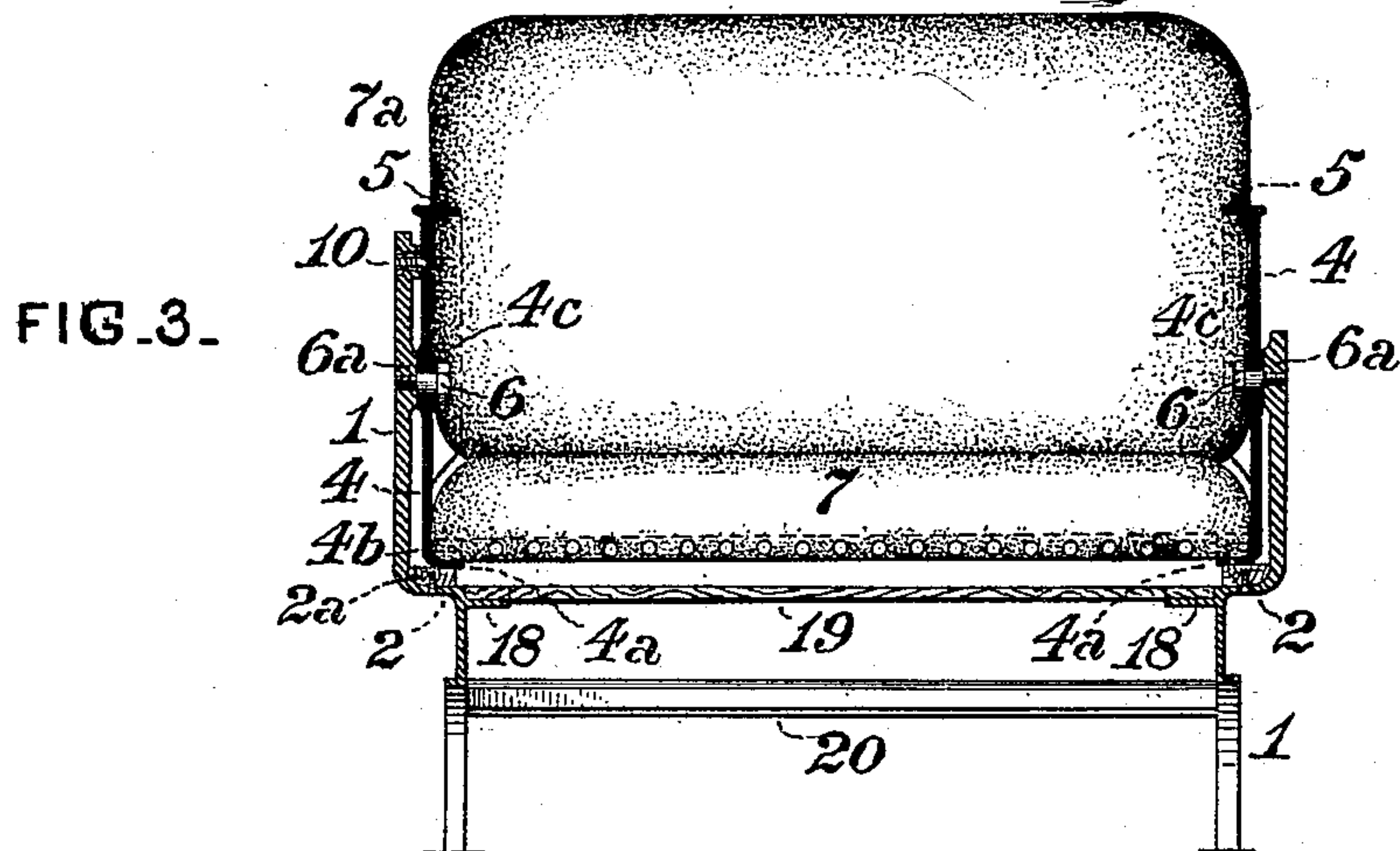
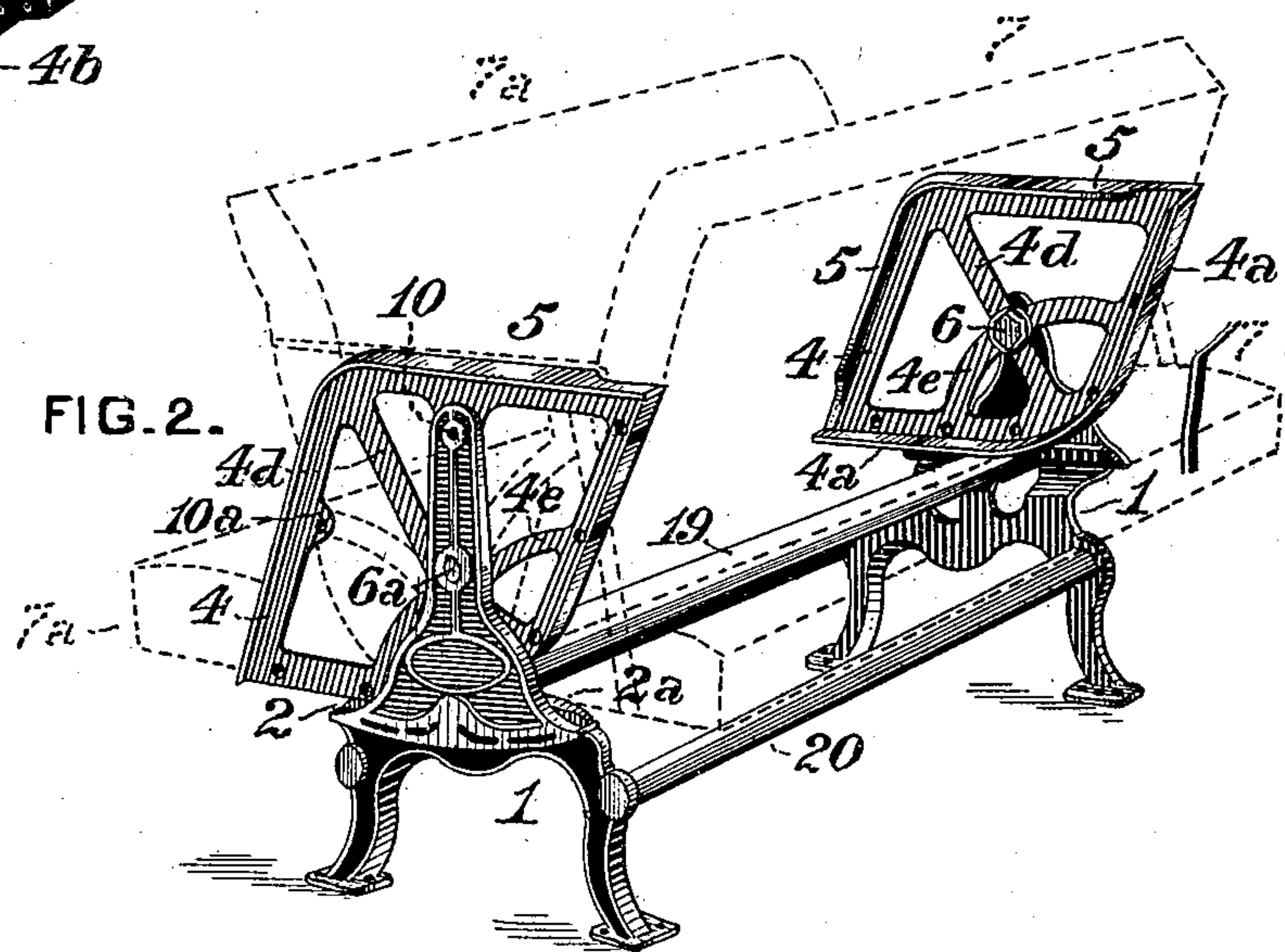
