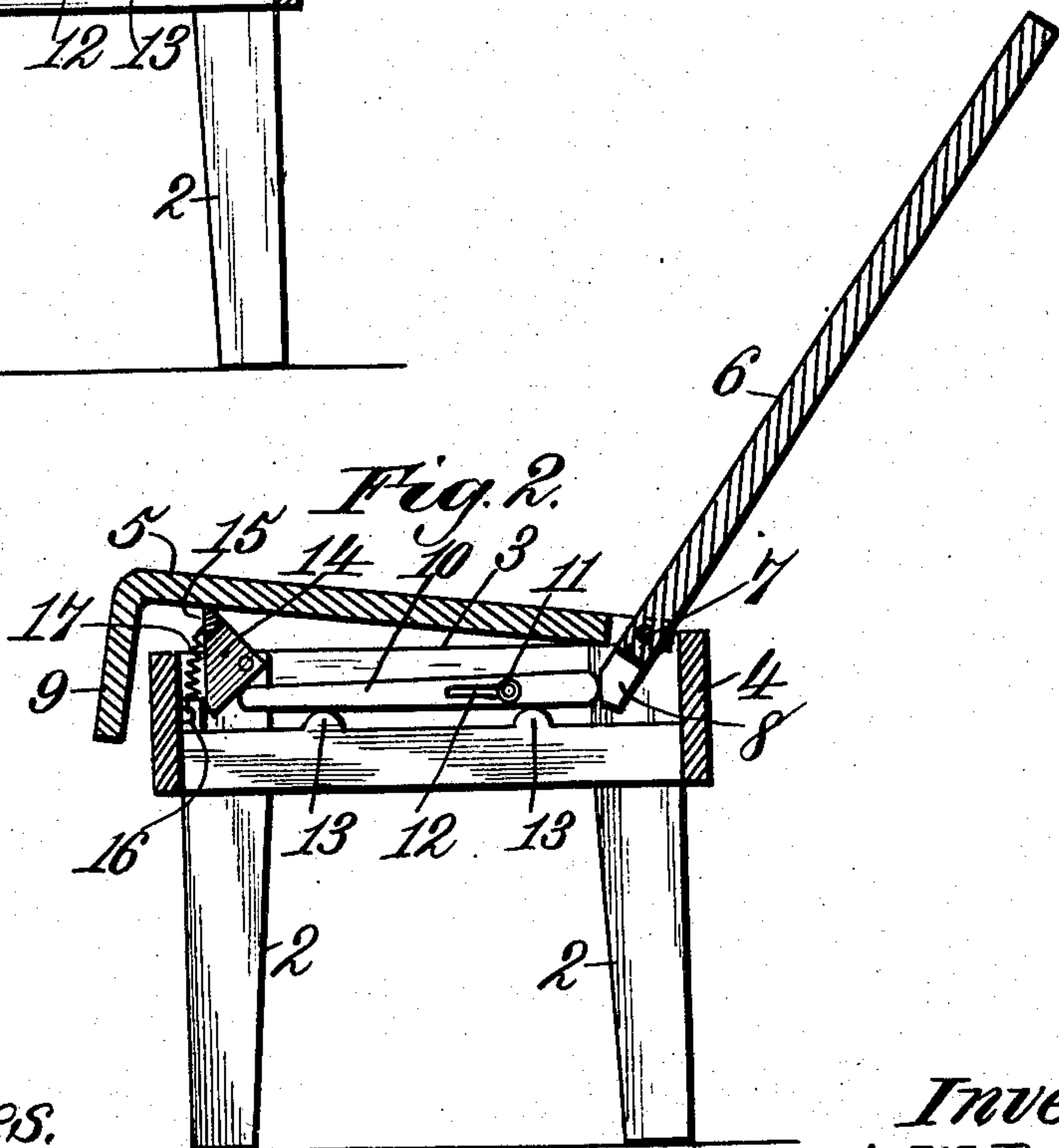
