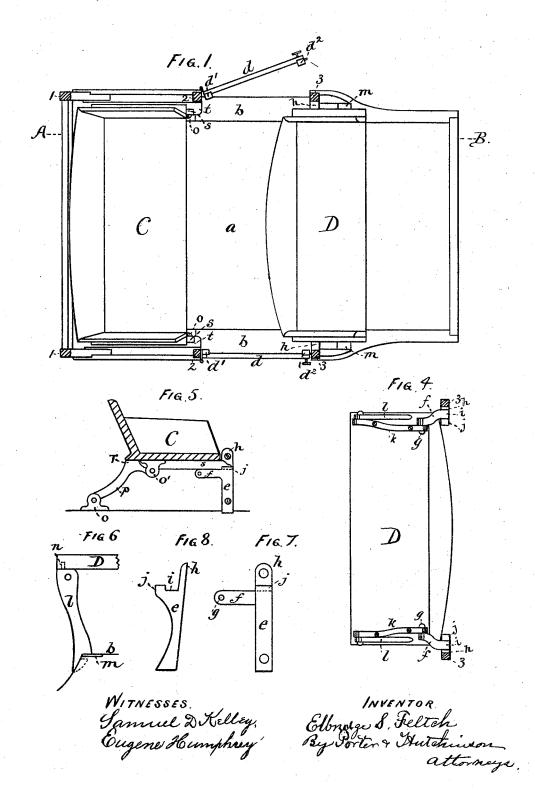
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No. 184,236.

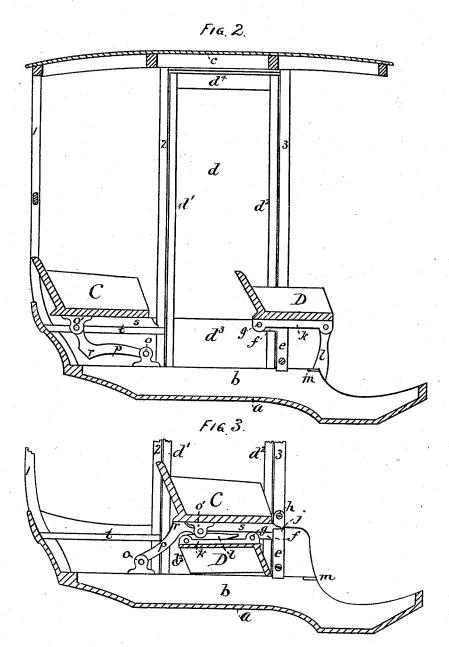
Patented Nov. 14, 1876.



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WITNESSES Samuel D. Kelley. Eugene Humphrey INVENTOR. Elbridge S. Feltch By Porter & Hutchinson, attorneys.

UNITED STATES PATENT OFFICE.

ELBRIDGE S. FELTCH, OF SALISBURY, MASSACHUSETTS.

IMPROVEMENT IN JUMP-SEAT CARRIAGES.

Specification forming part of Letters Patent No. 184,236, dated November 14, 1876; application filed October 5, 1876.

To all whom it may concern:

Be it known that I, E. S. FELTCH, of Salisbury, State of Massachusetts, have invented Improvements in Standing-Top Carriages and Jump-Seats, of which the following is a specification:

This invention relates more especially to that class of carriages which are formed or provided with a "standing top" as contradistinguished from tops which are susceptible of being removed, folded back, or turned down; and the improvements consist in peculiarly-formed metal brackets, which are secured to the front top posts, and which are provided with arms terminating in pintles, whereon the front seat is hinged and swings when being folded down or adjusted in position for use, said brackets serving greatly to strengthen the top, and also furnishing a rest for the back seat when it is jumped forward.

It also consists in the peculiar construction and arrangement of the hinges of the front seat, the front props or supports thereof, and the catches which engage such props and secure the seat in position, whereby the said hinges serve not only to connect the seat with said pintles, but also as strengthening-cleats for the seat bottom, and as hinges for the front props, so that said props fold into position automatically when the seat is folded down, and swing forward in the same manner and engage the catches when the seat is placed in position for use.

It also consists in the peculiar form and arrangement of the hanging or jumping irons of the back seat, whereby they not only serve the usual purpose of similar devices for jumping the seat backward or forward, but when the seat is jumped forward for use as the single seat of the vehicle, the said irons serve as the sole support of the rear corners of the seat, while the front corners are supported in recesses formed in said front-seat brackets.

It further consists in a standing-top carriage provided with an adjustable or folding and expanding front seat, a "jump-seat," and top posts, arranged on either side between the front and rear posts, thereby relieving the side panels from the usual duty of supporting the seat, and rendering feasible side door-

posts and a "full-high" door in a jump-seat carriage.

It also consists in a standing-top carriage provided with an adjustable or folding and expanding front seat, a jump-seat, a top postarranged on either side between the front and rear posts, and full-high door hinged to such intermediate posts, whereby a door of ample and convenient size is rendered feasible, and the side curtains are divided into three sections, to wit, the curtain on the door, the curtain forward of the door, and the curtain back of the door; and the passengers can enter or leave the carriage at the side as readily as from a coach, thereby avoiding the hitherto inevitable trouble of either step. ping over the front seat or else unfastening the side curtains in order to make room for ingress or egress at the side of the vehicle.

