

(No Model.)

T. J. SULLIVAN & H. A. EAGLE.

BUGGY TOP.

No. 345,332.

Patented July 13, 1886.

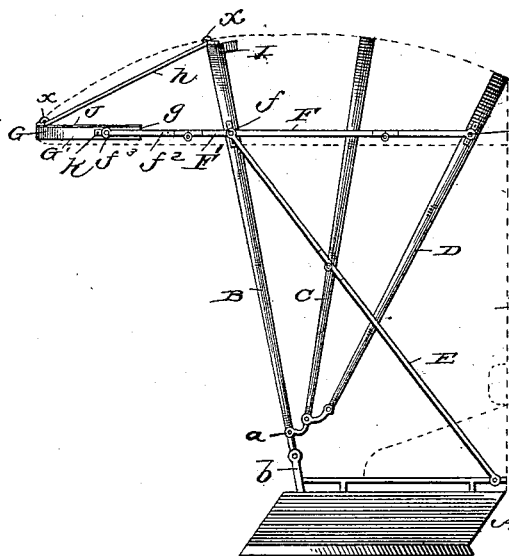


Fig. 1.

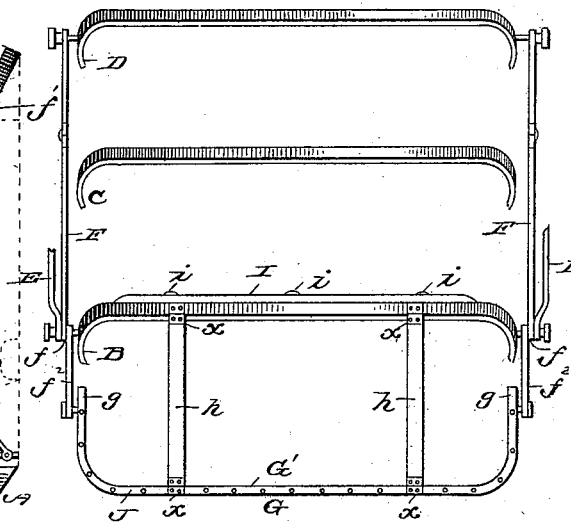


Fig. 2.

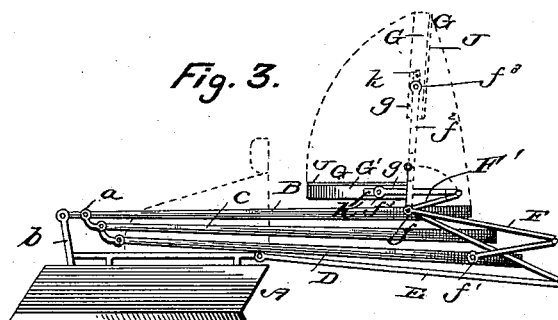


Fig. 3.

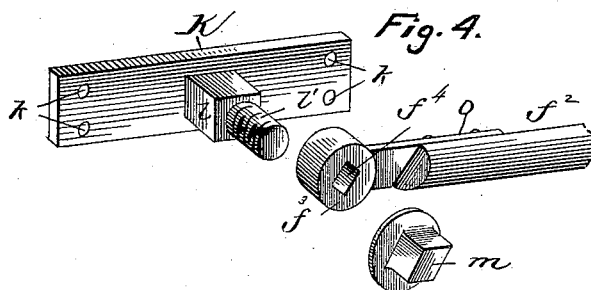
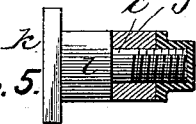


Fig. 4.

WITNESSES

WITNESSES
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Fig. 5.



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UNITED STATES PATENT OFFICE.

THEODORE J. SULLIVAN AND HENRY A. EAGLE, OF PERU, INDIANA.

BUGGY-TOP.

SPECIFICATION forming part of Letters Patent No. 345,332, dated July 13, 1886.

Application filed October 6, 1885. Serial No. 179,147. (No model.)

To all whom it may concern:

Be it known that we, THEODORE J. SULLIVAN and HENRY A. EAGLE, citizens of the United States, residing at Peru, in the county of Miami and State of Indiana, have invented a new and useful Improvement in Buggy-Tops, of which the following is a specification, reference being had to the accompanying drawings.

Our invention has relation to improvements in buggy-tops, and has for its object to provide an extension-top to the tops or hoods of buggies of ordinary construction, which shall be capable of operation independently of the ordinary top, which shall be easily and conveniently thrown forward to exclude sun and rain from entering the body of the buggy, and which can be thrown back with ease and facility when desired, which shall provide strength and durability without strain on other parts of the top, and which can be applied to tops of ordinary construction with a minimum of cost.

To these ends the invention consists in the construction, combination, arrangement, and adaptation of the various parts for service, substantially as hereinafter fully set forth, and specifically pointed out in the claims.

In the annexed drawings, Figure 1 is an elevation of an ordinary buggy-top having our improvement applied thereto. Fig. 2 is a plan view. Fig. 3 is a side elevation similar to Fig. 1, showing the top folded, and Figs. 4 and 5 are detail views of parts of our improvement.

