

(No Model.)

2 Sheets—Sheet 1.

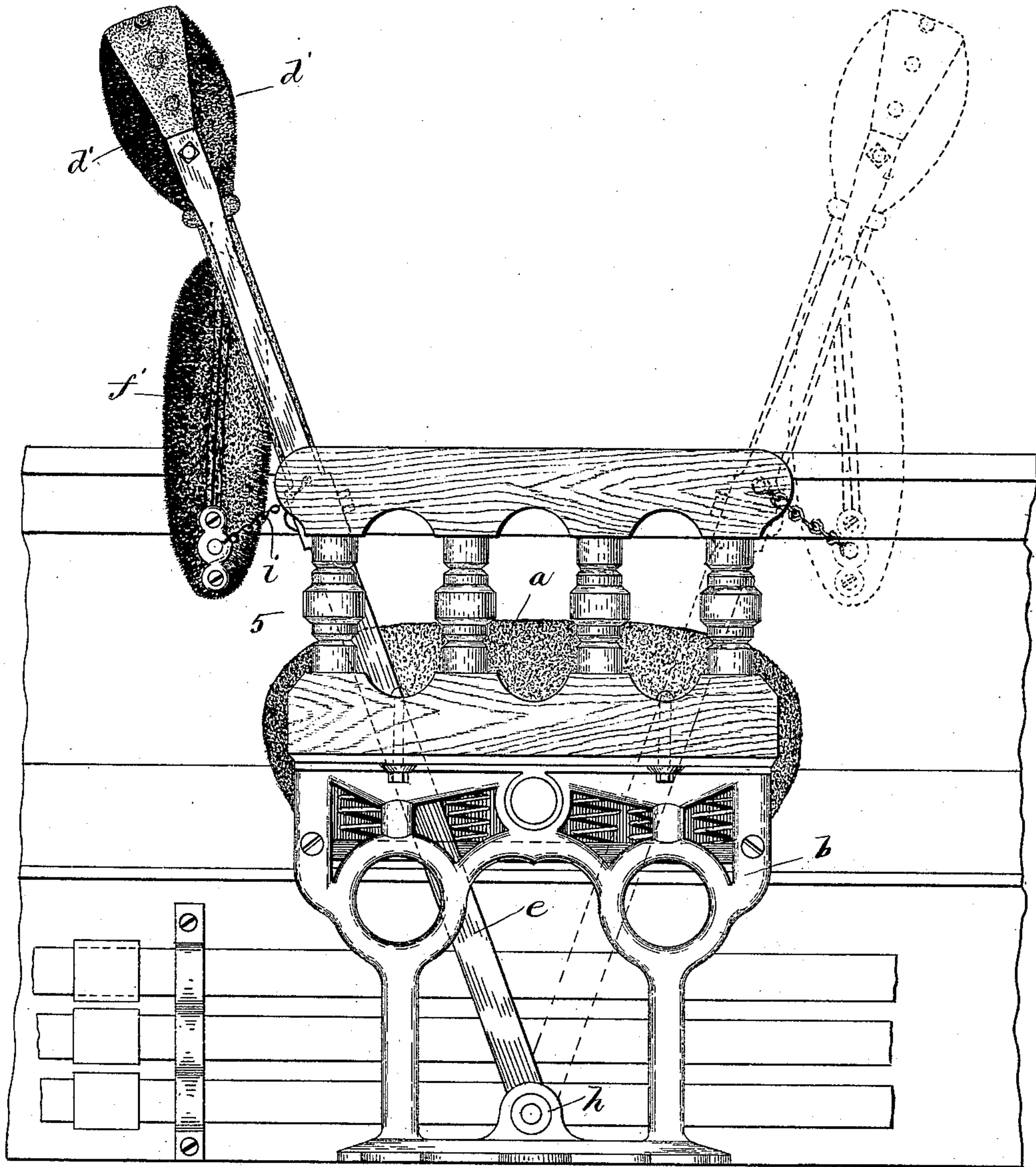
J. P. DOYLE.

REVERSIBLE BACK FOR CAR SEATS.

No. 387,404.

Patented Aug. 7, 1888.

Fig. 1.



WITNESSES.
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J. E. Smith.