Figure 1 is a top or plan view of a topbuggy with the roof omitted, and showing the top posts in section upon a line with the tops of the doors or immediately beneath the roof or canopy, and showing both seats. Fig. 2 is a longitudinal vertical section, taken on line A B, Fig. 1, and showing the left-hand side of the carriage looking from the inside, or from the right-hand side of the vehicle. Fig. 3 is a section similar to Fig. 2, but show. ing the front seat folded down, and the back seat "jumped" forward for use as the single seat of the carriage. Fig. 4 is a detached top view of the front seat as folded down when the back seat is jumped forward. Fig. 5 is a detached side elevation of the back seat jumped forward, viewed from the inside of the vehicle, (the front seat being omitted,) and showing the method of supporting the seat. Fig. 6 is an enlarged detached side elevation, showing the front prop or support of the front seat, the catch for fastening the same, and an elastic spring to insure contact with the catch. Fig. 7 is an enlarged inside elevation of the front post and seat brackets. Fig. 8 is an enlarged side elevation of the said bracket, as viewed from the front of the carriage.

Similar letters of reference indicate corresponding parts in the several figures.

In the drawings, a represents the floor.

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and b b the side sills, of the carriage. c is the canopy or roof supported by the six posts shown, the two rear ones being numbered 1, the middle ones 2, and the front ones 3. d d are the doors, which are framed in the usual manner, with the stiles or side pieces d^1 d^2 , the bottom rail d^3 , and the top rail d^4 . The space within these posts may be occupied by a panel, or by a panel and glass, or a curtain, in any of the methods of constructing a full-high door for carriages. C is the back or jump seat, and D the front or folding seat.

As I make no claim to the carriage-body, the doors, or seats in the abstract, but only claim the peculiar devices or irons by which the seats are hung or secured to the body, and the combination of the jump and folding seats with the carriage, as described and shown, a more particular description of the body, the top, or the seats, is not deemed nec-

essary.

e is the metal bracket, which is secured to the fronts, as shown in Figs. 1, 2, 3, 5, by screws, which are inserted in the holes shown in Fig. 7, in the vertical part or member. f is a horizontal arm extending from the vertical member to the rear, and curving inward slightly, as shown in Fig. 4. The pintles g(shown in Figs. 2, 3, 4, 5, 7) are formed upon arms f. k k are hinge-bars extending across and secured to the under side of seat D. These bars are formed with eyes, which receive the pintles g, and at the opposite end they are formed either with similar eyes or with pintles, that they may be also pivoted to the front supports l l. These props l l are formed at their lower ends with a narrow slot or recess, (shown in Fig. 6,) which engages a metal plate, m, secured in the sills b at the angle formed by the curve of the foot-board, as shown in Figs. 2, 3, 6. These supports are so constructed and arranged that they fold down or out for use by their own weight. An elastic buffer, n, inserted in the seat, as shown in Fig. 6, serves to hold the prop l in contact with the catch m.

It will be apparent that brackets e may be formed with holes instead of the pintles g, and that the hinges k may be formed with pintles to fit the bracket-holes, if desired.

In Figs. 2, 3, 4, the positions of these several devices, either when the seat is folded or in position for use, are so clearly shown as to be clearly understood without further explanation.

o is a double-eared step or holder, which is secured to the sills b b, and o' is a similar holder secured under the corners of seat C.

P represents an arm, the ends of which are secured by a pivot, as shown, between the ears of the steps o and o', respectively, as shown. These arms hold the seat in place when it is in the position shown either in Figs. 2 or 3, besides serving as the means of jumping the seat back and forth; and when the seat is jumped forward the arms P P

serve as the sole support of the rear corners of the seat, by virtue of the knuckles r formed upon the levers, and the relative bearings or connections of the arms with the steps, as before described.

When the seat C is thus jumped forward its front corners are supported in the steps i formed in brackets e between the stop j and the ear

h. (Shown in Figs. 3, 5, 6, 7.)

Thus seat C, when jumped forward and resting solely in brackets e e at its front corners, and upon arms P P at its rear corners is supported, through the agency of said irons, directly upon and by the sills b b, and not, as has been heretofore the practice, upon the

sides of the body.

By thus supporting seat C at its rear corners upon the jumping-irons, the ledges t t (upon which the seat rests when jumped back) extend forward only a sufficient distance for that purpose, instead of extending forward a sufficient distance to furnish a support for the seat when jumped forward, as formerly constructed; and the full-high doors are thus rendered available, as they, or the section of the carriage-body which they occupy, are not required to furnish any support for the jump-seat when jumped forward, and which the doors, from their essential construction, could not furnish. Besides, by this construction, a greater space or width is available, to the extent of the said ledges, which are thus dispensed with, and the space thus saved renders the said middle posts feasible.

As stated, I do not claim, broadly, either a carriage formed and provided with a front folding seat and a jump-seat, or a carriage having full-high doors or middle posts for the support of such doors; but

What I do claim is—

1. The metallic bracket e formed with a vertical member for attachment to the carriage, and an arm, f, for connection with and support of the seat D, substantially as described and shown.

2. The bracket e, formed with a vertical member for attachment to the carriage, an arm, f, for supporting the front seat, and a step, i, for the support of the front corners of the back seat, substantially as described and shown.

- 3. The combination of the supportingbrackets e, folding props l, and hinge-bars k, substantially as and for the purposes specified.
- 4. In combination with a turn down or folding seat, the supports l, hinged to the front corners of the seat, and provided with the locking slot, substantially as described and shown.
- 5. The jumping-bars P, formed to be pivoted at their extremities, and with a fulcrum or bearing, r, substantially as described and shown.
 - 6. In combination with a jump-seat, the

supporting and jumping irons P and brackets e, when constructed and arranged to support the seat, substantially in manner as described and shown.

7. A carriage-body, provided with a front folding or turn-down seat, a rear jump-seat, and a full-high door, substantially as described and shown.

8. A canopy-top carriage, formed and provided with a front folding or turn-down seat, a rear jump-seat, and the middle posts 2 2, substantially as described and shown.

ELBRIDGE S. FELTCH.

Witnesses:

EUGENE HUMPHREY, BENJAMIN COLE, Jr.