P. B. FULLER.

Shifting-Rail for Carriages.

No. 208,303. Patented Sept. 24, 1878.

Fig. 1.

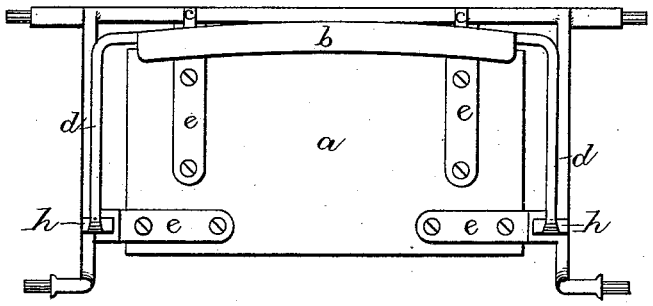


Fig. 2.

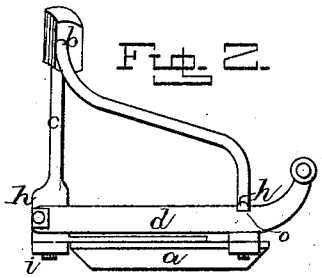


Fig. 3.

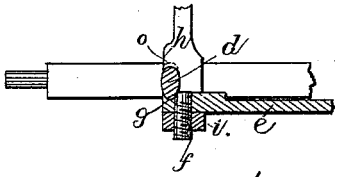


Fig. 4.

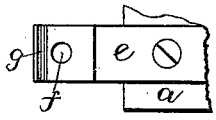
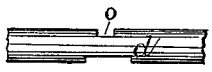


Fig. 5.



Witnesses:

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H. L. D. Ames.

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F. A. Lehmann,

Atty.

UNITED STATES PATENT OFFICE.

PLIMMON B. FULLER, OF UNION CITY, PENNSYLVANIA.

IMPROVEMENT IN SHIFTING-RAILS FOR CARRIAGES.

Specification forming part of Letters Patent No. **208,303**, dated September 24, 1878; application filed September 3, 1878.

To all whom it may concern:

Be it known that I, PLIMMON B. FULLER, of Union City, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Shifting-Rails; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in shifting tops for carriages; and it consists in making a jaw or clamp upon each of the irons secured to the back, so that the rail to which the top is fastened can be securely clamped between the said back-irons and the seat-irons, and yet allow the rail to be removed at any time without having to take off the back, as will be more fully described hereinafter.

The accompanying drawings represent my invention.

a represents the seat; *b*, the back, and *c* the irons secured thereto and connecting it to the seat; *d*, the rail to which the top is fastened, and *e* the seat-irons.

The seat-irons *e* project a suitable distance beyond the edges of the seat, and have holes *f* through them for the screw ends of the back-irons *c* to pass through, and just beyond the holes are the transverse grooves *g*, for the lower edges of the rail to fit in. At a distance above the tops of the seat-irons, to be regulated by the thickness of the rail *d*, on the outside of each back-iron *c*, is made a hook or clamp, *h*, which catches over the top edge of the rail. By tightening the nuts *i* on the lower ends of the back-irons the hooks *h* will be drawn downward, so as to clamp the rail with any desired force between them and the seat-irons *e*. When it is desired to remove the rail, it is only necessary to loosen the nuts until the back-irons are capable of being raised high enough up to let the rail *d* be removed.

By the construction above described the rail can be removed and replaced without the trouble of removing the back, while the cost of making the parts is no greater. In the top and bottom edges of the rail will be made notches *o* for the clamp to catch in, and thus prevent any lateral motion should the nuts work loose. The rail, being made perfectly straight everywhere except at the front ends, can be manufactured more cheaply than any others now in use.

Having thus described my invention, I claim—

The combination of the back-irons *c*, having the hooks *h*, with the seat-irons *e* and rail *d*, the rail being clamped in position by the nuts *i* between the seat-irons and hooks, substantially as shown.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of August, 1878.

PLIMMON B. FULLER.

Witnesses:
WM. INNMEYER,
H. L. CHURCH.