No. 822,635. PATENTED JUNE 5, 1906.

W. J. SLYDER.

CANOPY SUPPORT.

APPLICATION FILED FEB. 19, 1904.

2 SHEETS—SHEET 1.

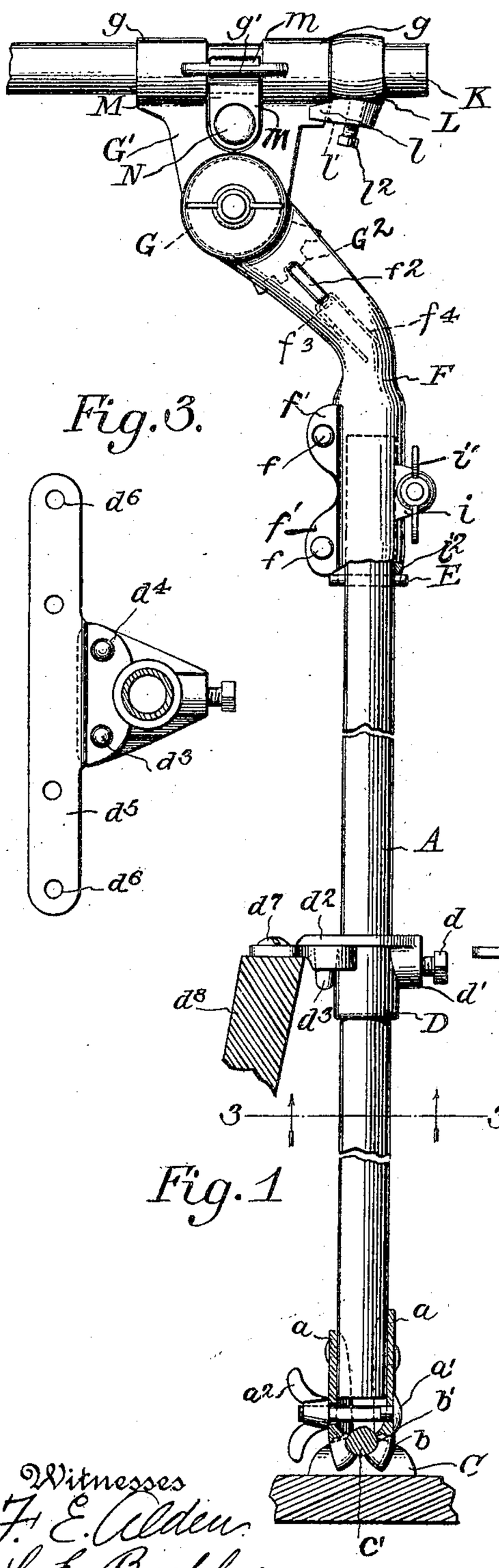



Fig. 1

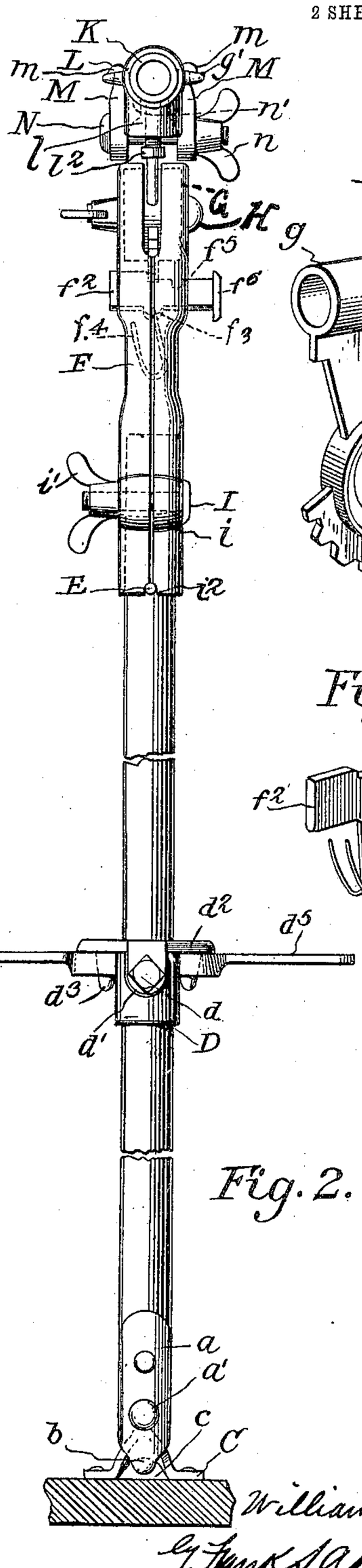



Fig. 2.

Fig. 3.

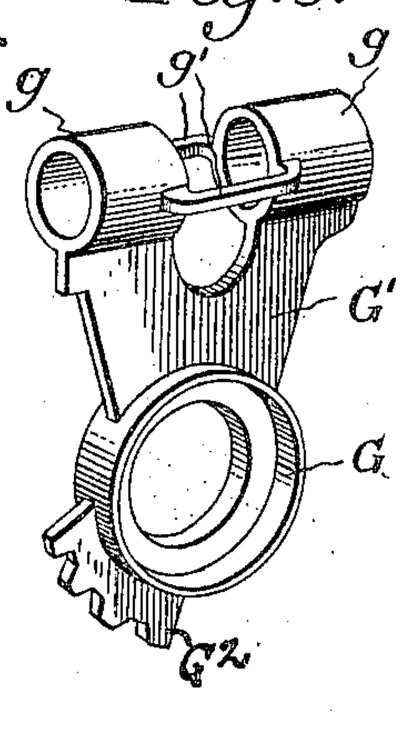



Fig. 5.

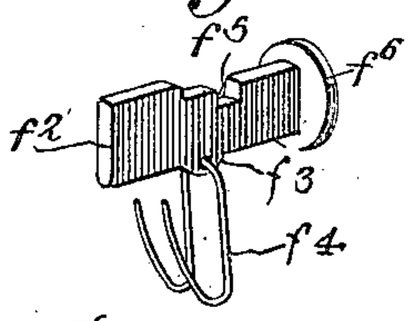



Fig. 4.

Witnesses
F. E. Alden
L. C. Barkley.

Inventor
William J. Slyder
by Frank D. Ackerman
Attorney

No. 822,635. PATENTED JUNE 5, 1906.

W. J. SLYDER.

CANOPY SUPPORT.

APPLICATION FILED FEB. 19, 1904.

