No. 849,604. PATENTED APR. 9, 1907.

B. F. FORTINER.

SUPPORT FOR SEAT BACKS.

APPLICATION FILED SEPT. 6, 1906.

Fig. 1,

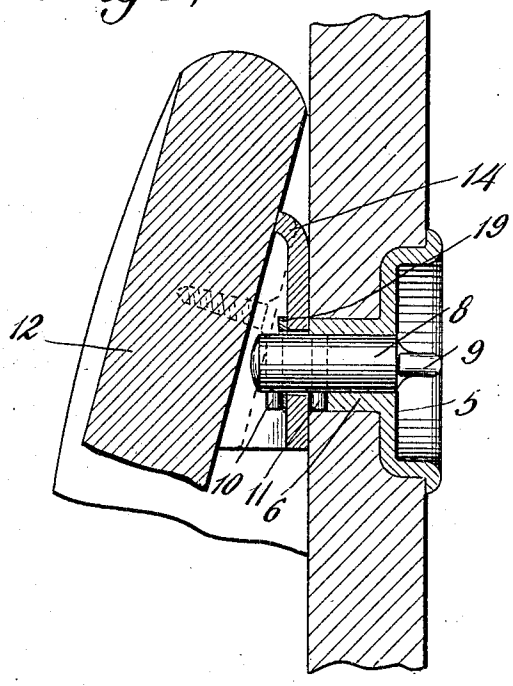


Fig. 2,

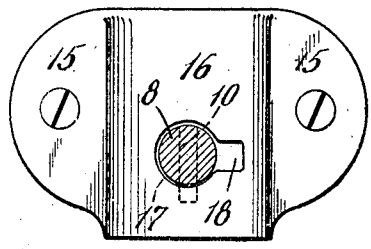
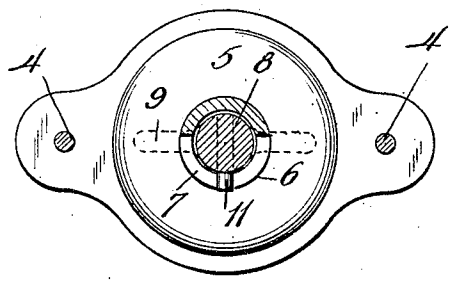
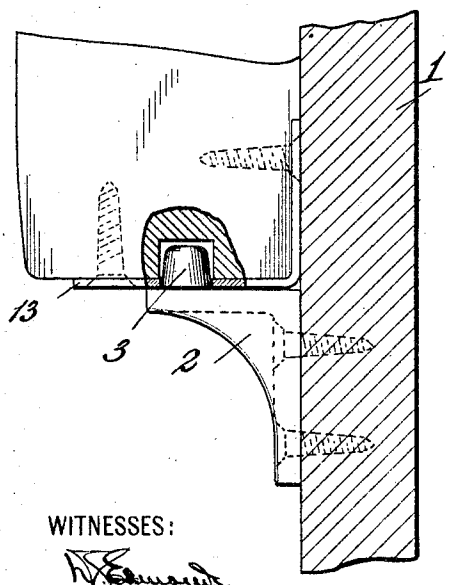


Fig. 3,





WITNESSES:

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SUPPORT FOR SEAT-BACKS.

No. 846,604. Specification of Letters Patent. Patented April 9, 1907.

Application filed September 6, 1906. Serial No. 333,448.

To all whom it may concern:

Be it known that I, BENJAMIN F. FORTINER, a citizen of the United States, residing at Camden, in the county of Camden, State of New Jersey, have invented certain new and useful Improvements in Supports for Seat-Backs, of which the following is a specification.

This invention relates to detachable supports for the backs of seats, and more particularly for such seats as are employed in cars having backs which are stationary as distinguished from those which may be turned to reverse the facing direction of the seat.

The object of the invention is to provide means for supporting a seat-back which shall possess ample strength, which shall hold the back firmly in position, and which shall permit of readily detaching the back for the purpose of cleaning, inspecting, or repairing.

The features of my invention are especially applicable to car-seating for closed or semi-convertible cars having the seats arranged longitudinally of the car along the side walls. With such car-seating it often becomes desirable to remove the seat-back, and in accordance of my invention the back is so supported that this can readily be done. At its lower edge the back rests upon small brackets secured to the side wall of the car and having studs thereon, adapted to enter openings in metallic plates secured on the lower edge of the back and from which brackets the back can be readily lifted. At its upper edge the back has plates secured thereto, with which coact locking devices operated from the other side of the wall of the car to hold the upper edge of the back firmly to the wall. In such cars openings are provided in the side walls below the openings therethrough for the windows, into which the windows and blinds may be lowered when desired, and these openings are of such width that the hand may be inserted a short distance therein. The movable locking members for holding the upper edge of the seat-back to the wall of the car may be located in the side wall a short distance below the upper edge of these openings, so that the operator can easily reach and operate them when it is desired to remove the back.

The preferred embodiment of my invention is illustrated in the accompanying drawings, in which—

Figure 1 is a sectional elevation of a seat-back secured to the wall of a car by my improved supporting means. Fig. 2 is an elevation of the plate which receives the end of the locking member; and Fig. 3 is an elevation, partly in section, of the holder for the locking member, the latter being shown in section in both Figs. 2 and 3.

