(No Model.) 2 Sheets—Sheet 1.

J. W. ANDERSON.

JUMP SEAT FOR CARRIAGES.

No. 248,005. Patented Oct. 11, 1881.

Fig. 4

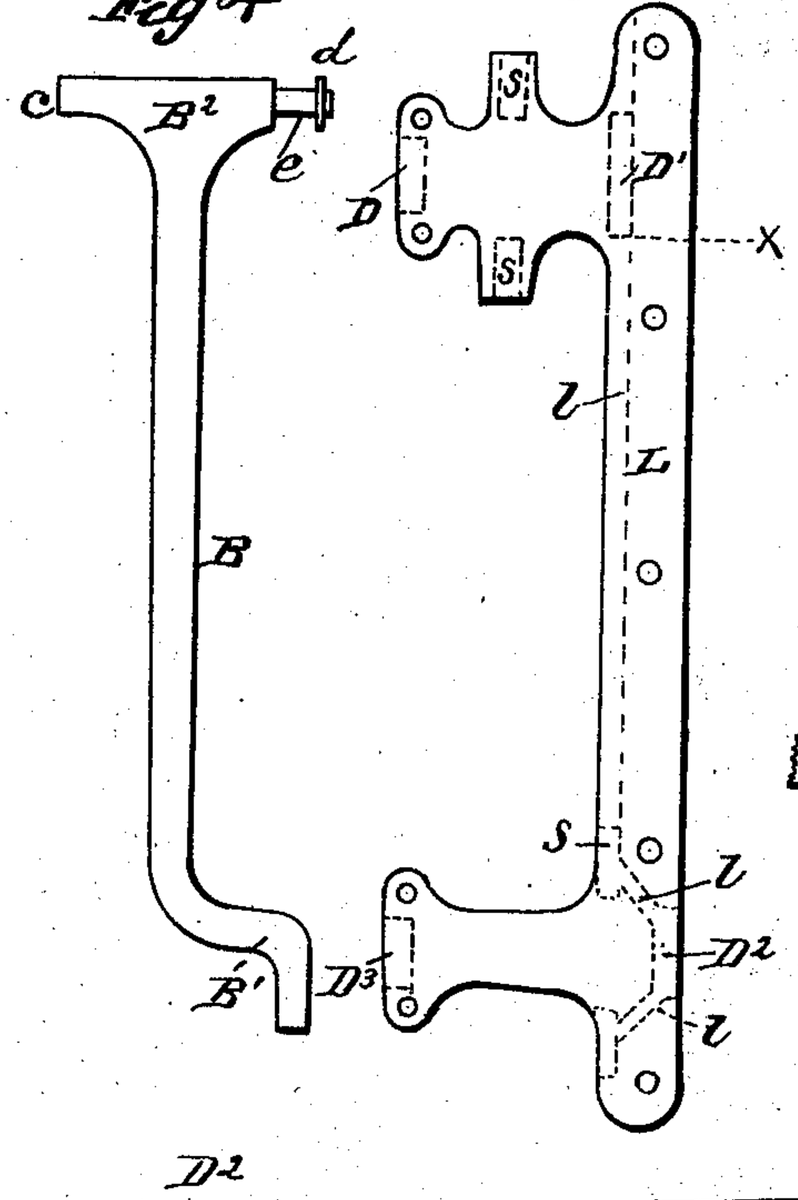


Fig. 5.

