

J. R. GRAVES.

SEAT.

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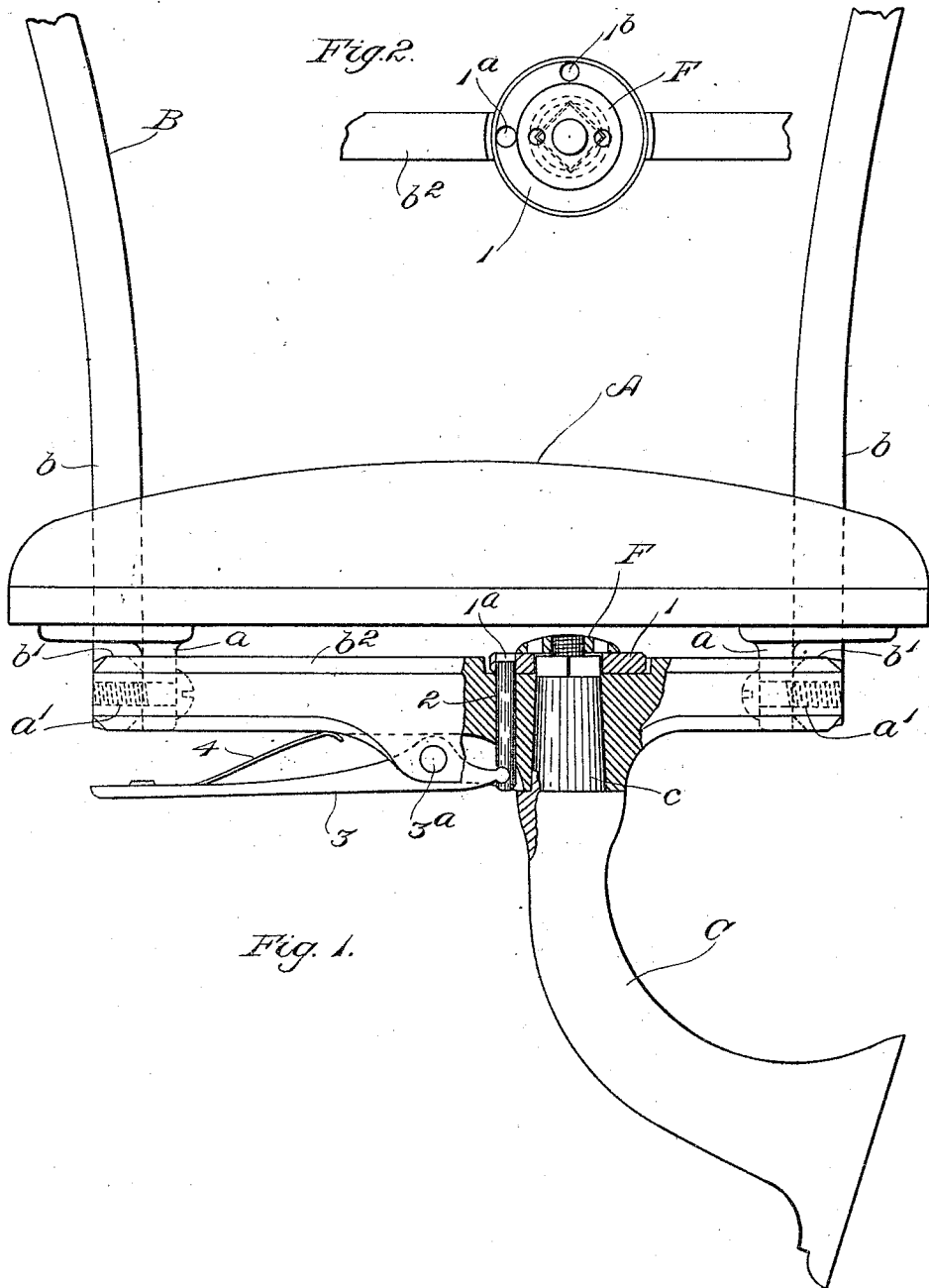


Fig. 1.

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To all whom it may concern:

Be it known that I, JAMES R. GRAVES, a citizen of the United States, residing at Amesbury, in the county of Essex, State of Massachusetts, have invented a certain new and useful Improvement in Seats, of which the following is a specification, reference being had therein to the accompanying drawings.

10 In a certain type of seats employed principally as additional seats in automobiles, but in some cases used elsewhere, the seat proper is in hinged connection with a seat-frame provided with a horizontal cross-bar 15 having a socket fitted to an upright journal upon a supporting arm, the seat-frame being adapted to swing in a horizontal plane around the said journal, and the seat proper being adapted to swing in a vertical plane 20 upon its connection with the seat-frame. A seat of such type is shown and described in U. S. Letters Patent to Graves and Benson, No. 937,595, granted Oct. 19, 1909. When a seat of the said type is mounted in connection with the side of an automobile the seat-frame may be swung around into a position 25 in which the cross-bar stands at right angles to the said side with the seat facing forward, or the seat-frame may be swung into a position in which the cross-bar extends parallel with the said side. When the seat-frame occupies this latter position the seat may be turned up out of the way.