2 SHEETS—SHEET 2.

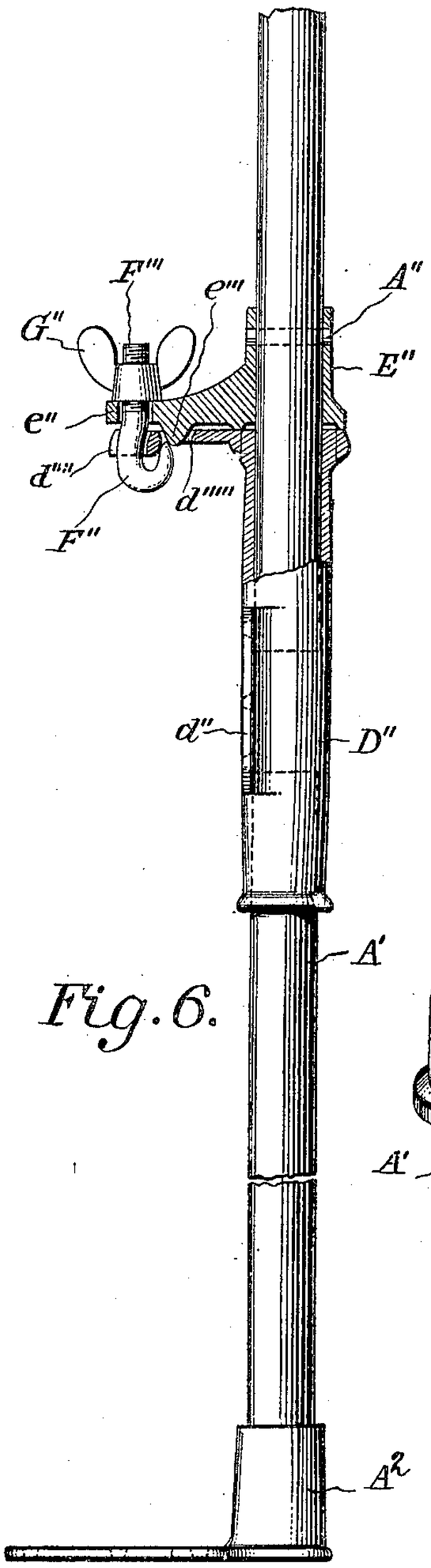



Fig. 6.

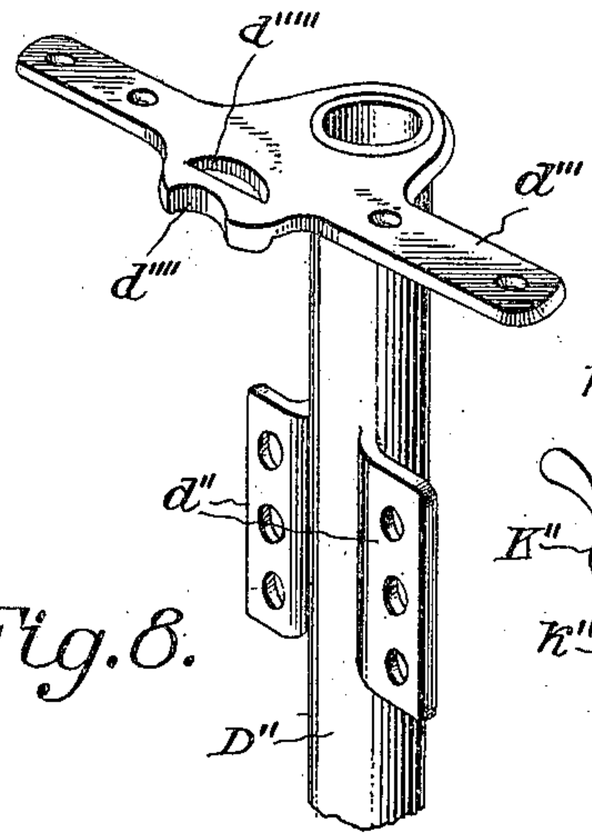



Fig. 8.

