H. E. EDWARDS.

VEHICLE TOP.

APPLICATION FILED SEPT. 24, 1915.

1,210,439. Patented Jan. 2, 1917.

Fig. 1.

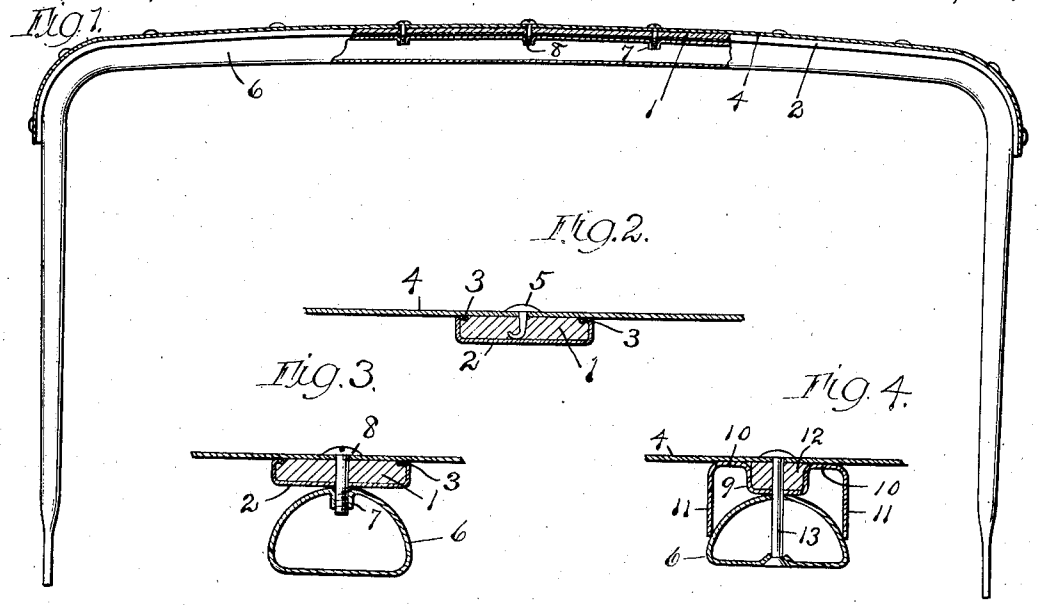


Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

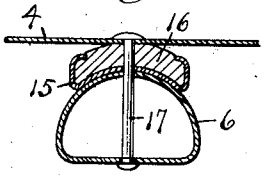


Fig. 6.

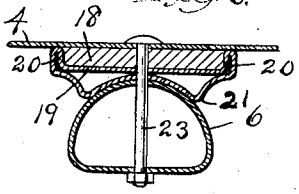


Fig. 7.

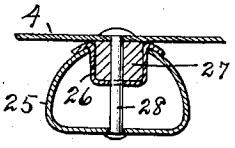


Fig. 10.

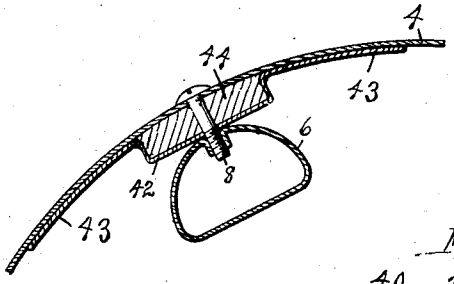


Fig. 8.

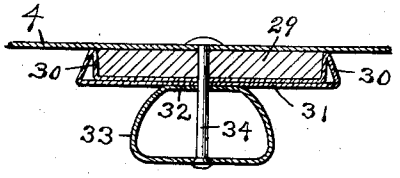
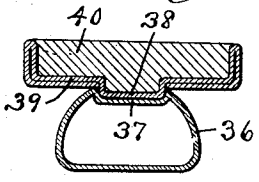


Fig. 9.



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UNITED STATES PATENT OFFICE.

HENRY E. EDWARDS, OF JACKSON, MICHIGAN.

VEHICLE-TOP.

1,210,439. Specification of Letters Patent. Patented Jan. 2, 1917.

Application filed September 24, 1915. Serial No. 52,341.

To all whom it may concern:

Be it known that I, HENRY E. EDWARDS, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented a new and useful Vehicle-Top, of which the following is a specification.

This invention relates to means for securing the tops of carriages and automobiles to the bows that support the top, and its object is to provide connecting devices which may be attached to the tops during manufacture, so that the tops can be quickly and easily secured to or detached from the supporting bows without the aid of frames or special tools.

This invention consists in a series of tacking-strips to which the tops are permanently secured, metal channels to support and retain the tacking-strips, and means to secure the tacking-strips, the channels and the tops to the bows of vehicles.

In the accompanying drawing, Figure 1 is an elevation of a bow for supporting a carriage top. Fig. 2 is a cross-section of a tacking-strip. Figs. 3 to 10 inclusive are cross-sections of various modifications of the vehicle bow having attached thereto the retaining channels and tacking-strips to which the top of the vehicle may be secured.

Similar reference characters refer to like parts throughout the several views.

Bows for vehicle tops are usually made with their upper portions of wood, properly bent and covered with cloth, the vertical portions often being of metal tubing or covered with sheet metal. The cloth tops are secured to these bows by means of large-headed tacks, the bows being mounted on a dummy body or frame during the assembling. If a top is so injured as to require replacement, it must be entirely removed and sent back to the factory, where a new top is secured to the bows. The present invention is designed to avoid the necessity of removing the bows from the vehicle, but to permit a new top to be substituted for the one injured in a minimum of time.

