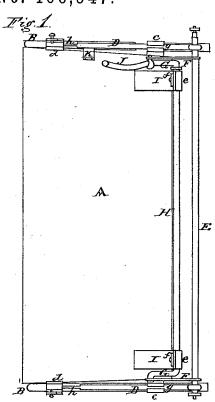
## O. E. MALLORY.

Shifting Carriage-Top.

No. 106,947.

Patented Aug. 30, 1870.



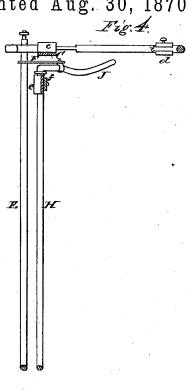
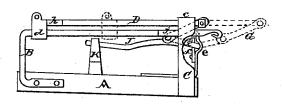
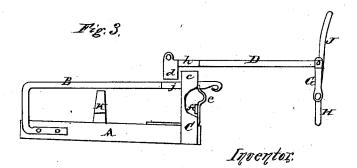


Fig.2.





Witnesses. All Hamilton Cohnson E. R. Prown

Orson E. Mallory
By Alex: A. C. Rlancke vlo

## United States Patent Office.

## ORSON E. MALLORY, OF BATAVIA, NEW YORK.

Letters Patent No. 106,947, dated August 30, 1870.

## IMPROVEMENT IN SHIFTING CARRIAGE-TOPS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Orson E. Mallory, of Batavia, in the county of Genesee and State of New York, have invented a new and useful Improvement in Movable Wagon-Tops; and I do hereby declare the following to be a full, clear, and exact description thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand and construct the same, reference being had to the accompanying drawing which makes part of this specification, and in which—

Figure 1 is a plan view of a wagon-seat, with my

improvementt attached.

Figure 2 is a side view of the same, the top being in a torward position, and showing the operative parts.

Figure 3 is a similar view, the top being in the act of being removed, and showing the mode of doing this.

Figure 4 is a bottom view of the same, the seat being cut away to show the operative parts.

Like letters of reference indicate like parts in the

several figures.

My invention is an improvement upon the movable wagon-top, for which Letters Patent were granted me on the 28th day of June, 1870, and it consists in making a movable wagon or carriage-top entirely detachable, when the same is constructed so as to slide horizontally forward or backward over the seat.

In the drawing-

A may represent a wagon or buggy-seat.

B are the side-rails, resting with their rear parts on standards C, provided with loops c, in which the slide-bars D, carrying the top, slide, the forward ends of these slide-bars being provided with loops d, which clasp over the side-rails B, sliding freely on them.

E is the rear bar of the top-carrying frame, connecting the rear ends of the slide-bars D, and carrying near each end a short lever, F, which swings

freely around bar E.

These levers F are pivoted to the end of cranklevers G, formed on or forming part of the revolving

bar H, which latter rests in standards I.

One of the crank-levers G is outwardly extended to form a lever-handle, J, which, when moved forward, may be secured by a spring-catch, K, suitably attached to the seat.

When the lever-handle is moved forward, the whole top-carrying frame slides forward on the side-rails B, and when it is moved back, the frame slides back.

I have so far described the parts which constitute the invention for which Letters Patent were granted me, dated June 28, 1870. In that patent the top of the carriage was not detachable, but was merely made to slide horizontally forward and backward. My present improvement consists in making this top removable, and I will now proceed to describe the means by which this is accomplished.

Instead of forming loops on the standards I, in which the bar H revolves, I construct the bearings for the latter by bending the standards, or otherwise construct them so as to form loops open one side, as shown at e, into which loops the bar H is placed, and held in place by means of pivoted lugs f. When these lugs are turned down, the bar H can be readily

removed from the standards.

The loops c, on standards C, have, on their upper part a slot, g, corresponding in length and width with square portions h, at the inner end of slide-bars D, and the loops d, on the slide-bars D, have similar slots, i, on their under sides, corresponding with square portions j on the side-rails D, which square portions j

extend from the standards C inwardly.

It will be readily understood that, when the bar H has been detached, as above described, and the top-carrying frame been pushed backward as far as possible, the loops c d will exactly cover the square portions h j respectively, (see fig. 3.) By now merely raising the top-carrying frame up squarely, the loops d will pass upwardly over the square portions j on the side-rails B, while the square portions h on the slide-bars D pass upwardly out from loops c, on standards C, thus completely detaching the top from the seat.

Having thus described my invention, What I claim as new, and desire to secure by Let-

ters Patent, is-

1. A movable wagon or carriage-top sliding horizontally over the seat, when made detachable, substantially in the manner herein described.

2. The combination of the slotted loops c d, and square portions h j on the standards C and slide-bar D respectively, with the bent standards I and lugs f, substantially as and for the purpose described.

O. E. MALLORY.

Witnesses:

R. F. THOMPSON, W. T. BLISS.