

J. E. KILBURN.
 VEHICLE BODY.
 APPLICATION FILED JAN. 15, 1913.

1,148,236.

Patented July 27, 1915.

Fig. 1,

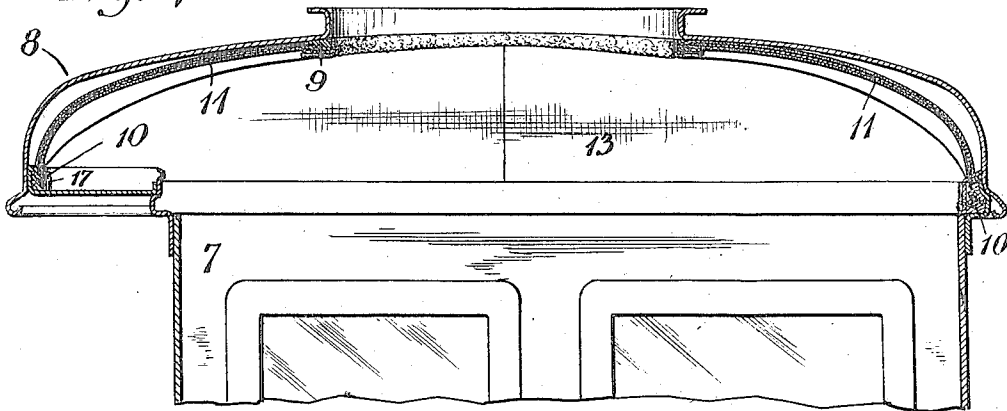


Fig. 2,

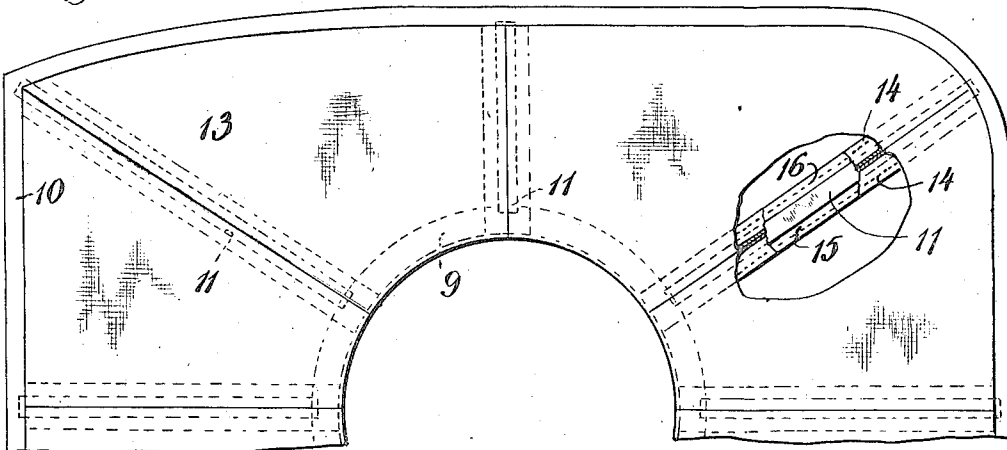


Fig. 3,

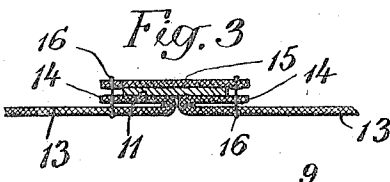


Fig. 5,

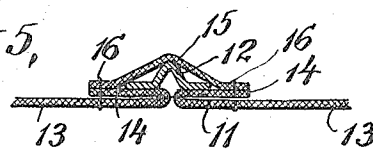


Fig. 4,

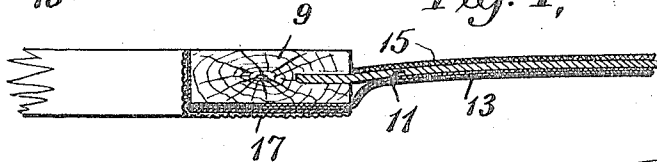
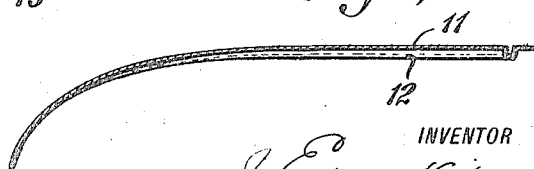


Fig. 6,



WITNESSES

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VEHICLE-BODY.

1,148,236.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN E. KILBURN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Vehicle-Bodies, of which the following is a specification.

