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UPHOLSTERY CONSTRUCTION

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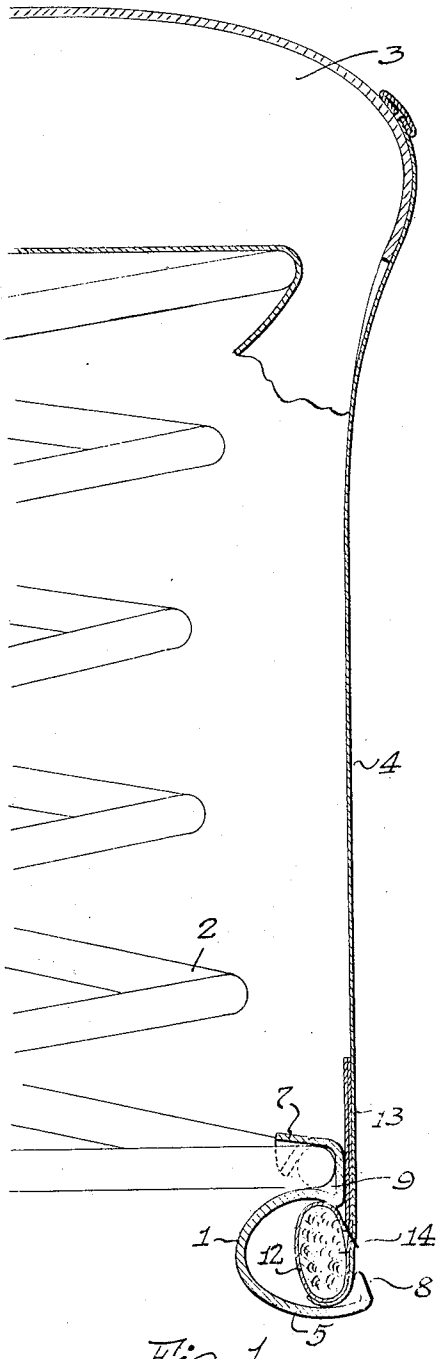


Fig. 1.

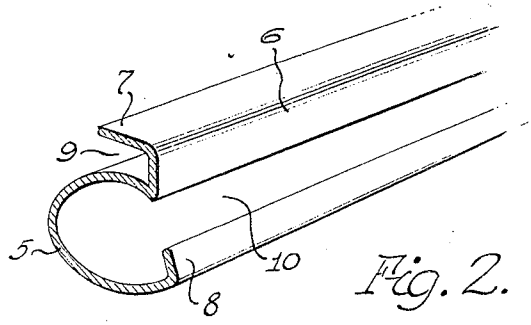


Fig. 2.

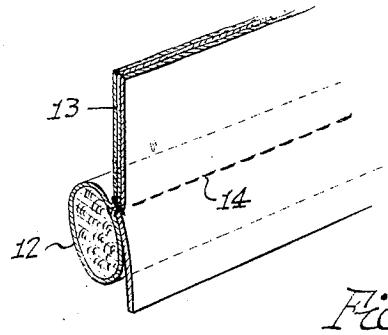


Fig. 3.

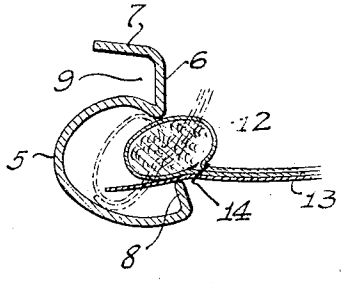


Fig. 4.

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UPHOLSTERY CONSTRUCTION

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3 Claims. (Cl. 155—180)

The present invention pertains to a novel upholstery construction and relates more particularly to a seat construction for motor vehicles.

Such seat constructions comprise a base frame into which is secured the welt of an apron hanging from the top of the seat. Various styles of base frame for retaining the welt as well as the lowermost coils of the inner springs have been suggested, as in prior Patent No. 1,242,346 of October 9, 1917.

It is desirable to insert the lock and welt in the base frame with as little manipulation of the latter, either before or after insertion, as possible. The present invention aims to provide a construction whereby the welt may be easily inserted and securely retained in the base frame.

In keeping with this object the welt is made of elliptical cross section in the preferred embodiment. The minor axis of the elliptical cross section is of such dimension as to pass readily into the base frame, but the major axis is considerably longer than the throat or opening of the same. Thus, when the welt is inserted in the base frame on its minor axis and then turned somewhat, the longer major axis prevents the welt from being drawn out of the frame.