Referring to these drawings, 1 indicates a support for the seat-back, which may be the side wall of a car. Secured thereto by screws or other suitable means is a bracket 2, having an upright stud 3 upon the outwardly-extending portion thereof. At a considerable distance above the bracket an opening is provided in the wall, in which a holder 5 is secured by screws 4. This holder has a circular depression at one end and an integral tubular portion 6 extending therefrom. The end of this tubular portion is cut away on one side, as indicated at 7, Fig. 3. The holder 5 has a central cylindrical opening therethrough to receive a locking member 8. This locking member is of cylindrical form and has wings 9 at one end thereof. Near its other end the locking member has two studs 10 and 11 on the side thereof, spaced apart for a short distance.

The seat-back is indicated at 12 and may be of any usual or suitable construction. Secured thereto at its lower edge is a metallic strip or plate 13, bent to a right angle and secured to the back and lower edge of the seat-back by screws or other suitable means. In the plate 13 is an opening to receive the stud 3 of bracket 2, and the frame of the seat-back may be cut away under this opening, as shown in Fig. 1. A plate 14 (shown in elevation in Fig. 2) is secured to back 12 near the upper edge thereof. This plate has wings 15 at its sides to facilitate securing it to the seat-back by screws or other suitable means, and these wings lie in a plane at an angle to that of the body portion 16 of the plate, so that when the plate is secured to the seat-back the body portion 16 will lie in a vertical plane— that is, flat against the support 1. In the body portion 16 of plate 14 is a circular opening 17, cut away on one side, as indicated at 18, Fig. 2.

Two sets of plates 13 and 14 are secured to the seat-back, one set near either end thereof, and two brackets 2 and holders 5 are secured to the support in position to coact with these plates. To mount the back in position, it is lowered down upon the brackets 2 until the studs 3 on the latter enter the openings in the plates 13, and the latter rest upon the upper surfaces of the brackets. The locking members 8 are turned in the openings in the holders 5 to positions ninety degrees displaced from the position illustrated in the drawings, and the upper edge of the seat-back is then moved against the support 1. As this is done the ends of the locking members 8 pass through the openings 17 in plates 14, the studs 10 thereon passing through the cut-away portions 18. The locking members 8 are then rotated to carry the studs 10 away from the openings 18, and when so rotated the studs 10 will coact with the inner faces of the body portions 16 of plates 14 to hold the upper edge of the seat-back firmly against the wall and hold the entire seat-back against being raised off of the stud 3. As each locking member is rotated the stud 11 moves around in the space provided by the cut-away portion 7 of the tubular extension 6, and this stud and the wings 9 preclude longitudinal movement of the locking member in the opening through the extension 6 of holder 5—that is, the wings 9, being of greater length than the diameter of the opening in extension 6, preclude movement of member 8 to the left in Fig. 1, and stud 11, engaging the wall of the cut-away portion 7, prevents movement of member 8 to the right in Fig. 1. If desired, the parts may be so proportioned that the stud 10 lies close against the inner surface of the body portion 16 of plate 14, or a cam-surface may be provided, as indicated at 19, up which the stud will ride in order to hold the upper edge of the seat-back to the wall so tightly as to prevent any movement of the back whatsoever. As above stated, the support 1 may be the side wall of a car, in which case the holder 5 may be positioned in the wall a short distance below the sill of a window. The locking member 8 may then be readily operated by the wings 9 by reaching down a short distance into the opening provided in the wall of the car to receive the window and blinds.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In car-seating, the combination of a support, a seat-back, a plate having oppositely-disposed faces one inclined relatively to the other secured to the back with one of said faces lying against the back, the other face of said plate having an opening therein and a cut-away portion at one side of said opening, a locking member rotatable in an opening in said support its end being adapted to extend through the opening in said plate, and a stud on said member adapted to be carried by the rotation thereof toward and away from said cut-away portion, substantially as described.

2. In car-seating, the combination of a support, a seat-back, a plate having oppositely-disposed faces one inclined relatively to the other secured to the back with one of said faces lying against the back, the other face of said plate having an opening therein and a cut-away portion at one side of said opening, a holder having an opening therethrough mounted on said support, a locking member rotatable in the opening in said holder, its end being adapted to extend through the opening in said plate, and a stud on said member adapted to be carried by the rotation thereof toward and away from said cut-away portion, substantially as described.

3. In car-seating, the combination of a support, a seat-back, a bracket secured to said support and on which the seat-back rests, a plate having oppositely-disposed faces one inclined relatively to the other secured to the back with one of said faces lying against the back, the other face having an opening therein and a cut-away portion at one side of said opening, a locking member rotatable in an opening in said support its end being adapted to extend through the opening in said plate and a stud on said member adapted to pass through said cut-away portion and to be carried by the rotation of said member toward and away from the same, substantially as described.

4. In car-seating, the combination of a support, a seat-back, a locking member mounted for rotation in said support, an operating-handle on one end of said member, two studs on the side of said member at the other end thereof, one nearer said end than the other and a plate secured to said seat-back with which one of said studs coacts, substantially as described.

This specification signed and witnessed this 1st day of September, 1906.

BENJAMIN F. FORTINER.

Witnesses:
M. GETZ,
R. M. FRIES.