W. T. DOREMUS.

Tilting-Chair.

No. 161,671. Patented April 6, 1875.

Fig. 1

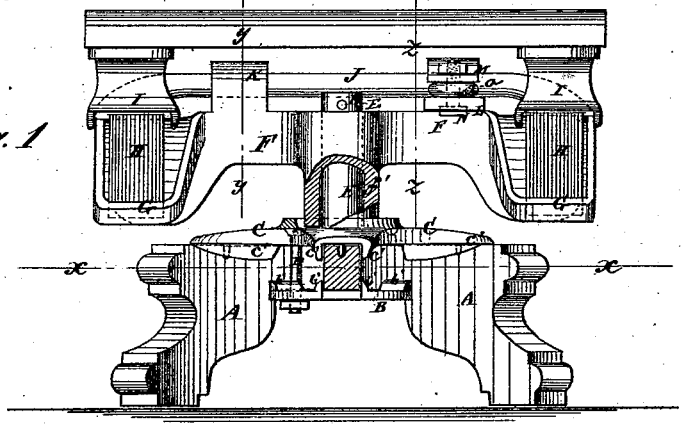


Fig. 2

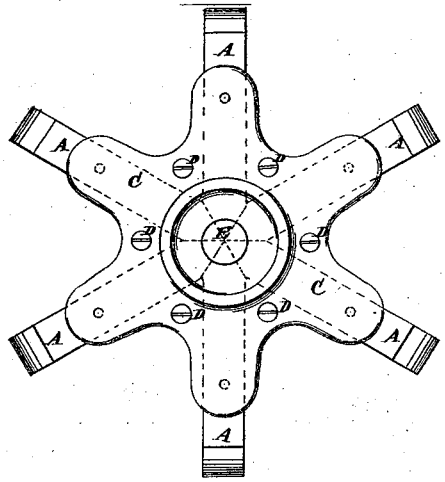


Fig. 4

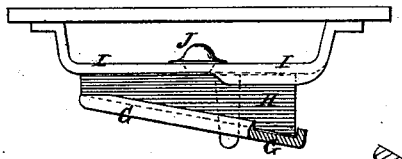


Fig. 3

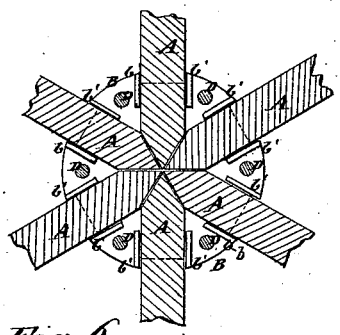


Fig. 5

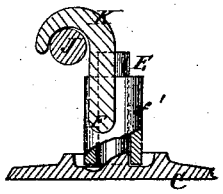
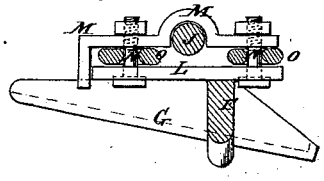


Fig. 6



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UNITED STATES PATENT OFFICE.

WILLIAM T. DOREMUS, OF NEW YORK, N. Y.

IMPROVEMENT IN TILTING CHAIRS.

Specification forming part of Letters Patent No. **161,671**, dated April 6, 1875; application filed January 11, 1875.

To all whom it may concern:

Be it known that I, WILLIAM T. DOREMUS, of New York city, in the county and State of New York, have invented a new and useful Improvement in Oscillating Spring-Chair, of which the following is a specification:

Figure 1 is a rear view of the spring mechanism of my improved chair, partly in section through the base. Fig. 2 is a top view of the same. Fig. 3 is a horizontal section of the base, taken through the line *x x*, Fig. 1. Fig. 4 is a side view of one of the rubber blocks, its seat and top bar. Fig. 5 is a detail section taken through the line *y y*, Fig. 1. Fig. 6 is a detail section taken through the line *z z*, Fig. 1.

My invention has for its object to furnish an improved oscillating spring-chair, which shall be so constructed as to yield to the movements of the person sitting upon it instead of opposing a rigid resistance to said movements, as an ordinary chair does, and which at the same time may have a gentle oscillating, or backward and forward movement.

