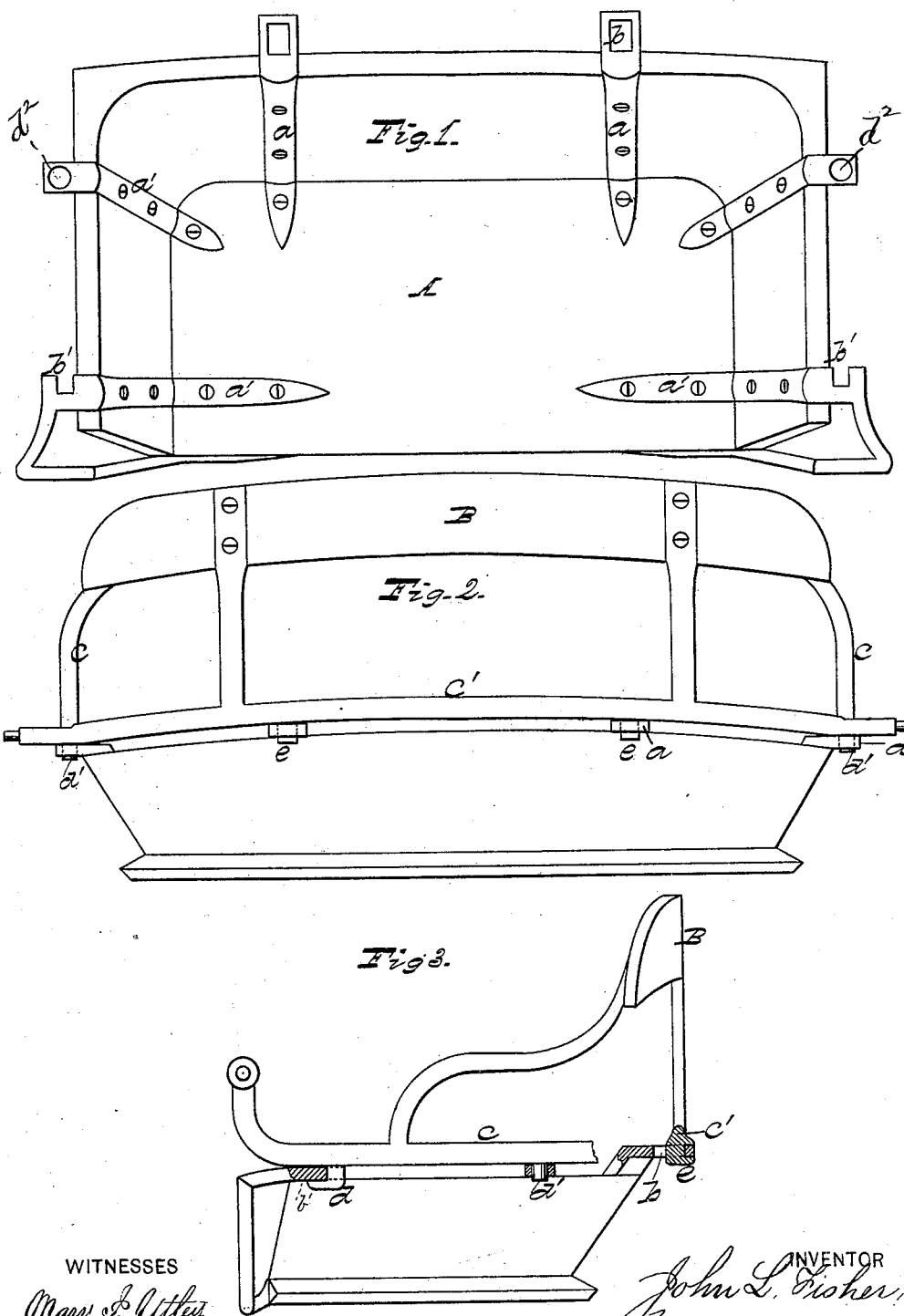


J. L. FISHER.  
Shifting-Rail for Vehicles.

No. 221,295.

Patented Nov. 4, 1879.



WITNESSES

Mary J. Utley  
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# UNITED STATES PATENT OFFICE.

JOHN L. FISHER, OF WHITE WATER, WISCONSIN, ASSIGNOR OF ONE-HALF  
OF HIS RIGHT TO EDWARD MONTAGUE WILCOX, OF SAME PLACE.

## IMPROVEMENT IN SHIFTING-RAILS FOR VEHICLES.

Specification forming part of Letters Patent No. **221,295**, dated November 4, 1879; application filed  
April 21, 1879.

*To all whom it may concern:*

Be it known that I, JOHN LESLIE FISHER, of White Water, in the county of Walworth and State of Wisconsin, have invented a new and valuable Improvement in Shifting-Rails for Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of my improved shifting-rail for vehicles with the seat-back removed, in plan view. Fig. 2 is a rear view thereof; and Fig. 3 is a side elevation of the same, partly in section.

This invention relates to certain improvements in shifting-rails for vehicles, the object of which is to provide for easily and quickly connecting and disconnecting the back-rail of the seat; and the nature of the invention consists in constructing the back-rail with front and rear hooks, adapted to be sprung and locked into catches or eyes connected to the seat, and held in place by intermediate stop-projections and engaging-studs, substantially as hereinafter more fully set forth.

In the accompanying drawings, A marks the seat, with its parts fastened together by irons or braces *a a'*, in the usual manner. The upper ends of the rear braces or irons are provided with projecting staples or eyes *b b'*, and the front-side braces with notches *b'*.

B is the back-rail of the seat, having the arm or side pieces, *c c*, connected to a spring-bar, *c'*, of the back-rail.

The arms or side bars, *c*, and the spring-bar *c'* are provided (the former at their forward ends) with forwardly-projecting hooks *d*, fitting into the notches *b'* at that end of the seat, and at their rear ends with downwardly-projecting studs *d'*, entering locking eyes or staples *d<sup>2</sup>* on the seat, or rather in its braces, while the spring-bar *c'* is provided with rearwardly-projecting hooks *e e*, fitting into eyes or staples *b* in the back-braces of the seat.

To disconnect the back-rail B of the seat, press at the points of connection in rear in-

wardly upon the spring-bar *c'*, and as the hooks *e e* come in a line with their eyes or staples, lift the back-rail, then move the latter rearwardly, when its other hooks will be disengaged from their notches or catches, allowing it to be removed.

The method of again uniting the back-rail to the seat is effected by simply inserting its forward hooks, *d*, in their notches or catches *b'*, which will bring their studs *d'* in line with their coincident eyes or staples, and then pressing upon the spring-bar *c'*, as before, until the rear hooks, *e*, are in line with their eyes or staples, the latter hooks, with a slight downward pressure or movement of the rail, will spring into and be locked in their eyes or staples, thus firmly and securely locking the back-rail in position.

As the spring-pressure of the bar *c'* is outward, or in the same direction as that which may be exerted by the occupant of the seat, there is little or no liability to accidental disengagement.

I am aware that a spring shifting-rail adapted to be attached to a buggy-body is not new; hence I make no broad claim to such invention.

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

The combination, with the seat, having the rear eyes, *b*, front notches, *b'*, and stop-perforations *d<sup>2</sup>* between the same, of the seat-back rail, having the spring-bar *c'*, provided with rearward hooks, *e*, passing through the eyes *b*, forward hooks, *d*, engaging with the front notches, *b'*, and locking-studs *d'*, engaging with the stop-perforations *d<sup>2</sup>*, and preventing forward or rear movement of the rail after it is sprung into position, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN LESLIE FISHER.

Witnesses:

E. M. WILCOX,

J. A. PARTRIDGE.