(No Model.)

G. W. SCOTT & C. LEIDIGH.

TOP SUPPORT FOR VEHICLES.

No. 342,046. Patented May 18, 1886.

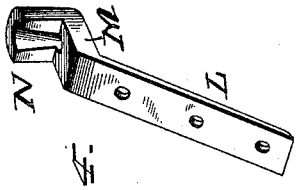


Fig. 4.

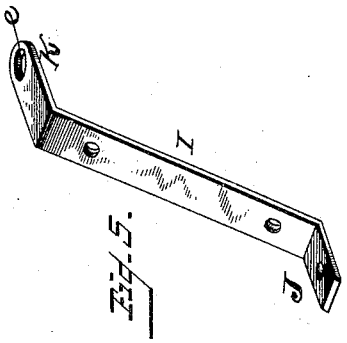
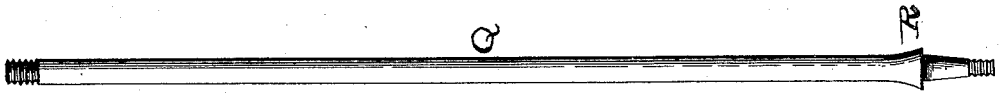
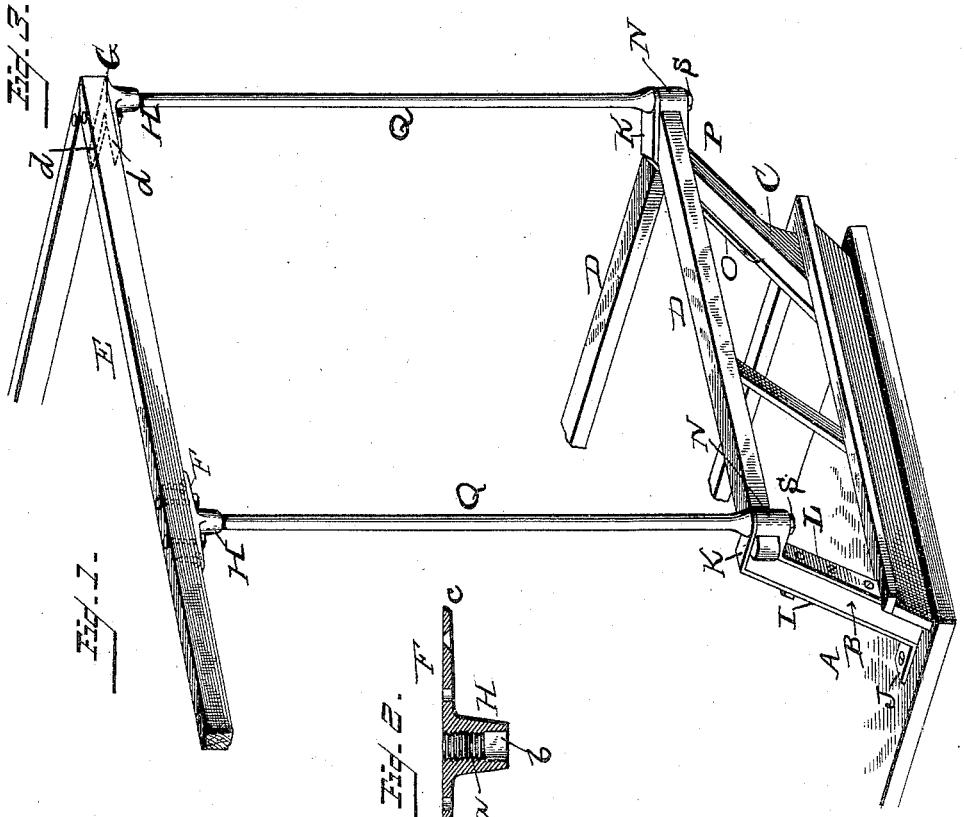
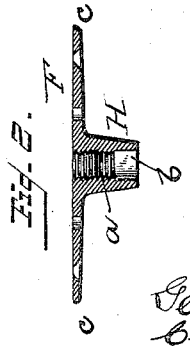


Fig. 5.







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UNITED STATES PATENT OFFICE.

GEORGE W. SCOTT AND CHRISTIAN LEIDIGH, OF TROY, OHIO, ASSIGNORS TO SCOTT, LEIDIGH & TODD, OF SAME PLACE.

TOP-SUPPORT FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 342,046, dated May 18, 1886.

Application filed March 4, 1886. Serial No. 194,015. (No model.)

To all whom it may concern:

Be it known that we, GEORGE W. SCOTT and CHRISTIAN LEIDIGH, citizens of the United States of America, residing at Troy, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Top-Supports for Vehicles; and we 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 appertains to make and use the same.

