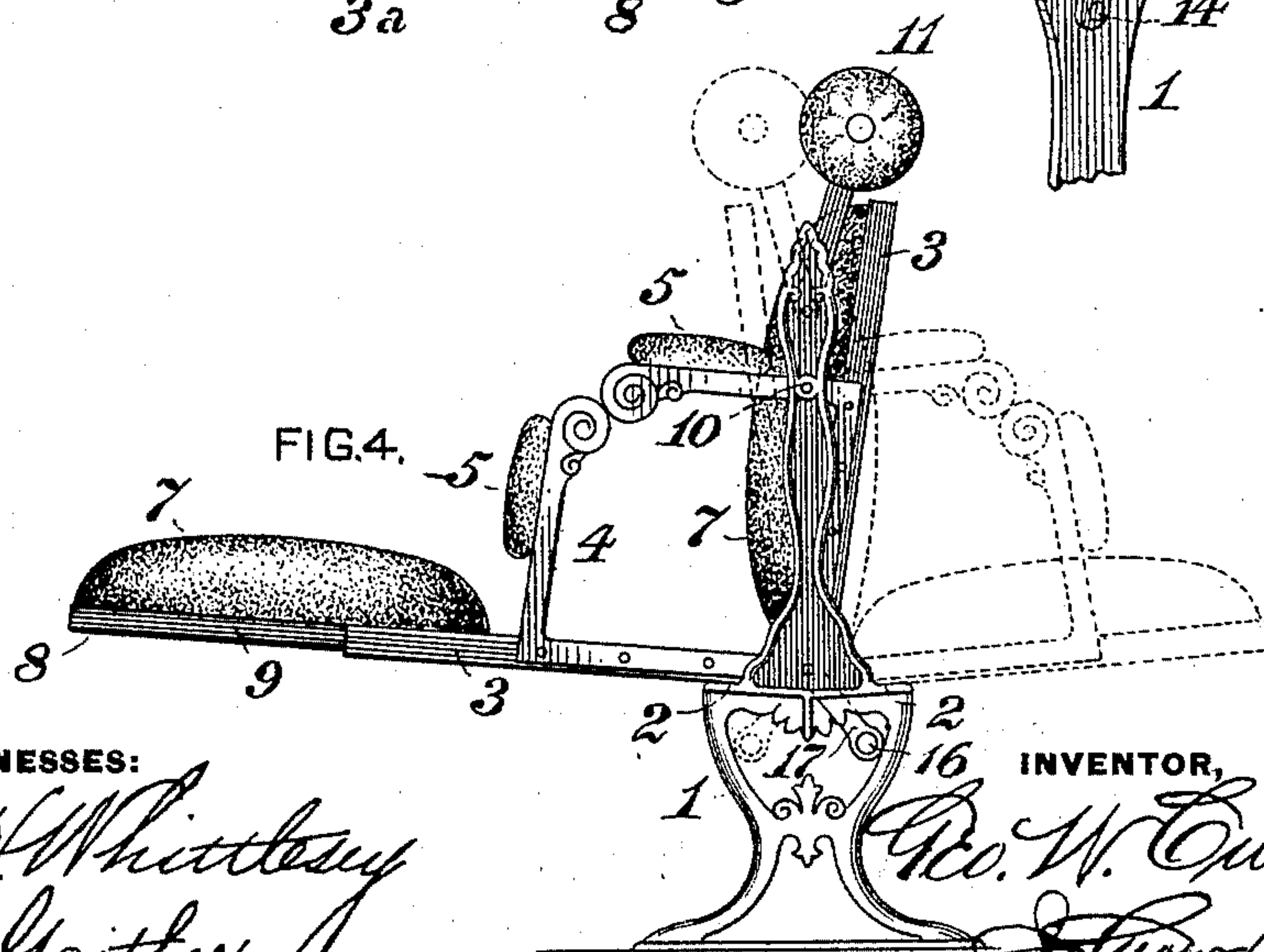
