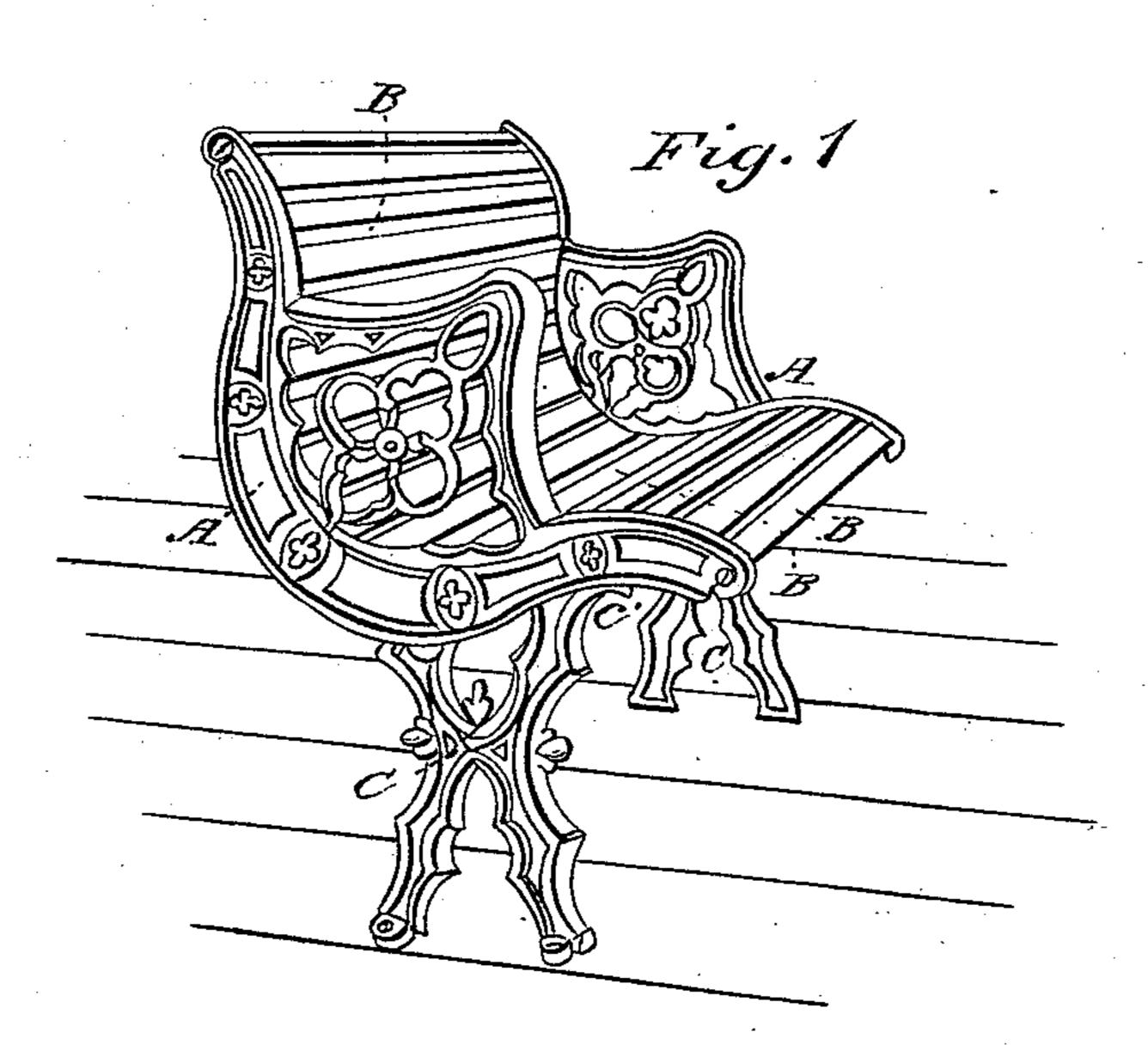
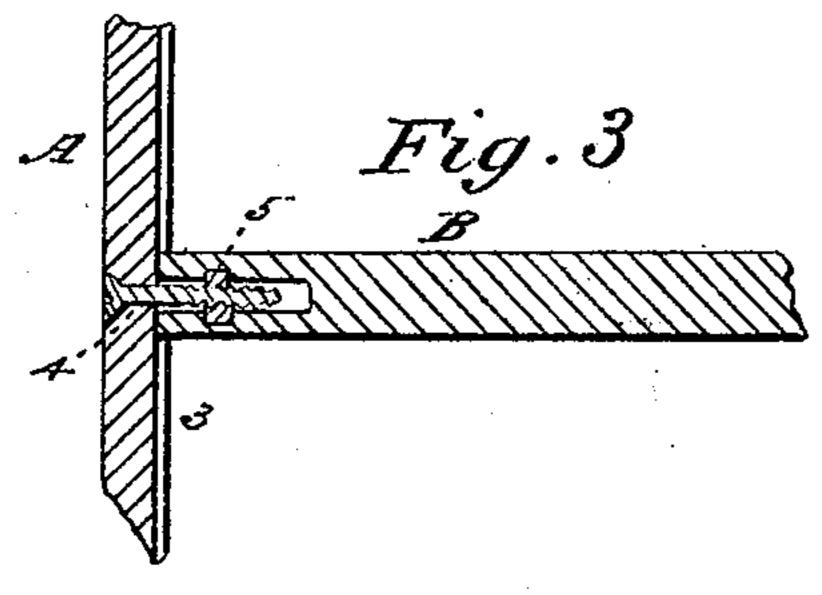
T. J. CLOSE.

