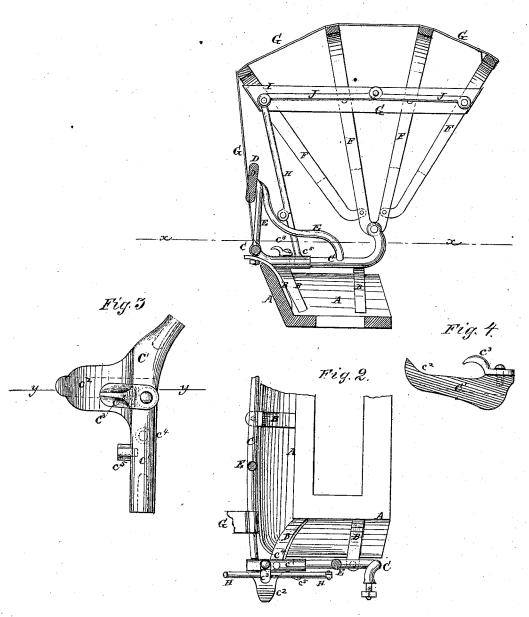
## N. B. RICHARDSON.

Carriage Top.

No. 108,831.

Patented Nov. 1, 1870

Fig. L



Witnesses:

A. J. Almqvish D. S. Walvee Inventor: N. B. Richardsgr.

PER MMM (50)

## United States

## NATHAN B. RICHARDSON, OF SOMERVILLE, NEW JERSEY.

Letters Patent No. 108,831, dated November 1, 1870.

## IMPROVEMENT IN CARRIAGE-TOP FIXTURES.

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, NATHAN B. RICHARDSON, of Somerville, in the county of Somerset and State of New Jersey, have invented a new and useful Improvement in Carriage-top Fixtures; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 is a vertical section of a carriage-top and seat to which my improvements have been attached.

Figure 2 is a horizontal section of the same, taken through the line x x, fig. 1.

Figure 3 is a top view of a modified form of the corner-iron of the seat-rail.

Figure 4 is a detail sectional view of the same, taken through the line y y, fig. 3.

Similar letters of reference indicate corresponding

My invention has for its object to improve the

construction of carriage-tops, so as to make them more convenient in use and manufacture, and at the same time more durable and less liable to injure the cover of the top; and

It consists in the construction, combination, and arrangement of various parts, as hereinafter more fully

A is the seat, to the ends and back of which are attached the straps B, to the upper ends of which the seat-rail C is bolted in the ordinary manner.

D is the lazy-back, which is connected with and supported from the rail C by the arms E.

ci are the corner-irons of the rail C, which, when the seat is made with square corners, is cast with a hole in its forward end, and with a hole in the side of its rear end, which holes are tapped to receive the ends of the end and back parts of the rail C, as shown in figs. 1 and 2.

When the seat A is made with rounded corners, the corner-iron  $e^1$  is east upon a curve, and the holes to receive the back and end parts of the rail C are made in the two ends of the said corner-irons, as shown in fig. 3.

Upon the outer side of the rear parts of the corner-irons  $c^1$  is cast an arm or rest,  $c^2$ , to support the top when turned down, and upon the upper side of the rear part of said irons is east a hole, to be tapped to receive the screw that pivots the button c3 to said corner-irons, the said button being designed to be turned over the jointed arm of the top when turning down, to prevent the said top from shaking about.

Upon the lower side of the middle part of the corner-irons  $c^1$  is cast a bolt,  $c^4$ , which is designed to pass through a hole in the strap B, and have a screwthread cut upon it to receive a nut, to secure it to the said arm or strap B.

Upon the outer side of the forward part of the corner-irons  $c^1$  is cast a projection,  $c^5$ , with a hole in it to receive the screw by which the lower end of the rear jointed arm is pivoted to the said corner-irons.

F are the bows, the ends of which are connected with and pivoted to the forward ends of the end parts of the rail C in the ordinary manner, and which are kept from spreading too far apart, or getting out of place when the top is raised, by straps or webbing, G, in the usual manner.

H are the rear jointed arms, the lower ends of which are pivoted to the inner sides of the corner-irons  $c^{i}$ , in the manner hereinbefore described, and the upper ends of which are pivoted to the pivots I, attached to the inner side of the rear bow F.

J are the forward jointed arms, the rear ends of which are pivoted to the pivot I, and the forward ends of which are pivoted to the pivots K, attached to the inner side of the forward bow F.

The pivots I and K are formed with holes in their projecting ends, to receive screws by which the said jointed arms are secured to them, thus giving a neater finish than is possible when the said arms are secured to the said pivots by nuts in the usual way.

By this construction and arrangement both the rear and forward jointed arms are brought within the top, enabling them to be conveniently operated by the driver from the seat to raise and lower the top, and at the same time the outer cover of the top is prevented from being worn or chafed by said arms, and the outside of the top has a neater appearance, and is not disfigured by projecting arms and their attachments.

Having thus described my invention,

I claim as new and desire to secure by Letters Pat-

1. A cast-iron corner, c1, in both ends of which is screwed the iron rail to which the top is fastened.

2. A cast-iron corner, having on the forward part thereof a projection, separate from and unconnected with the rest, to receive and bring the upright jointed brace on the inside, and to enable it to fold within the top.

NATHAN B. RICHARDSON.

Witnesses:

PETER DEWITT. A. V. D. B. Nosseler.