July 1, 1947 N. E. SHOCKEY 2,423,159

SPRING COVER

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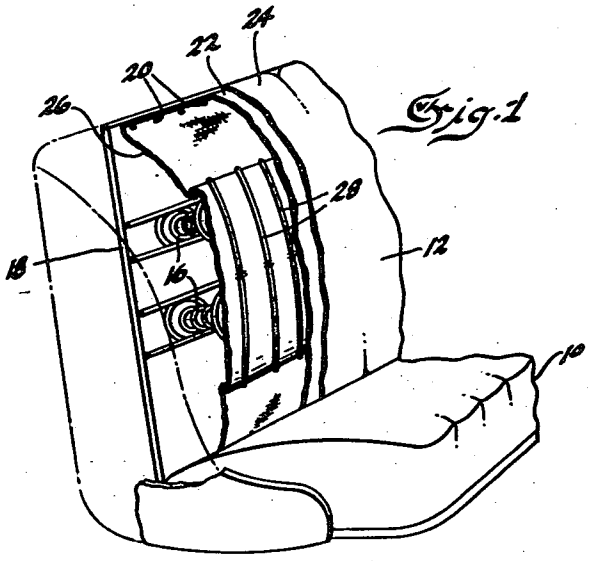


Fig. 1

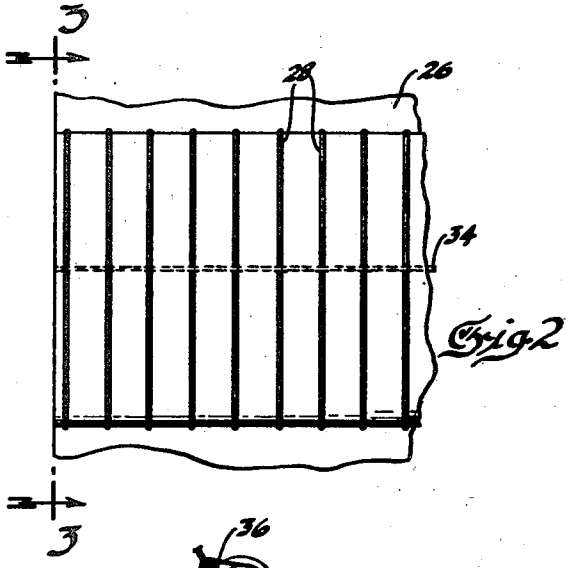


Fig. 2

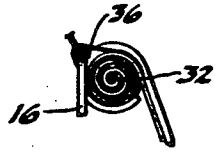


Fig. 6



Fig. 4

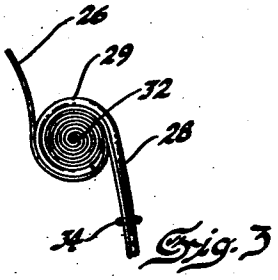
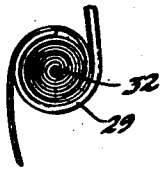


Fig. 3



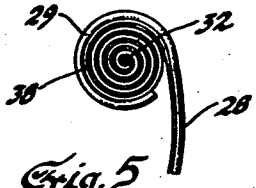


Fig. 5

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SPRING COVER

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6 Claims. (Cl. 155—181)

1

This invention relates to an improved spring cover or liner adapted to be interposed between an upholstery spring assembly and the upholstery padding and covering material which extends over the spring assembly.

An object is to provide a spring cover or insulating liner of the character described which is in the form of a sheet of flexible material such as fabric and is provided with resilient stiffening means associated therewith and which sheet is adapted to be spread over a spring assembly, such as an assembly of a plurality of the conventional hour glass type of coil springs used in automobile seat or back cushions, furniture, spring pads, inner spring mattresses or the like.

This spring cover is spread over the spring assembly underneath the upholstery padding and covering material which overlies the springs. This cover is so reinforced with resilient stiffening members as to prevent the upholstery padding and covering material from sagging down into or between the separate coil springs which make up the spring assembly.

Another object is to provide such a liner which is inexpensive as to cost, which is capable of being readily manufactured, which is effective in use and which is of simple, rugged structure.

More particularly an object is to provide a liner or insulating cover of the character described which comprises a flexible sheet of material such as fabric, as for example burlap, which sheet is reinforced with stiffening means in the form of a series or succession of spaced apart resilient stiffening members extending transversely across the sheet and bent at the ends over a bead formed in the sheet by folding it upon itself along a line extending lengthwise of the sheet.

Preferably the sheet is folded upon itself along two spaced apart parallel lines to form a bead or fold extending along each line. Reinforcing stiffening members in the form of spring wire or the like extend across that portion of the sheet between the two folds and are crimped at their ends over the folds.

These folds may extend along two opposite margins of the sheet or they may extend along intermediate portions spaced inwardly from the margins, whichever is desired.