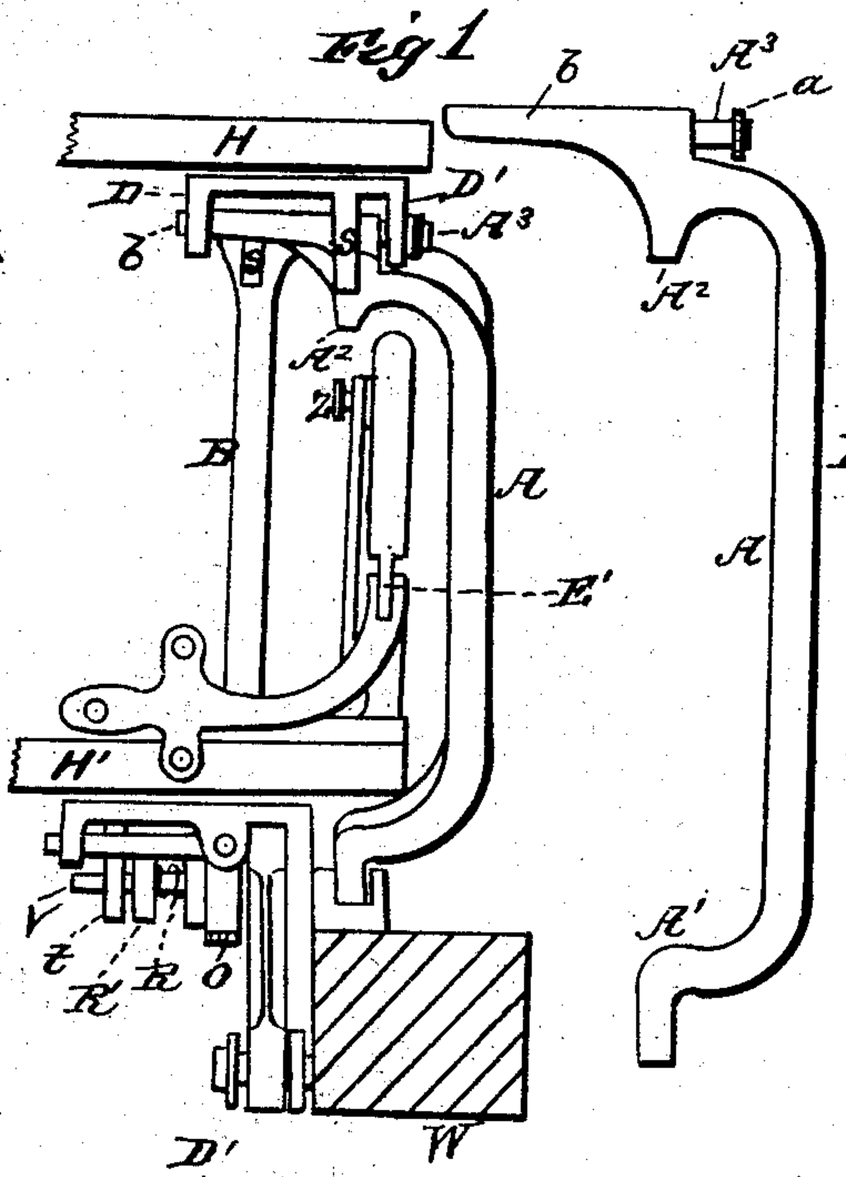


Fig. 1

Fig. 3.

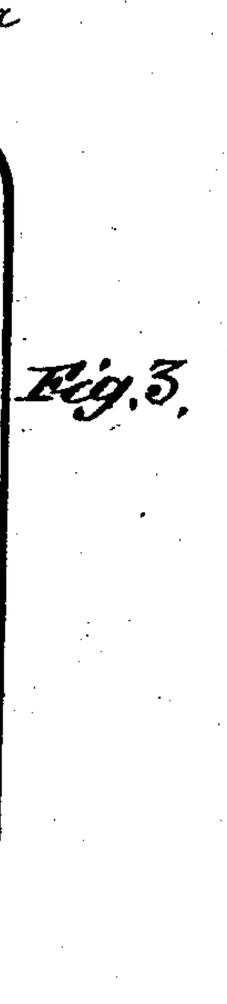
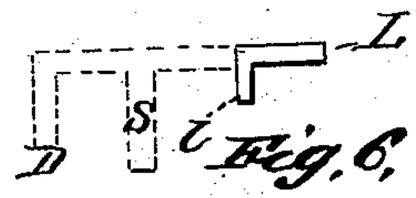


Fig. 2.

Fig. 6.



WITNESSES
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(No Model.) 2 Sheets—Sheet 2.

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JUMP SEAT FOR CARRIAGES.

No. 248,005. Patented Oct. 11, 1881.