This invention relates to certain improvements in the construction of top-supports for adjustably attaching, supporting, and bracing canopy or stationary tops to the bodies of surries, buggies, and other pleasure and business wagons. The supporting-frame consists, essentially, of flanged plates attached to the under face of the canopy, and having depending collars or sockets interiorly screw-threaded for a portion of their length, flanged plates secured to the inner or top faces of the body-post, and extending across and beyond the top rail of the body, and flanged and socketed plates secured to the under side or outer faces of said posts, and extending across the under and outer faces of said top rail, and rods or posts having screw-threaded upper ends engaging with the depending collars, and conical or wedge-shaped and screw-threaded lower ends engaging with and connecting the socketed and flanged plates attached to the body posts or standards, and clamping the same and the body together, said posts being secured in position at their lower ends by nuts, and being adjustable or capable of being rotated, so as to either raise or lower the canopy-top, all as hereinafter specified.

In the accompanying drawings, Figure 1 represents a perspective view of a section of a vehicle-body with our improvements applied thereto. Fig. 2 represents a sectional detail view of one of the socketed plates secured to the canopy-top. Fig. 3 represents one of the standards or supporting-rods. Fig. 4 represents a perspective view of one of the under body-bracing and post receiving and supporting bars or plates. Fig. 5 shows a detail view of one of the flanged bracing-bars attached to the upper faces of the body.

A represents the body of a vehicle; B, the front and C the rear corner body-post, and D the top rail; E, the canopy-top.

F and G represent flanged top plates secured to the under side of the canopy-top. These plates each have a depending socket or collar, H, which is interiorly screw-threaded at its upper end, said screw-threads extending down a portion only of the length of the socket, as shown at *a*, while the lower portion of said sockets has a plain face, *b*, the object of this construction being to permit of the screw-threaded upper ends of the canopy-supporting posts passing into said sockets and engaging with the screw-threaded portions thereof, and of being turned therein, so as to either raise or lower the top, and thereby adjust it in position without exposing the screw-threads on the top of said posts. By forming the sockets with the post-connecting screw-threaded portion at the top only and forming screw-threads of similar length on the tops of the posts this is readily accomplished, as when the posts are turned in one direction, so as to raise the top, the lower portion of the screw-threads on said posts, which then come below the screw-threaded portion of the sockets, will be covered by the lower plane-faced portion of said sockets and their exposure prevented. Of course, when the posts are turned in the opposite direction to lower the top the screw-threads thereon will also be covered, as the sockets will then extend thereover. The collars are exteriorly of the shape of a depending cone, the screw-threaded portion upon which the wear comes being thicker than the remaining portion. The flanges *c* of the socketed top plates, F, attached to the canopy-top at the front extend in a straight horizontal direction, and are connected to said top by either screws or bolts and nuts, or both, as shown, while the flanges *d* of the corner-irons or top plates, G, extend at right angles, so as to extend around the corners of the top, said flanges *d* being secured, respectively, to the side and rear under faces of the top, thus bringing the depending post-receiving sockets at the rear corners of the top, whereby the top is firmly supported at the extreme corners and for some distance on either side thereof.

I represents flanged plates resting against

and attached to the inner or upper faces of the front posts or ribs, B, of the vehicle-body. These plates have at their lower ends inwardly-extending flanges J, which are secured to the bottom of the vehicle-body, and at their upper ends outwardly-extending flanges K, which rest upon and extend across and slightly beyond the top rail, D, a vertical slot or hole, *e*, being formed in the flange K, through which the lower portions of the front standards are passed.

L represents other plates secured to the under or outer faces of the front posts or ribs, B, these plates having at their upper ends outwardly-extending flanges M, which rest against the under face of the top rail, D, and terminating in upwardly-extending sockets N, of semi-cylindrical external contour, with straight inner edges, to permit of their resting snugly against the outer side or edge of the rail, and thereby, in connection with the flanged plates I and L, securely clamping and strengthening the top rail, D, at that point, and affording a strong bearing for the front standards or posts supporting the canopy. The interior of said sockets N are of conical or taper form, to adapt them to receive and support the tapering lower portion of the standards, to be presently described.

The corner bracing arms or plates are represented at O P. Of these, O represents the bracing-plate secured to the inner or upper face of the corner or rear post or rib, C, and is of the same construction as that of the plates or braces I, except that in this case the lower flange, J, may be dispensed with. The flanged plates P, attached to the under side or outer face of the corner or rear posts or ribs, C, are of the same construction and are similarly secured to the body as the flanged plates L and for the same purpose.

Q represents the canopy-supporting posts or standards, which at their upper ends are screw-threaded for a distance corresponding, or nearly so, in length with the length of the screw-threads in the upper portion of the collars or sockets H. Near their lower ends these standards have a circumferential shoulder, R, which, when said posts are in position, rests upon the top flanged plates, I and O. Below these shoulders the posts or standards extend in conical or tapering form for a short distance, so as to snugly fit the tapering interior of the sockets N on the lower flanged plates, while their extreme lower ends are screw-threaded to receive securing-nuts.