Like letters of reference indicate corresponding parts in all the figures of the drawings, referring to which, A designates a body of a buggy or like vehicle, and B C D the bows thereof, hinged together at their lower ends, as at *a*, and to standards *b*, said bows being covered with the webbing, (not shown,) and adapted to fold one upon the other, as shown in Fig. 3, and as is usual.

E designates a jointed inclined prop pivoted to the body and to the bow B, as shown, and F designates a jointed folding prop, arranged in a horizontal position when the top is extended, and pivoted to the front and rear bows, B D, as at *f f'*.

F' designates a brace or arm that extends beyond the front bow, B, and to this brace is connected a horizontally-disposed arm, *f*², by means of a break-up joint, as shown.

The inclined and horizontally-disposed braces or prop-arms E F are pivotally connected together, as at *f*, and they are each provided with a break-up joint, to adapt them and the top to fold in the position shown in Fig. 3.

G designates our improved extension top or hood to the ordinary top hereinbefore described, and which is arranged in front of the bow B, and hinged thereto, as presently described, to adapt it to fold independently of the ordinary top.

G' designates the front bar or bow, bent or curved at its ends to provide arms *g*, which are connected to the front ends of the props F' by an arm or joint, *f*², thereof, and to the front bow, B, by straps or bands *h*, (two or more in number,) and hinged or pivoted at its ends to the said bows G' B, as at *x x*. (See Figs. 1 and 2.) The webbing or covering (shown in dotted lines in Fig. 1) is extended over the bow G', or from the bow B to the said bow G', and serves, in connection with the arms *f*², F', and the straps *h*, to support and hold the extension hood or attachment in position, and to be carried and supported by the top, the hood being extended, as shown in Fig. 1 of the drawings, when the top is unfolded, and when the top is folded into the position shown in Fig. 3 the hood is carried by and folded with it.

The bow B has a re-enforcing or strengthening strip, I, of wood or metal, preferably secured on the inner face thereof by screws or bolts *i*, to prevent straining or breaking of said bow; and the bow G' is also provided with a metal band or re-enforcing strap, J, secured thereto by screws or other suitable fastening means, and extending around and bracing the bent or curved arms *g* thereof, to prevent them from breaking or becoming strained under the force exerted by the extension-hood.

The rear ends of the arms *g* of the bow G' are provided on their outer faces with plates K, which are secured thereto by screws or bolts passing through openings *k* therein, and said plates are further provided with squared studs *l*, cast or formed therewith or separate therefrom, at or near their middle, and provided with outwardly-projecting threaded bolts *l'*.

The extreme forward ends of the prop-arms *f*² are each provided with a forwardly-projecting plate, O, the free end of which has an en-

larged head, f^3 , which is provided with a socket or opening, f^4 . This socket is of a shape and size corresponding to that of the stud l of the plate k , over which it is fitted, and held in place by a nut, m , secured on the threaded stud or bolt l' of the lug l , as more fully and clearly shown in Figs. 4 and 5.

It will be observed from the foregoing description, taken in connection with the drawings, that a firm and secure connection and support is provided for the extension-hood G , and that it is supported and carried by the top, the supporting-straps h being hinged or pivotally connected with the top, to permit of such movement, and to properly support the hood and to bring a minimum degree of strain and wear upon the parts.

The top is folded in the ordinary well-known manner, as shown in Fig. 3, and carries with it the extension-hood G , which folds upon the bows BCD , as shown in Fig. 3, the prop-arms f^2 and straps h folding downwardly and permitting the bow G' and its attached webbing to fold, as is obvious.

The operation of our invention will be readily understood from the foregoing description, taken in connection with the drawings.

Various slight changes in the form and proportions of parts and in the detailed construction may be made without departing from the principle of our invention, the essential features of which will be readily understood.

We do not claim, broadly, the combination, in a buggy-top, with the folding bows and jointed braces thereof, of an extension-hood comprising a short front bow connected with the main front bow by straps jointed to the main and short bows, and side prop-braces having break-up joints, one arm of each of the

braces being rigidly secured to the short bow and pivotally secured to the main bow.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a buggy-top, and in combination with the main bows thereof, an extension-hood comprising a bow, G' , carrying the angular lugs and the threaded studs, a jointed prop secured to the main bows, and having a jointed arm, f^2 , provided with a socket-piece at its free end which fits over the angular lug of the front bow, a nut fitted on the threaded stud for securing the arm f^2 to the bow G' , and the straps h , hinged to one of the main bows, and the bow G' of the extension-hood, substantially as described, for the purpose set forth.

2. In a buggy-top, and in combination with the main bows thereof, the front one, B , of which has a re-enforcing strip, I , the jointed braces F , connected with the main bows, and having arms f^2 , provided at their free ends with socket-plates O , an extension-hood comprising a bow, G' , the plates K at the free ends of the bow having the angular lug l and the threaded studs l' , the nuts fitted on the threaded studs of the plate, to prevent the socket-plates O from becoming detached from the lugs, and the straps h , intermediate of the bows B and G' , substantially as described, for the purpose set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

THEODORE J. SULLIVAN.
HENRY A. EAGLE.

Witnesses:

ELLENOR KARTHOLL,
J. D. OATES.