F. GREER.

CUSHION.

APPLICATION FILED JULY 3, 1909.

963,757.

Patented July 12, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

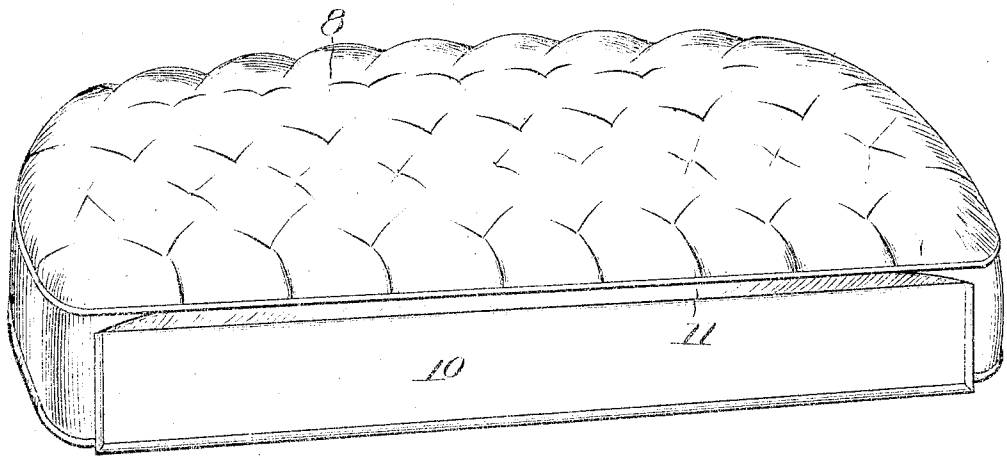
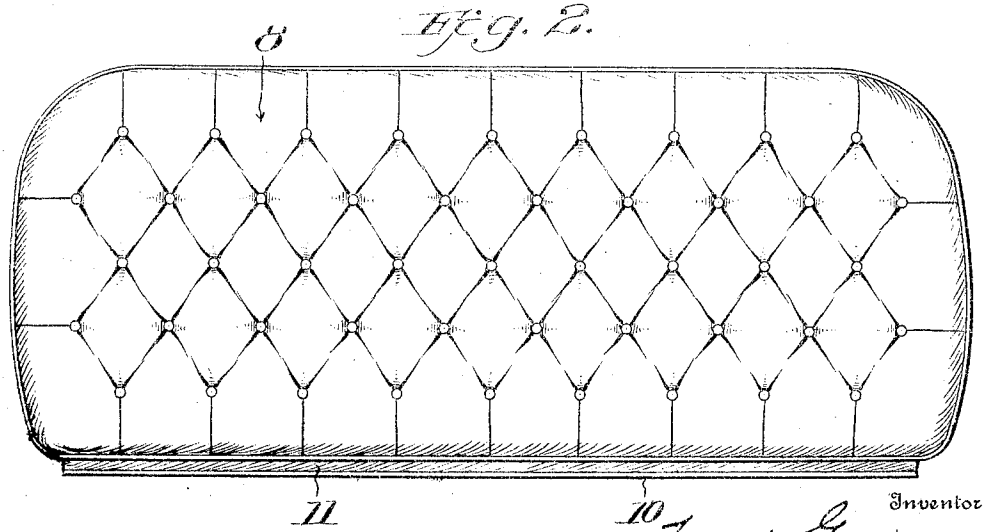


Fig. 2.



Witnesses

C. M. Walker.

W. C. Baughman

Inventor

Frank Greer

By G. F. C. Attorney

F. GREER.

CUSHION.

APPLICATION FILED JULY 3, 1909.

963,757. Patented July 12, 1910.

2 SHEETS—SHEET 2.

Fig. 3.