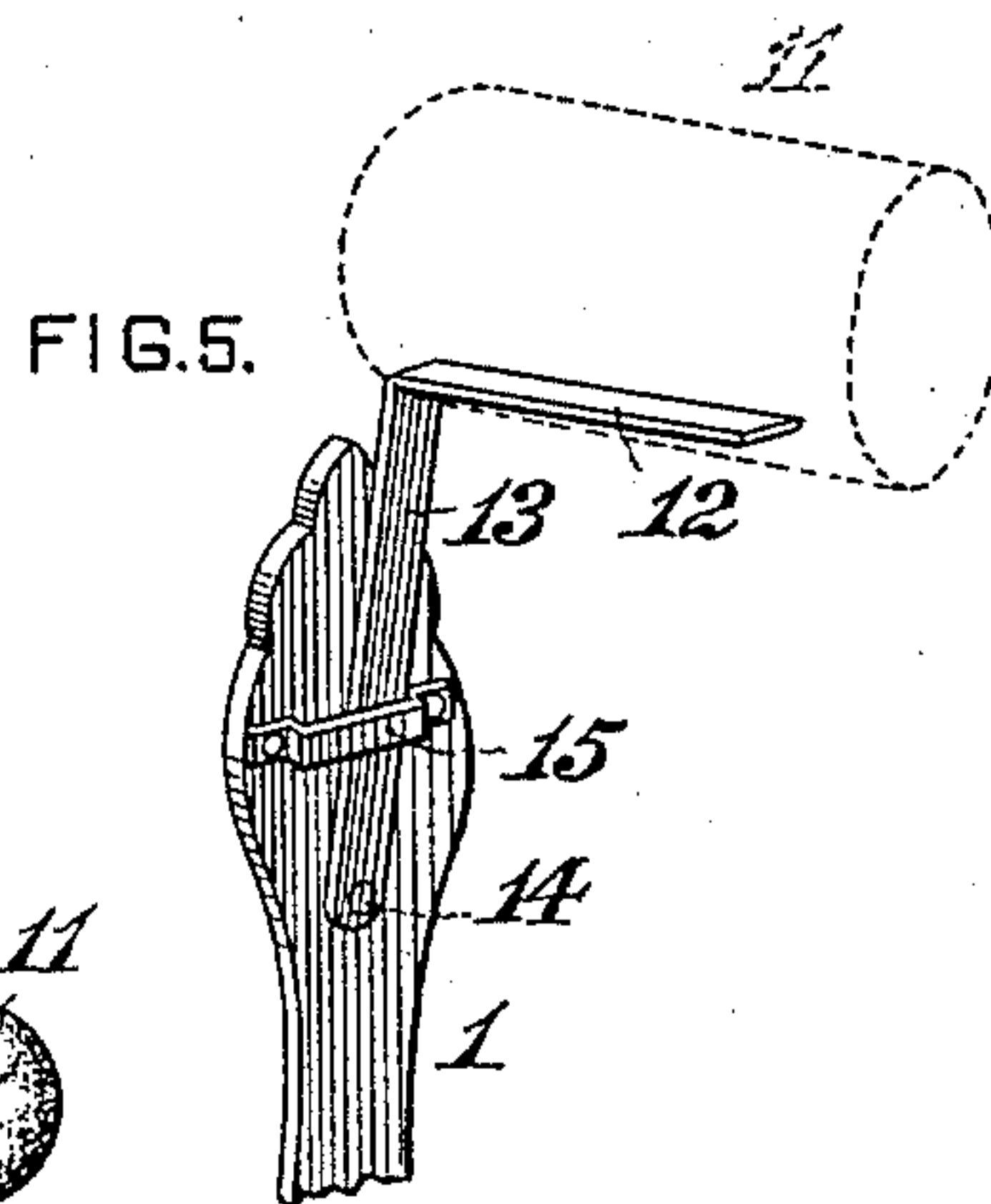
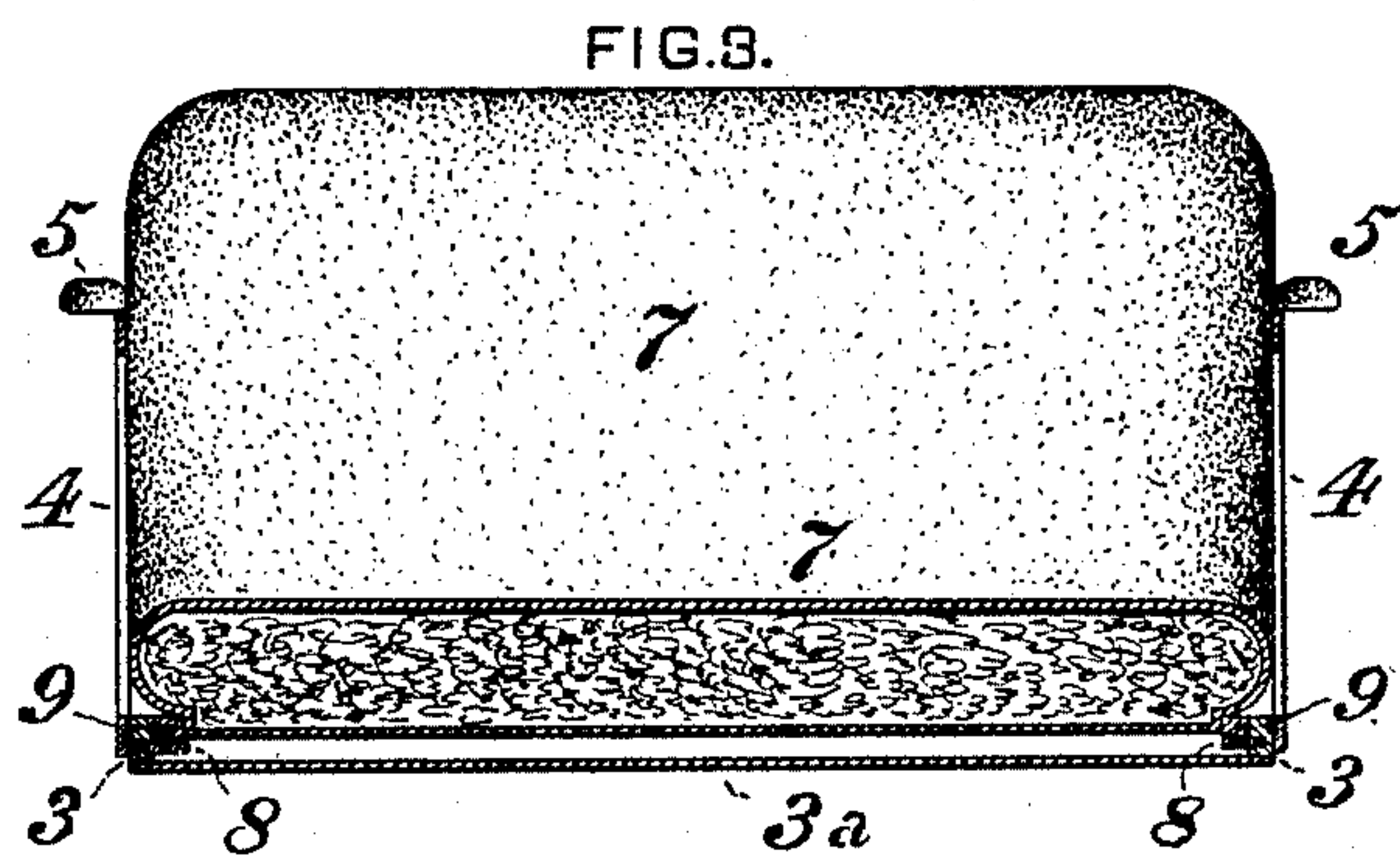
