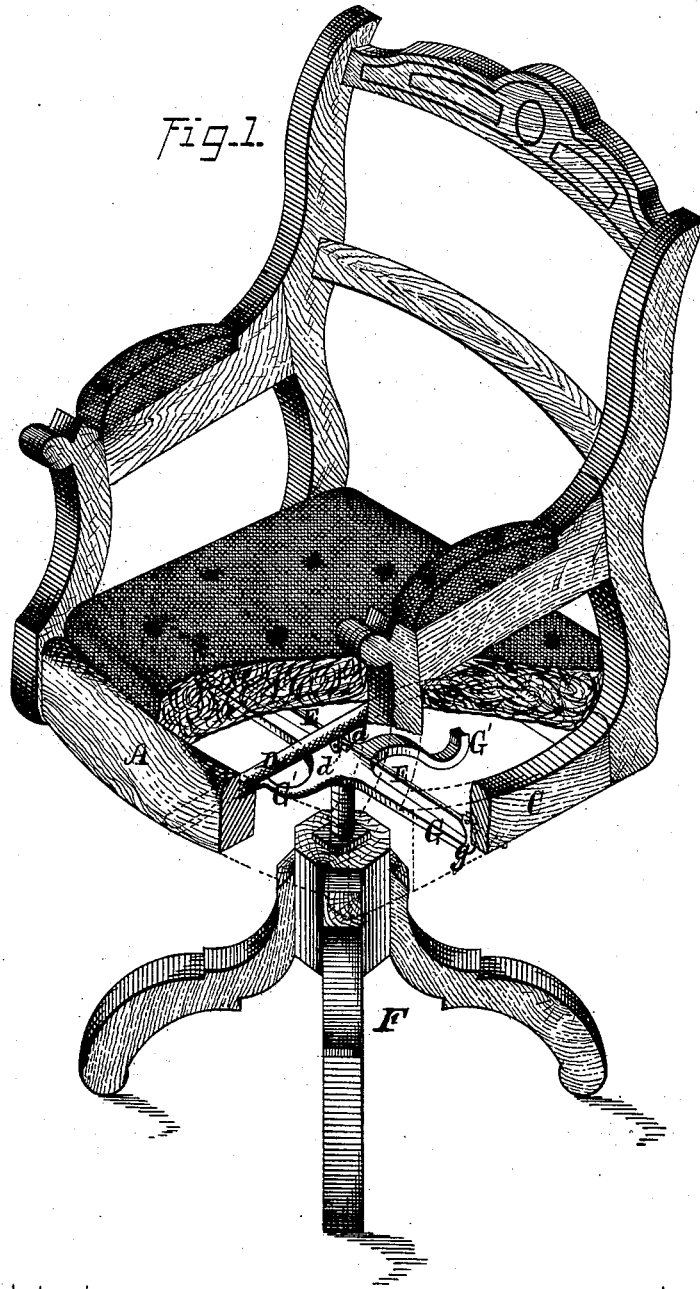


J. WHITE.  
TILTING-CHAIR.

No. 193,433.

Patented July 24, 1877.



WITNESSES:  
*Geo. C. Hutchinson*  
*Henry G. Hazard*

INVENTOR:  
*John White, by*  
*Orinelle W. Lee his Att'y.*

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Fig. 2.

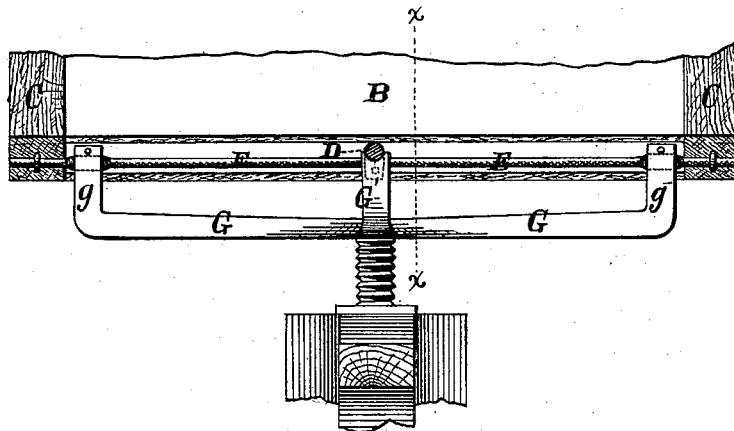


Fig. 3.

