No. 896,863. PATENTED AUG. 25, 1908.

J. E. SMITH.

# CANOPY TOP FOR VEHICLES.

APPLICATION FILED MAR. 23, 1908.

2 SHEETS—SHEET 1.

FIG. 1.

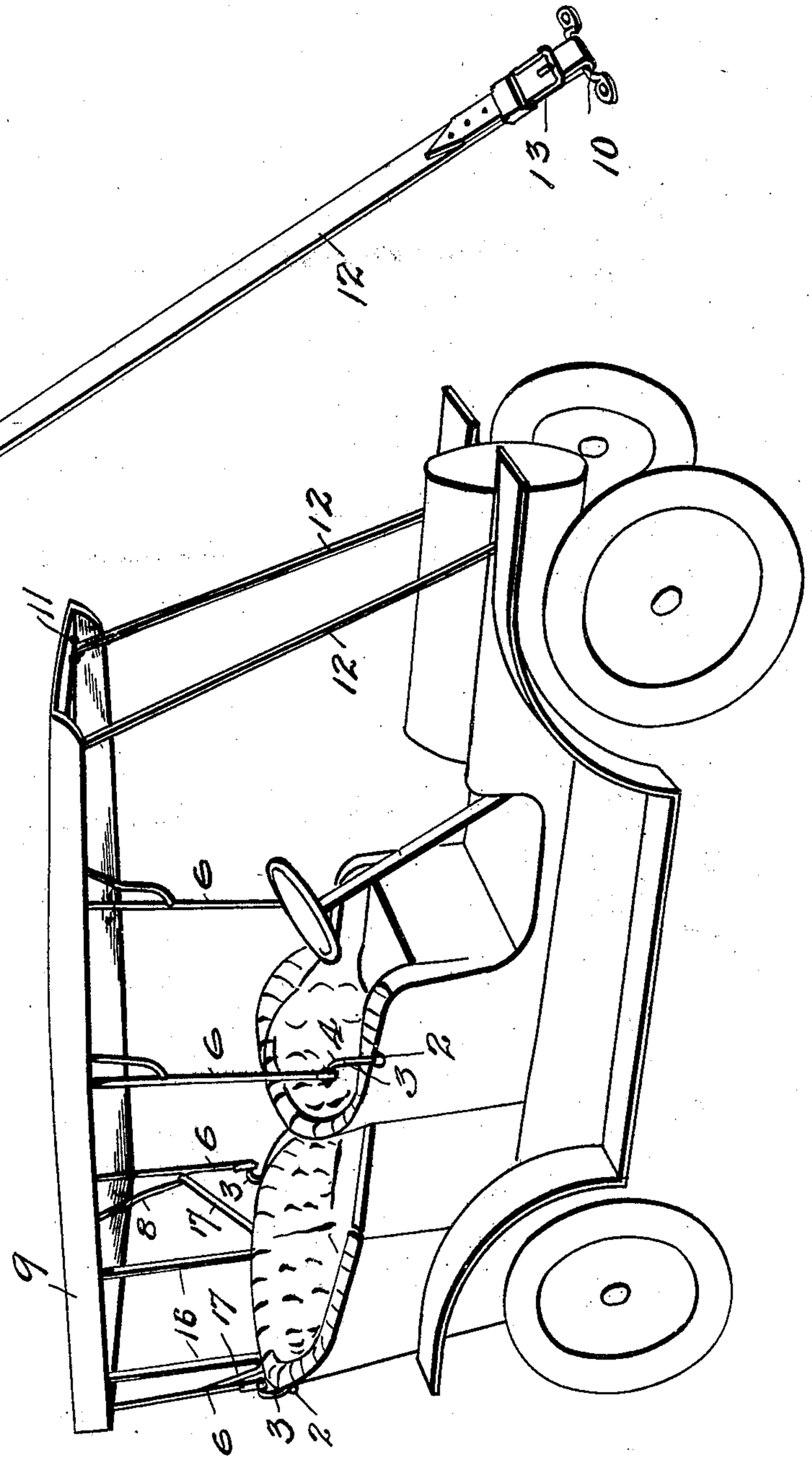



FIG. 4.




WITNESSES

Chas. K. Davis

INVENTOR

J. E. Smith

By F. E. Stebbins Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

No. 896,863. PATENTED AUG. 25, 1908.

J. E. SMITH.

# CANOPY TOP FOR VEHICLES.

APPLICATION FILED MAR. 23, 1908.

2 SHEETS—SHEET 2.

FIG. 5.

