

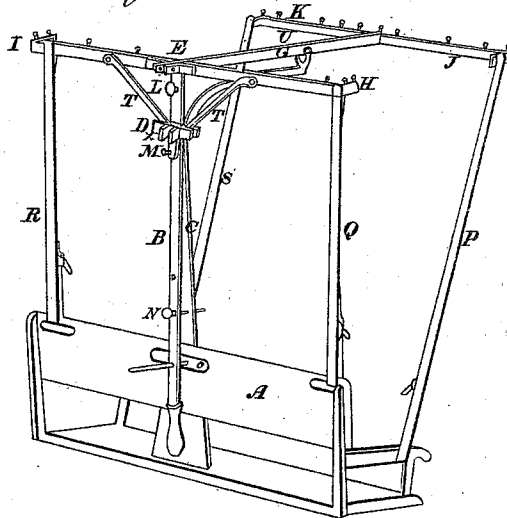
J. H. HAVEN.

Carriage-Top.

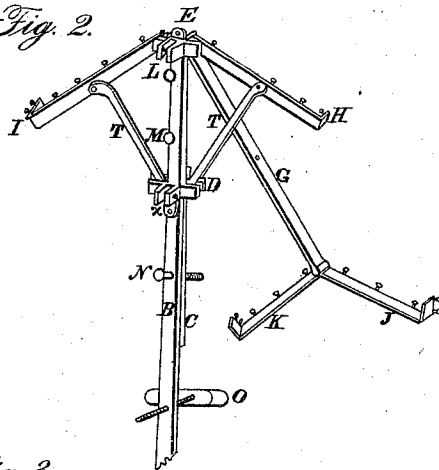
No. { 1,473, }  
      { 32,477. }

Patented June 4, 1861.

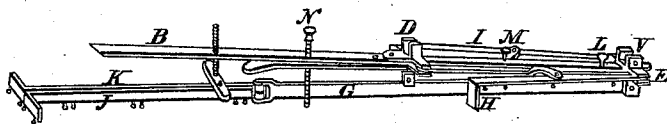
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses:

*W. S. Ruff*  
*James H. Ruff*

Inventor:

*Jonathan H. Haven*

# UNITED STATES PATENT OFFICE.

JONATHAN H. HAVENS, OF TROY, OHIO.

## FRAME OF BUGGY-TOPS.

Specification of Letters Patent No. 32,477, dated June 4, 1861.

*To all whom it may concern:*

Be it known that I, JONATHAN H. HAVENS, of Troy, in the county of Miami and State of Ohio, have invented a new and Improved Frame for a Buggy-Top; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in providing a cheap, light and convenient covering from storms or the heat of the sun to be attached to any kind of vehicle costing less by half than the ordinary buggy top and weighing two thirds less. Convenient, because it can be readily removed from one vehicle to another and when not in use can be shut up and hung in a very small space.

In order to remove this top from seat loosen principal thumb screw N, and webbing P, Q, R, S, as seen in drawing Figure 1. In order to fold it up, remove thumb screw U, from main arm G, at the point sustained by main brace F, then remove thumb screw at the point where main brace F, enters slot in lower head block D, as seen in drawing Fig. 1, take away main brace F, as seen in Fig. 4, then return thumb screw to slot in lower head block D, return thumb screw to main brace F, as seen in Fig. 4, then remove thumb screw M, from lower head block D, as seen in Fig. 1, of drawings, then press upon right and left rear arms H and I, until closed against standard B, as seen

in Fig. 3, of drawings, right and left fore wings J and K will fall forward as main arm G, descends, as seen in Fig. 2, of drawings. Guide O, as seen in Fig. 1, of drawings is to be run out or in to suit the bevel of whatever kind of seat lip C, may be fastened to in order that standard B, may always be perpendicular. If at any time it becomes necessary to remove lip C, you will remove thumb screw L, from below upper head block E, and lip C, can be drawn out by also withdrawing principal thumb screw N, which fastens standard B, and lip C, to seat A, as seen in Fig. 1, of drawings, if necessary to extend the top over two seats, as in case of spring wagons, another main arm like G, and main brace like F, with right and left wings like K and J can be inserted in slot V and X, of upper and lower head blocks E and D, as shown in Fig. 2, of drawings by dotted lines.

This frame may be made of iron, brass, wood or any other suitable material.

What I claim as my invention and desire to secure by Letters Patent is,

The combination of standard B, with arms I and H a longitudinal braced arm with wings K and J, the whole so constructed and arranged as and for the purposes set forth in the above specification.

JONATHAN H. HAVENS.

Witnesses:

S. P. BIRDLY,  
CHARLES V. ROYCE.