

(No Model.)

H. S. HALE.
SEAT CUSHION AND BACK.

No. 567,470.

Patented Sept. 8, 1896.

Fig. 1.

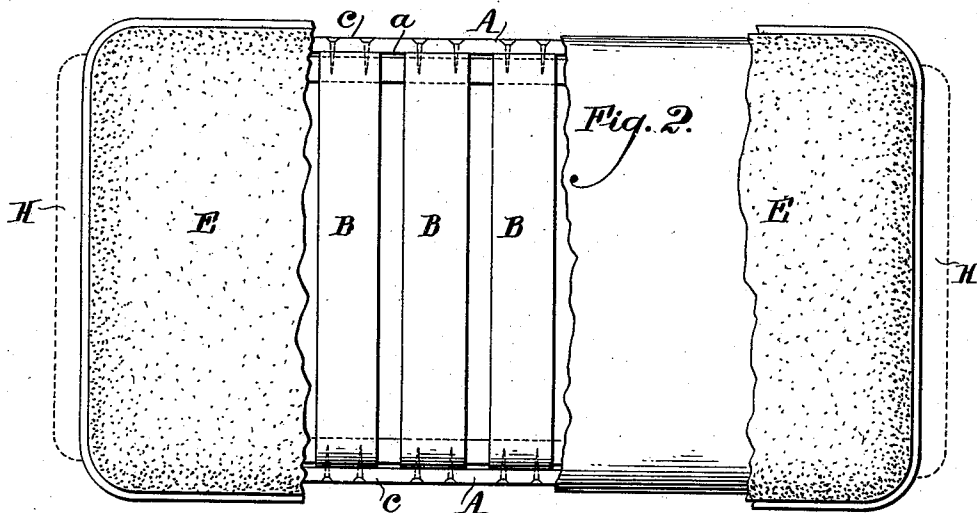
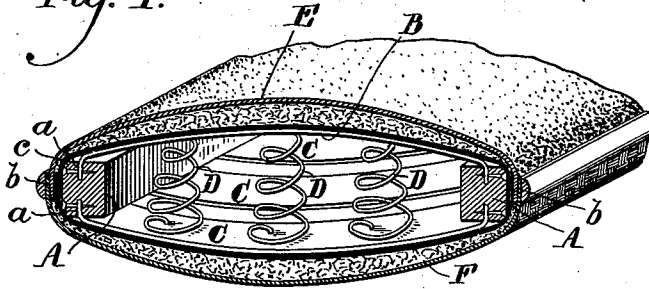


Fig. 3.

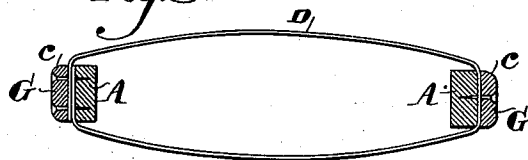


Fig. 4.

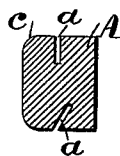
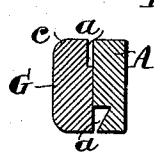


Fig. 5.



Witnesses.

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UNITED STATES PATENT OFFICE.

HENRY S. HALE, OF PHILADELPHIA, PENNSYLVANIA.

SEAT CUSHION AND BACK.

SPECIFICATION forming part of Letters Patent No. 567,470, dated September 8, 1896.

Application filed April 17, 1896. Serial No. 587,903. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. HALE, of the city and county of Philadelphia and State of Pennsylvania, have invented an Improvement in Seat Cushions and Backs, of which the following is a specification.

My invention relates to cushions and backs for car-seats, &c.; and it consists of the improvements which are hereinafter described and claimed, and which are shown in the accompanying drawings.

It is the object of my invention to provide a seat cushion or back of improved construction, which shall possess increased strength and durability, and shall have great elasticity.

It is also an object of my invention to provide a reversible seat-cushion either face of which may be turned uppermost.

In carrying out my invention I provide the wooden frame with an elastic base or support for the usual coiled springs which are arranged below the face or body portion of the cushion, whereby these springs are elastically supported and the usual wooden cross-pieces are dispensed with. This elastic base or support is preferably composed of a series of broad metallic spring-bands extending across the wooden frame and secured thereto. By forming both faces of these broad metallic bands and covering them with suitable upholstery I obtain a reversible seat-cushion of which each face possesses the same characteristics of elasticity and firmness.

