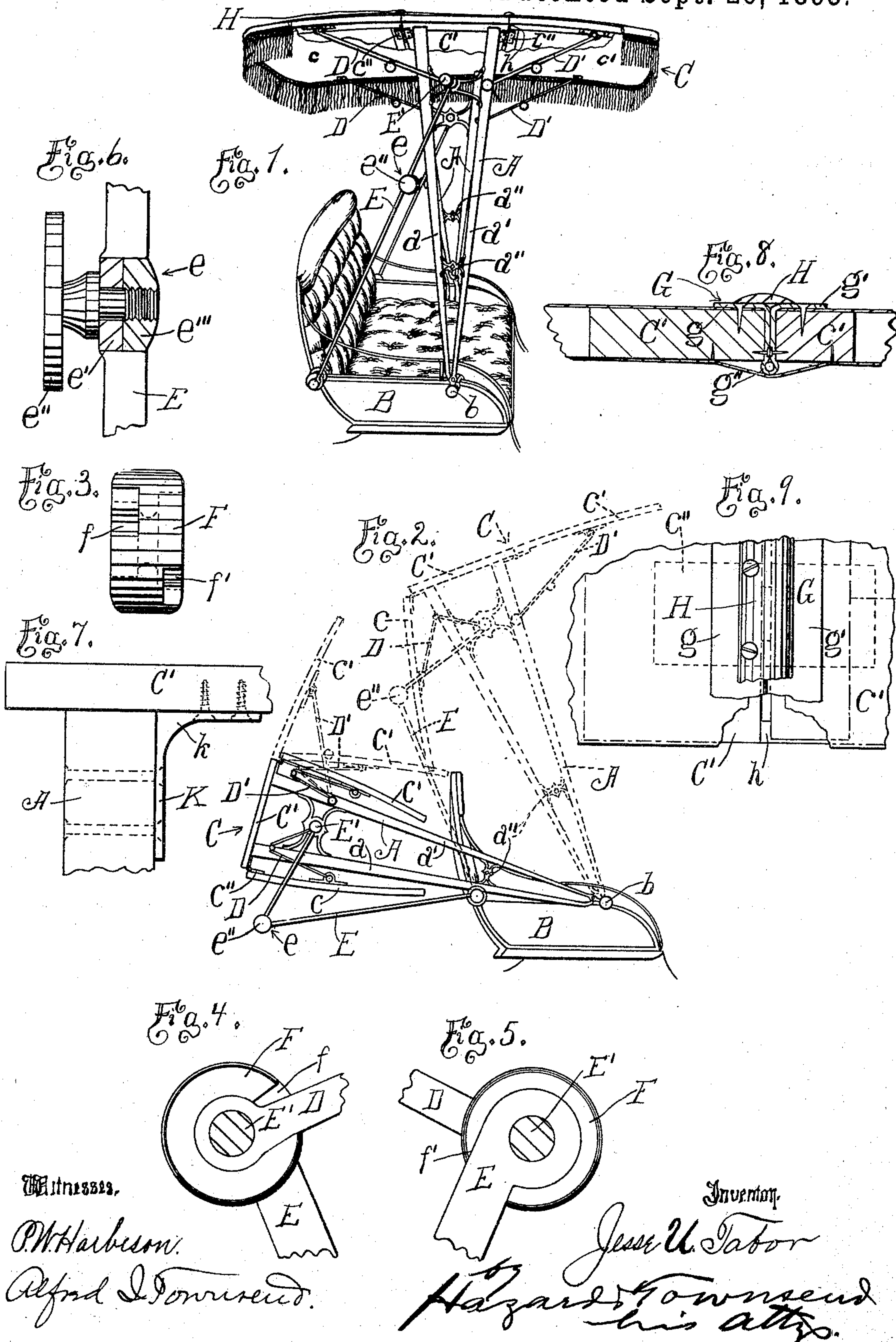


(No Model.)

J. U. TABOR.
CANOPY TOP FOR VEHICLES.

No. 505,544.

Patented Sept. 26, 1893.



UNITED STATES PATENT OFFICE.

JESSE U. TABOR, OF LOS ANGELES, CALIFORNIA, ASSIGNOR TO THE TABOR CARRIAGE WORKS, OF SAME PLACE.

CANOPY-TOP FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 505,544, dated September 26, 1893

Application filed June 26, 1893. Serial No. 478,832. (No model.)

To all whom it may concern:

Be it known that I, JESSE U. TABOR, a subject of the Queen of Great Britain, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Canopy-Tops for Vehicles, of which the following is a specification.

The object of my invention is to provide a neat, cheap, light and effective canopy top for vehicles, one which will be adjustable and will be adapted to be lowered out of the way, and folded into compact shape when desired.

