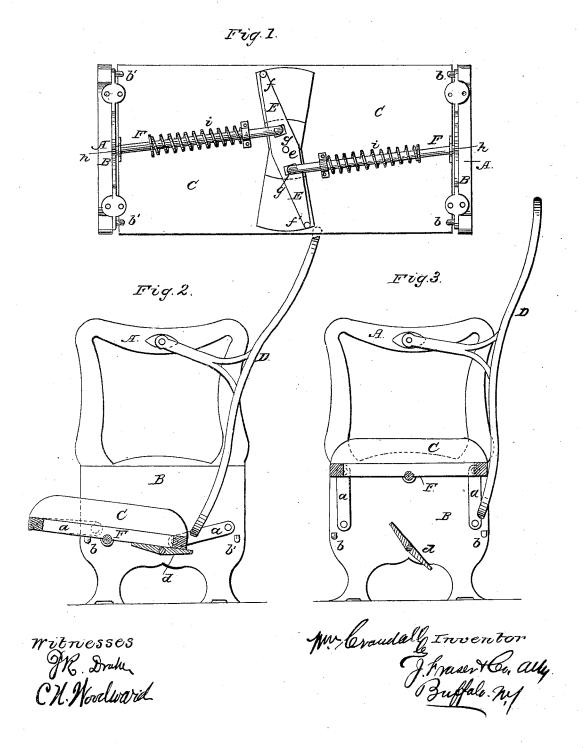
## W. CRANDELL.

Car Seat.

No. 110,746.

Patented Jan. 3, 1871.



# Anited States Patent Office.

### WILLIAM CRANDELL, OF WESTFIELD, NEW YORK.

Letters Patent No. 110,746, dated January 3, 1871.

#### IMPROVEMENT IN RAILWAY-CAR SEATS.

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

I, WILLIAM CRANDELL, of Westfield, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in "Car-Seats," and for other purposes, of which the following is a specification.

#### Nature of the Invention.

My invention is for the purpose of making car-seats, &c., more comfortable for night and day use by turning them into lounging chairs; and

The invention consists in raising and lowering the

The invention consists in raising and lowering the seats and slanting the seat and back, and the appliances by which this is accomplished, to be hereinafter fully described.

#### General Description.

In the drawing-

Figure 1 is a bottom view of the seat, with the footboard removed.

Figure 2 is a sectional side elevation, showing the seat lowered.

Figure 3, a similar view, with the seat raised.

A A' are the arms, and

B B', the metal standards or "legs."

C is the seat, secured to the standards B by means of pivoted arms a a', which allow it to be lowered by swinging forward or backward and downward until the front end rests on lugs b b', while the back end rests on the "rail" or foot-board d, which is lower than the lugs and causes the back end of the seat to slant, making the seat more comfortable.

At the same time the seat is lowered the back D gravitates back of itself, making a greater slant, which permits the occupant of the seat an almost reclining posture, and serving as a support for the back, as well as a head-rest.

The swinging arms a a' permit the seat to swing

forward or back, according to which end—for the time being—is the front of the car.

To keep the seat in the usual elevated position when it is not required to be lowered, I provide the bottom of the seat-frame, on the inside, with a double lever, E, pivoted at e, and having handles or knobs, ff, near the edge of the seat, by which it may be operated from above.

Two slots, g g', in the lever E, receive the bent ends

f rods or catches F F'

The opposite ends of these rods F F' enter holes in the standards at h h', (see fig. 1,) and are held in that position by spiral springs i i'.

The lever E is moved sidewise, which pulls rods F F out of the holes h h' in the standards B, releasing the seat, which falls into place by its own weight.

the seat, which falls into place by its own weight. When the seat is elevated, if one end is raised higher than the other, the rod on that side will shoot into its place quicker than the opposite one. This is accomplished by means of slots g(g), which enable the rods F(g) to act independent of each other in a sufficient degree.

#### Claims.

What I claim as my invention is-

1. The combination of the pivoted arms a a' with the seat C and back D, in the manner and for the purpose specified.

2. The pivoted arms a a', the swinging lever E, and the spring rods F F', arranged together and operating in connection with the changeable seat C, in the manner and for the purpose specified.

In witness whereof I have hereunto signed my

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

WILLIAM CRANDELL.

GEO. B. KIMBERLY, JAMES L. WHITE.