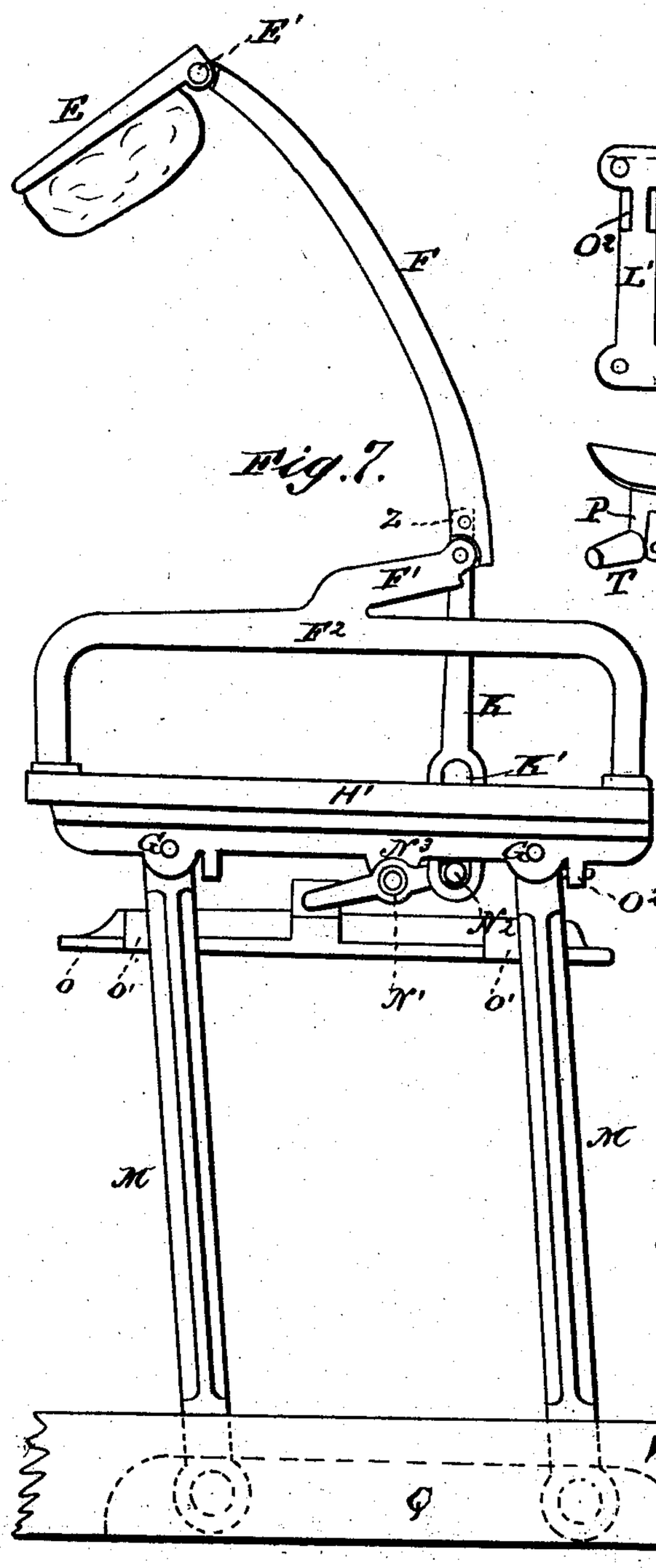

Fig. 7.

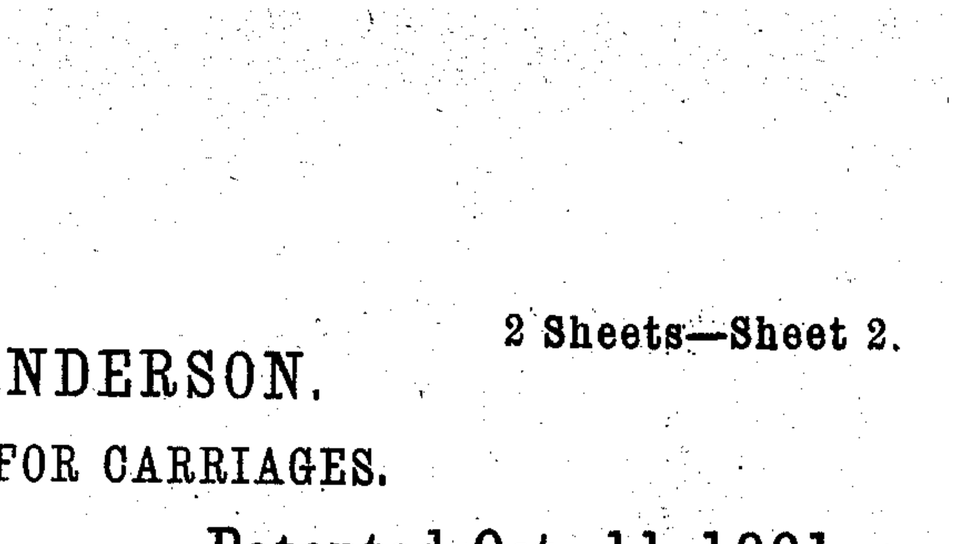

Fig. 8.