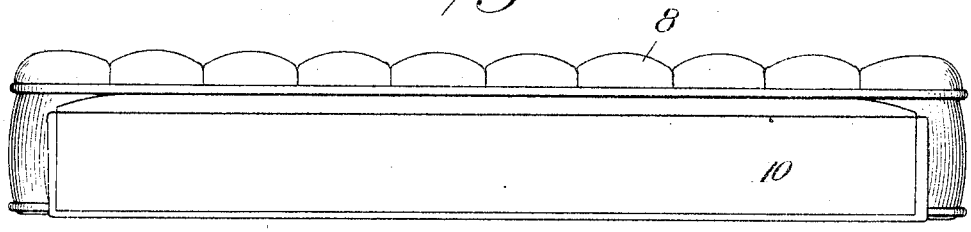


Fig. 4.

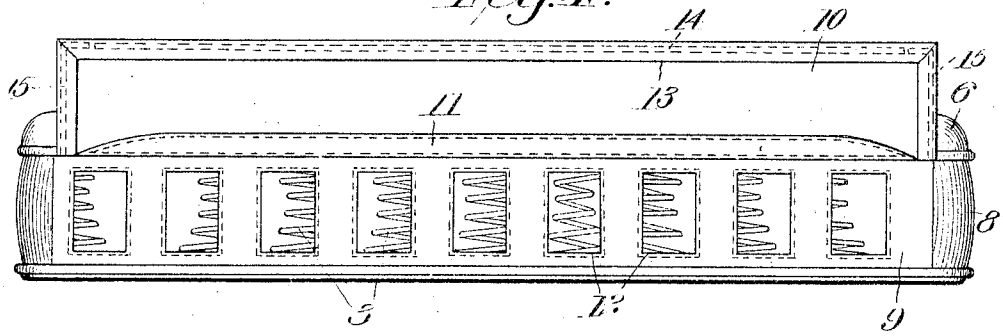


Fig. 5.

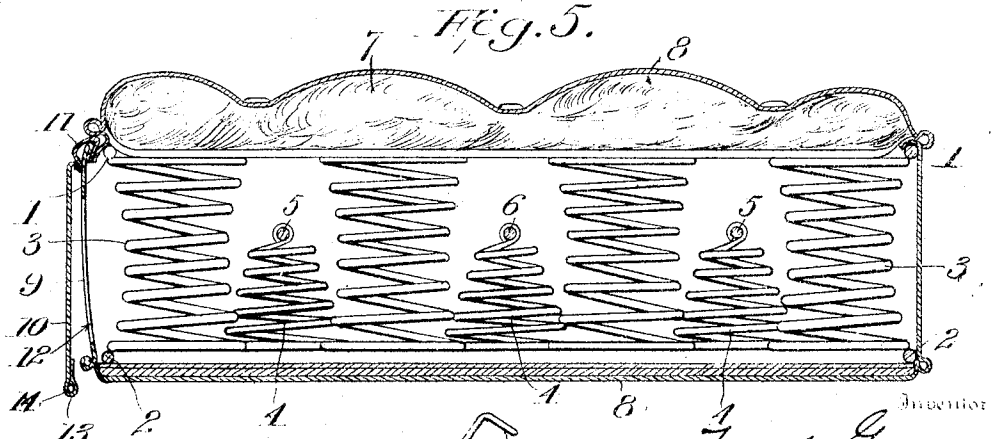
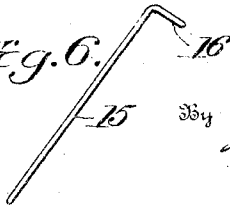


Fig. 6.



Witnesses,
G. Walker,
H. C. Baughman

Inventor
Frank Greer.
By H. C. Baughman
Attorney

UNITED STATES PATENT OFFICE.

FRANK GREER, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF TO WATSON R. SMITH, OF JACKSON, MICHIGAN.

CUSHION.

963,757. Specification of Letters Patent. Patented July 12, 1910.

Application filed July 3, 1909. Serial No. 505,633.

To all whom it may concern:

Be it known that I, FRANK GREER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Cushions, of which the following is a specification.

This invention relates to cushions for automobile or other seats.

One object is to provide a cushion, whether composed of spring work and stuffing or either, or whose body is pneumatic, embodying such characteristics that when it is compressed, its front facing will work up and down over the edge of the seat upon which the cushion is mounted and maintain the front straight, thereby giving the cushion a very neat appearance and hiding from view all appearances of bulging at the front of the cushion when compressed.