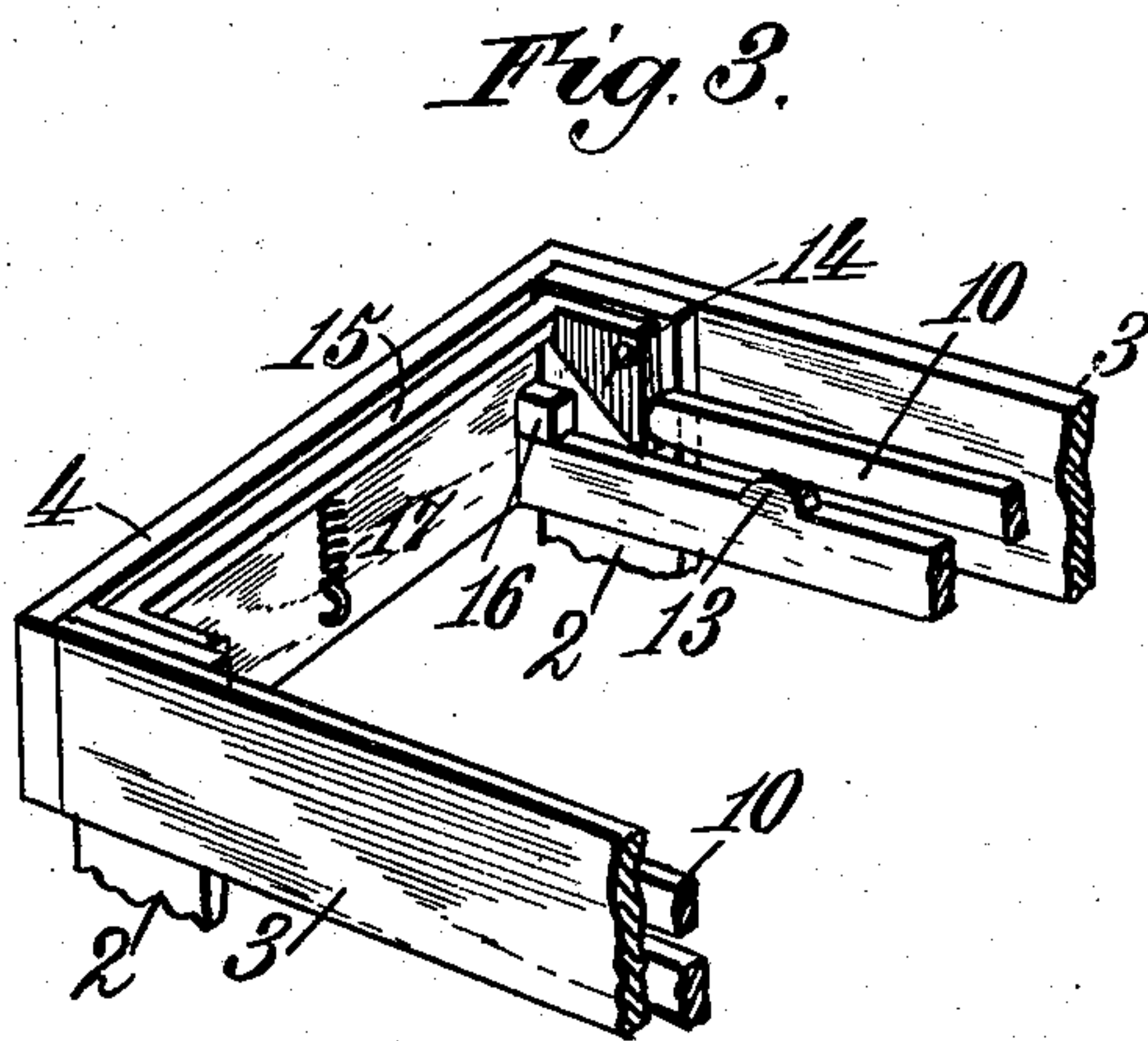