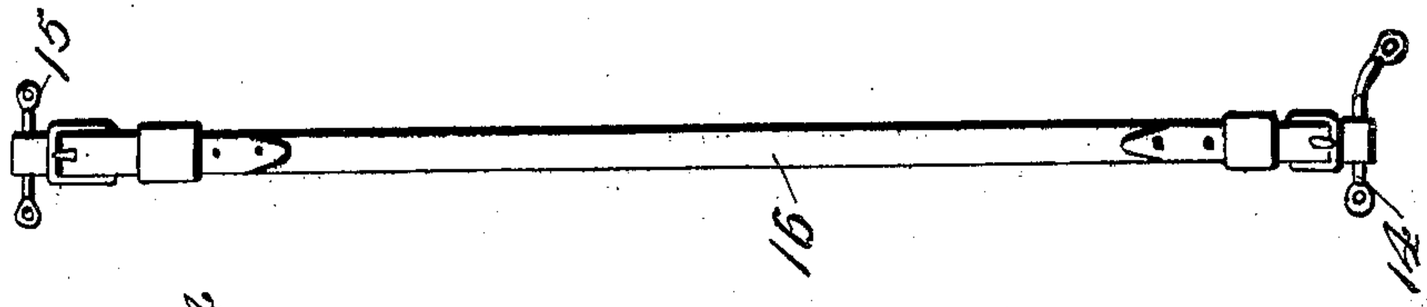



FIG. 3.

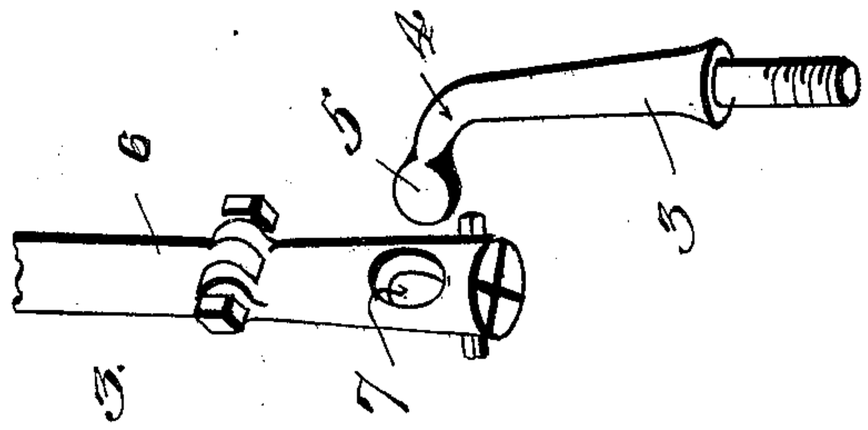



FIG. 6.