INVENTOR.
J. P. Doyle.
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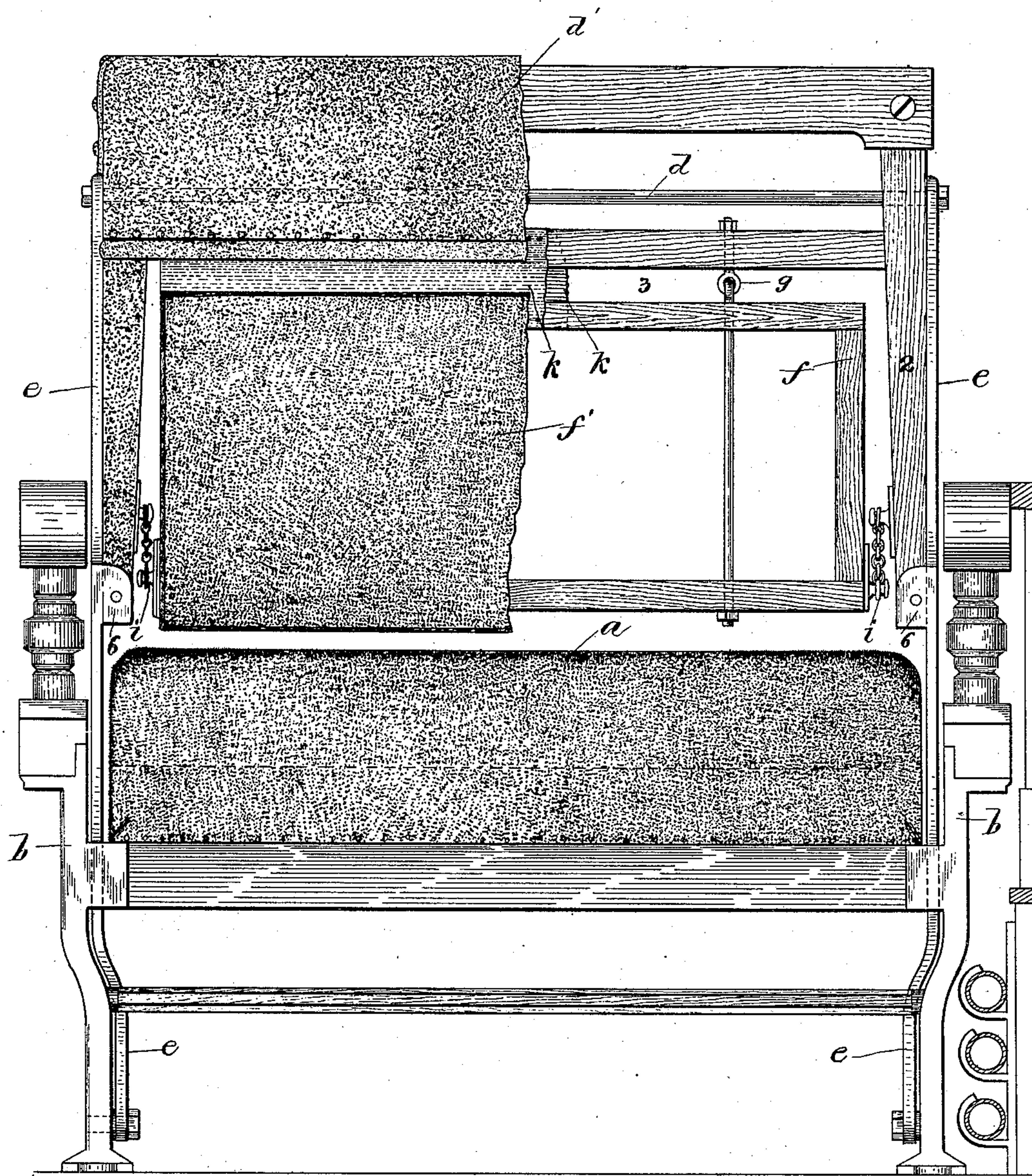
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Fig. 2.



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UNITED STATES PATENT OFFICE.

JOSEPH P. DOYLE, OF BOSTON, MASSACHUSETTS.

REVERSIBLE BACK FOR CAR-SEATS.

SPECIFICATION forming part of Letters Patent No. 387,404, dated August 7, 1888.

Application filed February 15, 1888. Serial No. 264,120. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH P. DOYLE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and
5 useful Improvements in Reversible Backs for Car-Seats, of which the following is a specification.

This invention has for its object to provide a reversible back for car-seats which shall be
10 simple in construction, durable, and not liable to breakage; and it consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a
15 part of this specification, Figure 1 represents an end elevation of a car-seat having my improvement. Fig. 2 represents a rear elevation of the same, a part of the upholstery being removed.