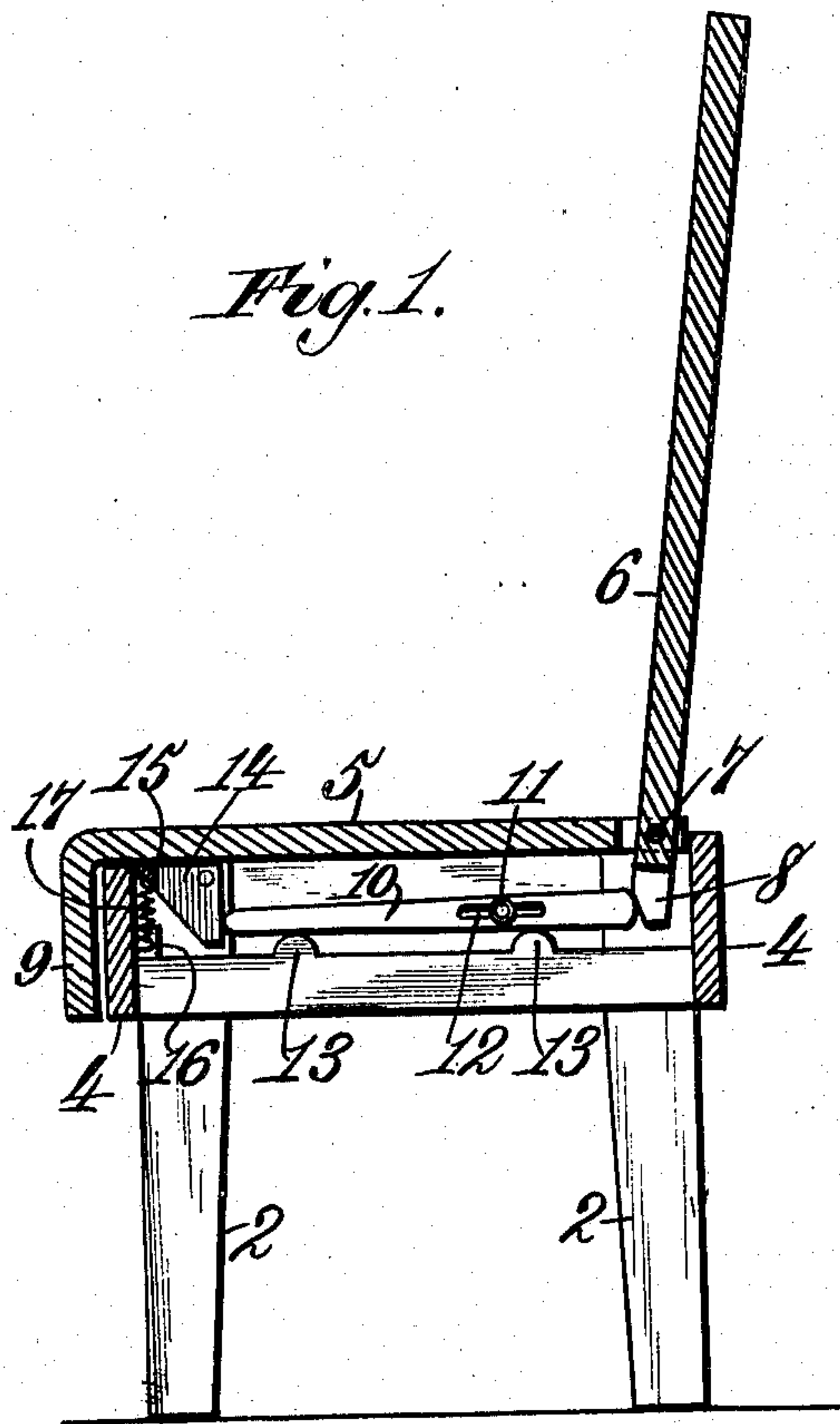


