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PATENTED MAY 3, 1904.

W. M. SALISBURY.
DIAPHRAGM FOR CAR VESTIBULES OR THE LIKE.

APPLICATION FILED JAN. 11, 1904.

NO MODEL.

Fig. 1.

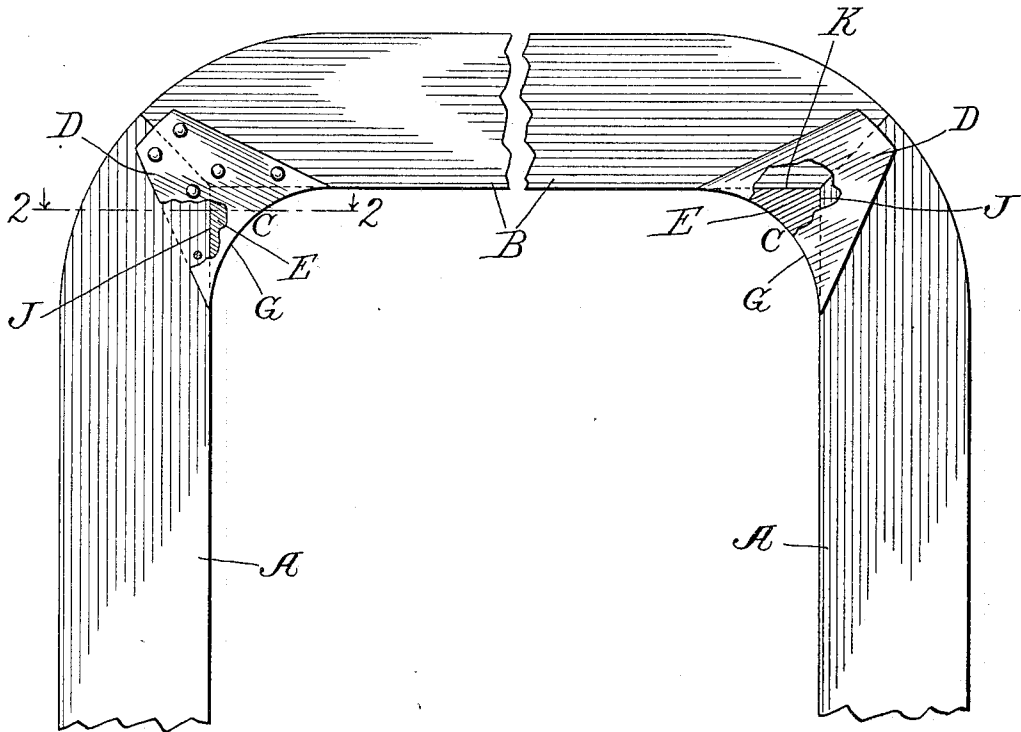
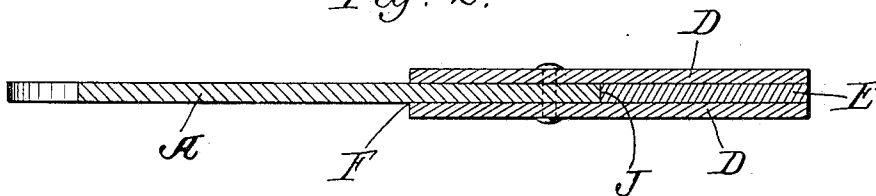


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

WARREN M. SALISBURY, OF CHICAGO, ILLINOIS.

DIAPHRAGM FOR CAR-VESTIBULES OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 758,856, dated May 3, 1904.

Application filed January 11, 1904. Serial No 188,456. (No model.)

To all whom it may concern:

Be it known that I, WARREN M. SALISBURY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Diaphragms for Car-Vestibules or the Like, of which the following is a specification.

My invention relates to diaphragms for car-vestibules or the like, and has for its object to provide strengthening-corners for the accordion plaits of such diaphragms.

