2 Sheets
Sheet 1.

M. V. B. Howe.

Tilting Chair-Seat.

No. 73721 Patented Jan. 28, 1868.

Fig. 3

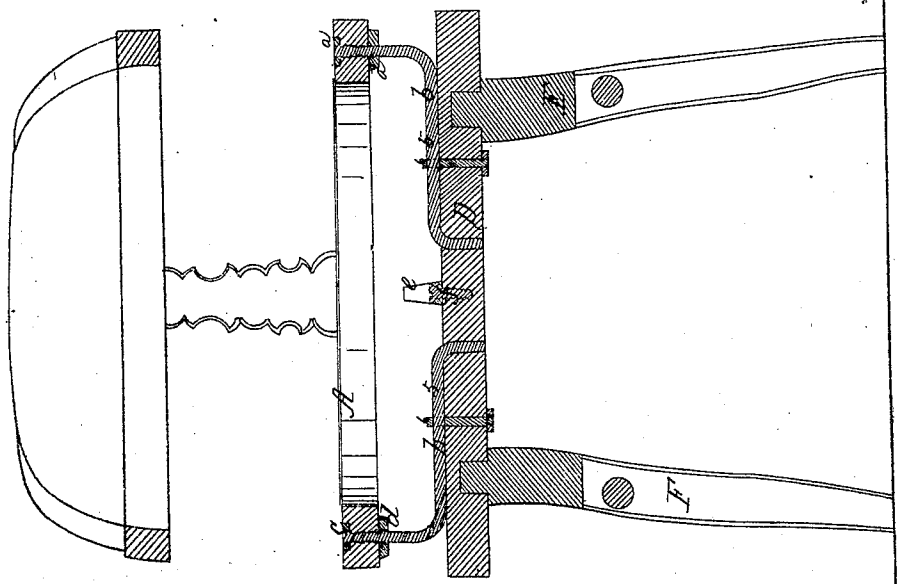
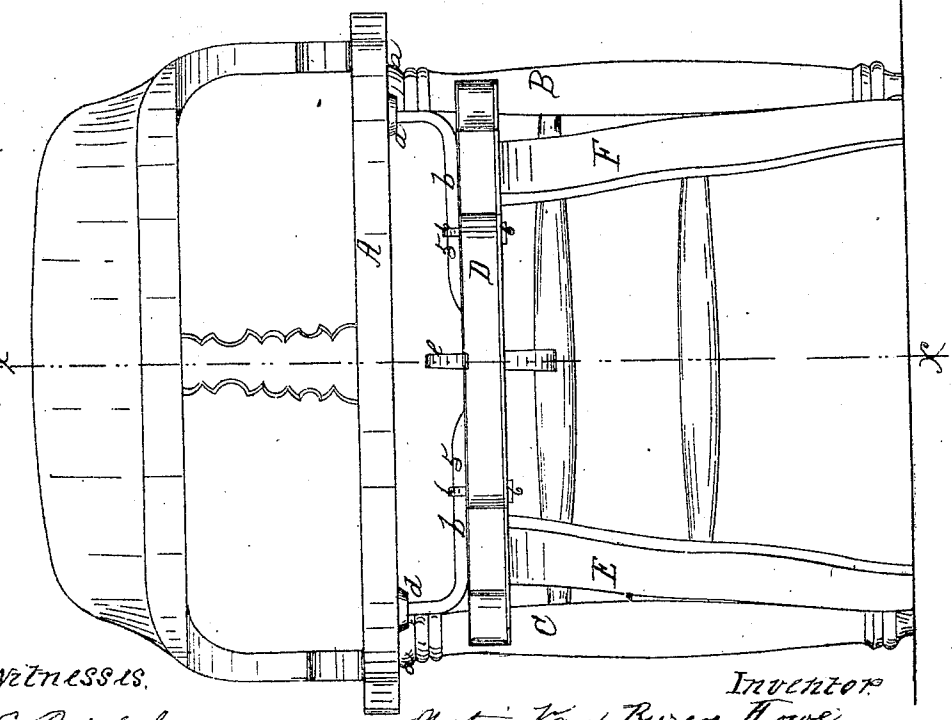


Fig. 1.



Witnesses.

L. E. Batchiller
W. J. Cambridge

Inventor.