No. 847,880.

PATENTED MAR. 19, 1907.

L. W. BARKER & J. JACKSON.
CHAIR.

APPLICATION FILED APR. 2, 1906.



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UNITED STATES PATENT OFFICE.

LEWIS W. BARKER AND JOHN JACKSON, OF CLINTON, IOWA.

CHAIR.

No. 847,880.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed April 2, 1906. Serial No. 309,390.

To all whom it may concern:

Be it known that we, LEWIS W. BARKER and JOHN JACKSON, citizens of the United States, residing at Clinton, in the county of Clinton and State of Iowa, have invented new and useful Improvements in Chairs, of which the following is a specification.

This invention relates to chairs.

A chair involving our invention comprises a tiltable back and a seat and means for elevating the fore part of the seat with respect to the rear part thereof on the rearward motion of said back. These several parts may be of any desirable character. In the drawings, however, accompanying and forming a part of this specification we have shown one form of embodiment of the invention which to enable those skilled in the art to practice said invention we will set forth in detail in the following description, while the novelty of said invention will be included in the claims succeeding said description.

By virtue of the invention considerable comfort ensues to the user of the chair in that when the back is tilted rearward the fore part of the seat will be sufficiently elevated to insure such result.

Referring to said drawings, Figure 1 is a sectional side elevation of a chair involving our invention and showing the seat and back as occupying their normal positions. Fig. 2 is a like view showing the back and seat as tilted, and Fig. 3 is a detail view in perspective of the fore part of the seat-frame.

Like letters refer to like parts throughout the several figures.

The chair represented in the drawings includes in its make-up four legs, each denoted by 2, surrounded at their tops by side rails, as 3, and front and rear rails, as 4, the several rails and legs being connected together in any desirable way to present a rigid structure and the said four rails constituting a convenient frame for a seat, as 5.

The back is denoted by 6. Said back 6 and seat 5 may be of any suitable construction, they being represented as pivotally connected together, as 7. The back and seat, therefore, move about an axis in common, which axis in the present case is stationary. There are two diametrically opposite pivots, as will be understood, supported in the present instance near the tops of the rear legs 2. The seat 5 when down or occupying its normal position, as shown in Fig. 1, rests loosely upon its frame. The back 6 is extended be-

low the rear part of the seat, as shown at 8, and the function performed by this downward extension 8 will be hereinafter explained.

From what has been stated it will be obvious that the back 6 can be tilted rearwardly and that the fore part of the seat 5 can be elevated so as to bring said seat to an upward inclination from the rear thereof. The center of motion of the seat is therefore a stationary one in the present instance and is located at or near the rear thereof. Said seat is shown as having at its front a downwardly-extending apron 9, overlying normally the front rail 4.

In connection with the back we provide means for elevating the fore part of the seat whereby it can assume the angular position pointed out, and said means may be of any desirable character, although the mechanism shown for securing such object is an effective one. Such mechanism comprises the companion endwise-movable rods 10, associated directly with the two side rails 3. These side rails have on their inner sides headed studs, pins, bolts, or equivalent devices, as 11, extending through longitudinal guide-slots 12 in the respective rods 10 to permit sliding movement of said rods. The rods are therefore supported independent of the seat and back. The rear ends of the rods are rounded so as to engage against similar rounded portions on the downward extension 8 of the back. The rods 10 travel back and forth upon suitable antifriction means carried upon the two side rails 3, said antifriction means being represented as composed of independent convex or rounded projections 13 upon the respective side rails 3.

The two front legs 2 are shown as carrying near their tops angle-levers, as 14. These angle-levers are shown as triangular and as fulcrumed in proximity to one of their angles to the said front legs. The levers are pendant from their respective fulcrums and are shown as connected by the tie bar or rod 15, extending from the forward angle of one lever to the corresponding angle of the other lever, so that uniform movement of the two levers is assured. The forward ends of the two rods 10 are adapted to engage against the levers 14 near their lower or free ends or against their normally vertical faces.