The invention will first be fully described, and then pointed out in the claims.

A are the feet of the chair, which are made short to bring the base close to the floor. The feet A are arranged radially, and their upper parts project inward, and have the sides of their ends beveled off so as to meet in a center, as shown in Fig. 3. The inwardly-projecting parts of the feet A are placed between two plates, B C, which are secured in place by bolts D passing through the said plates B C, and through the angular space between said feet. The bodies of the bolts D may be concealed by small ornamental blocks placed upon them. If desired, the bolts D may pass through the plates B C, and through the feet A, but I prefer the construction first described, as it avoids boring the said feet. The outer edge of the lower plate B is notched to receive the inner edges of the feet A, and has flanges b' formed upon its upper surface to keep the said feet from lateral movement. For the same reason flanges c^1 may be formed upon the lower surface of the upper plate C. Upon the lower surface of the upper plate C may also be formed points c^2, to enter the tops of the feet A, and prevent them from being drawn out. Upon the center of the upper plate C is cast the pivot E, which passes up through the center of the cross-bar F, and is secured by a pin or other convenient means. The cross-bar F is supported by a tubular projection or hub, f', formed upon its lower side, through which the pivot E passes, and the lower end of which rests and turns upon the plate C. Upon the end of the cross-bar F are formed inclined cross-heads G, to serve as seats for the rubber blocks H, which form the springs. The rubber blocks H may be made wedge-shaped, or of any other suitable form, and are kept from slipping out of place by flanges formed along the side edges and the lower end edge of the cross-heads G. Upon the top of the rubber blocks H rest the cap-arms I, the forward parts of which are made about twice as long as their rear parts. The end parts of the arms I are bent upward, and then outward, and have holes formed through them to receive the screws, by which they are secured to the chair-seat. The parts of the arms I that rest upon the rubber blocks H have flanges formed upon their side edges to prevent them from slipping off the said rubber blocks. The two arms I, at about the middle part of the rubber-blocks H, are rigidly attached to or formed solidly upon the ends of a rock-bar, J, which is thus placed above and a little in front of the cross-bar F. The arms I are held in place upon the rubber blocks H by hooks K formed upon the cross-bar F, and which hook over the rock-bar J, as shown in Figs. 1 and 5. Or cross-heads L may be formed upon the cross-bar F, to the end parts of which are bolted the ends of yokes M, which pass over the rock-bar J, and have recesses formed in them to receive the said rock-bar J. The forward ends of the yokes M have flanges formed upon them which overlap the ends of the cross-heads L, to relieve the bolts N from a side strain when the chair is oscillated. O are rubber blocks interposed between the ends of the cross-heads L and the yokes M, and through which the bolts N pass to keep them in their places. The rubber blocks O, by their elasticity, take up the slack when the rubber blocks H are under pressure to prevent the yokes M from rattling.

With some styles of chairs the hooks K may

be used, and with other styles the cross-heads L and the yokes M will be preferable, or both may be used upon the same chair, as shown in Fig. 1.

The rock-bar J is placed forward of the cross-bar F, to bring the center of oscillating motion forward of the center of rotary motion, and thus enable a smaller base to be used than would otherwise be necessary, and prevent the front feet from projecting beyond the front of the chair.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The herein-described plates B C, constructed with flanges b' c^1, points c^2, and pivot E, said plates being bolted together to hold the legs A, in the manner set forth.

2. The combination with hooks K, cross-bar F, having inclined seats G at its ends and rubber blocks H, and of rock-bar J that connects arms I, as and for the purpose specified.

3. The combination of cross-heads L, yokes M, bolts N, and rubber blocks O, with the cross-bar F and rock-bar J, as and for the purpose set forth.

4. The combination of rock-bar J, front cross-bar F, pivot-bar E, and arms I, as shown and described, to bring the center of oscillation in front of the center of rotation.

WILLIAM T. DOREMUS.

Witnesses:
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