20 The same letters of reference indicate the same parts in both figures.

In the drawings, *a* represents a car-seat resting on supports which are attached to the end frames *b b*, the latter being of any suitable design and adapted to be secured to the floor of
25 a car.

The back constituting my invention is composed of two general parts—viz., a frame, *d*, rigidly secured to two swinging levers, *e e*,
30 and provided on both sides with covering or cushion *d'*, of suitable material, constituting the upper or head-rest portion of the back, and a frame, *f*, connected by hinges *g* to the frame *d* and depending therefrom, said frame
35 *f* having an upholstery covering, *f'*, on both sides, and constituting a back-support below the head-rest portion.

For convenience of description I will call the frame *d* and its covering the “upper section” of the back and the hinged frame *f* and
40 its covering the “lower section” of the back.

The levers *e e*, to which the upper section is rigidly attached, extend downwardly through openings between the ends of the seat *a* and
45 the frame-pieces *b b*, and are pivoted at their lower ends to central ears, *h*, formed on said frame-pieces *b*, so that said levers and the back supported by them can be inclined to bring the back to either edge of the seat, as indicated
50 in full and dotted lines in Fig. 1. The lower section of the back being hinged to the upper

section normally hangs in a vertical position therefrom and is prevented from swinging back beyond a given point in either direction by short chains *i*, secured to the lower portions of said lower section and to the arms 2
55 4 of the frame of the upper section. The length of said chains determines the extent to which the lower section may swing back from the seat, and they may be adjusted so that the
60 said section will stand vertically, as shown, or will have a forward inclination from its upper to its lower edge.

The space 3 between the frames *d f* may be covered and the hinges *g* concealed by strips
65 *k k*, of leather, plush, or other suitable material, secured to said frames.

It will be seen that whenever the levers *e e* are turned from one position to the other the lower section of the back conforms automati-
70 cally to the changed position of the upper section, so that in each position the supporting-surfaces of the back are in the same relation to the seat and to each other, the two sections conforming to the back of the sitter
75 equally well in both positions.

As the upper edge of the back is the same in both positions, the necessity of making the back of such width that its lower edge projects below the seat is obviated. Economy of
80 material is thus effected, and an opening, 5, is left between the seat and the lower edge of the back, through which cinders, dust, &c., will pass to the floor instead of being retained between the back and seat.

The frame *f* is provided with the downwardly-extending side pieces, 2, which are bolted to the levers *e*, the latter having sockets 6 for the lower ends of said side pieces. The side pieces, 2, are preferably upholstered
90 or covered with plush. The upper section may be of such height as to constitute a head-rest, or may be of only sufficient width to constitute, with the lower section, a support for the back.

I am aware that it is not new to pivot a seat-back to levers which are pivoted below the seat and swing at the ends of the seat, the pivoted back being reversible by movements of the levers; and I do not claim, broadly, the
100 combination, with a seat, of a back composed of an upper section attached to pivoted lev-

ers and a lower section hinged to the upper section.

I claim—

1. The combination, with a stationary car-
5 seat having fixed arm-rests at the ends thereof,
and the frame-pieces *b*, having centrally-aper-
tured ears, of the levers pivotally secured at
their lower ends to said ears and projected up
between the said seat and arms, and having
10 sockets *6* secured to their inner sides, the frame
d, having the parallel arms secured to the up-
per ends of said levers and having their lower
ends in said sockets, the lower frame, *f*, the
hinges *g*, connecting said frames, and the chains
15 *i i*, connected to said levers and lower frame,
substantially as shown and described.

2. The combination, with the fixed seat and
the fixed arm-rests at the ends thereof, of the
levers *e e*, pivoted to fixed supports below the
20 seat and arranged to swing between the ends

of the seat and the fixed arm-rests, the upper
back-section composed of an upholstered frame
having downwardly-projecting side pieces, *2*,
rigidly attached to the upper ends of said le-
vers, the lower back-section connected by 25
hinges *g* to the upper back-section and adapted
to swing backwardly in either direction, the
covering strips *k k*, whereby said hinges are
concealed, and the chains *i*, connecting the le-
vers and the lower back-section, whereby the 30
backward movement of the same in each di-
rection is limited, as set forth.

In testimony whereof I have signed my name
to this specification, in the presence of two sub-
scribing witnesses, this 10th day of February, 35
A. D. 1888.

JOSEPH P. DOYLE.

Witnesses:

C. F. BROWN,
A. D. HARRISON.