(No Model.)

J. A. EDWARDS.

FOLDING SEAT FOR VEHICLES.

No. 574,310. Patented Dec. 29, 1896.

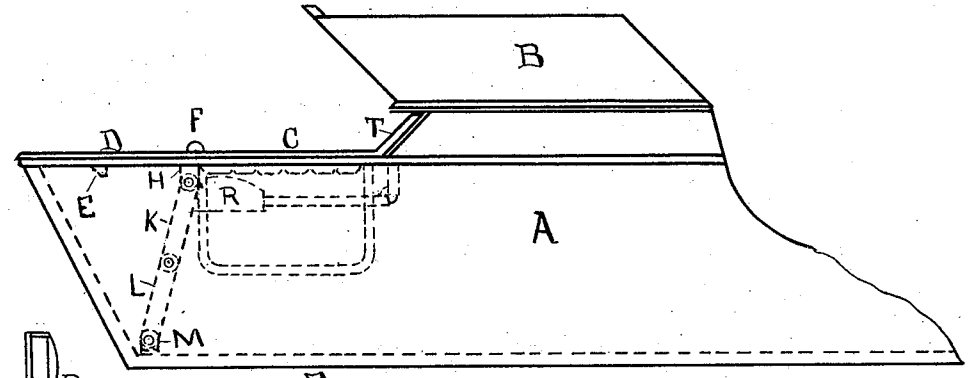

Fig. 1.

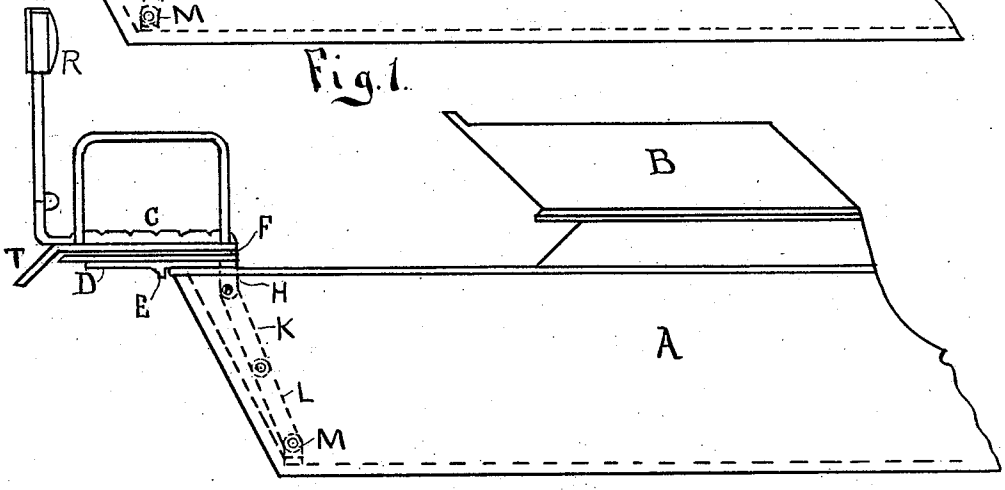

Fig. 2.

Witnesses
Ambrose B. Kindleman
Wm. E. Elliott

Inventor
James A Edwards
By Edward Taggart
His Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES A. EDWARDS, OF OWOSSO, MICHIGAN, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO JAMES A. COOPER, OF SAME PLACE.

FOLDING SEAT FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 574,310, dated December 29, 1896.

Application filed August 17, 1896. Serial No. 603,009. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. EDWARDS, a citizen of the United States, residing at the city of Owosso, in the county of Shiawassee and State of Michigan, have invented certain new and useful Improvements in Vehicle-Boots and Folding Seats, of which the following is a specification.

My invention relates to any class of vehicles which ordinarily have a boot and in which a folding seat is desirable in order to vary the passenger-carrying capacity of the vehicle; and its object is to provide a seat which can be used to accommodate extra passengers, children, or others, and which, when not in use, can be folded down into the boot and leave the vehicle the same in external appearance as though it contained no extra seat, but was of the usual construction. This object I accomplish by the construction shown in the accompanying drawings, in which—

Figure 1 is a side plan view of a portion of the vehicle-body containing my invention, the same being folded, so that the vehicle appears externally of the usual form and the position of the folding parts and mechanism being shown by dotted lines; and Fig. 2 is a side plan view of the same, showing the parts folded out and the folding seat ready for occupancy and also showing by dotted lines the position of the interior parts.

Similar letters refer to similar parts in the two figures.

A is the side of the vehicle-body, the front portion being broken away for convenience and being of any customary form or shape. I have shown the rear end of the box beveled or inclined, but this is not material, as slight and obvious changes in the form of my mechanism will adapt it to a vehicle-body of any shape.

B is the usual and ordinary seat.