Another object of the invention resides in the provision of an upholstered spring and air or stuffed cushion for automobile, or other vehicles or for other use, that will be effectually ventilated at comparatively small expense, with very little labor and without permitting the ingress of rain, sleet, or snow in stormy weather by way of ventilation openings.

With the above and other objects in view, the present invention consists in the combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes may be made in the form, proportion, size and minor details without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is a perspective view. Fig. 2 is a top plan view. Fig. 3 is a front view illustrating the front flap or facing in normal position on the cushion. Fig. 4 is a similar view illustrating the front flap or facing in raised position. Fig. 5 is a transverse sectional view through the cushion. Fig. 6 is a detail perspective view of one of the reinforcing elements of the front flap or facing.

Referring now more particularly to the accompanying drawings, the reference characters 1 and 2 indicate upper and lower edge wires, respectively, constituting a frame in which may be mounted a plurality of main and auxiliary springs 3 and 4, respectively, of any variety and arranged in any particular way, according to the purpose of the invention and the desires of the builder, the character and arrangement of the springs being immaterial to the invention involved herein, and for purposes of illustration only the main and auxiliary springs have been shown, the outermost auxiliary springs being connected at their tops through the instrumentality of a suitable auxiliary frame 5, connecting the ends of which and the tops of the intermediate auxiliary springs is a rod 6. At the outset, however, let it be understood that the wire frame and springs are not particularly an essential feature of the present invention and that the interior of the cushion may be of the inflatable variety, constituting what is known as an air cushion, or the interior may be composed wholly of curled hair or other suitable stuffing material.

The illustrated frame with the springs in it may be upholstered in any suitable manner by a suitable filling material 7 and a leather or other covering 8, which may be composed of separate pieces or one piece, or any other method may be followed in constructing the same. In the present case, however, the covering for the front edge of the cushion is preferably formed of a separate piece of leather or other suitable material 9, which is sewed or otherwise secured to the bottom, top and ends of the covering, and provided with a plurality of openings 12, and which may be bulged outwardly when the cushion is compressed, but whose bulging will be hidden from view by a flap 10, which remains straight and which works up and down over the front edge of the cushion to let out the air, through the plurality of openings 12 formed in said material 9, thereby overcoming the more or less unsightly appearance of the usual bulging of the front side of the cushion when compressed under a rider and permitting of the ingress and egress of air to ventilate the cushion.

Sewed or in any other way secured to the top covering between the front edge thereof and the upper inner face of said strip 9 is what may be termed a hinge strip 11, which extends preferably substantially throughout the entire length of the cushion, the lower edge and ends of this hinge strip being preferably free from the covering, as shown.

Secured by sewing or otherwise to the free longitudinal edge of the hinge strip 11 is the closure flap or front facing 10, which, by virtue of the hinge strip 11, may be swung upwardly over the top of the cushion, or swung downwardly over the openings in the strip 9 to close the openings, as clearly shown in the drawings.

For ventilating purposes the flap may be thrown backwardly in the manner just alluded to, so as to permit air to pass freely into the cushion and circulate through and between the springs confined therein, or through stuffing or around an inflatable bag (not shown). If desired, the flap or front facing 10 may remain thrown backwardly over the top of the cushion when the same is used beneath a rider in a vehicle (not shown), whereby the constant compression of the cushion will result in air being continually drawn into and forced out of the cushion, thereby effectually ventilating the latter. Ordinarily, however, the front flap or facing 10 should be thrown downwardly over the front edge of the cushion, which would give the same a very neat appearance and not interfere with a proper circulation of air and a consequent effectual ventilation of the cushion, because, incident to the compression, there would be a constant drawing in and forcing out of air, which would find its way between the cushion proper and the free edges of the downwardly turned front flap or facing 10.

