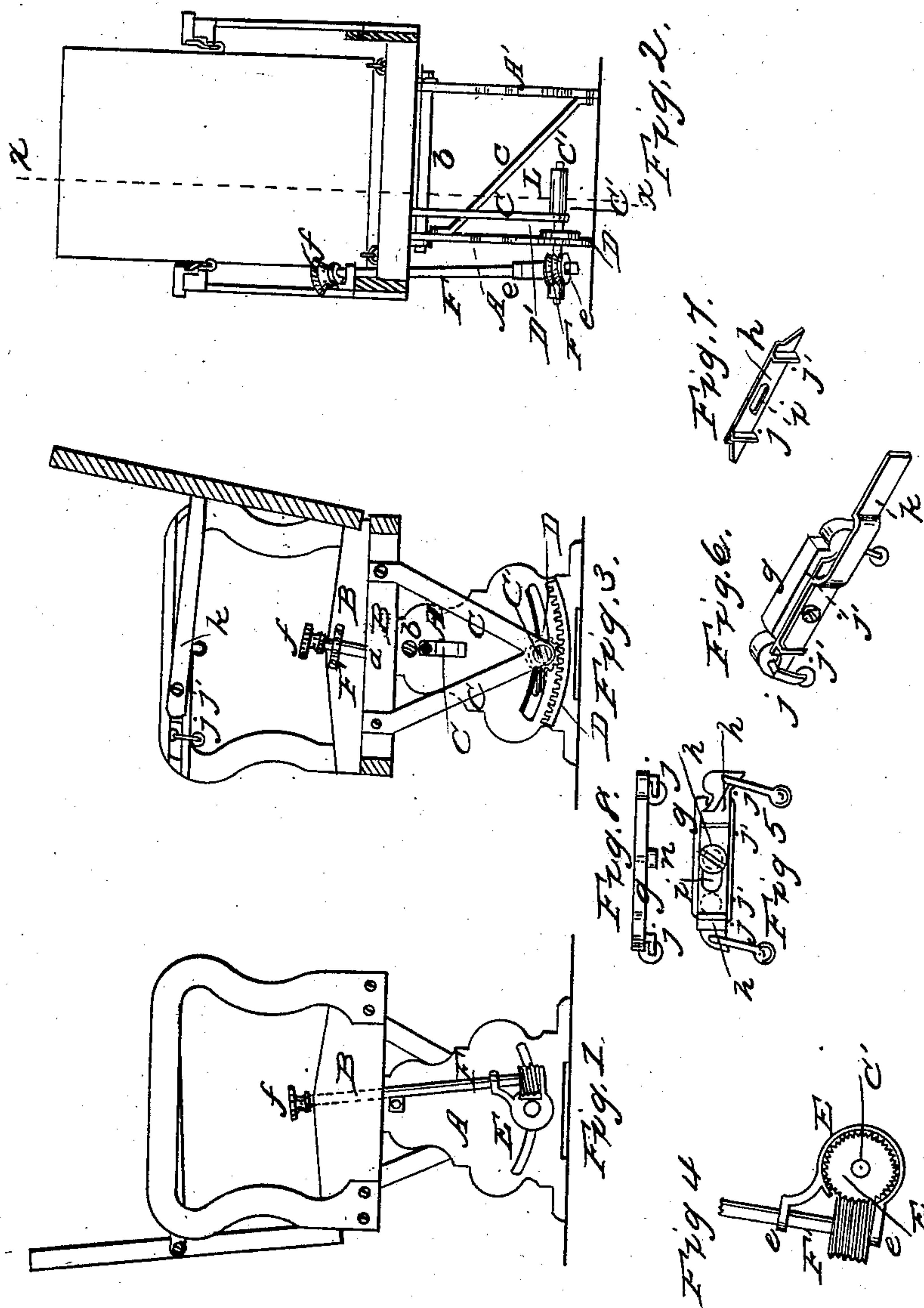


T. C. THEAKER.
Railway Car Seat.

No. 93,660.

Patented Aug. 10, 1869.



Witnesses.
E. R. Brown.
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Inventor:
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T. C. THEAKER, OF BRIDGEPORT, OHIO.

Letters Patent No. 93,660, dated August 10, 1869.

IMPROVED RAILWAY-CAR SEAT.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, T. C. THEAKER, of Bridgeport, in the county of Belmont, and State of Ohio, have invented a new and useful Improvement in Railroad-Car Seats and Couches; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation;

Figure 2 is a front elevation;

Figure 3, a vertical section, taken in the line *x x* of fig. 2; and

Figures 4, 5, 6, 7, and 8, are views of some of the parts in detail.

Like letters designate like parts in all the figures.