The invention is fully disclosed by way of example in the following description and in the accompanying drawing, in which—

Figure 1 is a vertical section of a spring seat constructed according to the invention;

Fig. 2 is a sectional perspective view of the base frame;

Fig. 3 is a sectional perspective view of the lower edge of the apron; and

Fig. 4 is a detailed section showing the manner of inserting the welt into the base frame.

Reference to these views will now be made by use of like characters which are employed to designate corresponding parts throughout.

In Figure 1 is illustrated a spring cushion seat of more or less conventional structure consisting of a base frame 1 secured to the lower ends of coil springs 2 which in turn are surmounted by upholstery material 3. An apron 4 enclosing the spring depends from the edges of the top structure 3 and is secured in the base frame in a manner presently to be described.

The base frame has a cross sectional configuration resembling the Figure 5 and is somewhat similar to the form shown in prior Patent No. 1,242,364 of October 9, 1917. It has a curved body portion 5 with a vertical neck 6 at one edge and horizontal flange 7 projected from said edge. The remaining edge of the body portion 5 has a comparatively short, inwardly directed, straight flange 8. The upper part of the body portion in conjunction with the neck 6 and flange 7 forms a channel 9 which receives the bottom coil of each spring 2. The neck 6 and flange 8 define a throat 10 which constitutes an entrance to the interior of the body portion 5.

To the lower edge of the apron 4 is secured a welt 11 of wood, fiber or other material and having preferably an elliptical cross section. The welt is enclosed in a sheath or envelope 12 having considerable surplus material formed into a two-ply flap 13 which lies contiguous to the lower part of the apron. The stitch 14 which holds the sheath enveloped around the welt and defines the flap 13 also passes through the apron in order to attach the welt to the latter. It will be seen that the stitch is in a line intermediate the intersections of surface of the welt with the major and minor cross sectional axes of the ellipse.

The minor axis of the ellipse is equal to, or preferably somewhat smaller than the width of the throat 10, so that the welt may be passed through the throat on its minor axis, without forcing or expanding the metal. This is to be distinguished from the prior modes of assembly where the throat must be spread to admit the welt and then contracted to retain it.

The location of the stitch 14, hereintofore described, tilts the welt when pressure is exerted by the springs 2 between the frame 1 and top 3, so that the welt takes the position shown in Figure 1. The major axis of the elliptical cross section, which is wider than the throat, crosses the throat, and the welt is thus prevented from being drawn out of the throat. It is to be observed that no subsequent contracting or crimping of the base frame is necessary for holding the welt, which in this case bears against the upper part of the curved body portion 5 and the inner face of the flange 8.

The cross sectional formation of the body portion 5 and the throat 10 are such as to permit the removal of the welted edge, if desired, without mutilation of the parts. In such a case the top upholstery 3 is pressed downwardly to relieve the tension of the apron 4, and the welted edge is reached by a suitable tool and turned so that it may be withdrawn from the throat 10 in substantially the same manner as it was entered.

Although a specific embodiment of the invention has been illustrated and described, it will be understood that various alterations in the details of construction may be made without departing

from the scope of the invention as indicated by the appended claims.

What we claim is:—

1. In an upholstery construction, a base frame having a restricted throat, an apron and a welt of elliptical cross section carried by said apron, said welt being adapted for insertion into said throat on its minor axis, and a flange extending from said frame into said throat and engageable by said welt when lying with its major axis across said throat, said apron being attached to the surface of said welt in the upper and outer sector thereof between the intersections of said surface with the axes of the welt when the welt lies in the last named position.

2. In an upholstery construction, a base frame having a restricted throat, an apron and a welt of elliptical cross section carried by said apron, the minor cross sectional axis of said welt being substantially equal to the width of said throat, and a flange extending from said frame into said throat and engageable by said welt when lying with its major axis across said throat, said apron being attached to the surface of said welt in the upper and outer sector thereof between the intersections of said surface with the axes of the welt when the welt lies in the last named position.

3. In an upholstery construction, a base frame having a restricted throat, an apron and a welt of elliptical cross section carried by said apron, said welt being adapted for insertion into said throat on its minor axis, and a flange extending from said frame into said throat and engageable by said welt when lying with its major axis across said throat, said apron being attached to the surface of said welt in the upper and outer sector thereof between the intersections of said surface with the axes of the welt when the welt lies in the last named position, said welt being in engagement with the top and bottom of said frame immediately inward of said throat.

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