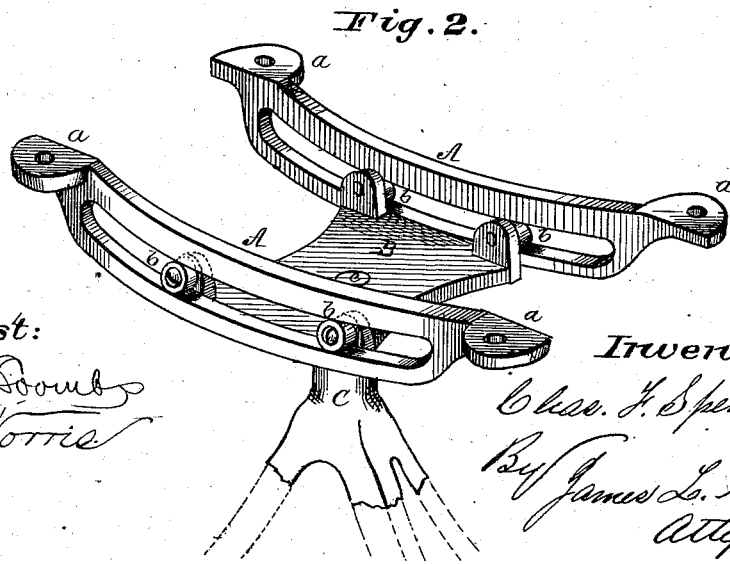
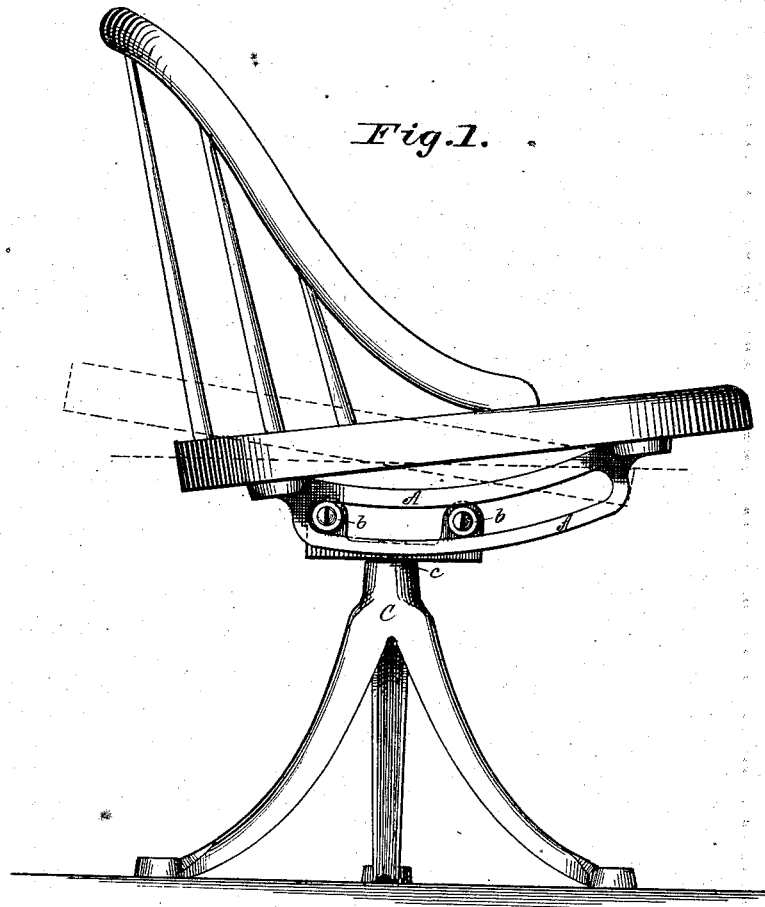


C. F. SPENCER.
Tilting-Chair.

No. 160,624.

Patented March 9, 1875.



Attest:
Joseph S. Spence
Atty. Norris

Inventor.
Chas. F. Spencer.
By *James L. Norris,*
Atty.

UNITED STATES PATENT OFFICE

CHARLES F. SPENCER, OF CLEVELAND, OHIO.

IMPROVEMENT IN TILTING-CHAIRS.

Specification forming part of Letters Patent No. **160,624**, dated March 9, 1875; application filed February 26, 1875.

To all whom it may concern:

Be it known that I, CHARLES F. SPENCER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Tilting-Chairs, of which the following is a specification:

This invention relates to certain improvements in that class of chairs which have a revolving and tilting motion; and the invention consists of two arched frames secured to the bottom of the seat at each side thereof, to which is adapted rollers journaled to a small frame or block loosely connected with the legs of the chair, so as to revolve on the same, whereby the seat of the chair has a rocking motion by means of the arched frame traversing the rollers, as will be hereinafter more fully described.

In the accompanying drawings, Figure 1 represents a side elevation of a chair with my invention applied thereto. Fig. 2 is a perspective view of the roller-frame and arched frame.

The seat and back of the chair may be of any desired pattern or style, and to the under side of the seat, at or near its sides, is securely attached two arched frames or supports, A A, having flanges *a* at their ends, provided with openings for the passage of screws for holding them in position. The arched frames are each provided with an arc-shaped or curved slot extending nearly the entire distance of the frames, and in said slots are adapted to work rollers *b b*, which are journaled to vertical arms at or near the side corners of a rectangular or square block or frame, B, mounted on the leg-frame C of the chair. In the present instance the upper end of the leg-frame is provided with a cylindrical tenon, *c*, adapted to a central circular opening or aperture in the roller-frame, for allowing the latter to revolve on the tenon to give the revolving or rotary motion to the chair-seat; but it is evident that the roller-frame may be provided with the usual screw-threaded shank adapted to a screw-threaded socket passing through the leg-frame.

By the construction above specified, I provide a chair which has an easy and comfortable rocking or tilting motion, and capable of revolving, rendering it very desirable as an office-chair.

It will be seen that the arched frame traverses the rollers, and that when the chair is being used it may be inclined forward to accommodate a person when reaching forward to procure an article, say, for instance, at his desk; and, further, the seat can be inclined forward or backward, as shown in the full lines and dotted lines, or retained in a horizontal position, as the occupant may desire.

Instead of providing the arched frame with an arc-shaped or curved slot, I design casting the same in a solid piece, possessing the arched or curved shape, and journal to the block or frame B, at each side of the same, three rollers, *b*, in such a manner that one of said rollers shall traverse the upper surface of the arched frame, and the remaining two shall traverse its under surface, thus practically accomplishing the result before mentioned; and, further, it is evident that, instead of the journaled rollers, the frame B could be provided with projections which would answer the same purpose as the rollers.

I am enabled by the above construction to dispense with all springs for giving a tilting motion to the chair, which are very liable to break, and require frequent renewal; and, further, provide a tilting-chair, the structure of which possesses great strength and durability.

I claim as my invention—

The frame B, having the vertical arms provided with rollers *b*, in combination with the frames A, having the curved slots in which the rollers operate, and the flanges *a* for securing them to the chair-seat, substantially as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand.

CHAS. F. SPENCER.

Witnesses:

JAMES L. NORRIS,
A. H. NORRIS.