A further object of my invention is to provide improved means for automatically spreading and folding the back leaf of the canopy as the canopy supports are elevated and lowered.

A further object of my invention is to provide a folding canopy top, which, when lowered will resemble in appearance an ordinary carriage top with the duster thrown across the top and extending to the top of the lazy-back.

The accompanying drawings illustrate my invention.

Figure 1 is a perspective side elevation of a canopy top embodying my invention, and secured in place upon the seat of a vehicle.

In this view a portion of the trimming of the top is broken away to expose the construction.

Fig. 2 is a side elevation of my improved canopy top with the trimming removed therefrom, the parts being shown in their folded position. Dotted lines indicate various positions in which the canopy may be adjusted and secured.

Fig. 3 is a rear view of my improved brace coupling, by the use of which I am enabled to automatically elevate the rear leaf of the canopy when the canopy supports are raised, and to fold the said leaf and retain it in its folded position when the canopy supports are lowered.

Fig. 4 is a fragmental detail showing the automatic hinge brace coupling with a fragment of each of the brace arms in position therein.

Fig. 5 is a view of the reverse side of the same. Fig. 6 is a fragmental view showing in section the frictional joint whereby the canopy top may be secured in various positions.

Fig. 7 is a fragmental detail illustrating the manner of

attaching the canopy supports to the canopy frame. Fig. 8 is a sectional view illustrating the manner of trimming the joint between the main body and the leaf of the canopy to allow the leaves to be folded without leaving an opening through the canopy. Fig. 9 is a fragmental plan view illustrating the same construction as Fig. 8.

In the drawings, A represents the canopy support which is pivoted at its lower end to a vehicle B (only the seat of which is shown) and is adapted to stand upright as shown in Fig. 1 to hold the canopy elevated or to swing upon its pivot *b* to lower the canopy as shown in Fig. 2.

C is a canopy which comprises the main body *C'* which is attached to the top of the support A and extends across the vehicle, and two canopy shade leaves *c c'* hinged respectively a rear leaf upon the rear side of such main body and a front leaf upon the front side of such main body, each adapted to stand at an angle with the canopy support as shown in Fig. 1 and to be folded upon such support as shown in Fig. 2; suitable means are provided to hold such leaves elevated and to allow them to be folded upon the supports. As shown in the drawings, these means consist of the leaf hinge brace arms D and D', hinged respectively at one end to the leaves *c c'* and at their other ends to the canopy support A.

E is a canopy support hinge brace arm, which is pivoted at one end to the vehicle and is pivoted at its other end to the canopy support A by the pivot E', and is adapted and arranged to be extended as shown in Fig. 1 to hold the canopy support in its upright position, and to double upon itself as shown in Fig. 2, to allow the support to be swung upon its pivot to lower the canopy.

In order to make the operation of the rear leaf *c* of the canopy automatic, I operatively connect the rear canopy leaf brace D with the canopy support hinge brace E by suitable means adapted and arranged to be operated by the support hinge brace E to cause the leaf to stand at an angle to the support when the support is in its upright position as shown in Fig. 1, and to cause such leaf to fold against the support when the support is lowered, as shown in Fig. 2. The means which I employ

for this purpose consist of a brace coupling, comprising a collar F made of hardened brass or other suitable material and adapted to fit upon the pivot E' between the brace arms D and E, and provided in one side with the brace arm receiving seat *f* adapted and arranged to receive and seat the shade leaf hinge brace D therein, and provided upon its other side with a brace receiving seat *f'* adapted to receive and seat the canopy support hinge brace E therein; the seat *f* is larger than the shade brace D as shown in Fig. 7 in order to allow a slight rotation of one brace arm with relation to the other brace arm. This is necessary in order to secure automatic movement of the leaf together with graceful proportions of the two arms.

e is a suitable friction joint provided in the hinge brace arm E and comprises an outer member *e'*, an inner member *e''* and a thumb nut *e'''* arranged to clamp the two members together to support the canopy at an angle with the horizon as shown in dotted lines in Fig. 2.

In order to form a joint whereby the canopy leaves may be hinged to the main body and yet allow the leaves to be folded upon the supports A or to be elevated to stand at an angle thereto without tearing the roofing or trimming I hinge the canopy shade leaves *c c'* to the main body C' by hinges *c''* each arranged upon the lower side of the main body, and provide a joint closing strip G preferably of leather, having one of its edges *g* secured to the top of the main body C', and having its other edge *g'* secured to the top of the leaf *c'* and having its body *g''* folded upon itself and arranged depending between the opposing edges of the main body and the canopy shade leaf.

H is a molding secured to the main canopy body C' and projecting beyond the edge thereof to cover the joint between the body and the leaf when the leaf is raised, and *h* is a joint stop which is provided at each end of the shade leaves *c c'* and arranged projecting from the edges of such leaf to engage the main body C' to hold the edges of the two members apart intermediate the stops, to thereby avoid undue compression of the depending body *g''* of the joint strip G, which undue pressure would soon destroy the leather.