30 The invention consists in a seat of the general construction just described having combined therewith improved locking devices for holding the seat-frame in either of the two positions just explained, at will.

35 The invention is illustrated in the drawing in which latter,—

40 Figure 1 is a view mainly in elevation but partly in vertical section of a seat, seat-frame and supporting-arm having my invention applied thereto, the top part of the seat-frame being broken away. Fig. 2 is a detail view in plan.

45 Having reference to the drawings,—At A is shown the seat proper, and at B is shown the back, the seat-frame being formed of metal, usually in practice, with its opposite side-portions b , b , united at their lower ends with horizontally-extending side-arms b' , b' , which latter at their front ends are joined together by the cross-bar b^2 . The seat is 50 hinged to the side-arms b' , b' , by means of pivotal pins a' , a' engaging with the said

side-arms and with depending lugs a , a , carried by the seat. The supporting arm is marked C. This supporting arm is in practice applied to or connected with the support, in general, for the seat. In the Letters Patent aforesaid the said supporting arm is applied removably to a stand which is attached to one side of an automobile. At c is the upright pin at the upper end of the supporting arm, constituting the journal for the seat-frame, and as shown in Fig. 1 the cross-bar b^2 of the seat-frame is formed with a socket which receives the said pin. The upper end of the said pin or journal c is reduced in diameter and screw-threaded and has screwed upon the same a nut F, between which and the top of the cross-bar b^2 is confined a plate 1. 60 65 70

75 The plate 1 is held from turning relative to the pin or journal c by engaging it with the latter in convenient manner. Herein the upper end of the pin or journal next below the screw-threaded portion thereof is formed of polygonal shape in cross-section, 80 and the plate 1 has therein an opening which conforms to the exterior of the said polygonal portion of the pin or journal and fits the latter. The said plate, held from turning relative to the pin or journal c of the supporting arm C, forms a part of the means for locking the seat-frame in the desired position after having been turned into such position. It is furnished with holes or sockets 1^a , 1^b , located at an angular distance 85 90 apart corresponding in number of degrees with the different positions which the seat-frame is required to have. In this instance the two holes 1^a , 1^b , shown in the drawing are 90 degrees apart. A locking pin 2 is 95 movably combined with the cross-bar b^2 by forming the said cross-bar adjacent its hub which fits upon the pin or journal c with a cylindrical hole extending vertically there-through, the said pin being contained within the said hole and fitting the same with capacity to slide vertically therein. When the upper end of the said pin is projected into one of the holes or sockets of the plate 1, the seat-frame is locked thereby in the angular position then occupied by it, so as to prevent turning movement of the seat-frame around the pin or journal c . The locking pin or bolt 2 is operatively engaged with an actuating lever 3, which is pivoted at 3^a in connection with one or a pair of lugs depending from the cross-bar b^2 . The engage- 100 105 110

ment is secured, in the present instance, by forming a transverse recess in the lower portion of the pin or bolt, and entering into such recess the rounded inner end of the lever 3. The lever 3 is actuated with yielding force to turn the same so as to push the pin or bolt 2 upward, and to keep it up, as by means of a spring 4 which is confined between the lever and the under side of the cross-bar b^2 . The outwardly-extending portion or arm of the lever constitutes a handle by means of which the lever may be moved by hand to work the pin or bolt.

The pin or bolt 2 preferably fits closely and snugly within the hole in which it is contained in the cross-bar b^2 , and preferably also a close fit is provided for between the engaging end of the said pin or bolt and the holes or sockets 1^a , 1^b , in the plate 1. Thereby looseness or play of the seat-frame in a horizontal direction after being locked in position is prevented. The locking pin or bolt cannot become forced by strain or a blow of the socket or hole in plate 1 which is occupied by it at any given time. Consequently, the seat is held locked positively in the desired position. As in the Letters Patent aforesaid the pivotal pins a' , a' , con-

necting the seat with the side-arms b' , b' , are located at a short distance horizontally from the cross-bar b^2 . When the seat is turned down into position for use, as in Fig. 1, it extends over the said cross-bar and is supported in its horizontal position by the cross-bar.

What I claim is:

The combination with a supporting arm and a seat-frame provided with a horizontal cross-bar having a socket fitted to an upright journal upon said supporting arm, of a locking plate held from turning movement relative to said supporting arm and provided with holes or sockets, a locking pin or bolt movable vertically through a hole in the said cross-bar which it fits and adapted to enter by one end thereof into either of the said holes or sockets, and an actuating lever pivoted to the said cross-bar and operatively combined with the said bolt or pin.

In testimony whereof I affix my signature in presence of two witnesses.

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Witnesses:

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