I have shown in the drawings a common form and shape of road-wagon. Any other vehicle might be illustrated as well.

C is the bottom of the folding seat. It is made, preferably, of wood of any suitable size, form, or shape to fit the vehicle-body, and it may carry suitable upholstery upon that surface which is its top when open, as shown in Fig. 2, and which is its bottom when closed, as shown in Fig. 1. To the rear side of this folding seat C is hinged by suitable connection, as F, a lid or cover D. This is preferably a board of the same length as the seat C and of a width sufficient entirely to cover that portion of the top of the vehicle-box which is at the rear of the seat C when the same is folded. When the parts are in the folded position shown in Fig. 1, this lid or cover can be raised from the rear, turning on the hinge F, and access is thereby had in the usual manner to the interior of the boot. When the lid is not raised, the parts D and C together form a smooth and continuous covering for the boot, the same being usually so constructed that the hinge F is not prominent. That edge of the seat C which is forward when the same is closed I prefer to turn up into a flange or lip T, which fits closely against the rear side of the main seat-support and makes a substantially tight joint, preventing the entry of rain or dust.

The seat C has a folding back R, and preferably has some ordinary form of arm at the end, as shown. The lid or cover D has upon its lower surface a cleat or stop E, which, when the device is open, as shown in Fig. 2, and weight is upon the seat, prevents the seat from sliding forward out of position.

The hinge connection between the folding seat and the vehicle-body consists of the knuckle-joint H K L M. The part H is rigidly attached to the seat, and the part M is rigidly attached to the vehicle-body. This attachment may be in any suitable manner; but I have found it desirable to attach the same by means of irons screwed onto the seat and the vehicle-body, respectively, and turned up at their ends to permit the pivoting of the knuckle-joint. This is made, as shown, in two parts K and L, pivoted together at their inner ends, and each pivoted at its outer end, one to the seat-iron and one to the body-iron. The use of this knuckle-joint permits the seat and the lid or cover D to be moved backward along the top of the box of the vehicle-body with what is practically a sliding motion, and I am thereby enabled, when the device is closed, to allow the for-

ward part of the folding seat or the lip T to engage with or pass under a rearwardly-projecting portion of the main seat, as shown in Fig. 1, thereby making a better joint and a better finish than could otherwise be done. It is apparent, however, that other forms of hinge connection may be used in substitution for the form shown, where the construction of the vehicle-body is such that the seat could be directly folded open without a rearwardly-sliding motion, and it is apparent also that the seat might be connected with the vehicle-body by a sliding connection by employing suitable ways or grooves and without using the knuckle-joint shown. I have not illustrated those different forms because they are obvious and because I have found that the form which is illustrated combines in the greatest degree the desired ease of operation and the necessary strength and rigidity.

The operation of my invention is as follows: The device being closed, as shown in Fig. 1, I take hold of the sides of the lid or cover D and raise it just sufficiently so that the cleat or stop E, when I pull backward, will pass over and rest behind the rear edge of the top of the box. The lid is then allowed to fall into its horizontal position, and the folding seat will be found to be moved back far enough so that it will be free from engagement with the main seat and can easily be turned over on the hinge F, so that it will rest, with its upholstered side uppermost, directly upon the cover D and indirectly upon the vehicle-box and will be firmly held from any further rearward motion by the joint connection H K L M. I then turn up the folding back, which, for convenience, may have a strap or other fastening (not shown in the drawings) to hold it in folded position down against the seat, so that it will not fall away when the seat is turned over. The device is then ready for use as a seat. When it is desired not to use it longer in that way, it may be returned to its folded position in the boot by reversing the specified operation.

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

1. In combination with the vehicle-boot, the folding seat C, and the toggle-arms K, L, pivotally connected to each other and to the seat C and the vehicle-body, whereby the seat may be moved back and forth horizontally in a right line, substantially as described.

2. The combination of the folding seat C attached to the vehicle-body by suitable hinge connections and the lid or cover D, adapted to give access to the interior of the boot when the device is closed, and to be moved backward and form support for the seat when the device is open substantially as shown and described.

3. In combination with the folding seat C, the lid or cover D connected to the seat by hinge connection carrying upon its lower surface the stop E, such lid or cover adapted to be raised and drawn back over the rear end of the box and the stop adapted to hold the same in position, substantially as shown and described.

4. The combination with a vehicle provided with a fixed front seat B, of a rear folding seat C provided at its free end with an upturned lip or flange T, arranged to form a close connection with the rear of the front seat when the seat C is folded down, and toggle-arms K, L, pivotally connected to each other and to the seat C and the body of the vehicle, substantially as described and for the purpose specified.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

JAMES A. EDWARDS. [L. S.]

Witnesses:
ISAAC H. KEELER,
JAY MATTESON.