In practice, the canopy is supported in its elevated position by means of the canopy supports A, the canopy support hinge braces E, and the leaf hinge braces D D' as shown in Fig. 1; when it is desired to change the position of the canopy for any reason, such for instance, as the change of position of the vehicle with relation to the sun, the operator throws the two members of each of the hinge braces E out of line to cause the braces to double upon themselves as shown in Fig. 2 and the canopy supports A swing upon their pivots to lower the canopy; the hinge braces E, operating through the medium of the brace coupling F causes the rear leaf sup-

porting hinge brace D to double upon itself and to fold such rear leaf against the supports as shown in Fig. 2, and, also operates to hold the leaf folded thereagainst until the canopy supports are again raised into an upright position; when such supports are raised the operation just described is reversed and the leaf is automatically raised. In case it is desired to simply lower the canopy part way, it may be quickly adjusted and secured in place by tightening the friction joint *e* to hold the hinge braces E rigid to support the canopy in the desired position. If desired, the front leaf *c'* may be folded against the supports A as shown in Fig. 2, and will then serve to prevent dust or dirt, &c., from falling upon the lining of the rear leaf *c*; or such front leaf may be lifted as shown in dotted lines in Fig. 2, to shield the back of the rider from wind or sun. It will thus be seen that I am enabled to provide a cheap, simple, and convenient canopy top which may be folded into small compass, and which may be quickly adjusted to suit any ordinary conditions.

The canopy supports A as shown are formed in the same manner as the ordinary tubular metallic carriage bow socket and may be of any character desired; they are formed integral and are of sufficient length to hold the canopy elevated the proper distance above the seat.

In the drawings I have shown the supports each formed of two members *a* and *a'* in order to secure strength and rigidity, and I provide a strengthening brace *a''* which is arranged between the two members of each support to cause the two members to mutually support each other and prevent the weight of the top from bending the bows when the supports are lowered as shown in Fig. 2. The tubular supports or braces A are secured to the main body C' of the canopy top by means of metallic knees K which are thickened at the angle *k* to give strength to the connection.

The canopy as shown is supported by two supports, arranged one upon each side of the vehicle, and two support hinge braces E are shown also arranged one upon each side of the vehicle.

When the canopy is in its lowered and folded position it presents the same general appearance as a carriage top when lowered and having a hood or duster stretched from the top of the front bow to the lazy-back.

Now, having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a canopy top, the combination of a support pivoted at its lower end to a vehicle and adapted to stand upright to support the canopy and to be lowered to lower the canopy; a suitable supporting hinge brace pivoted at one end to the vehicle and pivoted at its other end to the support and adapted to hold the support upright and to allow it to be swung upon its pivot to lower the canopy; a main

canopy body attached to the top of such support and extending across the vehicle; two canopy shade leaves hinged respectively one upon each side of such main body and adapted to stand at an angle with such canopy support and to be folded upon such support, and suitable means adapted and arranged to hold such leaves elevated and to allow them to be folded upon the support.

2. In a canopy top having a suitable support hinged at its lower end to a vehicle and having a hinge brace pivoted at one end to the vehicle and pivoted at its other end to the support and adapted to hold such support upright and to allow it to be swung upon its pivot to lower the canopy, and having a canopy shade leaf adapted to be folded upon such support or to be held at an angle thereto, the combination therewith of a canopy shade leaf hinge brace pivoted at one end to such shade leaf and having its other end operatively connected with the canopy support hinge brace and adapted and arranged to be operated by such brace to cause the leaf to stand at an angle to the support when the support is in its upright position, and to cause such leaf to fold against the support when the support is lowered.

3. In a canopy top, the combination of the canopy support pivoted at its lower end to a vehicle and adapted to stand upright to hold the canopy elevated and to be swung upon its pivot to lower the canopy; a suitable hinge brace pivoted at one end to the vehicle and pivoted at its other end to the support and adapted to be extended to hold the support in its upright position and to double upon itself to allow the support to be swung upon its pivot to lower the canopy; a suitable canopy secured to such support and comprising a main body and a leaf hinged to such main body, such leaf being adapted and arranged to stand at an angle to the support and to be folded thereagainst; and suitable operative means adapted and arranged to hold such leaf at an angle with such support when the support is in its upright position, and adapted and arranged to hold such leaf folded against the support when such support is in its lowered position.

