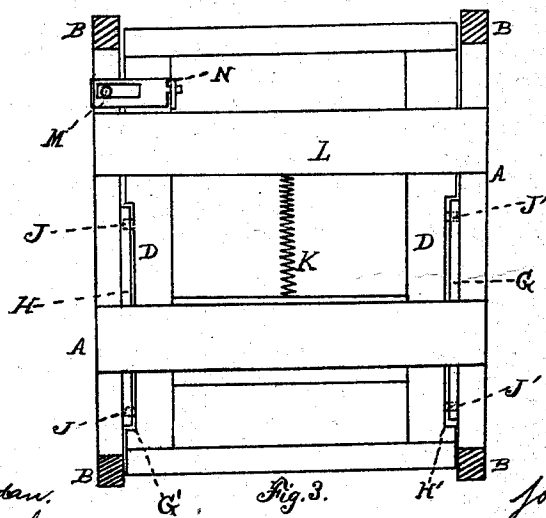
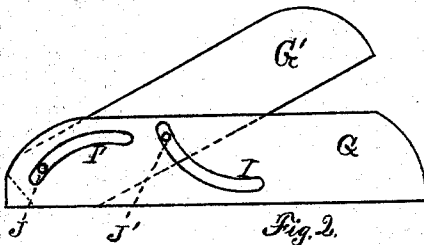
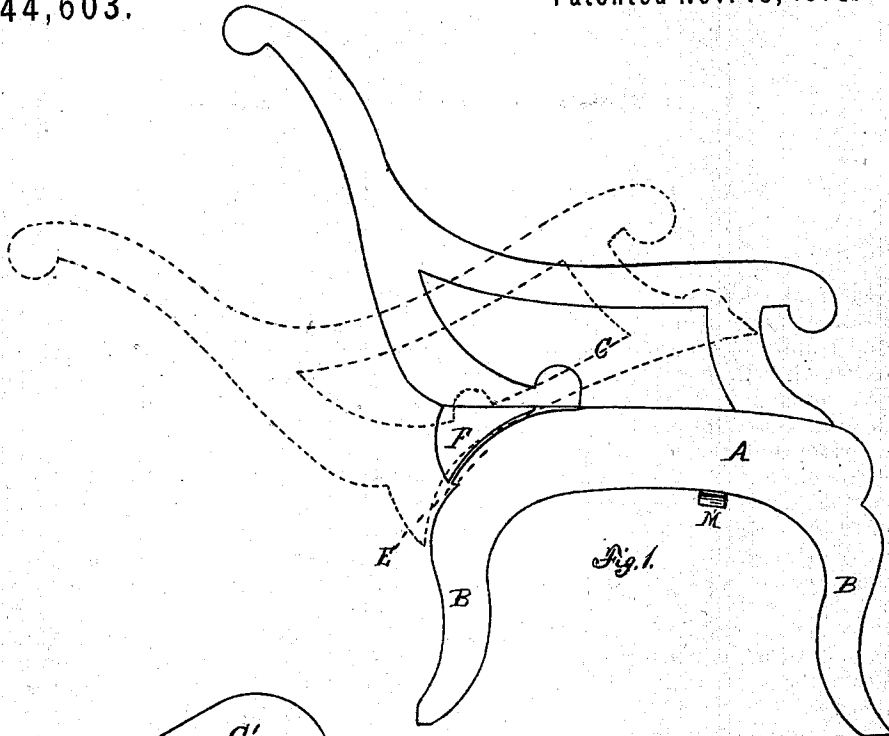


J. ENGER.
Tilting-Chairs.

No. 144,603.

Patented Nov. 18, 1873.



Witnesses:
Frank H. Jordan.
Edwin W. Haskell

Inventor:
John Enger.
Per atty.
Wm. Henry Claffern.

UNITED STATES PATENT OFFICE.

JOHN ENGER, OF PORTLAND, MAINE.

IMPROVEMENT IN TILTING CHAIRS.

Specification forming part of Letters Patent No. **144,603**, dated November 18, 1873; application filed May 2, 1873.

To all whom it may concern:

Be it known that I, JOHN ENGER, of Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Tilting Chairs; and I do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a side view of my invention. Fig. 2 shows the pieces G G', hereinafter described, one of which carries the curved slots I I', the other the studs J J'. Fig. 3 is a bottom view.

Same letters show like parts.

My invention relates to a peculiar combination of devices for imparting to a chair a rocking motion when desired, while dispensing with the common rockers. It also admits of the chair-bottom being so fixed as to remain like an ordinary chair, without rockers, when desired.

In Fig. 1 is shown a chair with the parts in the common position, and the position, when tipped back, indicated by dotted lines. The horizontal side piece A of the frame and the legs B of the chair remain stationary on the floor. The seat C is attached to the arms and back parts of the chair, and to a certain inner frame, D, and said arms, back, and seat tip back together. The said pieces A are curved at E, and over this curve fits the curved part F on the bottom of the side pieces of the chair-back. Under the seat, at each side, are arranged the pieces G H G' H'. The pieces G H are attached to the inside of the horizontal frame A, and have in them the curved slots I I'. The pieces G' H' have the studs J J' to

move in said slots, and the said parts G' H' are attached to the bottom of the seat and to the sides of the frame D. A spiral spring, K, is attached to the under side of the seat and to a cross-bar, L, stretching across the width of the horizontal frame. This spring is to draw back the seat to a horizontal position when tipped, as indicated by dotted lines in Fig. 1, backward and then forward. As the seat C is tipped, the studs J J' move in the curved slots I I'. A slide, M, with a slot and a pin in the bottom edge of one of the horizontal side frame-pieces A, serves, in combination with the catch N, to fasten down the seat C, when desired. The end of the slide fits an aperture in the catch N, when moved toward it, and so holds down the seat, the said catch N being attached to the bottom side of the seat, to one of the frame-pieces D. The slide M can be drawn back, and so allow the seat to tip again when desired. If desired, rollers may be attached to the studs J J', to allow of the easier rocking motion of the chair.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the horizontal frame A, legs B, seat C, curved parts E F, slots I I', pieces G H G' H', studs J J', and spiral spring K, substantially in the manner herein set forth.

2. In combination with the tipping seat C, the slotted slide M and catch N, arranged as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of April, 1873.

JOHN ENGER.

Witnesses:

WM. HENRY CLIFFORD,
FRANK H. JORDAN.