In the drawings, Figure 1 is a perspective view of a transverse section of a seat-cushion embodying my invention. Fig. 2 is a plan view of the cushion with the upholstery partly broken away. Fig. 3 is a transverse sectional view of the frame of the cushion, illustrating a modification. Figs. 4 and 5 are sectional views of parts of the frame, illustrating modifications.

A A are wooden rails of the usual rectangular frame.

B B are broad metallic spring-bands extending transversely across the upper face of the frame and secured to the rails A A, preferably by the downwardly-bent extremities inserted in grooves *a* in the upper face of the opposite rails A.

C C are similar broad metallic spring-bands

extending across the lower face of the frame and secured at their ends to the rails A, preferably in the same manner as the bands B B are secured. These bands C C constitute an elastic base to support the usual coiled springs D, which are interposed between the bands B and C, to each of which they are fastened at their extremities. The face of the cushion is covered by the usual upholstery E, fastened along the edge to the wooden frame.

The principal advantages of forming the base-support of the broad metallic bands instead of the usual cross-pieces of wood are, first, they afford an elastic support for the coiled spring, thus relieving the strain upon them and rendering the seat more elastic; second, they occupy less vertical space and therefore permit longer coiled springs to be employed; third, they may be made sufficiently broad to provide a support for the entire base of the coiled springs.

The ends of the pieces B C may be nailed to the outside of the rails A, but I prefer to insert them in grooves or notches, as described, so that there may be a continuous face *c*, of wood, along the edge of the seat, over which the upholstery extends and to which it is secured. If desired, this outer wooden edge may be formed by an independent piece G, as shown in Fig. 5.

Instead of employing separate upper and lower bands B C, as in the construction shown in Fig. 1, a single continuous metallic band may be used, as shown in Fig. 3. This continuous band is shown secured to one rail A at one of its ends, then stretched transversely to the opposite rail, bent about it and fastened, and then stretched transversely back to the first rail and there secured. In this case I prefer to use the outer wooden strips G to provide the outer face for attachment of the upholstery or covering. A covering of suitable material may be placed over the metallic bands C C and fastened at its edges to the frame. I prefer, however, to cover them with suitable upholstery F, thus producing a seat-cushion upholstered on both faces and reversible. I prefer also to upholster the faces with different material, using, for example, plush on one face and rattan on the other. A beading or strip *b*, of wood, rattan, leather, or other suitable material, may

be fastened along the edge of the cushion to conceal the edges of the upholstery.

When the seat-cushion is made reversible, it may be provided with cleats H H, (dotted lines in Fig. 2,) adapted to rest on the frame, and thus support the seat-cushion without bringing the upholstered face in contact with the supports.

The details of construction which have been shown may be varied without departing from the invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a seat-cushion, the combination of a substantially rectangular wooden frame, a series of broad metallic bands extending entirely across the upper face of the seat and secured at their ends to the wooden frame, a covering of suitable material arranged over said bands, an elastic base carried by the frame, and a series of coiled springs supported by said elastic base and sustaining the series of broad metallic springs at their upper ends.

2. In a seat-cushion, the combination of a substantially rectangular wooden frame, a series of broad metallic bands extending entirely across the upper face of the seat and secured at their ends to the frame, a series of similar broad metallic bands extending en-

tirely across the lower face of the seat and secured at their ends to the frame, a series of coiled springs interposed between said sets of metallic bands, and suitable coverings over said bands.

3. In a seat-cushion, the combination of a substantially rectangular wooden frame, a series of broad metallic bands extending entirely across the upper face of the seat and secured at their ends to the frame, a series of similar broad metallic bands extending entirely across the lower face of the seat and secured at their ends to the frame, a series of coiled springs interposed between said sets of upholstery material over both said series of bands whereby said seat is made reversible.

4. A frame for a seat-cushion consisting of a wooden frame and a series of broad metallic bands stretched across both faces of wooden frame from one side to the other in one continuous piece and secured to the wooden frame.

In testimony of which invention I hereunto set my hand.

HENRY S. HALE.

Witnesses:

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