of which the following is a specification:

My invention consists in constructing an office or other chair in such a manner that the seat may be easily tipped back by the sitter to enable him to place himself in a more comfortable and easy reclining position, as hereinafter described.

Figure 1 is a plan of the lower or under side of the seat cut upon the line *a*, Fig. 2 and Fig. 3. Fig. 2 is a semi-sectional side view cut upon the line *b*, Fig. 1, showing the seat B of a chair in a level position. Fig. 3 is the same view, representing the seat B in a tilted position.

B represents the seat of a common office-chair, and is commonly connected with an elevating-screw, C, by means of some form of cast-iron mechanism.

It has been found desirable, in many kinds of office and other chairs, to have the seat B connected with the screw C in such a manner that the seat B may be tilted, as shown at B, Fig. 3, to enable the sitter to place him or herself in a reclining position, as before mentioned; and to accomplish this object it becomes necessary to connect the seat B with the screw C by the employment of some kind of a jointed or pivoted device which will admit of the said chairs being moved freely about without thereby being thrown back into its tilted position, but will be easily tilted at the option of the sitter.

A and D are metallic cross-bars, pivoted or jointed together at E, forming a jointed spider, which is connected to the seat B with common wood-screws, as shown at *e*, Fig. 1.

Instead of the bar A extending across the seat B a plate might be used; also, instead of the bar D a plate, board, or frame might be used, in which case a part of the metallic hinge E would be attached to this plate, board, or frame; and two or more of the hinges E with U-shaped springs *h* attached might be used to advantage.

d is an elastic bearing, upon which the seat B rests when in the position shown in Fig. 2; and, in order that the seat B may rest firmly upon this bearing *d* when the chair is moved about the apartment in which it is kept, I employ one or more U-shaped springs, *h*, which connect with the cross-bars A and D, and exert a force sufficient to keep the seat B down upon the bearing *d*, Fig. 2, and, when desired, admits of the tilting motion hereinbefore explained.

I make no claim to the elevating-screw C, nor to the elastic bearing *d*, nor to the pivot-joint E, for I am aware that these are not new; but

What I do claim as my invention is—

The pivoted bars A and D, in combination with one or more U-shaped springs, *h*, for the purpose specified, all constructed substantially as described.

EDWIN N. TUTTLE.

Witnesses:

H. J. COLBURN,
W. B. CHANDLER.