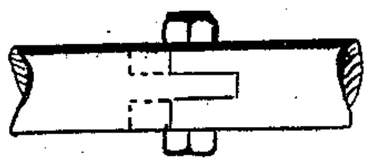
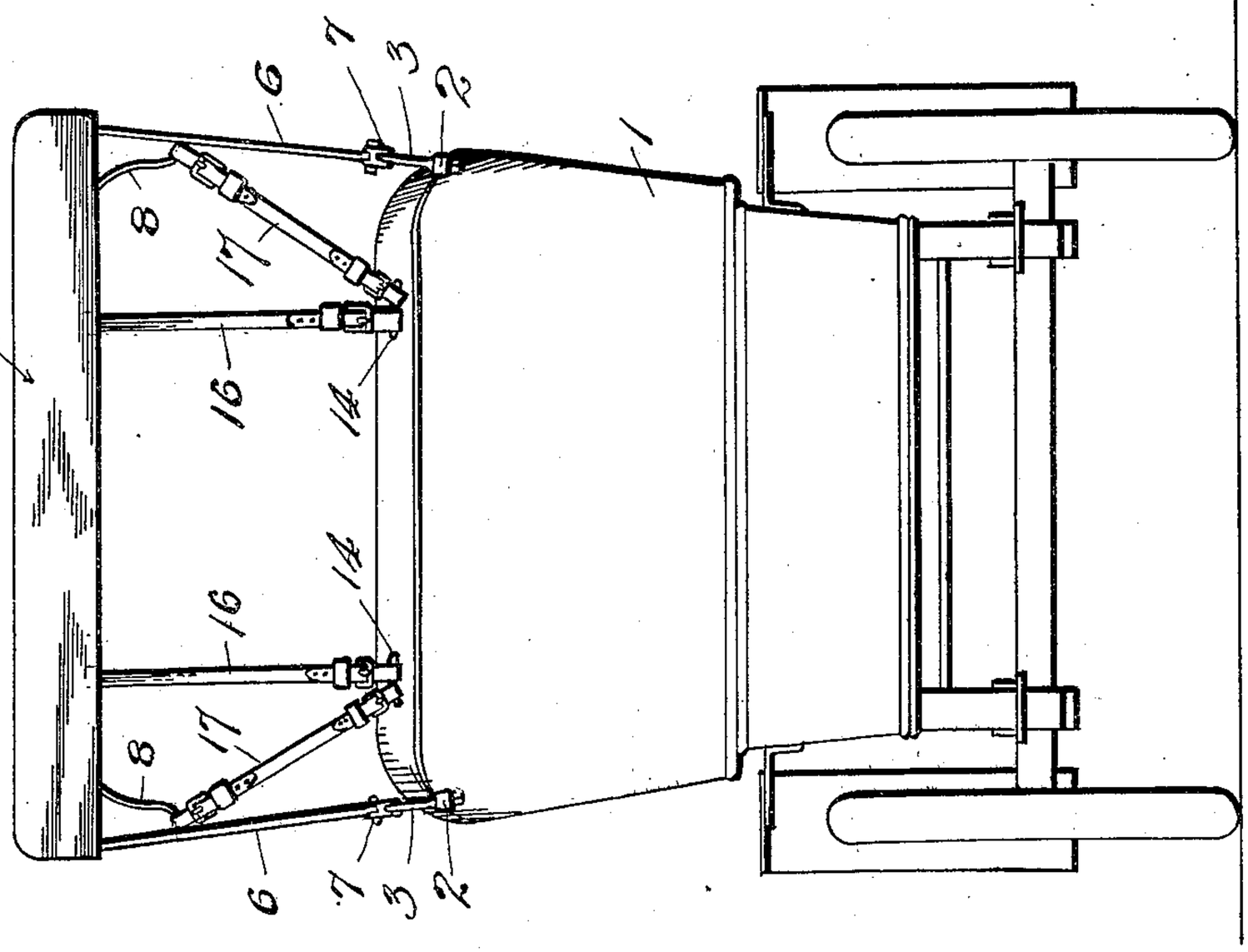


FIG. 2.




WITNESSES

Chas K. Davies

Thos. F. Moore

INVENTOR

J. E. Smith

By F. E. Stebbins Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

JOHN EDWARD SMITH, OF ATLANTA, GEORGIA.

## CANOPY-TOP FOR VEHICLES.

No. 896,863. Specification of Letters Patent. Patented Aug. 25, 1908.

Application filed March 23, 1908. Serial No. 422,666.

*To all whom it may concern:*

Be it known that I, JOHN EDWARD SMITH, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented new and useful Improvements in Canopy Tops for Vehicles, of which the following is a specification.

My invention relates to vehicle tops, and in particular to that type known as canopy tops. The use of such tops in connection with automobiles has almost entirely been abandoned, for the reason that damaging strains are imparted to the body by the racking of the top which heretofore has been fastened to the body of the vehicle by rigid posts or standards.

The object of my invention is to so support the top that when the vehicle is in motion the movements of the top will not be transmitted to the body with injurious effects.

My invention consists in flexibly supporting the top upon the body of the vehicle, as by ball and socket joints or by other means which will allow the top to move in substantially a horizontal plane without subjecting the body to injurious strains, and limiting the movements of the top relative to the body through the medium of flexible means, such as stays or straps.

The accompanying drawings illustrate one example of the physical embodiment of the invention constructed according to the best mode I have so far devised for the practical application of the principle.

Figure 1 is a view of an automobile having a canopy top flexibly supported upon the body and disclosing my invention. Fig. 2 is an elevation view of the rear end of the automobile. Fig. 3 shows the two parts of the ball and socket joint. Fig. 4 shows one of the front straps and the eye bars. Fig. 5 shows a rear strap. Fig. 6 illustrates a modified type of joint.

Referring to the several figures, the numeral 1 designates the body of the vehicle; 2, sockets attached to the body at any desirable points or places, in this instance said sockets being four in number, two secured to the arms of the front seat and two secured to the back of the rear seat; 3, short posts, each having a bent end 4 with a ball 5 at the end, detachably secured in the sockets; 6, the standards; 7, sockets in the lower ends of the standards within which are located the balls 5 at the ends of the short posts; 8, the offsets or braces at the top ends of the standards; 9, the top or canopy supported upon and attached to the standards through the medium of any suitable connections, such as bolts or screws; 10, eye bars or brackets secured to the front portion of the vehicle in any suitable place; 11, eye bars secured to the front under surface of the canopy or frame; 12, straps or stays, each with a buckle 13, attached at their ends, respectively, to the eye bars 10 and 11 in any suitable way; 14, eye bars or brackets secured to the back of the rear seat; 15, eye bars secured to the under surface of the rear end of the canopy frame; 16, vertical straps, each with a buckle, having their ends secured to the eye bars 14 and 15 by buckles or otherwise; and 17, oblique straps with their ends secured to the eye bars 14 and the offsets 8 of the rear standards.

