J. REID.

CANOPY TOP FOR VEHICLES.

APPLICATION FILED OCT. 28, 1908.

941,274. Patented Nov. 23, 1909.

Fig. 1.

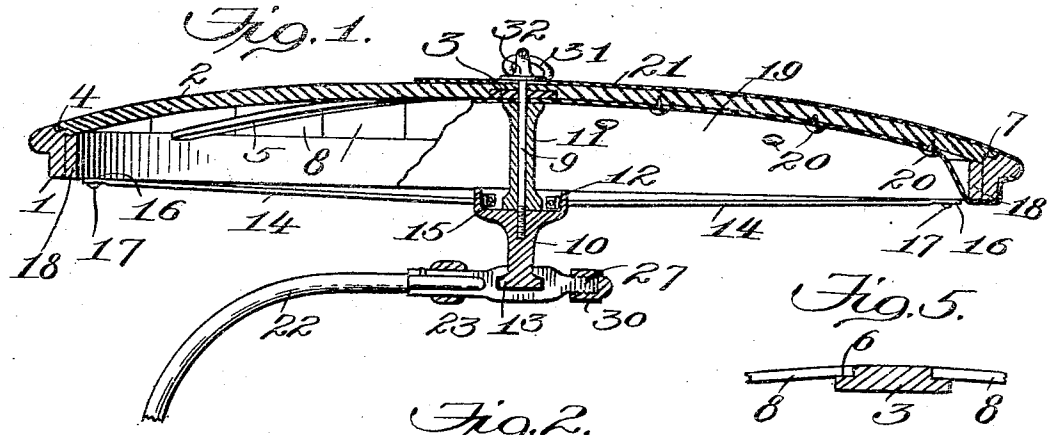


Fig. 5.

Fig. 2.

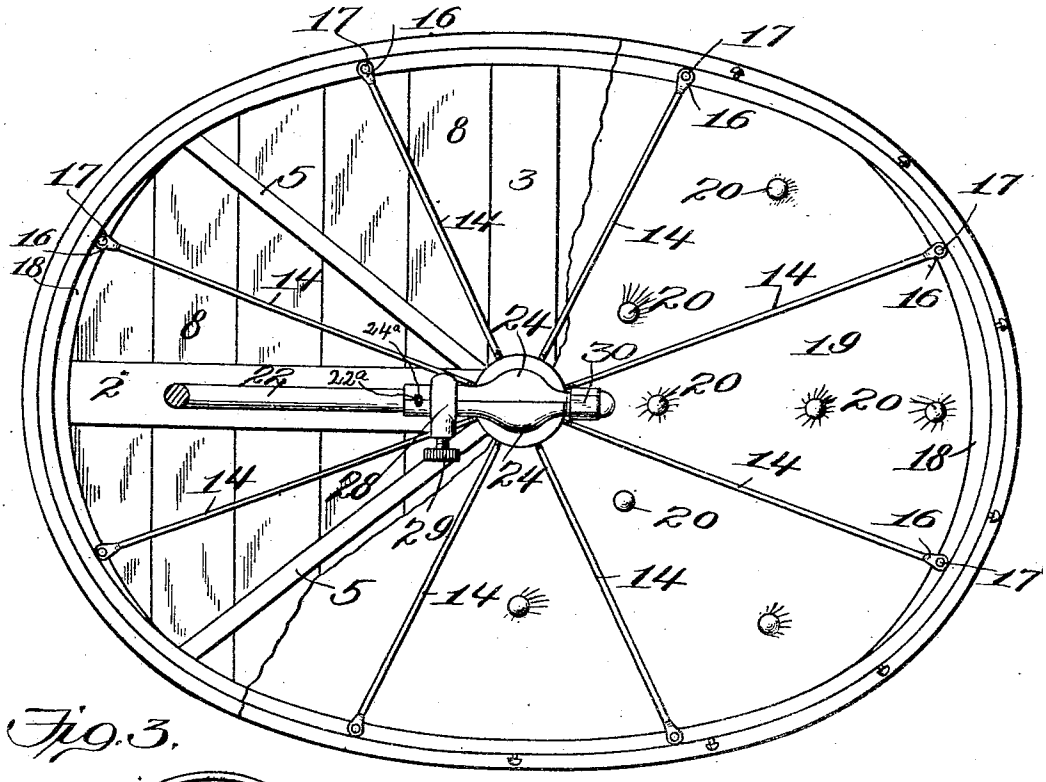


Fig. 3.