This invention relates to vehicle-bodies, and particularly to bodies of this character constructed largely or entirely of metal.

The invention is directed to the provision of means for securing a textile covering in place in the interior of a vehicle-body and more particularly within the interior of the roof thereof.

The invention is of particular utility in connection with bodies for automobiles. Heretofore it has been the common practice in bodies for automobiles and carriages to employ wood to such an extent that the securing of a textile lining in place was easily effected, for the lining or supporting ribs therefor could be readily secured to the wooden portions of the structure so as to hold them in place. But when bodies constructed largely or entirely of sheet-metal are employed, the expedients heretofore adopted in securing a textile lining in place cannot be employed.

In accordance with the present invention, a textile lining for the top of a vehicle-body is provided having a plurality of pockets for the reception of supporting ribs, and when the lining has been completed and the ribs inserted in position these parts are inserted in the top of the body and the ribs sprung into position against supporting members provided in the top for coaction with the ends of the ribs. The lining is thus held firmly and smoothly in its position, so that it presents an attractive appearance and, at the same time, the method employed is one which involves comparatively small manufacturing cost.

The preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal section of the upper portion of an automobile body, Fig. 2 is a view looking upward at the top of the body, this view being broken away in part, Fig. 3 is a section through one of the ribs and its pocket, Fig. 4 is a sectional view longitudinally of one of the ribs showing the

coaction thereof with its support, Fig. 5 is a view similar to Fig. 3 at a different point along the length of the rib, and Fig. 6 is a lengthwise sectional view of one of the ribs.

Referring to these drawings, Fig. 1 shows a vehicle-body 7 having a top 8, this top being formed from sheet-metal. The curvature of the top is shown in Fig. 1 and the outline of the top in Fig. 2, and both of these figures show that at the center of the top the metal is cut away and drawn upwardly to facilitate the provision of a ventilator at the center of the top of the vehicle-body. It will be understood, however, that the size, shape and contour of the top, as well as the presence or absence of a ventilator, are in no way concerned with the present invention, which may be used in connection with tops of various and widely different designs.

In the present instance an annular piece of wood 9 is secured to the top 8, this piece being of such size that its inner diameter is substantially the same as the diameter of the opening provided at the center of the top. If no such opening be provided in the top, the piece 9 may be of very much smaller size and may take the form of a disk. Strips of wood 10 are also secured to the top 8 adjacent to the edge thereof. The strips 10 and the annular piece 9 constitute supporting members for sustaining a plurality of sheet-metal ribs, each of which is sprung into position between the two supporting members and coacts at its ends therewith. Preferably each of the supporting members 9 and 10 is provided with grooves to receive the ends of the ribs in the manner shown in Fig. 4.

Each of the ribs consists of a strip of sheet-metal and each rib is preferably corrugated or otherwise curved transversely throughout the major portion, but less than the whole of its length. In Fig. 6, a portion of one of these ribs is shown, and it will be seen that the rib 11 is provided with a corrugation 12 along a portion of its length, but that this corrugation is flattened out toward the end of the rib, so that over a portion of the length of the rib adjacent to one end there is no corrugation whatever. The corrugation 12 stiffens the rib so as to prevent bending thereof to any great extent, but toward the end where the corrugation is omitted the rib is flexible. By corrugating or otherwise curving transversely the

several ribs 11 throughout portions of their length, the ribs may be made to assume the curvature desired when they are placed in position between the two supporting members 9 and 10. In this way the ribs may be made to assume a curvature closely approximating the curvature of the portions of the top 8 adjacent thereto.

The textile lining 13 is sustained by the ribs 11. To facilitate this, the lining is provided with a plurality of pockets, one for each of the ribs 11. These pockets preferably extend along seams where two pieces of the lining join. The pieces for a lining are preferably cut out in the form of gores, and these gores are sewed together in the manner indicated in Fig. 2. The manner of securing two adjacent pieces of the lining together and providing the pocket along the seam will be readily understood by reference to Figs. 3 and 5. The two adjacent pieces of the lining are sewed together along lines parallel to but spaced from the edges of the pieces, and then the two edge portions beyond the line of sewing are turned over upon the pieces, as shown at 14. A strip 15 of textile material is then laid upon the folds 14 and its edges are stitched to the edges of the folds 14, as shown at 16. This line of sewing 16 may be made to extend through the body portions of the pieces of the covering as well as through the folds 14 thereof. This having been done, a pocket is formed between the two folds 14 on one side and the strip 15 on the other, into which pocket one of the ribs 11 may be readily inserted. Figs. 3 and 5 are sections through one of the pockets and the rib therein at two points along the length of the rib. As seen in Fig. 3, the rib 11 is flat, for this section is at a point adjacent to the outer end of the rib. The section of Fig. 5 is nearer the middle of the rib and the corrugation 12 in the rib is, therefore, shown.