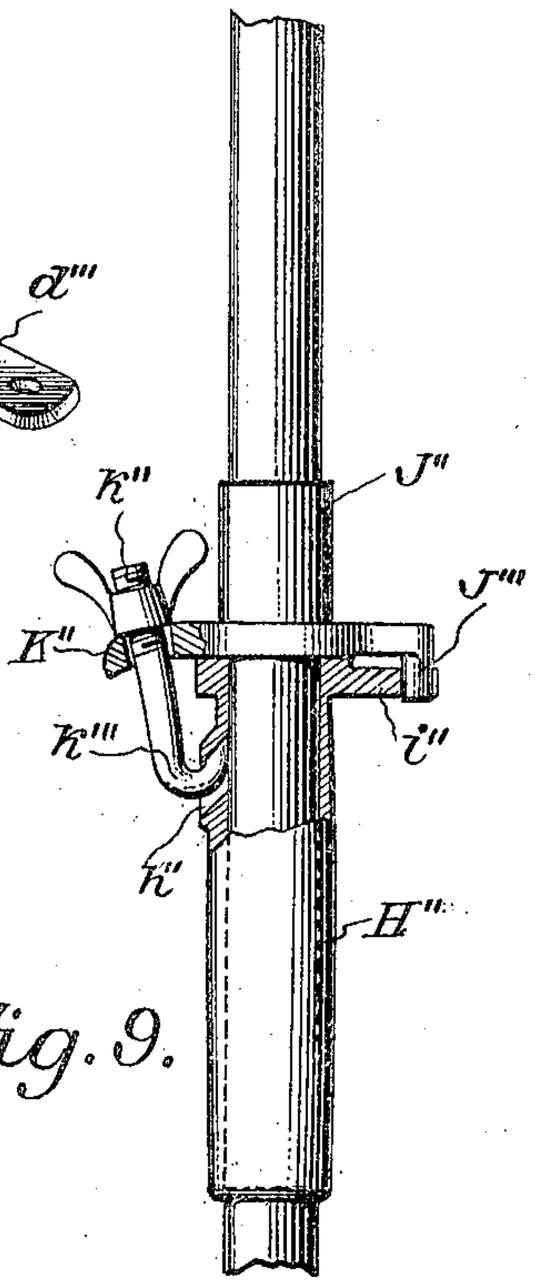



Fig. 9.

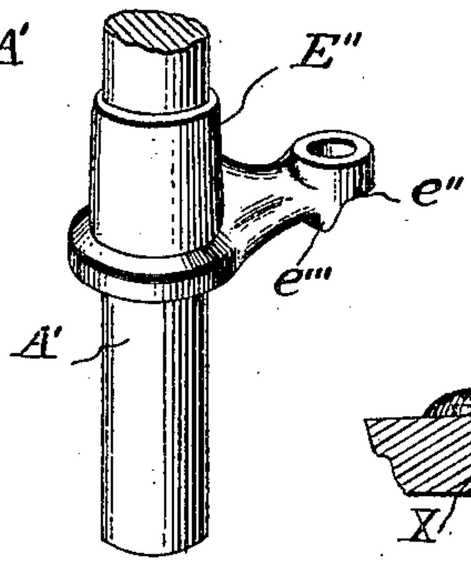
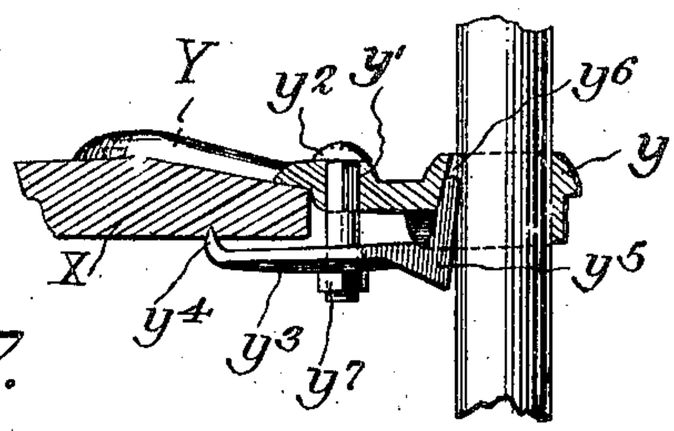



Fig. 7.

Fig. 10.




Witnesses
F. C. Celden.
L. E. Barkley.

Inventor.
William J. Slyder
by Frank Sackman
Attorney

# UNITED STATES PATENT OFFICE.

WILLIAM J. SLYDER, OF TROY, OHIO, ASSIGNOR TO GEORGE S. LONG, OF TROY, OHIO.

## CANOPY-SUPPORT.

No. 822,635. Specification of Letters Patent. Patented June 5, 1906.

Application filed February 19, 1904. Serial No. 194,329.

*To all whom it may concern*

Be it known that I, WILLIAM J. SLYDER, a citizen 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 Canopy-Supports, of which the following is a specification.

This invention relates to canopies and tops, and particularly to a class for supporting a canopy-staff in connection with a vehicle.

An object of this invention is to provide novel means for permitting the tilting of the canopy either longitudinally or transversely of a vehicle-body, and it furthermore involves means for affording an adjustment or tilt of the canopy toward either corner of the vehicle, thus permitting the said canopy to be positioned to intercept the rays of the sun regardless of the position of the sun with relation to the canopy-support.