The several flanged bracing-plates I, L, O, and P, extending, as they do, up the body posts or ribs, and also across and around the top rail of the body, effectually brace and strengthen the same. The upper flanged and socketed portions of said plates, extending across and beyond the top rail, D, are also firmly braced by reason of the connection of said plates to the top rail and body-posts. When it is desired to connect a canopy-top to a vehicle, said brace and standard receiving plates I L O P are secured to the body-posts, with their upper flanged and socketed ends extending horizontally outward beyond the top rail, and the flanged plates F G, having the depending sockets or collars H, are secured to the under side of the canopy-top. The upper ends of the top-supporting posts or standards Q are then screwed in the sockets or collars H, and their lower ends passed through the flanges of the plates secured to the upper faces of the body-posts, and down within the sockets N, with the shoulders R on said posts resting upon the flanged plates, their tapering lower portions wedging within the taper bore of the sockets N, and their screw-threaded bottom ends projecting below said sockets N, said standards being retained in position by suitable nuts, S, screwed upon the projecting lower ends thereof. Whenever it may be desired to either raise or lower the top either at one point or throughout its area, the supporting-standards are turned in their sockets without removal therefrom, and as they are so turned their screw-threaded upper portions, engaging with the screw-threaded sockets on the canopy-top, will raise or lower said top, as the case may be, depending upon the direction in which said standards are turned, their lower ends rotating freely in the sockets N, but being prevented from vertical movement in either direction by the shoulders R and nut S. By this construction and arrangement of parts the canopy-top can be readily adjusted vertically and leveled without taking any portion of the structure apart by simply grasping and turning the supporting standards or rods in the desired direction to either raise or lower the top. The top can readily be removed from the vehicle by simply turning the supporting-standards Q in the sockets or collars H, and the supporting devices and top can be very readily and expeditiously applied to and removed from any suitable vehicle without injuring or marring the appearance of any part thereof, and the several parts of the top-support can be readily duplicated, as required, and packed in small compass for transportation.

Having thus described our invention, what we claim is—

1. A canopy-top support consisting of flanged plates secured to the canopy-top, and having depending sockets interiorly screw-threaded in their upper portions and having plain lower portions, flanged brace-bars secured to and bracing the body of the vehicle, and extending across and embracing the top rail, and having interiorly-tapering sockets and top-supporting posts adapted to fit within the respective sockets and be freely rotated therein, as and for the purpose set forth.

2. In a canopy-top support, the combination of plates secured to the top, and having depending sockets or collars having interior screw-threaded upper portion and plain lower portion, bracing-plates secured to the body-posts, and having flanged upper portions ex-

tending rearwardly in a horizontal direction beyond the top rail thereof, and said sockets having a taper bore, and supporting posts or standards having screw-threaded upper ends to engage the top plates, and plain tapering lower portions to rest within the tapered interior of the said sockets, with capability of free rotation therein, substantially as and for the purpose set forth.

3. The combination of the front top plates, F, having straight flanges *c*, depending sockets or collars H, having interior screw-threaded upper portion and plain lower portion, corner top plates, G, having right-angled flanges *d* and sockets or collars H, depending from the corner thereof, and having interior screw-threaded upper portion and plain lower portion, flanged brace-bars adapted to be secured to the inner faces of the body-posts and extend across the top rail, bars adapted to be secured to the under faces of the body-posts, and having at their upper ends outwardly-extending flanges and upwardly-extending sockets, and standards or posts connecting said flanged plates and brace-bars together, said posts resting within the socketed portions of the brace-bars, with capability of free rotary movement therein, substantially as and for the purpose set forth.

4. The combination of the corner top plates, G, having right-angled attaching-flanges *d*, and depending socket H, having interior screw-threaded upper portion and plain lower portion, brace-bars adapted to be attached to the upper faces of the corner-posts of a vehicle-body, and having at their upper ends outwardly-extending flanges to extend across and rearwardly beyond the top rail, brace-bars adapted to be attached to the under faces of the body-posts, and having at their upper ends rearwardly-extending flanges and upwardly-extending sockets adapted to fit snugly against and brace the corner of the top rail, and having a tapering bore, and top-supporting posts having screw-threaded upper ends and tapering lower portions, substantially as and for the purpose set forth.

5. A canopy-top-supporting frame consisting of flanged bracing-plates having downwardly-depending sockets screw-threaded in their upper inner portion, supporting rods or standards connecting at their upper ends with said sockets, and having shouldered and screw-threaded lower portions, bracing-bars attached to the inner portion of the framing of the vehicle-body, and having flanged portions adapted to extend across the top rail of the vehicle, and bracing-bars attached to the outer portion of the vehicle-body, and having an outwardly-extending flanged and upwardly-extending semi-cylindrical portion adapted to embrace and clamp the top rail of the body and receive the lower portion of the standards, and nuts engaging with the bottoms of said standards and securing the several parts together, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

GEORGE W. SCOTT.
CHRISTIAN LEIDIGH.

Witnesses:
W. B. McKINNEY,
CHAS. A. SCHNELL.