In carrying out this invention, steel bows are preferred as they do not warp or swell out of shape, as do most wooden bows. Padding-up the low spots is therefore unnecessary. These bows are formed with evenly spaced holes, the spacing and sizes of the holes and fasteners being alike in all bows so that the tops are interchangeable.

The tacking-strip to which the top is directly secured may be of wood, fiber board or any other material that is adapted to hold the tacks. In Fig. 2, this strip 1 is flat and substantially rectangular in cross-section and is held in position in a channel bar 2 of light sheet metal having inturned edges 3 to hold the strip in position. The top 4 may be secured to the strips by means of tacks 5, the ends of which turn over when the tacks are driven down against the sheet metal. In Fig. 3, the bow 6 is shown formed with small threaded sleeves 7, formed by properly punching the metal of the bow and then threading. Screws 8 extend through the top, tacking-strip and channel into the bow, and secure the parts together.

In Fig. 4, the channel 9 is narrow and provided with lateral extensions 10 and downward extensions 11 that engage the bow 6 to support the top 4 and tacking-strip 12. A rivet 13 is shown to extend entirely through the tacking-strip and bow. In Fig. 5, the channel 15 and tacking-strip 16 fit the curved surface of the bow, being held in postion by means of the rivet 17.

In Fig. 6, the tacking-strip 18 fits within a channeled tube composed of the flat plate 19, flanges 20 and saddle 21 that fits onto the bow 6. A bolt 23 is shown holding the top 4, tacking-strip and channeled tube in position on the bow 6.

In Fig. 7, the bow 25 is incomplete, that is, it is formed with a longitudinal slot into which the channel 26 and tacking-strip 27 extend, being held in place by means of a rivet 28. The channel in Fig. 8 is shown to be flat and of double thickness so that the edges of the tacking-strip 29 are held in place by longitudinal braces 30. The flat side 31 of the channel is held against the flat side 32 of the bow 33 by means of rivets 34. In Fig. 9 the bow 36 is formed with a channel 37 to receive the ridge 38 formed on the bottom of the channel 39 that holds the tacking-strip 40. Any desired means may be employed to hold the parts together.

Where a curve of large diameter is desired at the front or rear end of the top, a channel 42 may be secured to the bow 6 by means of screws 8, and this channel may be formed with curved flanges or lateral extensions 43 of any desired width and curvature, the screws 8 passing through the top 4 and the tacking-strip 44 as before explained.

The channels and tacking-strips will be

properly positioned by the workman on a bench or frame and the cloth top drawn over them and tacked in place. The holes for the screws 8, rivets 13 or bolts 23 are then drilled, after which the top may be rolled up and stored or shipped. When the top is to be secured to the bows, the middle fastening device for the end bow is preferably positioned first, after which those on each side of the middle are inserted and secured. The ends of the tacking-strips and the channels that reinforce them may be bent at their ends to follow the curves of the bows, as shown in Fig. 1, and then be secured in position.

Any desired fastening means may be employed to secure any desired tacking-strips to the bows, the screws, bolts and rivets being shown as examples.

The details and proportions may all be varied without departing from the spirit of my invention. Thus the metal channels may be entirely omitted if desired, although such construction will lack the strength, finish and permanence which are secured by reinforcing the tacking-strips.

I claim:—

1. In a vehicle, the combination of a bow, a cloth top, a strip of fibrous material extending transversely to the top and to which the top is secured independently of the bow, a metal reinforcement for the strip, and fastening devices extending through the strip and reinforcement for securing the top and strip to the bow.

2. In a vehicle top, the combination of a tubular metal bow having a series of evenly spaced apertures in its outer side, a sheet of fabric, a strip of fibrous material extending transversely to the sheet, tacks driven through the sheet and strip to secure them together independently of the bow, and fastening devices extending through the sheet and strip and into the apertures in the bow to secure the parts together.

3. In a vehicle top, the combination of a tubular metal bow having a series of evenly spaced threaded apertures in its outer side, a sheet of fabric, a tacking-strip of fibrous material extending transversely to the sheet, tacks driven through the sheet into the strip to secure the sheet to the strip independently of the bow, a reinforcing channel of sheet metal in which the strip is mounted, and screws extending through the sheet, strip and channel into the apertures in the channel to secure the parts together, the channel fitting tightly against the bow and surrounding all sides of the tacking-strip excepting that to which the sheet of fabric is secured.

4. In a vehicle, the combination of a bow, a cloth top, a strip of fibrous material extending transversely to the top and to which the top is secured independently of the bow, a strip of sheet metal in the form of a channel fitting tightly against the bow and surrounding all sides of the strip excepting that to which the top is secured, and fastening devices for securing the top and strip to the bow.

5. In a vehicle, the combination of a bow, a cloth top, a strip of fibrous material extending transversely to the top and to which the top is secured independently of the bow, a strip of sheet metal in the form of a channel fitting tightly against the bow and surrounding all sides of the strip excepting that to which the top is secured, and fastening devices for securing the top and strip to the bow, the edges of the channel extending laterally and together with the strip forming a cylindrical surface on which the top may be supported.

6. In a vehicle top, the combination of a tubular metal bow having a series of evenly spaced threaded apertures in its outer side, a sheet of fabric, a tacking-strip of fibrous material extending transversely to the sheet, tacks driven through the sheet into the strip, a reinforcing channel of sheet metal in which the strip is mounted, and screws extending through the sheet, strip and channel into the apertures in the channel to secure the parts together, the channel fitting tightly against the bow and surrounding all sides of the tacking-strip excepting that to which the sheet of fabric is secured and having laterally extending edges, which, together with the tacking-strip, form a cylindrical surface adapted to support the rear end of the top.

In testimony whereof I sign this specification.

HENRY E. EDWARDS.