The lining for the top of a body is made up complete and the several ribs 11 are then inserted in the pockets formed in the lining. The lining with the ribs therein is then raised into the top of a completed vehicle-body and the ribs 11 are sprung into position one after another with their ends entering the grooves in the wooden supporting members 9 and 10. When a rib is thus sprung into position, it assumes a curvature such as that indicated in Figs. 1 and 6, its outer end where the corrugation is not present bending to a pronounced curve. Springing the ribs into position in this way draws the fabric taut between the ribs so that it lies smoothly. The edges of the fabric are then secured to the supporting members 9 and 10. This may be done in any suitable manner, as by means of tacks or glue. A suitable lace or braid 17 may then be secured to the supporting members,

overlapping the edge of the lining so as to conceal this edge and provide a more finished appearance.

I have described herein the embodiment of my invention which I prefer to employ, but I wish it understood that the form in which the invention is embodied may be varied in numerous respects without departing from the spirit of my invention. The form of the ribs 11 may be varied as desired with respect to the shape and extent of the transverse curvature of the ribs, instead of providing a single lengthwise corrugation in the rib, as shown in Figs. 5 and 6. Also, instead of a supporting member 9 in the form of a ring, a disk of wood may be provided secured to the top of the vehicle at the center thereof and provided with a groove in its periphery to receive the ends of the ribs. These and other modifications of the invention I aim to include within the terms of the claims appended hereto.

Having described my invention, what I claim as new therein and desire to secure by Letters Patent of the United States is:

1. In a vehicle-body, the combination of a top, supporting members secured to the under side thereof, adjacent to the center and the edge thereof, and having grooves therein, a fabric covering for the interior of said top, secured at its edge to said edge supporting member, and ribs sustaining said covering, extending between said supporting members and having their ends mounted in said grooves, said covering being drawn taut over said ribs, substantially as set forth.

2. In a vehicle body, the combination of a curved top, supporting members secured to the under side thereof, adjacent to the center and the edge thereof, and having grooves therein, a fabric covering for the interior of said top secured at its edge to said edge supporting member, and flexible metallic ribs supporting said covering, extending between said supporting members and having their ends mounted in said grooves, said ribs being of greater length than the distance between said grooves, and curved lengthwise approximately to the curve of said top, and said covering being drawn taut over said ribs, substantially as set forth.

3. In a vehicle body, the combination of a metallic top, a wooden supporting member secured to the top near the center thereof and having a groove in its outer edge, a second wooden supporting member secured to the top near the edge thereof, flexible metallic ribs extending between said members, curved in the direction of their length and having their ends received in said grooves, and a fabric covering for the interior of the car sustained by said ribs and secured to said members, substantially as set forth.

4. In a vehicle-body, the combination of a curved top, supporting means secured there-

to, a plurality of flexible metallic ribs within the top, sustained at their ends in position by said supporting means, said ribs being shaped transversely to stiffen them throughout the major portion but not the whole of their length, and held bowed in a curve approximating that of the top by said supporting means, and a textile covering for the interior of the top secured to said ribs, substantially as set forth.

5. In a vehicle-body, the combination of a curved frame member, wooden strips secured to the under side thereof, adjacent to the center and edge, a fabric lining for said member, secured to said strips, flexible curved metallic ribs, extending between said strips with their ends held thereby so that the ribs are curved in the same manner as said member, said lining being provided with pockets through which said ribs extend, and said lining being drawn taut between said ribs, substantially as set forth.

6. In a vehicle body, the combination of a top, a supporting member secured to the top near the center thereof, a second supporting

member secured to the top adjacent to the edge thereof, metallic ribs extending between said members, and a textile lining for said top secured to said members, and sustained by said ribs by being provided with pockets to receive the ribs, each of said pockets being formed along a seam where two pieces of the lining join substantially as set forth.

7. In a vehicle body, the combination of a top provided with means for supporting the ends of ribs, flexible metallic ribs of greater length than the distance between the means for supporting the ends thereof having their ends coacting with said means, said ribs decreasing in thickness and increasing in flexibility toward the ends, and a fabric covering sustained by said ribs, substantially as set forth.

This specification signed and witnessed this 13th day of January, 1913.

JOHN E. KILBURN.

Witnesses:

WM. J. EARNSHAW,
JOHN B. KILBURN.