March 26, 1940. L. H. HEUER 2,194,901

HEAD LINING LISTING SUPPORT

Filed Nov. 12, 1938

FIG. 1.

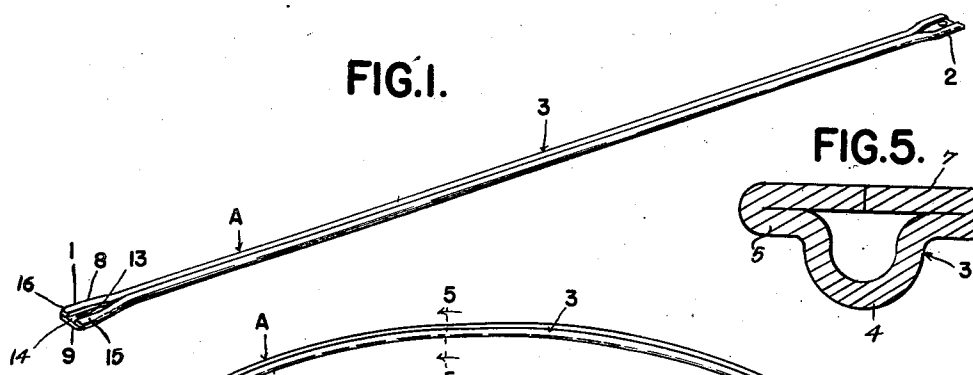


FIG. 5.

FIG. 2.

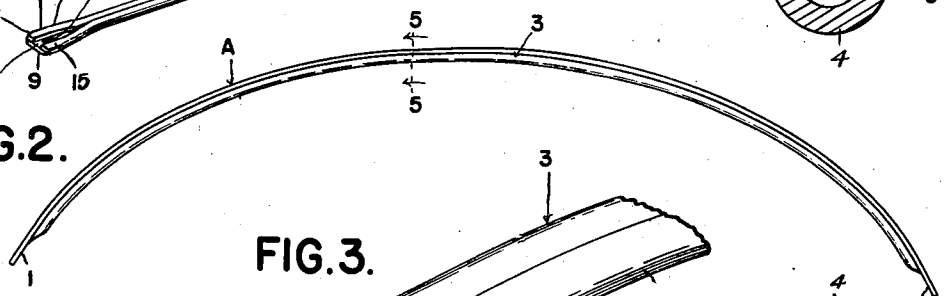


FIG. 3.

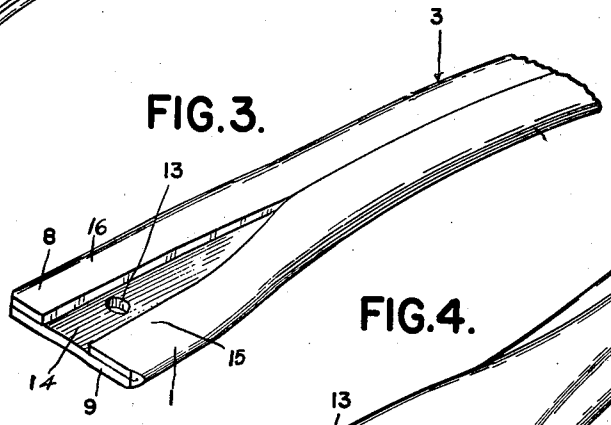


FIG. 4.

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Patented Mar. 26, 1940 2,194,901

UNITED STATES PATENT OFFICE

2,194,901

HEAD LINING LISTING SUPPORT

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Application November 12, 1938, Serial No. 240,198

2 Claims. (Cl. 296—118)

This invention relates generally to head lining listing supports and refers more particularly to those designed for use in vehicle body constructions.

One of the essential objects of the invention is to provide a support of this type that is lighter in weight and stiffer and stronger in construction than supports now available to vehicle body manufacturers.

Another object is to provide a support that is cheaper to make; that is uniform in construction; and that is free of ridges and/or projections usually present in other constructions such as those formed from solid stock.

Another object is to provide a support that may be bent readily without deformation to conform to the interior cross sectional configuration of the body structure to which it is applied.

Other objects, advantages and novel details of construction of this invention will be made more apparent as this description proceeds, especially when considered in connection with the accompanying drawing, wherein:

Figure 1 is a perspective view of one of the supports embodying my invention before it is bent to conform to the cross sectional configuration of a vehicle body top;

Figure 2 is an elevation of the support after it has been bent to conform to the cross sectional configuration of a vehicle body top;

Figure 3 is an enlarged perspective view of one end of the support;

Figure 4 is a view similar to Figure 3, but showing the opposite side thereof;

Figure 5 is a cross sectional view taken substantially on the line 5—5 of Figure 2.