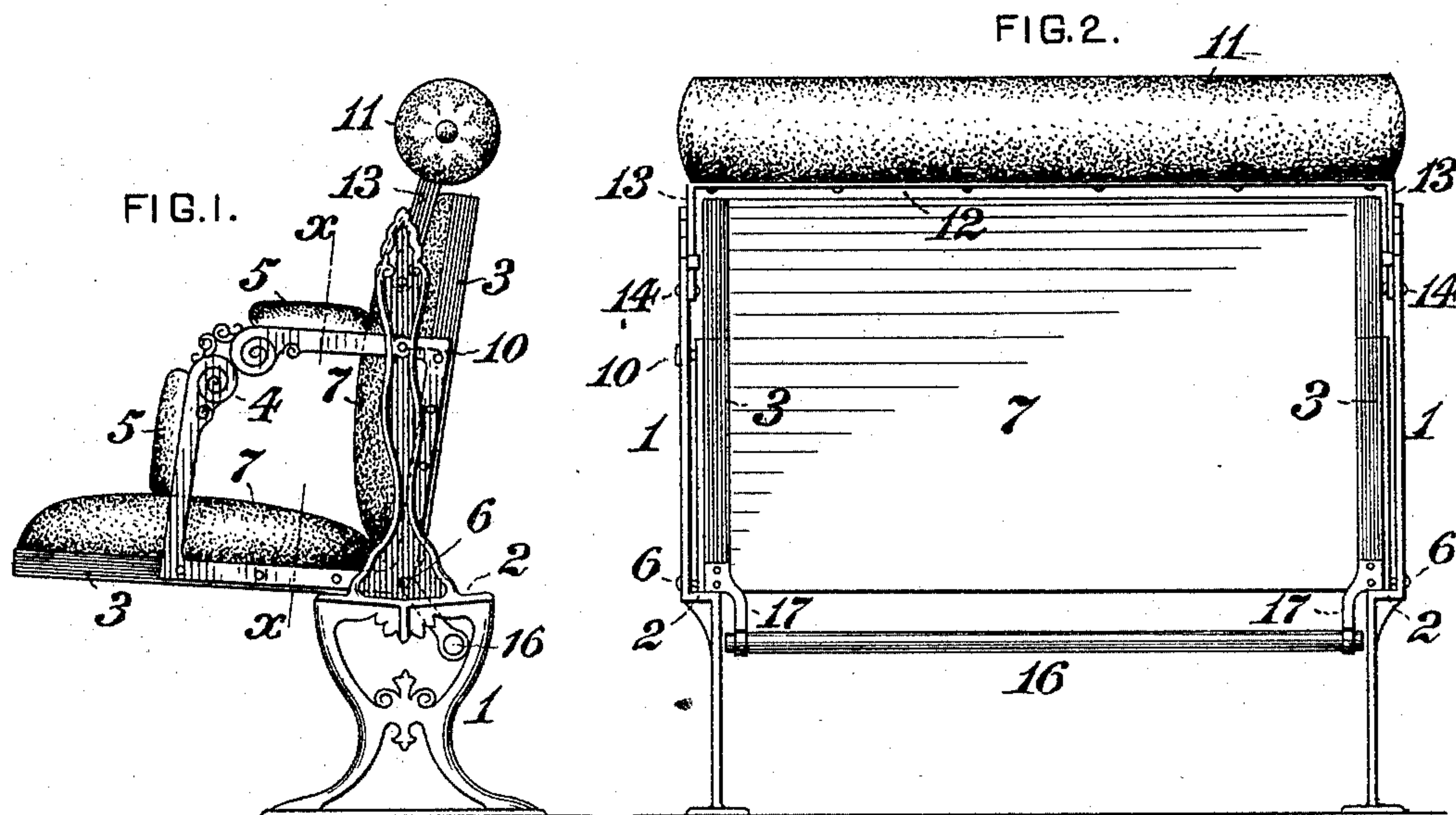