I have illustrated my invention in connection with a single plait or section of material. The several plaits can then be made up in any desired manner and be associated with any other necessary parts to complete the diaphragm.

I have illustrated in a diagrammatic way one form of my invention in the accompanying drawings, wherein—

Figure 1 is an elevation of a section or plait with parts broken away and others shown in dotted lines, and Fig. 2 is a cross-section on the line 2 2 of Fig. 1.

Like parts are indicated by the same letter in both figures.

A A are side strips of any kind of material suitable for the purpose, and B is a cross-piece of similar material.

C C are corner-pieces. Each of these corner-pieces consists of two exterior pieces D D and an inner piece of reduced size E. The three pieces are securely attached to each other or may be integral, so that wide slots, as indicated at F, are made between their exterior pieces to receive portions of the strips A A and B. The corner-pieces may be of any desired shape, but are preferably curved at G to form a simple finished internal corner. The inner pieces E are made rectangular, as indicated in dotted lines, so as to furnish at J a firm vertical bearing for the strip A and at K a firm horizontal bearing for the strip B.

The strips A and B may be of canvas-like material and the corner-pieces of leather; but, as previously suggested, either may be made of any suitable size, shape, or material, and they may all be proportioned as occasion may suggest.

The use and operation of my invention are sufficiently set forth, perhaps, in the foregoing; but I will explain that by this construction three diaphragm-sections only are required for each plait, and two corner-pieces. The diaphragm-sections are firmly held in proper vertical relation, so as to prevent sagging, particularly along the edge of the upper section. Moreover, they are given throughout an appreciable portion of their lengths firm properly-disposed bearings to assist in thus keeping them from sagging. Thus the upper section rests on a horizontal ledge or support at K at each end, while both ends are inclosed between the somewhat-extended overlying sections of the corner-pieces. This gives great strength and rigidity to the corner. The corner cannot give way, double, or yield, and there is little or no tendency of the strips or sections of the diaphragm to break at or near such corners.

My invention can be applied to any kind of diaphragms, or my diaphragm-section may be made up into any kind of a complete diaphragm. Therefore I have not shown a full diaphragm. The parts may be secured together at the corners in any desired way, as by rivets, as suggested in connection with one corner, or by adhesive material, which may be supposed to be applied to the other.

I claim—

1. A diaphragm-section comprising three strips, two vertical and one horizontal, abutting at their contiguous ends, and two corner-pieces overlapping the vertical and horizontal strips.

2. A diaphragm-section comprising vertical and horizontal strips with corner-pieces which have sections to overlap the strips and shoulders parallel to the length of the strips, and adapted to engage their edges.

3. A diaphragm-section comprising strips and corner-pieces, said corner-pieces provided with slot-like openings into which the strips are let and against the bottoms of which the strip edges abut for a considerable portion of their length.

4. A diaphragm-section comprising strips and corner-pieces, the latter consisting each of an inner portion and two larger portions, the

strips adapted to be received between the outer and against the inner portion.

5 5. A diaphragm-section comprising strips and corner-pieces, the latter consisting each of
10 an inner portion and two larger portions, the strips adapted to be received between the outer and against the inner portion, the three portions of the corner shaped so as to form a curve on the inside of the diaphragm.

15 6. A diaphragm-section comprising strips and corner-pieces, the latter consisting each of an inner portion and two larger portions, the strips adapted to be received between the outer and against the inner portion, the inner corner-piece forming substantially a right angle
15 lying between the overhanging portions.

7. A diaphragm-section of substantially uni-

form width consisting of strips and corner-pieces, the strips reduced in width at the corner, such reduction being compensated for by
20 an extension of the corner-piece.

8. A diaphragm-section comprising two vertical strips and one horizontal strip and two corner-pieces, each consisting of an inner portion two of whose edges are substantially at
25 right angles to each other, and two overhanging portions extending beyond such edges and angle, the strips received between such overhanging portions and against the inner portion.

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Witnesses:

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