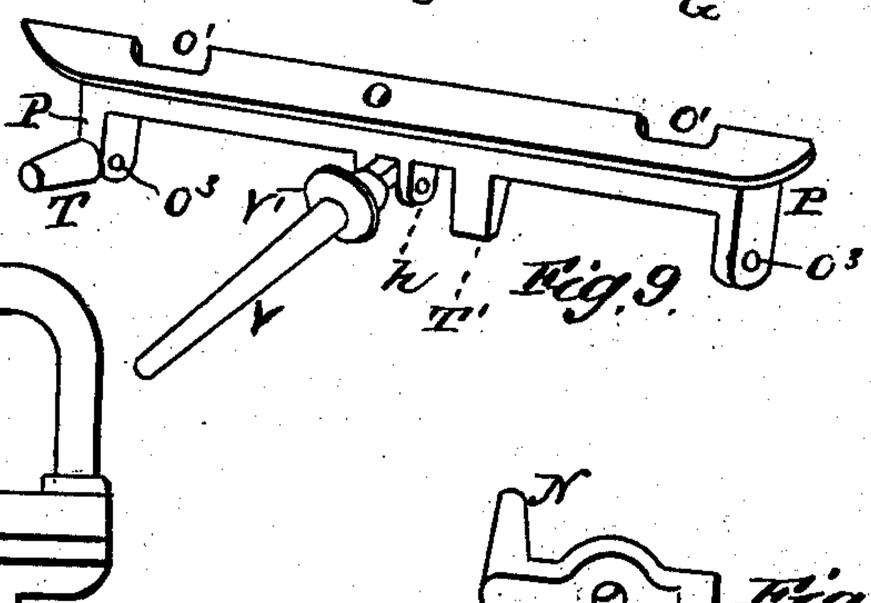

Fig. 9.

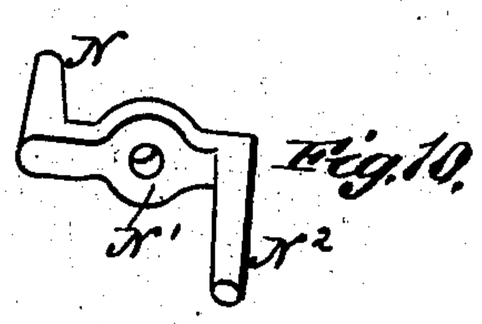

Fig. 10.

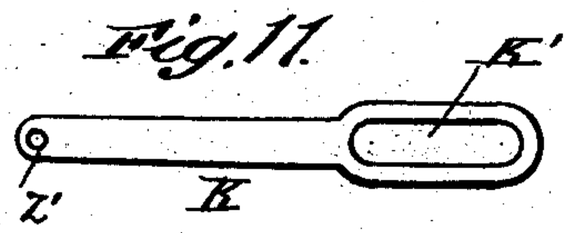

Fig. 11.

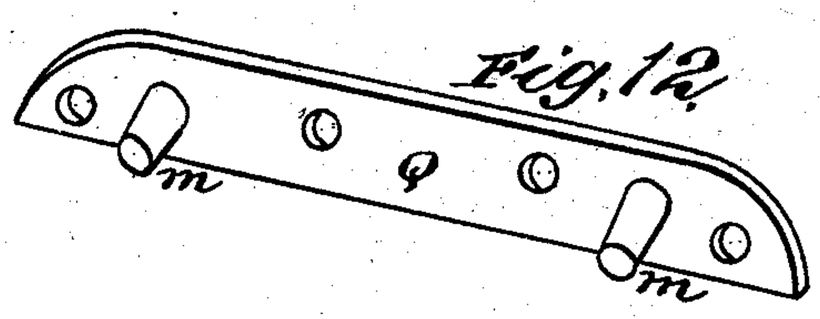

Fig. 12.