Furthermore, an object of the invention is to provide a novel means for applying or removing a canopy to and from its standard and for applying and removing the standard itself to or from the vehicle. I accomplish this object through the medium of certain novel interlocking members, which are readily applied or detached, provision being made for the tightening of joints and for rigidity at the points of connection.

A still further object of the invention is to provide novel means for permitting the rotation of the canopy-supporting member with relation to the head in which said canopy-supporting member is clamped, and I also provide novel means for retaining the said supporting member against rotation or thrust after the parts have been adjusted.

In order to enable those skilled in the art to ascertain the nature of this invention and in what manner the same is carried into practice, the said invention will now be described in detail, reference being had to the accompanying drawings, forming part of this specification, wherein like characters denote corresponding parts throughout the several views, in which—

Figure 1 is a view in elevation, showing a canopy staff and arm embodying the invention, there being shown a fragment of a vehicle-back and a fragment of the bottom of a vehicle-body. Fig. 2 is a view in elevation looking from the rear, showing a fragment of the bottom of a vehicle-body with the fragment of the back omitted. Fig. 3 is a horizontal sectional view taken on the line 3 3 of Fig. 1. Fig. 4 is a detail perspective view of a latch employed for holding the parts in adjusted position. Fig. 5 is a perspective view of a member of the arm. Fig. 6 is a view in elevation, partly in section, showing a modified means for attaching the staff to the back of a vehicle. Fig. 7 is a perspective view of one member of the interlocking connections shown in Fig. 6. Fig. 8 is a perspective view of the opposite coacting member of this joint. Fig. 9 is a view in elevation, partly in section, showing a still further modification. Fig. 10 is a view in elevation, partly in section, showing a clamped means for attaching a staff to the side of a vehicle.

In the drawings, A denotes a standard of a canopy having on its lower end two plates *a a*, each of which terminates in lugs *b*, having recessed inner surfaces *b'*, the said recesses forming sockets.

The base-plate C, adapted to be attached to a bottom of a vehicle-body, has its central portion arched, as shown at *c*, the said plate C being reduced in width to form a neck *c'*, which neck lies in the recesses of the lugs of the plates *a a* and is partially embraced by said lugs. A bolt *a'* projects through the said plates and is provided with a thumb-nut $a^2$, by which the lugs of the plate are clamped in engagement with the neck of the base-plate.

Approximately centrally of the standard and slidable thereon is a collar D, which is held at different adjustments on the standard by means of the bolt *d*, which is threaded in the boss *d'* of said collar. The collar has a flange $d^2$ provided with studs $d^3$, which are received by the apertures $d^4$ of the plate $d^5$, the said plate $d^5$ having apertures $d^6$, through which the screws $d^7$ are inserted in the back $d^8$ of a vehicle-seat. In this embodiment of the invention the two studs $d^3$ serve to hold the central part of the standard in fixed relation to the back of the seat during such time as the parts are held, as illustrated in Fig. 1. Near the upper end of the standard is a cross-pin E, and the end of the hollow arm F rests thereon. The arm comprises two sections which are riveted together by rivets *f*, extending through the ears *f'*, and the upper end of each section of the said arm is enlarged, and the facing members thereof are provided with

recesses forming bearings for the reception of the hub G.

The hub G has a segmental rack $G^2$, the teeth of which are engaged by a spring-pressed detent $f^2$, which is slidable in the arm, the said detent having an apertured ear $f^3$, which receives the spring $f^4$, the said spring hanging therefrom and being confined in the hollow portion of the arm F. The upper portion of the arm is clamped into engagement with the hub G by means of the bolt H. The detent $f^2$, which engages the teeth of the rack, prevents movement of the said hub so long as the detent is in the position shown in Fig. 2. The detent has a head $f^6$, which is pressed to move the latch against the action of the spring $f^4$.