While not absolutely necessary, it is preferred to reinforce the free edges of the front flap or facing 10, one method of reinforcing the same being to roll or turn the free longitudinal edge of the flap backwardly to provide a container 13 for the reinforcing rod or wire 14, and likewise the ends of the flap or facing 10 to provide a retainer to receive the reinforcing wires 15, the latter being preferably formed in substantially L-shape, with the ends 16 thereof directed into the roll in which the wire 14 is inserted, thereby providing a reinforcement extending around the corners at the free longitudinal edge and ends of the flap or facing 10. This reinforcing of the flap or facing protects the edges thereof, and also prevents curling of the flap or facing and maintains it normally in its true hanging position over the openings 12 in the front strip 9.

In the use of my invention, I obviate the employment of gromets, which are somewhat expensive and which result in an unsightly appearing cushion. I also obviate ventilated buttons on top of the cushion, which are expensive and which in a storm permit water to run into the cushion. It is not always practical or convenient to provide openings in the bottom of a seat to let out the air. The method employed in the present invention provides openings for an effectual ventilation of the cushion and when the latter is sat upon and thus compressed, the front flap or facing maintains its flap or straight condition and works upwardly and downwardly over the edge of the seat, giving the cushion a very fine appearance, overcoming the objection to the usual front bulging of the cushion and providing an exceedingly cheap, inexpensive, durable and efficient construction for the purposes herein stated.

What is claimed is:—

1. A cushion comprising a frame and a covering for the same, the covering having a plurality of alining openings at one edge of the frame, and a front flap or facing secured to the covering and adapted to swing over the openings, the free edges of the flap being reinforced.

2. A cushion comprising a frame and a covering for the frame, the covering having a plurality of alining openings at one edge of the frame, and an external front facing or flap secured to the covering at one edge only and adapted to work upwardly and downwardly over the openings when the cushion is compressed.

3. An upholstering covering for use in spring constructions, which spring constructions have a frame and springs mounted within the frame, said covering consisting of a body portion provided with a plurality of openings, and a front facing swingingly secured to the covering and adapted to work upwardly and downwardly over the openings when the construction is compressed.

4. A cushion comprising a frame and a covering for the frame, said covering including a strip provided with a plurality of openings, a hinge strip secured to the covering above said openings, and a front facing secured to said hinge strip and adapted to swing with it to cover said openings.

5. A cushion comprising a frame and a covering for the frame, said covering including a strip provided with a plurality of openings, a hinge strip secured to the covering above said openings, and a front facing secured to said hinge strip and adapted to swing with it to cover said openings, the free longitudinal edge and ends of the facing or flap being reinforced, the end reinforcements having a portion directed into alinement with the reinforcement along the free longitudinal edge of the facing or flap.

6. A covering for spring constructions, which spring constructions have a frame and springs mounted therein for compression, said covering consisting of a body portion including a separate strip provided with a plurality of openings, a hinge strip secured to the covering, and a facing or flap secured to the hinge strip and adapted to swing with the latter over said openings.

7. A covering for spring constructions, which spring constructions have a frame and springs mounted therein for compression, said covering consisting of a body portion including a separate strip provided with an opening, a hinge strip secured to the covering, and a facing or flap secured to the hinge strip and adapted to swing with the latter over said opening.

8. A cushion comprising a covering and inside filling, said covering consisting of a body portion including a separate strip provided with an opening, a hinge strip secured to the cushion, and a facing or flap secured to the hinge strip and adapted to swing with the latter and over the said opening.

9. A cushion including a covering provided with a plurality of horizontally alining openings, and a flap or facing connected to the covering and adapted to swing over said openings to conceal the same, said flap or facing moving upwardly and downwardly when the cushion is compressed.

10. A covering for cushions provided with an opening in one side, a hinge strip secured to the covering, and a flap or facing connected to one edge only of the hinge strip and being of a length substantially the length of the covering.

11. A covering for cushions provided with a plurality of horizontally spaced openings, and a flap or facing connected to the covering and adapted to swing over the openings to conceal the same and free at its lower edge and ends so that it may move upwardly and downwardly over the openings when the cushion is compressed.

12. A covering for cushions provided with an opening at the front of the cushion, and a flap or facing extending substantially throughout the length of the cushion at the front thereof and secured to the covering to swing over said opening and having its end and bottom edges free of the covering.

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

FRANK GREER.

Witnesses:
L. S. LOMMASSON,
ALBERT F. WEISS.