WITNESSES
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UNITED STATES PATENT OFFICE.

JOHN W. ANDERSON, OF LANCASTER, PENNSYLVANIA.

JUMP-SEAT FOR CARRIAGES.

SPECIFICATION forming part of Letters Patent No. 248,005, dated October 11, 1881.

Application filed February 21, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. ANDERSON, of the city of Lancaster, Pennsylvania, have invented new and useful Jump-Seats for Carriages, of which the following is a specification.

My invention relates to improvements in seat-irons designed for carriages whose seats are of equal and ample length, and whose front seat, with lazy-back thereon, may be shifted and folded to be under the rear seat when the latter is jumped forward to afford a single-seated carriage.

The specific objects of my improvements are mainly, first, self-sustained rear-seat supports, of which the front and hind leg at each end of seat are peculiarly bowed at their middle portions to be free of the front seat and its mountings when it is folded; second, a novel arrangement of the parts on the ends of the attaching-irons to better hinge and stop the upper ends of the legs connected therewith; third, the body of the attaching-irons made angle-form or vertically flanged to stiffen them; fourth, links eccentrically pivoted to the folding arms of a lazy-back of any approved make, and coupled with trip devices by which the latches locking the front-seat legs are tripped automatically simply by the adjustment of the lazy-back; fifth, the safety front-seat locking devices as made not only with spring stop-latches, whereby the legs at both ends of the seat are caught and held automatically, so that undoing one latch at either end by accident will not throw down the seat; but also as made by coupling said latches by suitable mechanical appliances to trip the same with the arm of the lazy-back in such manner that when the said latches are held in tripped or disengaged position by said appliances the cross-rail of said lazy-back is then in position vertically over the seat, and thus prevents its being occupied in that unsafe position. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front or edge view of my jump-seats set and folded as in a one-seated carriage. Fig. 2 represents an end view of the same. Figs. 3, 4, and 5 represent details of my rear-seat irons, the front leg, the hind leg, and the upper attaching-iron, respectively. Fig. 6 is a cross-sectional view of the latter, taken at the line *x*, Fig. 5. Fig. 7 represents an end view of my front seat in elevated, unlatched, and unsafe position, with lazy-back swung over the seat. Figs. 8, 9, 10, 11, and 12 are details representing, respectively, the front-seat upper attaching-iron with spring and latch plunger, the front-seat locking-latch with plunger, the turn-button, the connecting-link for lazy-back arm and turn-button, and the lower attaching-iron.

Similar letters refer to similar parts throughout the several views.

A and B represent the front and hind legs, respectively, of my rear seat, H, which are attached thereto by the attaching-irons L. Leg A has on its upper end an elevated shoulder, A^2, and is extended to form the journals A^3 and *b*, the latter being adapted to be slipped through one of the bearings, D^3, of iron L, and the other through bearing D^2, in which they are then retained by washer *a* and the riveted or swelled end of journal thereat, it being struck up after insertion to place. The top of each of the similar right and left legs B is also provided with the journals *cc*, the latter square shouldered, and attached with washer *d*, to retain the journals in the bearings D D′, as shown in Fig. 1, and anticipated in describing the attaching of legs A. The legs B are bowed oppositely from legs A, that they shall have ample offset from each other to admit between them the lazy-back railing and arm $F' F^2 F$, as shown in Figs. 1 and 2.

The hind seat, H, is stopped in its throw both ways by the lugs S S setting on the legs A and B, as shown in Fig. 2. Said stops S S are arranged on extensions of the attaching-irons L away from the bearings, and thus making the work open and accessible in fitting up the irons, as well as to obtain better results in casting the parts. Each of the irons L is also provided with the flange *l*, united also with the ears $D' D^2$ and stops S S, making the body angle form, as shown in Fig. 6, to stiffen the same to prevent its being bent or warped, as it is important that the shifting parts should describe parallelograms accurately to secure ease of motion, and that the seats may be shifted by catching them at either end. The warping referred to often occurs in shipping, and is obviated if even only the upper irons, L, are re-enforced, as set forth.

I will next proceed to describe the front seat,

H′, its supports and mountings, and its adjustments. It rests on fluted similar straight legs, M M, each made with extended journals, in inverted-L form.

