F. W. HAWES.

SPRING CONSTRUCTION.

APPLICATION FILED JULY 30, 1917.

1,242,346. Patented Oct. 9, 1917.

Fig. 1

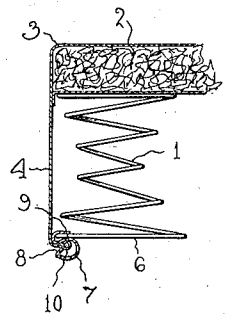


Fig. 2

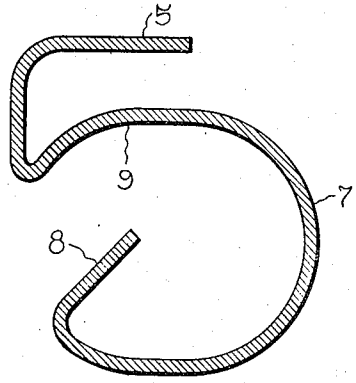
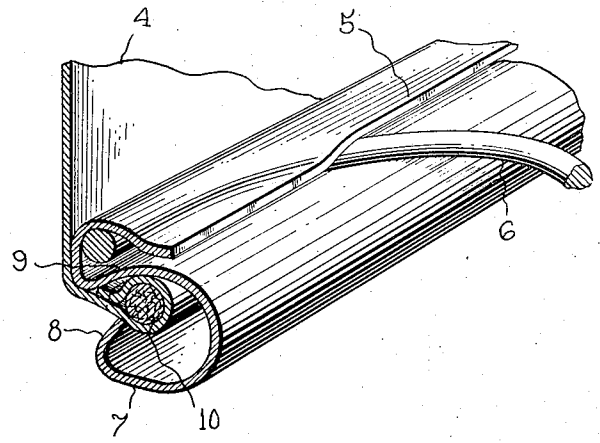


Fig. 3



Witnesses

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UNITED STATES PATENT OFFICE.

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SPRING CONSTRUCTION.

1,242,346. Specification of Letters Patent. Patented Oct. 9, 1917.

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To all whom it may concern:

Be it known that I, FREDERICK W. HAWES, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Spring Constructions, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to spring seat constructions and to an arrangement thereof whereby the apron or portion of the upholstery which depends from the cushion over the side of the structure is positively retained in position by means that do not tend to cut it and which thoroughly guard it while at the same time the apron is anchored smoothly and evenly throughout its length. The holding means also permits the withdrawal of the apron without injury, as in repairing or the like.

The invention consists in the matters hereinafter set forth, and more particularly pointed out in the appended claims.

In the drawings,

Figure 1 is a view in elevation, reduced and largely diagrammatic, of an upholstery construction that embodies features of the invention;

Fig. 2 is a view in transverse section of a base strip or member; and

Fig. 3 is an enlarged view in detail of the base strip with adjacent portion of the upholstery apron and an applied base coil of a spring.

As herein shown, a spring seat structure is formed of body springs 1 on a base frame, said springs carrying upholstery 2 covered in the usual manner by the seat fabric 3 and a depending apron 4.

Along the side rim of the base, or itself constituting the side of the base frame is a strip of sheet metal which may have an upper inturned flange 5 adapted to grip the lower coil 6 of a spring, when it is inserted and the inner margin forced down or may be provided with other spring securing means. Below this flange portion, the strip is bent between the lateral margins into a tubular body 7 with an inwardly inclined flange 8, the margin of which is so spaced in relation to a depending upper flange portion 9 of the strip that it permits the introduction of the thickened edge or welt cord 10 of the apron 4 when the latter is tucked into the throat or opening between the parts 8 and 9, but retains the welt when the apron is stretched upwardly as indicated in Fig. 3 under the normal tension of the spring. In other words, when the tension of the springs draws on the welt in a horizontal direction, the vertical distance across the throat or opening is sufficiently smaller than the edge 10, to retain the latter in operative position, while if the apron is pulled in a downwardly inclined direction, through the throat or opening, the said opening permits an easy withdrawal of the welt. There is also a tendency of the strip to compress when under load, thereby further restricting the opening or throat of the slot, the strip recovering its initial contour when relieved from weight.

As a result of this construction, the apron is retained smoothly and easily in a strip which itself is the finish of the base of the main frame of the structure. Because of the method of insertion of the apron, it is kept stretched without wrinkles and is not subjected to wear as it does not chafe upon the support on which the spring seat is placed.

If the apron becomes damaged, or it is desired to withdraw it for cleaning or having access to the seat, then it may be readily pulled out as described above as it is not clenched or gripped by the strip, but is merely held automatically therein when under normal stress.

Obviously changes in the details of construction may be made without departing from the spirit of my invention and I do not care to limit myself to any particular form or arrangement of parts.

What I claim is:—

1. In an upholstery spring construction, a base, a marginal strip having an upper inturned flange and a lower tubular portion with a longitudinal slot formed along the intermediate portion of the strip, and an apron having a welted edge inserted through the slot, the strip being provided with flanges along the slot that interlock with and retain the welt of the apron when the latter is drawn outwardly at an angle to the direction of insertion.

2. In a spring seat upholstery construction, body springs, upholstery thereon having a depending apron with thickened or welted lower margin, and a retaining member therefor consisting of a strip of suitable sheet material bent between the lateral

margins thereof into a tubular body, with a depending upper flange in spaced, substantially parallel relation to an inwardly inclined, upwardly extending lower flange, that underlies the upper flange, the flanges forming a throat through which the welted apron margin is insertible and retaining the welted edge when the apron is drawn upwardly in the direction of pull of the springs.

3. In a spring seat upholstery construction, a base, body springs thereon, upholstery carried by the springs, an apron depending from the upholstery and having a thickened or welted lower margin, and an apron retaining strip of suitable sheet material bent between the lateral edges thereof into a tubular body having a slot receiving the welted apron edge, the marginal portion of the strip above the slot being bent downwardly, and the marginal portion below the slot extending obliquely upward below and in spaced relation to the upper flange, the vertical distance between the edges of the flanges being greater than the thickness of the apron and less than the thickness of the welted margin.

4. Means for holding the welt of a seat apron comprising a strip having a throat to receive the welt of the apron, said strip being disposed at an angle to the direction of pull on the apron so as to cause said welt to hold at the inner end of the throat.

5. Means for holding the welt of a seat apron comprising a strip having a throat to receive the welt of the apron, said strip throat being formed by substantially parallel flanges permitting of the apron welt being inserted in the longitudinal direction of the throat and to bind against said flanges when pulled outwardly other than the direction of insertion.

6. Means for holding the welt of a seat apron comprising a strip having a throat to receive the welt of the apron, said strip throat being formed of flanges, one compressed toward the other when pressure is brought to bear on the seat so as to restrict said throat to a width less than that of said apron welt.

In testimony whereof I affix my signature in the presence of two witnesses.

FREDERICK W. HAWES.

Witnesses:
WM. A. FALLS,
KARL H. BUTLER.