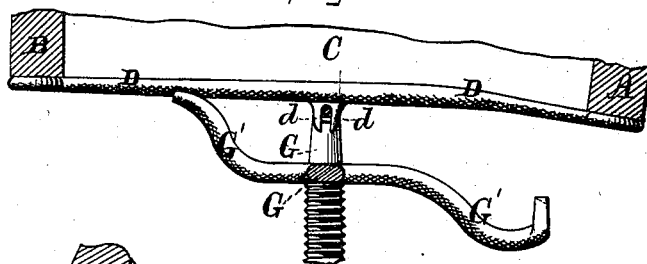
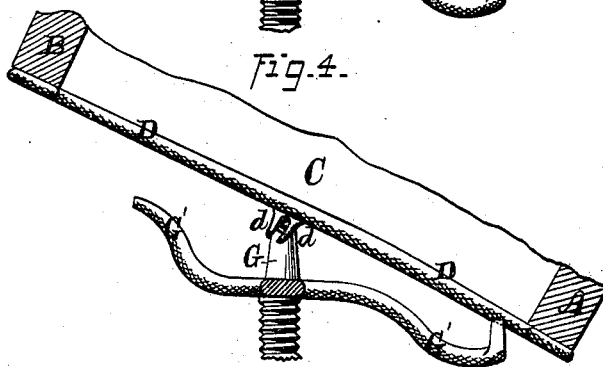


Fig. 4.



WITNESSES:  
*Jack Hutchinson.*  
*Henry G. Hazard*

INVENTOR.  
*John White, by*  
*Prindle & Co. his atty*

# UNITED STATES PATENT OFFICE.

JOHN WHITE, OF NORWICH, NEW YORK.

## IMPROVEMENT IN TILTING CHAIRS.

Specification forming part of Letters Patent No. **193,433**, dated July 24, 1877; application filed June 22, 1877.

*To all whom it may concern:*

Be it known that I, JOHN WHITE, of Norwich, in the county of Chenango, and in the State of New York, have invented certain new and useful Improvements in Tilting Chairs; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of my improved chair, a portion of the seat being removed, so as to show the supporting mechanism. Fig. 2 is a vertical section upon a line passing transversely in front of the center of said chair; and Figs. 3 and 4 are similar views upon line *xx* of Fig. 2, and show, respectively, the seat in its normal position and when tilted.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to increase the ease and durability of tilting or rocking chairs; and to this end it consists in the peculiar construction of the pivotal spring and its supporting mechanism, and their combination with the chair, substantially as and for the purpose hereinafter shown.

In the annexed drawings, A represents the front rail, B the rear rail, and C and C the side rails which form the frame of the seat of a chair of ordinary construction.

Secured to and extending between the longitudinal centers of the front and rear rails, A and B respectively, is a metal bar, D, which, slightly in rear of its longitudinal center, is provided with two jaws, *d*, that extend downward in parallel lines, and receive the central flattened portion of a steel rod, E. The ends of said rod E are loosely confined upon the lower side near the longitudinal center of the rails C.

Attached to a stool, F, or other suitable support, is a spider, which consists of a horizontal bar, G, and a transverse bar, G', which is placed at right angles to the former, and extends in a double curve downward and rearward, as seen in Figs. 3 and 4.

Upon each end of the bar G are provided two jaws, *g*, similar to the jaws *d* before described, which extend upward and grasp a flattened portion of the rod E just inside of the side rail C.

The spring-rod E is slightly twisted, so as to produce a torsional strain in such direction as to cause the chair to automatically turn to the forward limit of its motion, in which position the bar D rests upon the upper forward end of the bar G', as seen in Fig. 3.

The position of the chair described is normal, and will not be changed by ordinary use; but when its occupant desires, he may tilt the chair rearward to the position shown in Fig. 4, by simply throwing his weight against the back, during which operation the spring-rod E will be twisted by the motion of the jaws *d*, that grasp its center, the ends of said rod being prevented from turning in such direction by the jaws *g*.

It will be seen that the torsion-spring E performs a double office, by returning the chair, when unobstructed, to its normal position, and by serving as a pivotal bearing for and upon which said chair rocks.

Although my invention is intended, principally, for use upon swiveled office-chairs, I also propose to use it upon rocking-chairs, for which latter it is peculiarly applicable.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

The bar D, provided with the jaws *d*, the spring-rod E, and the spider G and G', having the jaws *g*, in combination with each other, the chair, and a stool or other support, substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of January, 1877.

JOHN WHITE.

Witnesses:

R. B. PRINDLE,  
GEO. A. THOMAS.