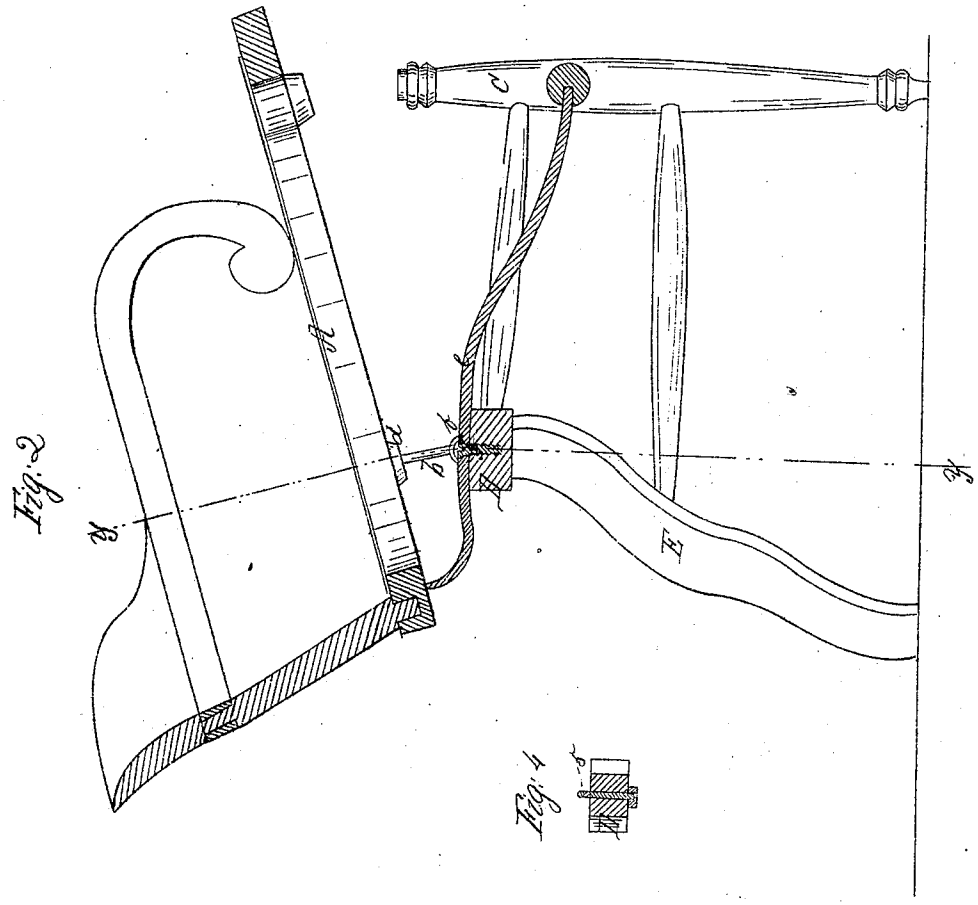
Martin Van Buren Howe
By his Attys Fischmacher & Pearson

2 Sheets
Sheet 2

M. V. B. Howe.

Tilting Chair-Seat.

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Witnesses
L. E. Batcheller
W. F. Cambridge

Inventor
Martin Van Buren Howe
By his Attys Teschemacher & Bearns

United States Patent Office.

MARTIN V. B. HOWE, OF GARDNER, MASSACHUSETTS, ASSIGNOR TO HEYWOOD, BROTHERS, AND COMPANY, OF SAME PLACE.

Letters Patent No. 73,721, *dated January* 28, 1868.

IMPROVED TILTING CHAIR-SEAT.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, MARTIN VAN BUREN HOWE, of Gardner, in the county of Worcester, and State of Massachusetts, have invented an Improved Tilting-Seat Chair, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a rear elevation of my improved chair.

Figure 2 is a vertical section on the line *x x* of fig. 1, the seat being tilted back.

Figure 3 is a vertical section on the line *y y* of fig. 2, with the seat in place.

Figure 4 detail to be referred to.

In tilting-seat chairs, as heretofore constructed, the seat has been connected by springs to a frame extending over the posts of the chair. My invention consists in directly connecting the rear of the seat of a chair to the rear posts or cross-bar extending over them, the ordinary frame under the seat being dispensed with, thus reducing the cost and simplifying the construction of the chair; the front of the seat in its normal position simply resting upon the front posts or their cross-bar, and being free to swing or tilt up when the occupant moves back into an inclined position, the pressure backward occasioned thereby causing the seat to tilt or swing, as required, a suitable stop being provided to prevent its being tipped down too far.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A is the seat of a chair, the under side of the front of which is provided with sockets or cup-shaped recesses, *a*, for the reception of the upper ends of the front posts B C. The back of the seat is connected by bent metal rods or wires, *b*, to the cross-bar D, in which the upper ends of the rear posts E F are secured. Each of the upper ends of these wires is provided with a screw-thread, upon the upper end of which a screw-nut, *c*, is turned flush with the upper surface of the seat A; a nut, *d*, fitting on the lower end of the screw-thread, and being turned up snugly against the under side of the seat, to insure the parts being more securely held together. The horizontal portion 5 of these wires is confined upon the top of the cross-bar D, in an upright position, as shown in cross-section, fig. 4, by means of an eye-bolt, 6, secured immovably within the cross-bar D by a screw-nut, 7, the lower ends of these wires being led down vertically through the cross-bar, and the wires serving as springs, by which construction, when the occupant assumes an inclined position, the upper ends of these wires or springs are bent or twisted over by his weight and the pressure of his back, and the seat yields to conform thereto, and is tilted into the position seen in fig. 2. *e* is a bent arm or stop, screwed or otherwise secured at *f* to the cross-bar D, one end of the stop being attached to one of the front rounds of the chair, while its other end is bent up, as shown in fig. 2, to prevent the seat from being tipped back too far. When the chair is vacated, or when the pressure on its back is relieved by the occupant sitting uprightly, the front of the seat is thrown by the recoil of the springs *b* into its original position, (see fig. 1,) the sockets *a* fitting snugly down upon and enclosing the tops of the posts B C, and preventing any lateral play of the seat thereon.

It is evident that the exact form of the springs *b*, and their points of connection with the seat and rear posts, or their cross-bar, may be varied without departing from the spirit of my invention. The seat may also be connected to the rear posts or to their cross-bar by ball-and-socket joints or hinges, but I prefer to use the springs, as above described.

By constructing a chair without the auxiliary frame heretofore used under the seat, and attaching it by springs directly to the rear posts, or to the cross-bar over them, the chair is much lighter, more stylish in appearance, and can be furnished at a less cost.

Claims.

I claim connecting the seat of a chair to the rear posts E F, or their cross-bar D, by means of springs *b*, substantially as and for the purpose set forth.

I also claim the stop *e*, in combination with the above, substantially as and for the purpose specified.

I also claim the springs *b*, constructed, applied, and operating substantially as and for the purpose set forth.

MARTIN V. B. HOWE.

Witnesses:

MARTHA W. HEYWOOD,

FRANCIS RICHARDSON.