The nature of my invention consists in the peculiar arrangements of devices for oscillating the seat of a railroad-car chair, and also for changing the position of its back, by which means the various changes can be made with facility, without the occupants being compelled to rise from their seats.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the drawing—

A A' represent the side pieces of the frame to which the seat-frame B, of the chair, is pivoted at or near their upper ends, by means of a rod, *a*, which passes through the pieces A A', and also through the seat-frame B.

The side pieces A A' have feet or flanges at their lower ends, by means of which they are bolted to the floor of the car, and are also secured at a proper distance apart by means of a rod, *b*, which passes through them at a convenient distance below the rod *a*, said rod having a nut on each end outside the side pieces.

There is also a brace, C, which extends from near the top of the side piece A to near the bottom of the side piece A', its ends being bolted thereto.

In the piece A is a slot, *d*, which is an arc of a circle, the radius of which is the distance from it to the rod *a*.

Extending down from, and secured to the cross-tie B', of the frame of the seat of the chair, is a V-shaped hanger, C, on one side of which is the boss or projection L, which forms a bearing for the shaft C', which shaft extends through the slot *d*, some distance outside the piece A.

On the inside of this side piece A is a cogged segment, D.

On the shaft C' is a pinion, D', which engages with the cog-segment D.

Secured to the outer end of this shaft is a box, E, having two arms, *e e*, which form the lower bearings

for the vertical or inclined shaft F, its upper bearing being on the inside of one side of one of the outer pieces of the frame of the chair-seat.

Secured to this shaft is a worm or screw-pinion, F', which is placed between the arms *e e*, of the box E.

This engages with a pinion, E', in the box E, said pinion being keyed to the shaft C'.

On the upper end of the shaft F is a crank-knob or hand-wheel, *f*, by means of which the shaft is revolved.

The arms of the chair are constructed in the same manner as those described in my patent, dated April 27, 1869. In the grooves of the arms are placed the slides *g* of the same construction as those used in my patent hereinbefore mentioned.

On the outside of these slides are sliding pieces, *h*, in which are slots, *i*, through which the wrist *n*, on the side of the slide *g*, projects.

The ends of the sliding pieces *h* are inclined or bevelled, to enable them to pass under the arms *j*, and between them and the slides *g*; the object of this being to hold up the front pawls above the projections or stops in the bottom of the grooves in the arms, so that when it is desired to raise the back, the slides will move forward without hindrance from the front pawls. At the same time the pawls next to the back hang loosely, so as to fall into the recesses between the projections, and take hold of said projections in order to hold the back in any desired position.

On the outside face of the sliding pieces *h* are projections, *j'*, there being one near each end.

To the wrists *n*, on the slides *g*, are attached the bars *k*, one end of which is attached to the wrist of the slides *g*, and the other to the back of the chair.

The front ends of these bars project a short distance beyond the wrists of the slides *g*, and against the inside of the front projections *j'*, thereby keeping the front ends of the sliding pieces *h* forward, their ends being under the arms of the front pawls, thus holding them up above the projections in the arms.

During the operation of reversing the back, the bars *k* are turned, and their front ends, (which are semicircular,) strike the projections *j'* on the other ends of the sliding pieces *h*, thereby moving their other ends under the arms of the rear pawls, (which now become the front ones,) and raise them, at the same time allowing the others to fall into the recesses in the bottom of the grooves in the arms.

To oscillate the seat, turn the shaft F, by means of the hand-wheel *f*, which turns the worm or screw-pinion F', which engages in the pinion E', thereby causing the shaft C' to revolve, and with it the pinion D', which engages with the cog-segment D, thereby causing the pinion D' to move backward or forward on the stationary segment D, carrying with it the

lower extremity of the V-shaped frame C, which is secured at its upper extremities to the cross-tie B' of seat-frame B, which will of course oscillate, as desired, the said seat.

The back of the chair is attached to the seat in the same manner as that described in my patent hereinbefore mentioned.

Having thus fully described my invention,

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

1. In the described chair, the supporting-frame, composed of the side pieces A A', rod *b*, and brace *c*, substantially as and for the purposes shown and described.

2. The segment D, pinion D', and hanger, or supporting-frame, C, all substantially as and for the purposes set forth and described.

3. The combination of the shaft F, screw or worm-pinion F', wheel E', pinion D', and segment D, all substantially as and for the purposes set forth.

4. The regulating slide pieces *h*, substantially as set forth, in combination with the slide *g*, or its equivalent, substantially as and for the purposes set forth.

5. The combination of the arms *k*, slides *h* and *g*, all substantially as shown and described.

6. The combination of the knob or crank *f*, shaft F, screw-pinion F', pinion E, pinion D', and cog-segment D, all substantially as set forth, and for the purpose of oscillating the chair-seat.

T. C. THEAKER.

Witnesses:

G. A. C. SMITH,
E. R. BROWN.