(No Model.)

G. W. CUSHING.  
CAR SEAT.

No. 441,942.

Patented Dec 2, 1890.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

GEORGE W. CUSHING, OF CHICAGO, ILLINOIS.

## CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 441,942, dated December 2, 1890.

Application filed July 12, 1890. Serial No. 358,478. (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.

The object of my invention is to provide a car-seat which shall embody all the substantial advantages of those of the ordinary reversible type, with a material economization of cost and simplification of structure relatively thereto.

To this end my invention, generally stated, consists in the combination of end supports, seat-frames pivoted thereto, two seats fitted in said frames at an angle one to the other, and a lock for retaining the frame and seats in position; also, in the combination of end supports, a movable seat, a head-rest pivoted to the supports, and stops for retaining the head-rest in desired position.

The improvement claimed is hereinafter fully set forth.

In the accompanying drawings, Figure 1 is an end view of a car-seat embodying my invention; Fig. 2, a rear view of the same; Fig. 3, a transverse section through the seat-frame at the line  $x x$  of Fig. 1; Fig. 4, an end view of the seat, illustrating one seat-cushion as partly withdrawn and showing in dotted lines the seat in reversed position; and Fig. 5, a view in perspective, illustrating the connection of the head-rest and end supports.

In the practice of my invention I provide a pair of vertical stands or end supports 1, which are secured to the car-floor at a proper distance apart to support between them a seat of the ordinary length, and which may be designated as "seat ends," being equivalent in function to the appliances so known in present practice. A shelf or rest 2, which may be either horizontal, or preferably, as shown, inclined slightly upwardly on each side of the central plane of the seat ends, is formed on the inner side of each seat end, for a purpose presently to be described.

