

A. W. STENGEL.
 BOW SEPARATOR FOR CARRIAGE TOPS.
 APPLICATION FILED JUNE 10, 1908.

906,327.

Patented Dec. 8, 1908.

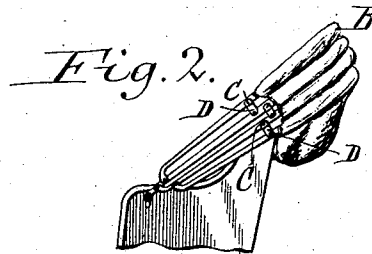
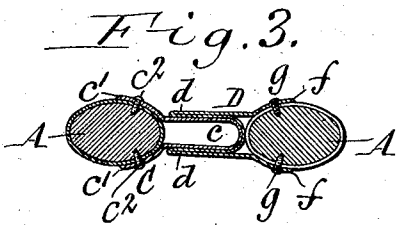
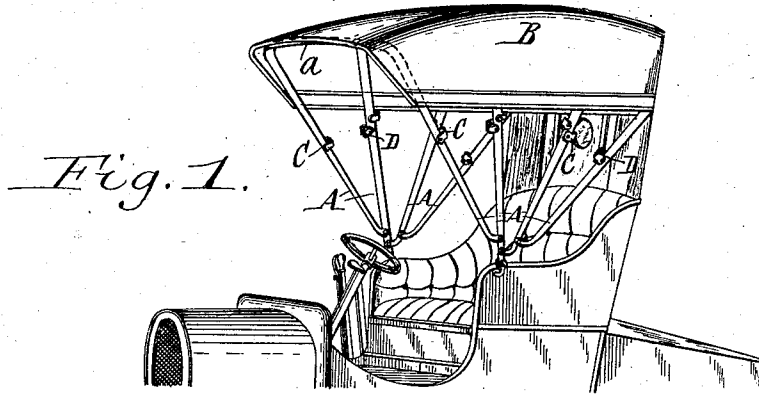


Fig. 4.

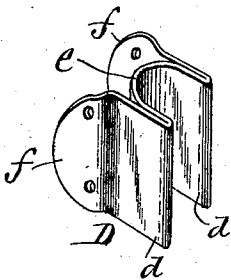
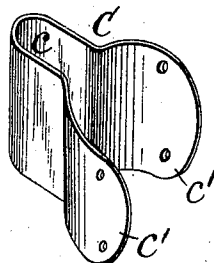


Fig. 5.



Witnesses:-
 Gustav W. Hora.
 Richard Sommer.

Inventor
 Alfred W. Stengel
 by Eyer & Papp
 Attorneys

UNITED STATES PATENT OFFICE.

ALFRED W. STENGEL, OF BUFFALO, NEW YORK, ASSIGNOR TO H. D. TAYLOR COMPANY, OF
BUFFALO, NEW YORK, A CORPORATION OF NEW YORK.

BOW-SEPARATOR FOR CARRIAGE-TOPS.

No. 906,327.

Specification of Letters Patent.

Patented Dec. 8, 1908.

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To all whom it may concern:

Be it known that I, ALFRED W. STENGEL, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Bow-Separators for Carriage and Automobile Tops or Canopies, of which the following is a specification.

In folding an automobile or carriage top or canopy the bows are liable to become chafed or marred by rubbing against each other and the folds of the pliable covering between the bows is also liable to become cut or injured.

The object of this invention is to provide such bows with separators which are adapted to interlock with each other in the folded position of the carriage top and prevent the above mentioned objectionable results.

In the accompanying drawings: Figure 1 is a fragmentary perspective view of a carriage automobile having its top unfolded and the bows thereof provided with my improved separators. Fig. 2 is a similar view showing the top folded and the separators of the bows interlocked. Fig. 3 is a horizontal section, on an enlarged scale, showing one form of the separators on two adjacent bows interlocked. Figs. 4 and 5 are detached perspective views of a pair of separators.

Similar letters of reference indicate corresponding parts throughout the several views.

A represents the arms of the bows of a carriage or automobile top which are pivoted at their lower ends in any suitable manner so that they can be folded and unfolded relatively to each other and B represents the covering which is secured to the transverse bars *a* of the bows and the upper parts of the arms thereof in the usual and well known manner.

Below the covering the adjacent arms of bows are provided with separators which are adapted to interlock with each other in the folded position of the carriage top. A pair of these separators comprises a socket D secured to one arm of a bow and a tongue C secured to the adjacent arm of another bow and adapted to engage with said socket.

In the preferred form of the sockets and tongues of the separators the same are each constructed of a single piece of sheet metal. When thus made the tongue, as shown in

Figs. 3 and 5, is constructed by bending the sheet of metal so as to form a single open fold or loop *e* of sheet metal the rear ends of which are provided with diverging perforated ears *e*¹ which are secured to opposite sides of a bow by means of screws *e*², as shown in Fig. 3, or otherwise.

The socket when made of sheet metal is constructed by bending the sheet of metal so as to form two closed folds or loops *d* the inner opposing sides of which are disconnected at their front ends while their rear ends are connected by a bow *e* and the outer sides of both loops being provided at their rear ends with perforated ears *f* which are adapted to be secured to opposite sides of a bow by screws *g*, as shown in Fig. 3, or by any other suitable means.

The distance between the double loops of the socket of the separator is preferably slightly less than the width of the single loop of the tongue of the separator, so that when the socket and tongue engage with each other upon folding the bows the loops of the socket and tongue will be sprung slightly and cause them to be frictionally interlocked. While the cooperating pair of separator members are thus interlocked, the bow arms which carry the same are held apart and also prevented from moving laterally relatively to each other, thereby avoiding chafing of the bows and also preventing cutting of the folds of the covering lying between the bows.

In both constructions of my improved separators the socket is open at its front, top and bottom and closed at the back, thereby permitting the tongue and socket to play lengthwise relatively to each other and also permitting slight variation in attaching the socket and tongue to the bows.

I claim as my invention:

1. A separator for canopy or top bows comprising a socket adapted to be secured to a bow and constructed of sheet metal to form two loops the opposing inner sides of which are disconnected at their front ends while their rear ends are connected by a bow, and a tongue adapted to enter between said loops and to be secured to another bow.

2. A separator for canopy or top bows comprising a socket adapted to be secured to a bow, and a tongue adapted to be secured to another bow and constructed of sheet metal to form a loop which is adapted to enter said socket.

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3. A separator for canopy or top bows
comprising a socket constructed of sheet
metal to form two loops the opposing inner
sides of which are disconnected at their
5 front ends while their rear ends are connect-
ed by a bow and the outer sides of the same
being provided at their rear ends with ears
which are adapted to be attached to a bow,
and a tongue constructed of sheet metal to
10 form a single loop adapted to enter between

said double loops and having the rear ends
of its sides provided with ears which are
adapted to be attached to another bow.

Witness my hand this 6th day of June,
1908.

ALFRED W. STENGEL.

Witnesses:

GEORGE C. FINLEY,
THEO. L. POPP.