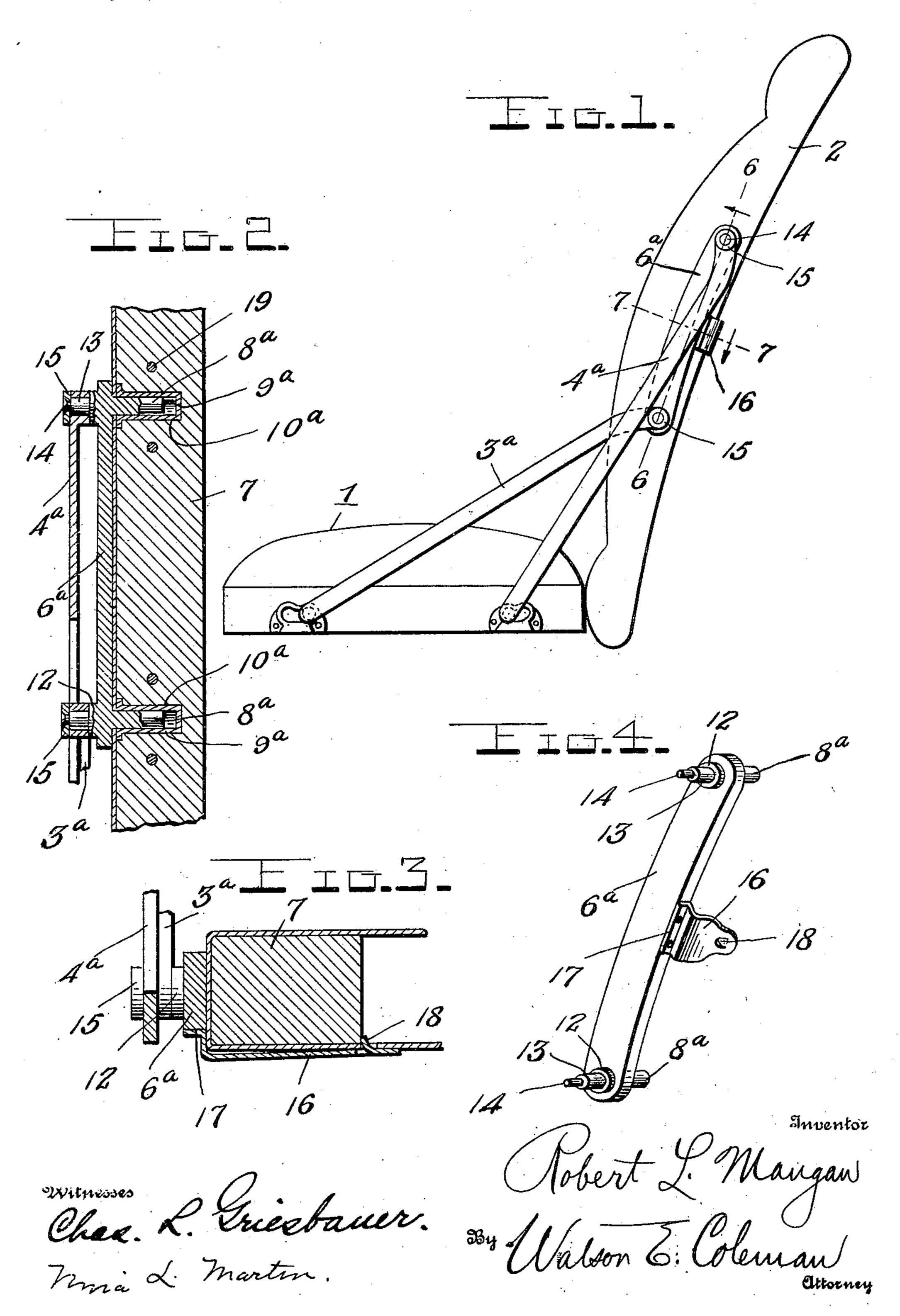
## R. L. MANGAN.

ADJUSTABLE SEAT BACK SUPPORT FOR REVERSIBLE CAR SEAT BACKS.

APPLICATION FILED NOV. 19, 1908.

922,303.

Patented May 18, 1909.



## UNITED STATES PATENT OFFICE.

ROBERT L. MANGAN, OF SPRINGFIELD, MISSOURI.