A light metallic seat-frame, which consists, essentially, of two arms 3, connected in L or angular form, is journaled at the junction of its arms 3 by a pin or bolt 6 to each of the seat ends 2, said seat-arms being provided for the purpose of supporting two seats 77, which

are fitted in the frames substantially at right angles one to the other, so that, as indicated in Fig. 4, each of them may serve either as a seat or as a seat-back, accordingly as the seat-frames are swung upon their pivots to one or the other side of the central plane of the seat ends. A seat-arm frame 4, having arm-rests 5 on two of its sides, is secured to the outside of each of the seat-frames 3, and the two seat-frames may be connected by transverse bars or plates 3<sup>a</sup>, if desired. The seat-frame pivots, which are provided both for holding the seats in position and for admitting of their reversal, may either be separate short bolts, as shown, or be formed on a transverse bolt extending from one seat end to the other and connected thereto by collars and nuts, so as to serve as transverse braces for holding the seat ends firmly in position. The seat, which in either position of the frames 3 serves as the seat proper, is supported exteriorly to the pivots on the rests 2, which may be supplemented, if desired, by rests fixed to the sides of the car, and the seats are preferably made removable from the frames to facilitate cleaning or repair when required. For this purpose a horizontal tongue 8 is fixed upon each of the cushion-frames 9 of the seats, said tongues sliding freely in corresponding grooves in the seat-frame arms 3, so that the seat may be drawn out therefrom and replaced when required, as indicated in Fig. 4. The seat-frames and seats are fixed in either position into which they may be turned by any suitable locking device adapted to connect the seat-frames and seat ends, an ordinary car-seat lock 10 being indicated in this instance and being conveniently applicable. It will be obvious that the seats may be permanently connected to the seat-frames, if desired, and that they may be of cane or perforated veneer, as in cars for suburban traffic, in lieu of being cushioned, as shown.

In order to afford a suitable support for the heads of the occupants of the seat, I provide a head-rest 11, which is connected adjustably to the seat ends 1, so as to be moved to either side of the central plane of the seat ends, in proper correspondence with the position of the seat on either side thereof. The head-rest 11 is secured upon a transverse bar 12, having a downwardly-extending arm 13 at



each of its ends, said arms being journaled by pivots 14 to the upper portions of the seat ends on their inner sides. The arms 13 vibrate in guides 15, secured to the seat ends, said guides having end stops or shoulders against which the arms abut at either extremity of their traverse, maintaining the head-rest in the desired relation to the seat.

A foot-rest bar 16 is connected to the lower ends of arms 17, which are secured to the seat-frames 3 at or near the junction of their arms and project downwardly therefrom in a plane bisecting their angles, said foot-rest bar being moved into proper position for use by the occupants of the next seat in and by each reversal of the seat.

My improvement provides a simple and inexpensive seat, which affords the same facilities of reversal as those of the standard type, and which, by reason of providing a slightly wider seating area, will be found more conducive to the comfort of passengers, particularly on long runs, by giving a better support to the legs of the occupants. A comfortable support for the head is further provided by the adjustable head-rest, which is conveniently applicable in connection with a seat of this construction without material addition to its cost.

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

1. In a reversible seat, the combination of end supports, an angular seat-frame pivoted to each support, said seat-frames having each an angular or double arm at each of its ends, cushion-frames, two seats supported by said cushion-frames, and a foot-rest fixed to the seat-frames at or near the junction of their arms and depending therefrom about midway of their angles, substantially as set forth.

2. In a reversible seat, the combination of

end supports, an angular seat-frame pivoted to each support, said seat-frames having each an angular or double arm at each of its ends, cushion-frames adapted to slide upon the seat-frames, two seats supported by said cushion-frames, and a foot-rest fixed to the seat-frames at or near the junction of their arms and depending therefrom about midway of their angles, substantially as set forth.

3. In a reversible seat, the combination of end supports, an angular seat-frame pivoted to each support, said seat-frames having each an angular or double arm at each of its ends, cushion-frames, two seats supported by said cushion-frames, head-rest frames pivoted to the end supports above the seat-frame pivots, a head-rest fixed to said arms above the arc of traverse of the outer ends of the seats on their pivots, and stops for maintaining the head-rest arms in inclined positions on either side of the central plane of the end supports, substantially as set forth.

4. In a reversible seat, the combination of end supports, an angular seat-frame pivoted to each support, said seat-frames having each an angular or double arm at each of its ends, cushion-frames adapted to slide upon the seat-frames, two seats supported by said cushion-frames, head-rest frames pivoted to the end supports above the seat-frame pivots, a head-rest fixed to said arms above the arc of traverse of the outer ends of the seats on their pivots, and stops for maintaining the head-rest arms in inclined positions on either side of the central plane of the end supports, substantially as set forth.

GEORGE W. CUSHING.

Witnesses:

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