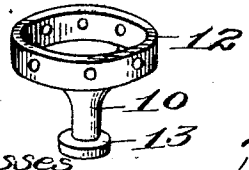
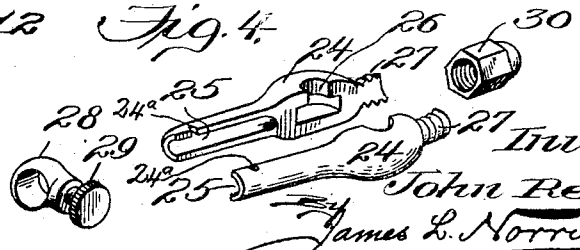


Fig. 4.



Witnesses

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CANOPY-TOP FOR VEHICLES.

941,274. Specification of Letters Patent. **Patented Nov. 23, 1909.**

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To all whom it may concern:

Be it known that I, JOHN REID, a citizen of the United States, residing at Childress, in the county of Childress and State of Texas, have invented new and useful Improvements in Canopy-Tops for Vehicles, of which the following is a specification.

This invention relates to new and useful improvements in canopy tops for vehicles and more particularly, to a canopy top mounted for adjustment at any desired angle for the purpose of obtaining a better shading effect and also for compensating for variations in the direction of the wind, in order that the area of resistance offered to the wind may be reduced to a minimum.

The invention aims primarily to provide a novel frame construction which shall be exceedingly light and at the same time of great strength. Toward this end the canopy frame proper is constructed of wood, and a number of radial tie rods adjustably connected to a central coupling member, are employed, the tie rods not only reinforcing the frame but also preventing distortion thereof by reason of warping or from other causes.

A further novel feature of the invention resides in the detail construction of the central coupling member and in the combination therewith of novel means for clamping the same to the canopy staff, the clamping means being so constructed as to permit the coupling member to be turned on its axis to desired positions, in effecting the positioning of the canopy frame. The said clamping means is articulately engaged with the coupling member and is constructed to hold the latter immovable from any position to which it may be set.

In the drawings accompanying and forming a part of this specification, I have shown in detail a simple and preferred embodiment of the invention, the construction of which will appear in the course of the following description, while the novelty of the invention will be included in the claims succeeding said description.

Referring to the drawings: Figure 1 is a longitudinal sectional view of the canopy frame and its appurtenant elements including the coupling member and the clamping means. Fig. 2 is a bottom plan view thereof. Fig. 3 is a detail perspective view of the coupling member. Fig. 4 is a detail perspective view of the clamping means, the elements thereof being separated but having the natural disposition of their assemblage. Fig. 5 is a fragmentary transverse section through one of the members of the cruciform supporting frame showing the cross sectional formation thereof, the other member of said frame being similarly formed.

The skeleton framework of the improved canopy top is comprised essentially of a rim 1 which, for the purpose of display and of convenience, is preferably of oval form. The rim 1 supports a cruciform skeleton frame comprised of a longitudinal bar 2 and a transverse bar 3, the bars 2 and 3 being articulated in a well known manner at their intersecting central portions and having their end portions rabbeted as at 4 for engagement with the similarly formed inner face of the rim 1. Between the members 2 and 3 radially disposed frame bars 5 are arranged, which bars 5 are connected to the rim 1 and to the central intersecting portions of the members 2 and 3. The latter are curved downwardly on each side from their centers and are constructed with projecting ledges 6, as shown more particularly in Fig. 5. The ledges 6 together with a ledge 7, afforded by the rabbeted formation of the rim 1, constitute seats for transversely disposed members 8 which are arranged on each side of the frame bar 2 and extend parallel with the frame bar 3. The members 8, together with the frame bars 2 and 3 make up the body of the canopy top. Said members 8 are curved in the direction of their longitudinal axes and present as a series a convex upper surface. The edges of the outer ends of the members 8 are curved in conformity to the portions of the rim 1 upon which they seat. The members 8 are held in position, preferably by nails or other suitable fastening means.

A stem 9 having a threaded lower end portion, passes centrally through the members 2 and 3 at a point coincident with their central point of intersection. A coupling member 10 has a threaded engagement upon the lower end portion of the stem 9 and is held in proper relation to the canopy frame by a spacing sleeve 11 which surrounds the stem 9. The member 10 is generally of cylindrical form and at its upper end is provided with an upstanding annular flange 12 which is spaced from the sleeve 11. At its