Other objects, advantages and meritorious features of this invention will more fully appear from the following description, appended claims and accompanying drawing, wherein:

Figure 1 is a perspective of the back cushion of an automobile seat structure partly broken away and exhibiting this invention.

2

Figure 2 is an elevation of a fragment of a liner exhibiting the invention.

Figure 3 is an end view of the liner shown in Figure 2 and taken on the line 3—3 of Figure 2.

Figure 4 is an elevation of a fragment of the liner taken on the same line as Figure 3 showing the beginning of the folding operation.

Figure 5 is a fragment of a liner exhibiting the invention and wherein the fold is provided along one margin of the fabric sheet.

Figure 6 shows the structure of Figure 5 secured to a spring assembly.

In the construction shown in Figure 1, an automobile seat cushion is indicated as 10 and the back cushion as 12. The back cushion is broken away to expose a spring assembly made up of a plurality of coil springs 16 supported by a suitable frame 18. My improved liner is stretched over the spring assembly and secured at its margin as by tacks 20 to the frame 18. Over the liner wadding 22 or the like is disposed and over the wadding of trim cloth 24 is disposed. The instant invention relates to the liner.

The liner is made up of a sheet 26 of fabric or the like, as for example burlap, with which is associated a succession of resilient stiffening members 28 which may be formed of spring wire or other suitable material. This sheet may be folded or rolled upon itself as illustrated at 30 in Figure 4 to form a roll or fold, such as indicated at 32 in Figure 3. Figure 4 shows the inception of the folding or rolling operation. Figure 3 shows the completion of it.

That portion of the fabric which is to be rolled upon itself to form the fold may be smeared with adhesive so that a bead is formed wherein the layers are adhesively secured together. Figure 3 illustrates two folds 32 which are spaced apart and extend parallel to each other and the lengthwise margin of the sheet. The fabric sheet shown in Figure 3 extends outwardly beyond the folds to form linear marginal portions which may be secured to the frame as shown in Figure 1.

The resilient stiffening members 28 are crimped at their ends as at 29 over the folds 32 as shown in Figure 3. These stiffening members may also be further secured to a portion of the sheet between the folds as at 34 by stitching or the like.

Figure 5 illustrates a modification wherein the marginal portion of the fabric sheet is folded to provide the roll or fold 32 and in this construction the reinforcing strands 28 extend transversely the full width of the sheet. In this construction of Figure 5 the liner instead of being attached to the frame as shown in Figure 1 may be

attached to the springs 16 by wire clips 36 or the like which clips embrace the fold 32 and are clipped about the upper coil of the spring.

This construction of Figures 5 and 6 exhibits another modification, namely, before the fabric sheet 26 is rolled or folded upon itself to form the bead 32 there is secured to the sheet, as by adhesive or the like, a layer or strip of paper 38 or other flexible reinforcing sheet material. This reinforced portion of the sheet is then folded upon itself to form the fold or roll 32.

What I claim is:

1. An upholstery spring cover comprising a flexible sheet adapted to overlie an upholstery spring assembly and having a strip of sheet material extending across the flexible sheet and secured thereto, that portion of the flexible sheet to which said strip is secured being folded upon itself lengthwise of said strip, and a plurality of substantially parallel spaced apart reinforcing stiffening members bent about said fold and extending substantially normally away from the fold across the sheet.

2. An upholstery spring cover comprising a sheet of flexible material adapted to overlie an upholstery spring assembly and having two strips of sheet material extending in spaced parallelism across said flexible sheet and secured thereto, those portions of the sheet to which said strips are secured being each folded upon itself lengthwise of the strip forming two spaced parallel folds, and resilient stiffening means arranged in a series of successive spaced apart sections extending transversely across the sheet and bent at their ends about said folds.

3. An upholstery spring cover comprising a sheet of flexible material adapted to overlie an upholstery spring assembly, such sheet being folded upon itself along a line forming a fold extending lengthwise over one surface of the sheet, and a plurality of reinforcing stiffening members each having one of its ends bent over said fold, said stiffening members being disposed in spaced substantial parallelism and extending transversely across the sheet away from the fold.

4. An upholstery spring cover comprising a flexible sheet adapted to overlie an upholstery spring assembly, such sheet being folded upon itself along two spaced apart substantially parallel lines, and reinforcing stiffening members extending in substantial parallelism transversely across the sheet between the folds and having their opposite ends bent about said folds.

5. An upholstery spring cover as defined in claim numbered three (3) characterized in that the fold formed in said sheet is formed therein along a line spaced from and extending substantially parallel to a linear margin of the sheet and the marginal portion of the sheet beyond the fold is extended outwardly over the end portions of the stiffening members which are bent about the fold.

6. An upholstery spring cover as defined in claim numbered three (3) characterized in that said fold is formed by rolling the sheet upon itself forming a fold in the form of a roll consisting of more than two layers of material and the reinforcing stiffening members are in the form of flexible resilient pieces of wire.

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