## ADJUSTABLE SEAT-BACK SUPPORT FOR REVERSIBLE CAR-SEAT BACKS.

No. 922,303.

Specification of Letters Patent.

Patented May 18, 1909.

Application filed November 19, 1908. Serial No. 463,434.

To all whom it may concern:

Be it known that I, Robert L. Mangan, a citizen of the United States, residing at Springfield, in the county of Greene and 5 State of Missouri, have invented certain new and useful Improvements in Adjustable Seat-Back Supports for Reversible Car-Seat Backs, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in reversible backs for car seats and more particularly to the one set forth in Patent No. 829,078 granted to me August 21, 1906.

The object of the present invention is to improve and simplify the means for attaching the seat back to its supporting arms and thereby render devices of this character less expensive and more durable and efficient.

With the above and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a car seat and its reversible back showing the invention applied thereto; Fig. 2 is a detail section taken on the plane indicated by the line 6—6 in Fig. 1; Fig. 3 is a detail section taken on the plane indicated by the line 7—7 in Fig. 1; and Fig. 4 is a detail perspective view of the arm attaching plate shown in Fig. 1 and showing a snap spring attached thereto.

seat back, 3° and 4° the supporting arms pivoted at their lower ends upon the ends of the seat adjacent its corners and having their upper ends pivoted to my improved attaching plate 6°. This plate is formed upon its inner face adjacent its ends with integral studs or pins 8° which enter flanged metal sleeves 9° formed in sockets or openings 10° in the end rail 7 of the seat back 2. Formed upon the outer faces of the arm attaching plate 6°, at the ends of the latter, are circular bosses 12 from which project reduced pivot studs 13 and from which latter in turn

project reduced stems 14. The pivots 13 are

50 adapted to project through openings in the

ends of the back supporting arms 3<sup>a</sup>, 4<sup>a</sup>, and the latter are retained on said pivots by washers 15 arranged upon the reduced extremities or stems 14 of said pivots and in turn retained upon said stems by upsetting 55 the latter, as clearly shown in Fig. 2 of the drawings. The bosses 12 on the outer face of the plate 6<sup>a</sup> are provided for the purpose of serving as stop shoulders for the engagement of the back supporting arms, as shown 60 in Fig. 1, and they are preferably formed concentric with the retaining pins or studs 8<sup>a</sup> upon the inner face of said plate.

For the purpose of effectively retaining the arm attaching plate 6° upon the end rail 65 7 of the seat back and also permitting it to be readily disconnected and removed, a snap spring 16 is preferably provided. This spring is in the form of an angular plate of resilient metal secured upon its broad end, as 70 shown at 17, to one edge of the plate 6<sup>a</sup> and adapted to extend around one edge of the rail 7 and to have a lip or projection 18 stamped from its small end, engage the inner side face of the rail 7 and thereby retain the 75 plate 6a upon the outer face of said rail and the pins 8<sup>a</sup> in the sockets or openings in said rail. When the small end of the snap spring 16 is sprung to disengage its lip 18 from the rail 7, the plate 6° may be removed from said 80° rail, as will be readily understood upon reference to Fig. 3 of the drawings.

The rail 7 of the seat back is preferably constructed of wood and in order to strengthen it and prevent it from splitting at points 85 where the sockets or openings 10, 10° are formed, bolts 19 are passed through said rail on opposite sides of the socket, as clearly shown in the drawings.

From the foregoing it will be seen that the 90 provision of the sockets or seats in the end rail of the seat back and the provision of pins or studs on the arm attaching plate, for the purpose of engaging said sockets or seats, insures an effective connection between the 95 plate and rail and one which will be simple and inexpensive.

Having thus described the invention what is claimed is:

In a device of the character described, the 100

combination with a car seat and a back having an end rail formed with sockets or openings, back supporting arms, an arm attaching plate to which said arms are pivoted, 5 said plate being formed with pins to enter said sockets in the end rail of the back, and an angular spring secured to the central portion of said plate to extend around said rail

and formed at its free end with a lip to take over one edge of said rail.

In testimony whereof I hereunto affix my signature in the presence of two witnesses. ROBERT L. MANGAN.

Witnesses:

JEROME O'HARA, Lucian O'Hara.