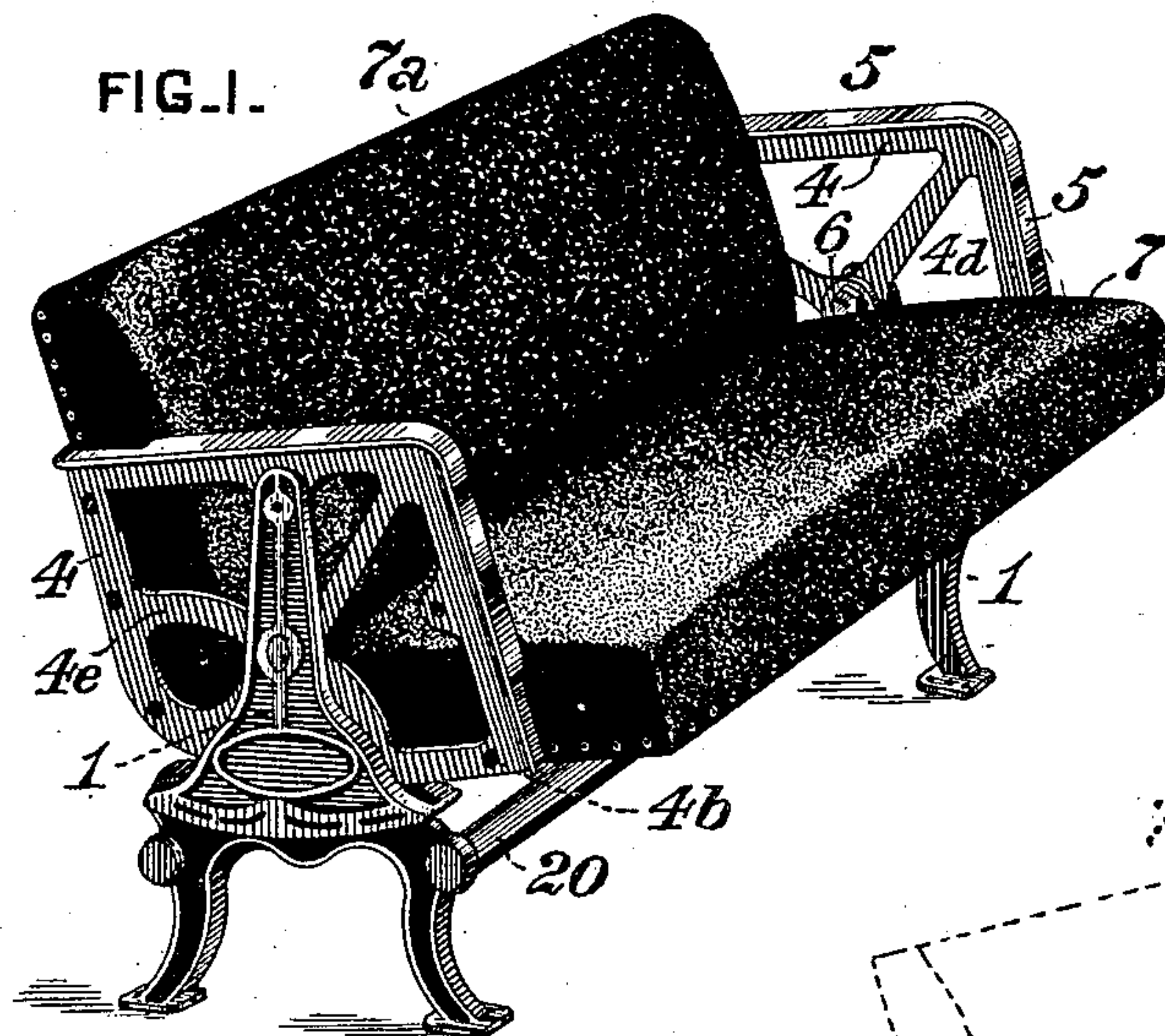