The ends of the spring $f^4$ bear against the inner wall of the arm and serve to hold the said detent in engagement with the teeth in the manner shown in Fig. 2. The detent is also provided with a recess $f^5$, which comes into registry or alinement with the teeth of the rack when the said detent is pressed transversely of the arm, in which position of the parts the rack is released, and the hub may be rotated or partially rotated in its bearings. The lower end of the arm is clamped on the standard A through the medium of the bolt I, passed through the ears $i$, and the thumb-nut $i'$. The lower end of the arm has sockets $i^2$, which receive the cross-pin E, so that when the said cross-pin is in the sockets rotation of the arm of the standard is prevented.

The hub G is provided with a web $g'$, the upper edge of which terminates in collars $g$, suitably separated, except for the yokes $g'$ on each side, which connect them. The rod or pipe K, to be hereinafter termed a "rod," is slidable in the collars in order to adjust the distance of the end of the rod from the said collars. The rod is designed for the purpose of supporting the head of a canopy. A ring L is placed on the end of the rod and has a lug $l$, with a recess $l'$, which receives the edge of the web G', and when the set-screw $l^2$ is threaded through the lug and ring and is in engagement with the rod K the engagement of the lug with the web will prevent the rod from being rotated in the collars $g$. As a means for further retaining the rod in position in the collars and to prevent the disengagement of the lug $l$ from the web G, I provide two clamping-plates M M, which have lips $m$, engaging the upper surfaces of the yokes $g'$, while their lower ends extend below the line of the rod K, the said clamping-plates having lugs $n'$ on their inner surfaces which are slightly concaved on their upper edges to conform to the contour of the rod K. As the clamping-nut is moved to draw the plates M M together at their lower ends the lugs $n'$ are forced into engagement with the rod K, whereby it is clamped in the collars $g$.

In the modification shown in Figs. 6, 7, and 8 the standard A′ may be of any ordinary construction, having a base-socket $A^2$ and a collar D″, the said collar being provided with apertured ears $d''$, by which the said collar is screwed to the rear of the back of a vehicle. The said collar is also provided with flanges $d'''$, which lie on the top of the back of the vehicle. The standard is run through the collar D″ and carries a second collar E″, having an apertured lug $e''$, which coincides with the recess $d''''$ in the flange of the collar. The said flange is also provided with an aperture $d'''''$, which receives the lip $e'''$ of the lug $e''$. When the parts are brought to the position shown in Fig. 6 with the lip $e'''$ in the aperture $d'''''$, the parts are interlocked, so that rotation of one member with relation to the other member is prevented. As the member E″ is secured on the staff A′ by the cross-pin A″, the standard is also prevented from rotating. In order to more effectually retain the parts in this assembled relation, I provide a depending hook F″, which embraces the edge of the flange of the collar by lying in the recess $d''''$ of said flange and having its hooked end extending from below into the aperture $d'''''$. The threaded shank of the hook extends through the aperture in the lug $e''$ and has a thumb-nut G″, by which the members are clamped against accidental displacement and whereby the joint is held against undue vibration or rattling.

The further modification shown in Fig. 9 consists of a collar H″, having a socket $h''$ in its wall, the said collar having an apertured flange $i''$ and flanges (not shown) similar to those shown at $d''$ in Fig. 8, the said flanges being for the purpose of securing the collar to the back of the vehicle. A member J″ has a lug J‴, which fits in the aperture of the flange $i''$. The member J″ is also provided with an apertured extension K″, through which the shank $k''$ of the hook $k'''$ extends. The shank is provided with a thumb-nut by which the said shank is moved, and the end of the said hook is adapted to be seated in the socket $h''$ of the collar. The arrangement of parts is very well shown in the drawings, and a further detailed description is believed to be unnecessary.

In the modification shown in Fig. 10 a device is provided which is designed to be clamped to the seat X of a vehicle for the purpose of holding the standard of a canopy in certain relation to the said seat, and this invention comprises a bracket Y, terminating in a socket $y$ for the reception of the staff of a canopy. The bracket is secured to the seat of a vehicle in any suitable manner and has an aperture $y'$ for the reception of the bolt $y^2$, which is passed therethrough. The bolt also extends through a coacting clamping member $y^3$, having spurs $y^4$, which are embedded in the seat X. The opposite end of the member $y^3$ has a right-angular extension $y^5$, which lies

in a recess $y^6$ in the inner wall of the socket $y$. As the nut $y^7$ on the bolt $y^2$ is run on said bolt that portion of the member $y^3$ within the socket is bound against the surface of the staff, and the said standard is therefore frictionally held in the said socket against displacement or disengagement, while the said member is held with relation to the bracket in the position just described.