In Fig. 1 the parts are shown as occupying their normal positions, the seat 5 being horizontal, or substantially so, and resting loosely

upon the several rails 3 and 4. When an occupant of the chair throws the back 6 rearward, the downward extension 8 of said back will engage the two rods 10 and will thrust the same forward, thereby rocking simultaneously the two angle-levers 14, so that the latter by engaging against the under side of the seat 5 near the front of said seat can elevate the fore part of the latter about a stationary axis. The two levers 14 are adapted to abut against suitable stops, as 16, which may consist of blocks carried by the front legs 2.

We provide means for positively returning the parts to their original position, and the same may be of any desirable character, although it is represented as consisting of a coiled spring 17, connected at its upper end to the tie-bar 15 and at its lower end to the front rail 4. When the back 6 is tilted rearward, the tie-bar, through the intermediate parts, is elevated, so as to stretch the spring 17. When the back is freed, the spring 17 draws the tie-bar 15 downward and returns the two angle-levers 14 to their original position in order to thrust the rods 10 rearward, and the rods by acting against the downward extension 8 of the back will positively return the latter to its original position, or that which it is represented as occupying in Fig. 1. The seat 5 will return to its original position by gravity.

We claim—

1. A chair involving a tilting back, a movable seat and its frame, slidable means supported for movement by the frame of said seat and movable forward by said back on the rearward movement thereof, and means for elevating the fore part of the seat with respect to the rear part thereof on the forward movement of said slidable means.

2. A chair involving a tilting back and a seat, lever means to act against the seat, and means between said lever means and the back and operable by the latter to elevate the fore part of the seat with respect to the rear part thereof when the back is tilted rearward.

3. A chair involving a swinging back, a movable seat, slidable means movable forward by the back on the initial rearward movement thereof and means operable by said slidable means on the forward movement thereof for elevating the fore part of the seat with respect to the rear part thereof.

4. A chair involving a tilting back and a seat movable about a common axis which is located at the rear of the seat, the back having a downward extension, horizontally-slidable means located below the seat and operable in a forward direction on the initial rearward tilting movement of the back, and means actuated by said sliding means on the

forward movement thereof for elevating the fore part of the seat with respect to the rear part.

5. A chair involving a tilting back, and a seat having a common and stationary axis of motion located at the rear of the seat, the back having an extension below said axis, slidable means movable forward by said extension on the initial rearward movement of the back and means operable by said slidable means on the forward movement thereof for elevating the fore part of the seat.

6. A chair involving a tilting back and a seat, sliding means movable in a forward direction by the back when the same is swung rearward, and lever means operable by said sliding means when the latter moves forward for lifting the fore part of the seat.

7. A chair involving a tilting back and a seat, sliding means movable forward by the back when the latter swings rearward, and triangular lever means operable by said sliding means on the forward movement thereof for lifting the fore part of the seat.

8. A chair involving a tilting back and a seat, sliding means movable forward by the back when the latter swings rearward, triangular lever means operable by said sliding means on the forward movement thereof for lifting the fore part of the seat, and spring means acting against said lever means for returning the latter to the normal position thereof when the back moves toward its normal position.

9. A chair involving a tilting back and seat supported for movement about a common axis located at the rear of the seat, said back having an extension below said axis, sliding means movable forward by said extension when the back swings rearward, and lever means operable by said sliding means on the forward movement thereof for lifting the fore part of said seat.

10. A chair involving a tilting back and a seat, a pair of endwise-movable rods adapted to be moved forward by the back when the latter is tilted rearward, antifriction means for supporting the rods, connected levers to lift the seat and operable for doing the same by and on the forward motion of said rods, a spring acting against the connection between the levers in opposition to the rods, and stop means to limit the rearward motion of the back.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

LEWIS W. BARKER.
JOHN JACKSON.

Witnesses:

B. M. JANSSEN,
J. W. SULLIVAN.