lower end an enlarged annular head 13 is provided. The flange 12 is provided with a number of equidistant apertures through which extend the threaded inner end portions of radially disposed reinforcing and tie rods 14. The inner ends of the tie rods 14 are preferably held by nuts 15 which are confined within the flange 12 and bear against the inner face thereof. The outer ends of the tie rods 14 are enlarged and flattened and in the form of eyes as at 16, securing screws or other fastenings 17 being engaged through the eyes 16. It is preferred to secure arcuate attaching blocks 18 to the rim 1 at the ends of said rim which are farthest distant from one another, that is, at the ends to which the member 2 is connected. The tie rods 14 which extend toward the remote ends of the rim 1 are secured to the blocks 18. The blocks 18 are employed for the purpose of affording a stronger construction and of allowing for greater adjustment of the tie rods secured thereto, when it is desired to increase the tension of said tie rods. A cover 19, preferably of fabric well known in the art, is secured to the under face of the canopy top by ornamental tacks 20, and an ornamental covering 21 is held upon the upper face of the canopy top, the edge portion of the covering 21 as well as the edge portion of the covering 19 being bound to the rim 1 by the fastenings 17 which hold the ends of the tie rods 14. The canopy top thus constructed is supported from a suitable bent standard 22, a clamping device designated generally 23, being employed to connect the canopy top to said standard, which device 23 is used in cooperation with the member 10. The body portion of the clamping device 23 is in the form of a split socket composed of two counterpart members 24. The latter are each constructed with recesses 25 and 26 and with threaded end portions 27. In the assembled relation of the members 24 the recesses 25 together form a complete cylindrical bore in which the end of the standard 22 is received.

The recesses 26 have a narrow neck and an enlarged central portion and together form a circular cavity in which the head 13 of the stem 9 is received. The said head in its engaged relation in the recesses 26 is, in effect, a swivel joint means to permit of the member 10 being turned on its axis in effecting a pivotal adjustment of the canopy top. The end portions of the member 24 which surround the end of the standard 22, are held in assembled relation by a sleeve 28 through which a set screw 29 is engaged, the screw 29 bearing frictionally against one of the members 24. Each of the threaded end portions 27 is semi-cylindrical so that when said end portions are juxtaposed they, together, constitute a cylindrical plug and are held in this relation by a threaded coupling cap 30. The threaded plug constituted by the end portions 27, preferably has a very slight taper in order that when the cap 30 is turned thereon, the members 24 may be caused to bind frictionally upon the head 13 and to consequently hold the member 10 against rotation from any position to which it may be set. While the bearing action of the screw 29 is ordinarily sufficient to hold the canopy top against displacement, it is at the same time preferable to provide positive means for accomplishing this action in case the screw 29 should work loose, and accordingly the standard 22 is provided near its end with an upwardly projecting pin 22^a which engages in alining recesses 24^a in the members 24. By virtue of such engagement the canopy is held against displacement from the standard under the circumstances noted. The recesses 24^a are of sufficient length to permit of a necessary range of pivotal adjustment of the canopy top.

The canopy top is movable pivotally in a horizontal plane with the stem 10 as a vertical axis. Said top is also capable of angular adjustment about the axis of the clamping device. In obtaining such angular adjustments the screw 29 is disengaged from the clamping device in order that the latter may be freely movable about the end of the standard 22. When such movement has been made as far as desired, the screw 29 is tightened upon the clamping device to hold the canopy top against displacement.

In order that further adjustments of the canopy top may be had, it is preferred to make the standard 22 in connected relatively and angularly adjustable sections. Inasmuch as this construction is well known in the art and does not form a part of the present invention, I have not thought it necessary to illustrate the same, the passing mention thereof being deemed sufficient.

The canopy top may be removed from its standard whenever desired, by disassembling the clamping means.

The various elements which enter into the formation of the canopy top may be dismantled when desired for the purpose of making substitutions or repairs. In disassembling the parts the tie rods 14 are freed from the rim 1 and the stem 9 is turned out of engagement with the coupling member 10. For the purpose of turning the stem 9, a ring 31 affording a hand grip is carried on the projecting upper end portion thereof. This latter is constructed with a bearing head 32.

Inasmuch as the framework and body parts of the canopy top are constructed of wood, a very light structure is produced. The tie rods 14 are themselves light and add no material weight to the structure. The provision of said tie rods assures of compactness, rigidity and strength.

Having fully described my invention, I claim:

1. In a canopy top for vehicles, a canopy frame having a coupling member, a supporting standard, a pair of counterpart clamping members, each having a pair of recesses, the recesses of one member registering with the corresponding recesses of the other member, the standard projecting into one pair of recesses and the coupling member projecting into the other pair of recesses, a clamping ring surrounding the inner ends of the members, a screw threaded through the ring and engaging the adjacent member, and a clamping nut surrounding the outer ends of the members.

2. In a canopy top for vehicles, in combination, a rim, a supporting frame secured to the rim and comprising intersecting frame members, a coupling member carried by said frame at the point of intersection of its members, tie rods secured to the rim and means for securing the ends of said tie rods for axial adjustment to said coupling member.

3. In a canopy top for vehicles, in combination, a rim, a supporting frame secured to the rim and comprising intersecting frame members, a stem passed through said frame at the point of intersection of its members, a coupling member provided on the lower end of the stem, a spacing sleeve surrounding the stem between the coupling member and the frame and tie rods connecting the rim and the coupling member.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN REID.

Witnesses:
J. J. ADDINGTON,
R. L. DAVIS.