Having fully described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a canopy-support, a suitable standard, plates secured to the lower end of the standard, having recessed lugs, a base-plate having its central portion arched and reduced in width, said reduced portion being clamped by the plates on the standard.

2. In a canopy-support, a suitable standard, two plates secured to the lower end of the standard having recessed lugs, a base-plate secured to the bottom of a vehicle, said plate having a reduced portion clamped by the plates on the standard, substantially as described.

3. In a canopy-support, a suitable base-socket, a standard in the socket, means for attaching the standard to a portion of a seat of a vehicle, an arm on the standard, said arm comprising two sections suitably secured together, a hub pivotally mounted in the arm, a segmental rack carried by the hub, a detent in the arm for engaging the rack, and a canopy-supporting member carried by the hub.

4. In a canopy-support, a suitable standard and means for securing it to a vehicle-body, an arm on the upper end of the standard, said arm comprising two sections suitably secured to the standard, bearings formed in the meeting faces of the sections of the arm, a hub pivotally mounted in the bearings, a segmental rack depending from the hub, a spring-pressed detent slidable in the arm for engaging the rack, a web rising from the hub, a collar carried by the web, a rod secured in the collar and means for clamping the rod in place.

5. In a canopy-support, a suitable standard and means for securing it to a vehicle-body, an arm on the upper end of the staff, said arm comprising two sections suitably secured to the staff, bearings formed in the meeting faces of the sections of the arm, a hub pivotally mounted in the bearings, a segmental rack depending from the hub, a spring-pressed detent slidable in the arm for engaging the rack, a web rising from the hub, a collar carried by the web, a rod in the collar, a ring on said member having a lug engaging the web and means on the web for supporting said member.

6. In a device of the character described, a suitable standard for a canopy-top, a collar slidable on the standard, means for securing the collar to a vehicle-seat, a second collar immovably secured to the standard engaging the sliding collar in such a manner as to prevent rotation of the standard.

7. In a device of the character described, a suitable standard for supporting a canopy-top, a collar slidable on the standard, means for securing the collar to a vehicle-seat, a second collar immovably secured to the standard, and a clamp carried by the second collar engaging the sliding collar, to hold the standard against rotation.

8. In a device of the character described, a suitable standard for supporting a canopy-top, a collar slidable on the standard, said collar being provided with an aperture, means for securing the collar to a vehicle-seat, a second collar immovable on the standard, and a lug on said second collar engaging the aperture of the sliding collar.

9. In a device of the character described, a suitable standard for supporting a canopy-top, a collar slidable on the standard, said collar having an aperture, a second collar immovably carried by the standard and a clamping means carried by the second collar engaging the aperture of the sliding collar.

10. In a device of the character described, a suitable standard for supporting a canopy-top, a collar slidable on the standard, said collar having an aperture, means for securing the collar to a vehice-seat, a second collar immovably secured to the standard, and a clamping-hook loosely held by the second collar engaging the aperture of the sliding collar.

11. In a device of the character described, a suitable standard for supporting a canopy-top, a collar slidable on the standard, said collar having an aperture, means for attaching the collar to a vehicle-seat, a second collar immovably secured to the standard, a lug on the second collar engaging the aperture of the sliding collar and a clamping means carried by the second collar also engaging the aperture of the sliding collar.

12. In a device of the character described, a suitable standard for supporting a canopy-top, a collar slidable on the standard, said collar having an aperture and a recess in an edge, a second collar immovably secured to the standard provided with an aperture and a clamping-hook loosely passing through the aperture of the second collar, engaging the recess of the sliding collar, and engaging the aperture of the sliding collar.