Referring now to the drawing, A is a support embodying my invention formed from a single sheet of metal and having flattened attaching portions 1 and 2, respectively, and an intermediate tubular body portion 3.

Preferably the body portion 3 is substantially T-shape in cross section. As shown, the stem 4 of the T is channel-shape and is provided throughout its length at the side edges of the channel with substantially flat laterally projecting flanges 5 and 6. The transverse portion 7 of the T is substantially flat and spans the channel 4 throughout its length. Preferably this transverse portion 7 is pressed firmly in surface-to-surface relation against the lateral flanges 5 and 6 aforesaid so that the transverse portion cooperates with the channel 4 to form a circumferentially closed tube, and cooperates with the flanges 5 and 6 to provide laminated webs at opposite sides of such tube. As illustrated in Figure 5, the outer edges of the transverse portion 7 connect into and are integral with the outer edges of the flanges 5 and 6. Thus, the cross section of the tubular body portion 3 provides the maximum strength both vertically and horizontally thereof.

The attaching portions 1 and 2 have two plies 8 and 9 pressed firmly together. As shown, the ply 9 at each end of the body portion 3 is a flattened endwise extension of the metal of the channel 4, while the ply 8 at each end of the body portion 3 is a flat endwise extension of the metal of the transverse portion 7. Preferably each ply 9 has an aperture 13 for receiving suitable securing elements such as nails, screws, etc. (not shown), and the metal of each ply 8 is divided and spread apart upon opposite sides of the apertures 13 to provide elongated slots 14 which permit the passage of the securing elements between the separated portions 15 and 16 of the ply 8 into the apertures 13. Thus, due to its construction the support A may be bent longitudinally without distortion, as illustrated in Figure 2, to conform to the cross sectional contour of a vehicle body top and may be secured in place by driving the securing elements mentioned through the apertures 13 into suitable parts of the vehicle body.

In the process of construction the support A is formed by first rolling a sheet of metal into tubular form corresponding in cross section to the intermediate portion 3. Predetermined lengths of such tubing are then cut whereupon opposite ends of such lengths are flattened as shown. Following this, the end portions are pierced to provide the holes 13 and are trimmed or otherwise finished so as to provide a smooth and neat structure. The lengths so formed are then bent longitudinally to conform to the cross sectional curvature of the vehicle top so that they may be readily secured in place.

In practice the intermediate portion 3 of such support is received within the downwardly opening channel of a crossbar or bow (not shown) of the top of the vehicle body, while the end portions 1 and 2 of the support extend downwardly beyond the ends of said crossbar and are fastened to the vehicle body at opposite sides thereof. Preferably fabric sleeves (not shown) are slipped onto the intermediate portion 3 of each support before the latter is attached to the vehicle body so that the head lining (not shown) constituting the interior trim of the vehicle body

top may be stitched or otherwise secured to the fabric sleeve on the support.

What I claim as my invention is:

1. A head lining listing support having a tubular body portion of substantially T-cross section and attaching portions constituting flattened endwise extensions of said body portion, the stem of the T being channel-shape and provided throughout its length at the side edges of the channel with substantially flat laterally projecting flanges, the transverse portion of the T being substantially flat and spanning the channel throughout its length, said transverse portion being pressed firmly in surface-to-surface relation against the lateral flanges aforesaid so that the transverse portion cooperates with the channel to form a circumferentially closed tube and cooperates with the flanges to provide laminated webs at opposite sides of the tube, the outer edges of the transverse portion and the outer edges of the flanges connecting into each other, the metal of the channel at opposite ends of the body portion being flattened and apertured for receiving securing elements, and the metal of the transverse portion at opposite ends of the body portion being divided and spread apart upon opposite sides of the apertures to permit the passage therebetween of such securing elements, said body portion and attaching portions being formed from a single length of sheet metal and being bendable longitudinally without distortion.

2. A head lining listing support having a tubular body portion of substantially T-cross section and attaching portions constituting flattened endwise extensions of said body portion, the stem of the T being channel-shape and provided throughout its length at the side edges of the channel with substantially flat laterally projecting flanges, the transverse portion of the T being substantially flat and spanning the channel throughout its length, said transverse portion being pressed firmly in surface-to-surface relation against the lateral flanges aforesaid so that the transverse portion cooperates with the channel to form a circumferentially closed tube and cooperates with the flanges to provide laminated webs at opposite sides of the tube, the outer edges of the transverse portion and the outer edges of the flanges being integral with each other, said body portion and attaching portions being formed from a single length of sheet metal and being bendable longitudinally without distortion.

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