(No Model.)

G. W. CUSHING.
CAR SEAT.

No. 459,881.

Patented Sept. 22, 1891.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE W. CUSHING, OF CHICAGO, ILLINOIS.

CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 459,881, dated September 22, 1891.

Application filed March 30, 1891. Serial No. 386,949. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. CUSHING, of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Car-Seats, of which improvement the following is a specification.

My invention relates to car-seats of the general class or type in which the seat and seat-back members are maintained in fixed relation one to the other and are journaled upon and movable relatively to fixed supports in order that by their movement from one to another position the member which in the former position serves as the seat will in the latter be utilized as the seat-back, and vice versa, thereby attaining the same capability of enabling the occupants of the seat to face in either direction, as results from the reversal of the ordinary movable seat-back relatively to a fixed seat. An instance of the class or type above referred to is exemplified in Letters Patent of the United States No. 441,942, granted and issued to me under date of December 2, 1890; and the object of my present invention is to further simplify and perfect the structural features which distinguish the car-seat set forth in said Letters Patent from those of the ordinary reversible-back type.

To this end my invention consists in certain novel devices and combinations hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a view in perspective of a car-seat embodying my invention; Fig. 2, a similar view with the seats removed and the seat-arm and support-frames turned in opposite directions; and Fig. 3, a vertical longitudinal section taken through the axes of the seat-pivots.