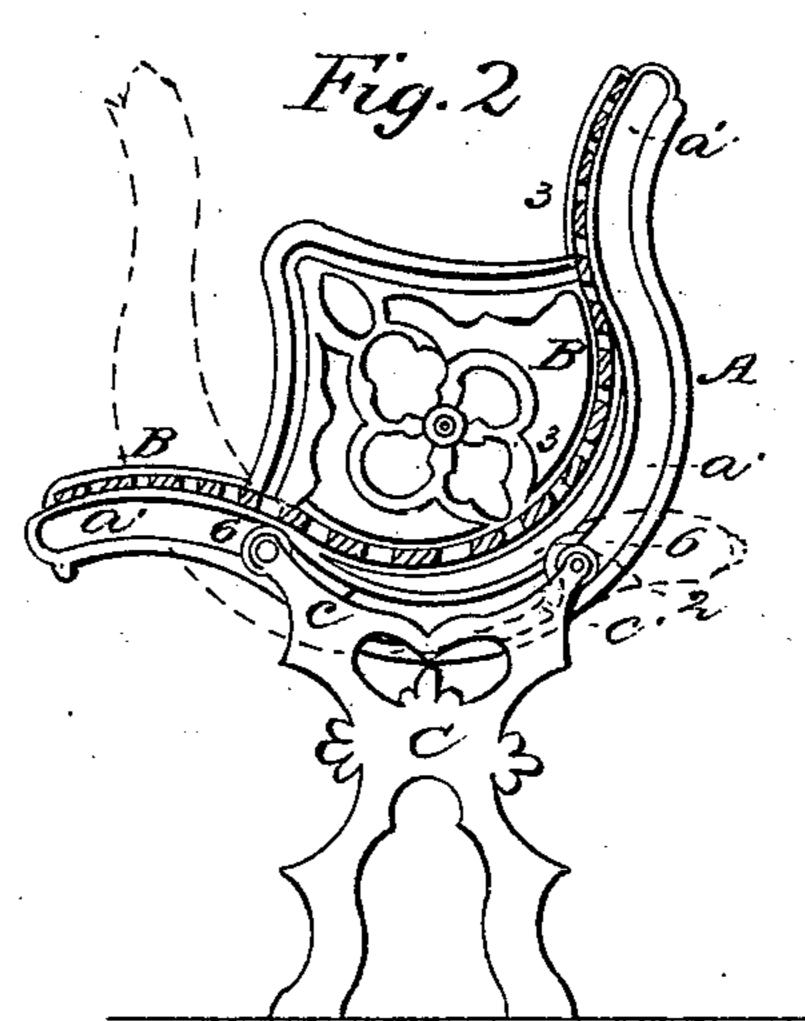
Car Seat.