13. In a device of the character described, a suitable standard for supporting a canopy-top, a collar thereon, means for attaching the collar to a vehicle-seat, and means carried by the collar to contact both with the collar and standard.

14. In a device of the character described, a suitable standard, means for securing the standard to a vehicle-body, an arm on the

standard provided with sockets, a canopy-supporting means carried by the arm; and a cross-pin carried by the standard and engaging the sockets of the arm to hold the arm against rotation.

15. In a device of the character described, a suitable standard, means for securing the standard to a vehicle-body, an arm carried by the standard, said arm being provided with sockets, means carried by the standard for engaging the sockets to hold the arm against rotation, and a canopy-supporting means carried by the arm.

16. In a device of the character described, a suitable standard, means for securing the standard to a vehicle-body, a hollow arm on the standard, a hub mounted in the arm, a segmental rack depending from the hub within the arm, a detent in the arm for engaging the rack, a spring depending from the detent and bearing against the walls of the arm, and a canopy-supporting means carried by the hub.

17. In a device of the character described, a suitable standard, means for securing the standard to a vehicle-body, an arm carried by the standard, a hub mounted on the arm, means for holding the arm against movement, suitably-spaced collars carried by the hub and a rod fitting within the collars.

18. In a device of the character described, a suitable standard, means for securing the standard to a vehicle-body, an arm carried by the standard, a hub mounted on the arm, means for holding the arm against movement, suitably-spaced collars carried by the hub, a rod fitting within the collars, and means for holding the rod against rotation.

19. In a device of the character described, a suitable standard, means for securing the standard to a vehicle-body, an arm carried by the standard, a hub mounted on the arm, means for holding the arm against movement, suitably-spaced collars carried by the hub, a rod fitting within the collars and means carried by the rod contacting with a collar for holding the rod against rotation.

20. In a device of the character described, a suitable standard, means for securing the standard to a vehicle-body, an arm carried by the standard, a hub mounted on the arm, means for holding the arm against movement, suitably-spaced collars carried by the hub, a rod fitting within the collars, a collar on the rod, and a recessed lug on the collar of the rod to engage the hub at a point adjacent one of the collars.

21. In a device of the character described, a suitable standard, means for securing the standard to a vehicle-body, an arm carried by the standard, a hub mounted on the arm, means for holding the arm against movement, suitably-spaced collars carried by the hub, a rod fitting within the collars, and means carried by the hub engaging the rod to hold the rod against longitudinal movement.

22. In a device of the character described, a suitable standard, means for securing the standard to a vehicle-body, an arm carried by the standard, a hub mounted on the arm, means for holding the arm against movement, suitably-spaced collars carried by the hub, a rod fitting within the collars, and clamping-plates carried by the hub contacting with the rod to hold the rod against longitudinal movement.

23. In a device of the character described, a suitable standard, means for securing the standard to a vehicle-body, an arm carried by the standard, a hub mounted on the arm, means for holding the arm against movement, suitably-spaced collars carried by the hub, a rod fitting within the collars, and clamping-plates carried by the hub provided with lugs contacting with the rod to hold the rod against longitudinal movement.

24. In a device of the character described, a suitable standard, means for securing the standard to a vehicle-body, an arm carried by the standard, a hub mounted on the arm, means for holding the arm against movement, suitably-spaced collars carried by the hub, a rod fitting within the collars, connections between the collars of the hub and clamping-plates carried by the hub engaging the connections and bearing against the rod to hold the rod against longitudinal movement.

25. In a device of the character described, a suitable standard, means for securing the standard to a vehicle-body, an arm carried by the standard, a hub mounted on the arm, means for holding the arm against movement, suitably-spaced collars carried by the hub, a rod fitting within the collars, and clamping-plates carried by the hub engaging the rod between the collars to hold the rod against longitudinal movement.

In testimony whereof I affix my signature, in the presence of two witnesses, this 16th day of February, 1904.

WILLIAM J. SLYDER.

Witnesses:
GEO. S. LONG,
FREDERICK W. LONG.