It will be observed that the two standards 6 at the rear end of the vehicle slant upwardly and backwardly and that the straps or stays 16 and 17, when drawn taut, hold them in their rearwardly inclined positions. When the straps or stays 12 are drawn taut the canopy may be slightly advanced and the tension of the rear straps 16 and 17 increased, the fulcrum points being at the ball and socket joints of the rear standards, as is obvious. The oblique straps or stays 17 hold the top against both excessive longitudinal and sidewise movements and in some cases may alone be used at the rear end of the vehicle, however, with heavy tops the vertical straps 16 should also be present to assist in restraining the longitudinal movements of the top.

The standard 6 and braces 8 are secured at their upper ends to the substantially rigid and non-foldable canopy top by bolts or screws, or in any other suitable way. The material of which the standards are made—metal or wood—can bend slightly under strains and hence the canopy top may move within limits in a horizontal plane. The flexible supports for the standards prevent the transmission to the body of the racking strains incident to the common means for supporting the non-foldable canopy top, that is, by standards rigidly secured at opposite ends to the body and the top.

From the foregoing description taken in connection with the drawings it will be clear that I have provided means for flexibly supporting the top upon the body and also for limiting its movements relative to the body, whereby the injurious effects incident

to the common method of construction are eliminated.

By the use of the ball and socket connection the top can move under restraint in substantially a horizontal plane in all directions, fore and aft, sidewise, and at all angles of obliquity to the length of the body. When it is desired that the top shall have a fore and aft movement only joints, for instance, like that shown by Fig. 6, may be used in connection with the standards.

It should be understood that I do not desire or intend to limit the scope of the invention to the particular means shown for securing flexibilty or for limiting the movements of the top flexibly supported, as other means may be substituted to perform the desired functions and attain the desired end or ends without constituting a substantial departure or departures.

What I claim is:

1. The combination with a vehicle body, of a rigid, non-foldable top; means for flexibly supporting the top upon the body; and means for limiting the movements of the top relative to the body.

2. The combination with a vehicle body, of a rigid, non-foldable top; means for flexibly supporting the top upon the body; and straps or stays for limiting the movements of the top relative to the body.

3. The combination with a vehicle body, of a rigid, non-foldable top; standards rigidly secured at their upper ends to the top and yieldingly secured at their lower ends to the body for supporting the top upon the body so the top may move fore and aft relative to the body; and means for restraining and limiting the movements of the top relative to the body.

4. The combination with a vehicle body, of a top; standards secured to the top; flexible joints between the standards and the body and yieldingly supporting the top; and means for restraining and limiting the movements of the top relative to the body.

5. The combination with a vehicle body, of a top; standards secured to the top; ball and socket joints in connection with the standards and body; and straps for restraining and limiting the movements of the top relative to the body.

6. The combination with a vehicle body, of a rigid, non-foldable top; means for flexibly supporting the top upon the body; flexible straps or stays connecting the front part of the top with the body; and flexible straps or stays connecting the rear part of the top with the rear part of the body.

7. The combination with a vehicle body, of a top; means for flexibly supporting the top on the body; flexible straps connecting the front part of the top with the front part of the body; and obliquely disposed straps or stays at the rear end of the vehicle for preventing excessive side movements of the top relative to the body.

8. The combination with a vehicle body, of a top; standards for supporting the top; flexible means between the top and the body which allow the top to move; flexible straps uniting the front part of the top and body; and flexible straps or stays at the rear of the vehicle; part of the standards being obliquely disposed between the top and the body.

9. The combination with a vehicle, of a top; standards secured to the top; means for allowing the standards and top to move relative to the body; straps or stays connecting the front part of the top with the body; and straps or stays for holding the rear part of the top in position relative to the body; the rear standards being upwardly and rearwardly inclined for the purpose set forth.

10. The combination with a vehicle body, of a top; means for flexibly supporting the top upon the body; straps or stays uniting the front and rear parts of the top to the body; and means for limiting the fore and aft movements of the top when the straps or stays at one end of the vehicle are placed under tension.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN EDWARD SMITH.

Witnesses:
EDWARD WILLINK,
B. V. STODGHILL.