In the practice of my invention I provide a pair of vertical stands or end supports 1, which, as in Patent No. 441,942, are adapted to be secured to a car-floor at a proper distance apart to support between them a seat of the ordinary length. The supports 1 are extended horizontally and outwardly at a level about corresponding with that desired for the bottom of the seat to form shelves or seat-rests 2, above and exterior to which each of the supports is prolonged vertically and centrally and provided with an eye or socket 6^a to receive a pivot-bolt 6, on which bolts the frames supporting the seats are journaled, as

presently to be described. The outer end support, or that which in operation adjoins the aisle or longitudinal passage in the car between the seats, is further upwardly prolonged and provided adjacent to its top with a seat-lock 10, of any suitable and preferred construction. A recessed or channeled lug 18 is formed centrally upon and projects inwardly from each of the supports 1 adjacent to the rest 2, said lugs receiving and being secured to the ends of a bar 19, which connects the two supports 1 centrally. Said supports are also connected by lateral foot-rest bars 20, located at a lower level.

Two seats 7 7^a of similar form and size, which are in this instance shown as cushions, but which may, if preferred, be provided with cane or perforated bottoms, are arranged with their edges adjoining and substantially at right angles one to the other, so that, as indicated in dotted lines in Fig. 2, each of them may serve alternately as a seat or a seat-back, accordingly as it may occupy a horizontal or a vertical position, respectively, the change of position by which such alternation of function is attained being rendered admissible by the connection of the seats and their pivotal suspension on the bolts 6, fixed to the end supports 1. The seats 7 are secured at their ends to a pair of seat arm and support frames 4, in which are formed the bearings of the pivot-bolts 6, and which form both the supporting members and the end arms of both seats.

Each of the seat arm and support frames 4 is of substantially quadrangular form, and is provided on two adjoining sides with inwardly-turned arm-rest flanges 5, and on the other two sides with inwardly-turned seat-flanges 4^a, which support the ends of the frames of the cushions or other seats 7, the cushion-frames being secured to the arms of the frames 4 adjoining the flanges 4^a by screws 4^b. In order to facilitate the reversal of the seats by reducing the amount of overhanging and unbalanced weight to be moved, as well as to enable the several seats in a car to be placed at a greater distance apart than heretofore without reducing the number admissible in a car of determined length, the pivot-bolt eyes or bearings 4^c are located within the seat arm and support frames in lieu of

being placed at the junction of two of their arms, as in my prior patent, each of said bearings 4^c being formed at the intersection of a diagonal brace 4^d, extending from the junction of the arms carrying the arm-rest flanges 5 to the opposite angle of the frame, with a segmental brace 4^e, connecting the arms which carry the seat-flanges 4^a. The portions of said arms between the ends of said segmental brace are curved concentrically with the pivot-bolt bearings to admit of the free movement of the frames 4 and connected seats on the pivot-bolts 6. The arms which carry the arm-rest flanges 5 of the frame 4 nearest the aisle of the car are provided with locking-lugs 10^a, one or the other of which is adapted to receive the bolt of the lock 10, so as to lock the seats in either position into which the seats may be turned. The seat 7, which in either position of the frames 4 serves as the seat proper, is supported exteriorly to the pivot-bolts on the seat-rests 2 or on blocks or facings 2^a, fixed thereto, the pivot-bolts being thereby relieved from the weight of the seat and its occupants and serving only as journals about which the seat is swung in its reversals of position.

My improvement attains the substantial advantages of presenting a simpler and less expensive seat than those of the prior constructions, and one which is also more easily and conveniently reversed and occupies less longitudinal space in a car. The support of the seats on the seat arm and support frames by the lateral flanges thereof relieves the strain on the fastening-screws and correspondingly obviates liability to breakage, and the construction and relation of the pivot-bear-

ings and seat arm and support frames is such as to afford ample strength with a lightness and neatness of structure adapted to appropriately conform with the present practice in passenger-car furnishings and fittings.

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

1. In a reversible seat, the combination of two end supports, one of which is provided with a lock fixed in a vertical extension, two quadrangular seat arm and support frames, each provided with a pivot-bearing on a brace within and on the bisecting line of one of its angles and one provided with locking-lugs on two adjoining sides adapted to receive the bolt of the lock, two seats secured at their ends to the sides of the frames opposite the positions of the locking-bolts, and pivot-bolts fitting in the pivot-bearings of the frames and in the end supports, substantially as set forth.

2. A seat arm and support frame for reversible seats having four side members connected in substantially quadrangular form, arm-rest flanges projecting laterally from two adjoining side members, a pivot-bearing formed on a brace connecting two side members, and seat-supporting flanges projecting laterally from the side members opposite those on which the arm-rest flanges are formed, the seat-supporting flanges and the side member on which they are formed being curved at their intersection concentrically with the pivot-bearing, substantially as set forth.

GEORGE W. CUSHING.

Witnesses:

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C. R. DART.