No. 102,498.

Patented May 3, 1870.







Witnesses: Bery mondon Um H. Morrison

Inventor Hos. J. alose.

# Anited States Patent Office.

# THOMAS J. CLOSE, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 102,498, dated May 3, 1870.

## IN REVERSIBLE SEATS FOR RAILWAY-CARS.

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

I, THOMAS J. CLOSE, of the city of Philadelphia, in the State of Pennsylvania, have invented certain Improvements in Reversible Seats for Railroad-Cars, Schools, &c., of which the following is a specification.

#### Nature and Objects of the Invention.

My invention relates to that class of reversible seats for railroad-cars in which the seat proper and the back thereof are combined, and move together in such a manner that the seat becomes the back and the back the seat, in accordance with whichever direction the same may be reversed on its support;

and My invention consists in the combination of certain curved end pieces of the seat and back, which have a correspondingly-curved groove in the inner side of each, and a recess or notch in the middle of the length of the upper boundary of the said groove, with a friction-roller on the outer side of each end of two branches of the stationary standard or support under each end of the said reversible seat and back, the objects of my invention being to afford facility in reversing, and stability afterward; to conceal the grooves and friction-rollers, and prevent them from eatching in the apparel of persons in passing; and to afford more space between any two seats when reversed to face each other, and thus admitting a larger number of the said seats to be placed in the same length of car, without diminishing the usual space for knee-room when the seats are arranged to face in the same direction.

### Description of the Accompanying Drawings.

Figure 1 is a perspective view of a reversible seat embodying my invention.

Figure 2 is a vertical transverse section, showing

the inner side of same. Figure 3 is a longitudinal section of the draw-bolt and nut, as applied to one of the end pieces and rails.

#### General Description.

The curved groove a' a', on the inner side of the end pieces A A, is of the same width and depth throughout its length, and reaches from one end to the other along the lower edge of the respective end plates.

The recess 2 is made in the upper boundary of the groove, and exactly in the middle of its length, (see

fig. 2.) Along near the upper edge of each of the end pieces there is a narrow groove, 3, for the reception of the ends of the wooden slats B B, which are inserted therein at suitable distances apart, and the ends and slats secured firmly together by means of a draw-bolt, 4, and nut 5, (see fig. 3,) in each end of the middle and of the two side slats.

The upper part of each of the two standards C C has two branches c'c', and at the outer side of the ends of each branch a friction-roller, 6, is attached, the outer end of which projects into the groove a' of the end piece, (see fig. 1,) and rotates in the groove as the said end piece is moved in reversing the seat and back.

It will be understood, without further description, that the seat and back can be readily reversed, (see fig. 2,) as occasion may require; that it will remain firmly in either of the reversed positions, and form a pleasant seat; that the space it occupies will be substantially the same in both positions; that the grooves and friction-rollers are concealed and out of the way of persons passing; and that, by extending the branches e'e', more space will be afforded between two facing seats.

#### Claim.

In a seat provided with a combined reversible seat and back, the curved end frames A A thereof, with their respective inside grooves a' a', having the recess or notch 2 in the midlength of the upper boundary of each of said grooves, in combination with the frictionrollers 6 6, secured on the outer sides of the respective ends of the two branches c' c' of the respective standards or supports C C, the said parts being constructed and arranged to operate together substantially as and for the purposes hereinbefore set forth.

THOS. J. CLOSE.

Witnesses: BENJ. MORISON, WM. H. MORISON.