4. In a canopy top, the combination of the canopy support pivoted at its lower end to a vehicle and adapted to stand upright to hold the canopy elevated and to be swung upon its pivot to lower the canopy; a suitable hinge brace pivoted at one end to the vehicle and pivoted at its other end to the support and adapted and arranged to hold the support in its upright position and to allow it to be swung upon its pivot to lower the canopy; a suitable canopy secured to such support, and comprising a main body and a leaf hinged to such main body, such leaf being adapted and arranged to stand at an angle to the support and to be folded thereagainst; suitable operative means connecting such leaf with the support hinge brace, and adapted and ar-

ranged to cause such support hinge brace to operate to hold such leaf at an angle with the support when the support is in its upright position, and to fold such leaf against the support when such support is in its lowered position.

5. In a canopy top, the combination of the two canopy supports arranged one upon each side of a vehicle and each pivoted at its lower end to the vehicle and adapted to stand upright to hold the canopy elevated and to be swung upon its pivot to lower the canopy; two suitable hinge braces, arranged one upon each side of the vehicle and each pivoted at one end to the vehicle and pivoted at its other end to its respective support and adapted to be extended to hold such support in its upright position and to double upon itself to allow such support to be swung upon its pivot to lower the canopy; a canopy comprising a main body and two leaves, such leaves being hinged respectively one upon each side of such main body, the main body being secured to the canopy supports and such leaves being adapted to stand at an angle to such supports and to be folded thereagainst, and suitable operative means adapted and arranged to hold such leaves at an angle to the supports and to allow them to be folded thereagainst.

6. In a canopy top, the combination of the two canopy supports arranged one upon each side of a vehicle and each pivoted at its lower end to the vehicle and adapted to stand upright to hold the canopy elevated and to be swung upon its pivot to lower the canopy; two suitable hinge braces arranged one upon each side of the vehicle and each pivoted at one end to the vehicle and pivoted at its other end to its respective support and adapted to be extended to hold such support upright and to double upon itself to allow the support to be swung upon its pivot to lower the canopy; a canopy, comprising a main body secured to the upper ends of such supports and a front and a rear leaf, hinged respectively one upon the front side of said main body and one upon the rear side of such body, and each adapted and arranged to stand at an angle with the supports and to be folded against such supports; suitable means arranged to hold the front leaf at an angle with the supports and to allow it to fold thereagainst, and suitable operative means connecting the rear leaf with each of the support hinge braces and adapted and arranged to be operated by such hinge braces to hold such leaf at an angle with the supports when the supports are in their upright position, and to fold such leaves against the supports when such supports are lowered.

7. In a folding canopy top, the combination of the canopy supports arranged one upon each side of a vehicle and each having its lower end pivoted to such vehicle, and adapted and arranged to stand upright to hold the canopy elevated and to swing upon its pivot to lower the canopy; two canopy support hinge

braces, arranged one upon each side of such vehicle, and each having its lower end pivoted to the vehicle and having its upper end pivoted to its respective canopy support, and adapted and arranged to hold such support in its upright position and to allow it to swing upon its pivot to lower the canopy; a canopy, comprising a body provided with a rear canopy shade leaf hinged to such body and adapted to stand at an angle to the canopy supports and to be folded thereagainst; two canopy shade leaf hinge braces, each pivoted at one end to the rear shade leaf, and pivoted at its other end upon the upper pivot of its respective canopy support hinge brace; the brace connection comprising a collar adapted to fit upon the upper pivot of the support of the hinge brace and provided upon one side with a suitable seat adapted and arranged to seat the canopy support hinge brace arm therein and provided upon its other side with a seat adapted and arranged to seat the canopy leaf hinge brace arm, one of such seats being wider than its respective arm to allow a slight rotation of one brace with relation to the other brace.

8. In a folding canopy top, the combination of the main body; the canopy shade-leaf hinged to such main body by a hinge arranged on the lower side of such body; a joint closing strip having one of its edges secured to the top of the main body, and having its other

edge secured to the top of the leaf, and having its body folded upon itself and arranged depending between the opposing edges of the main body and the leaf, and the molding, arranged to cover the joint between the body and the leaf when the leaf is raised.

9. In a canopy top the combination of the main body, the canopy shade-leaf hinged to such body and provided at each end with the joint stop projecting from the inner edge of such leaf to engage the main body to hold the edges of the two members apart intermediate the stops.

10. In a folding canopy top having a canopy support hinge brace and a canopy shade leaf hinge brace each pivoted by one end upon the same pivot, the brace coupling comprising a collar adapted to fit upon said pivot between the two braces and provided in one side with the brace receiving seat adapted to receive and seat the shade-leaf hinge-brace therein, and provided upon its other side with the brace receiving seat adapted and arranged to receive and seat the canopy-support hinge brace therein, one of such brace seats being larger than its respective brace and arranged and adapted to allow slight rotation of one brace arm with relation to the other brace arm.

JESSE U. TABOR.

Witnesses:

CHARLES UDELL,
ALFRED I. TOWNSEND.