The lazy-back irons F F′ F² are a common pattern of fenders or rails and back-irons, except the hinge E′, joining the parts F and E, is peculiar, its object being to fold the lazy-back compactly, as shown in Fig. 2, that the front seat may be remotely spaced from the hind seat, and yet when jumped and folded under the latter the part E may be concealed behind the fall thereof.

The attaching-plate L′ has the stiffening-standard *l* solidly formed thereon, and the lug N³, for attaching the button or trip device (shown in Fig. 10) in position, as shown in Fig. 7.

The latch O has on it the lug T or arm T′ in position, as shown, for connection with the trip device N N′. The locking-latches O are self-latching when the arms F of the lazy-back are fully thrown either forward or back. The ends of each of said latches are provided with beveled strikes, which the legs M M, in passing, trip inward from the seat ends, and the notches O′ O′ immediately arrest the passage of said legs when fully before them, the spring R′ pressing the said latch to catch and hold both legs at once in said notches, which are made with acute bite to securely maintain their hold. The said latches are released when the said seat is to be shifted, as follows: The lazy-back arms F, of ordinary make, are made means to retract said latches from said legs by the intervention of the links K and the turn-buttons N′, one at each end of the seat in position, as shown, by an intermitted action on the latches. Said link K is pivoted to said arm at Z eccentrically, and has the long eye K′, which loosely passes through the seat-board H′, and has inserted in it the finger N² of the turn-button N′, which is pivoted to the lug N³, and presses with its opposite finger or projection, N, on the lug T or cam T′ on the said latch. The parts T and T′ are both efficient; but the latter is preferred, as the pressure is communicated near the middle of the latch, and both its ends will thus be equally thrown back without spring of its frame. The work of the link K is simply to pull or turn the said button upward by its finger N², and the work of the said button N′ is simply to bear on the latch O by its finger N. The finger N² is made long, that the attaching-plate L′ may be set farther in from the end of seat H′ without disconnecting the link K.

It may be observed that when the lazy-back arm F is erected vertically over the seat, as in Fig. 7, the latches are then unlatched, and the seat may be freely shifted; also, that then the said back prevents said seat being occupied, and is therefore a cautionary or safety arrangement. If, now, the seat be thrown forward, or held erect forward inclined, as is sometimes done to admit passengers to occupy the rear seat, the operator need simply throw the lazy-back rearward to place for occupancy of the front seat, and then push said seat back, as it will be automatically and certainly latched, and no accident can occur, as in other faulty jump-seats, which sometimes drop back with the occupants thereon, greatly endangering the limbs of occupants on the rear seat. If, from the position of the said back (shown in Fig. 7) it be thrown forward as a children's seat, and it be desired to jump it back as a regular carriage-seat, its back need be simply thrown to its proper place, and the seat raised and pushed back, as the locking-latches will surely stop and hold the seat at the proper place. If, from said position, the front seat is to be let down rearward to form a single-seated vehicle, the arm F must be held up until the seat has passed rearward beyond the position for locking it, when it may be thrown forward onto the seat as the latter falls back, a lug, J, on the iron L′ limiting the descent of it by the rear leg being stopped on it.

What I claim, and desire to secure by Letters Patent, is—

1. In combination with a seat-attaching plate, L, provided with bearings located widely apart laterally, seat-supporting uprights A B, provided with transversely-extended pivotal members, one of which forms a slip-joint with said plate, and the other forms, with the opposite of the pair of the bearings on said plate, a shouldered or milled journal-joint, it being retained in its bearing by a collar on the end thereof, or its equivalent, substantially as and for the purposes set forth.

2. The links K K′, pivoted to the arms F of the lazy-back and coupled intermittedly with the trip devices N N′, and thereby with the latches O, all arranged and operating substantially as and for the purposes set forth.

3. The seat-attaching plate L, provided with bearings D D′ and D² D³, for pivoting thereto the uprights of the seat-supporting frames, and the stops S S, for limiting the throw of said uprights, arranged between the said bearings to divide the stress between the pivotal points, all substantially as set forth.

In testimony that I claim the foregoing as my invention I have hereunto set my hand and seal, before two witnesses, this 14th day of February, 1881.

JOHN W. ANDERSON. [L. S.]

Witnesses:
THEOPHILUS WEAVER,
PETER STUCKER.