

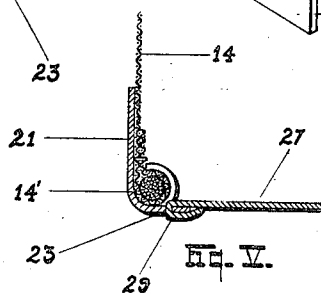
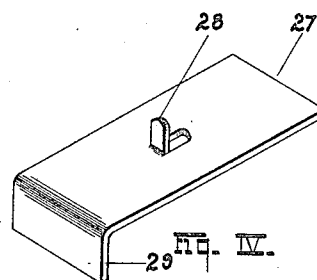
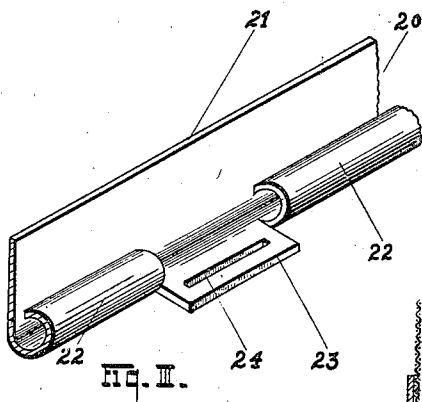
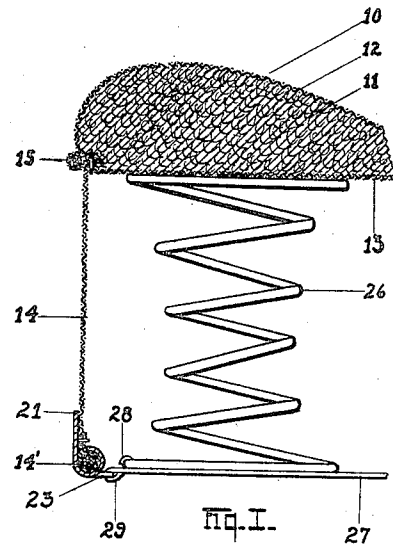
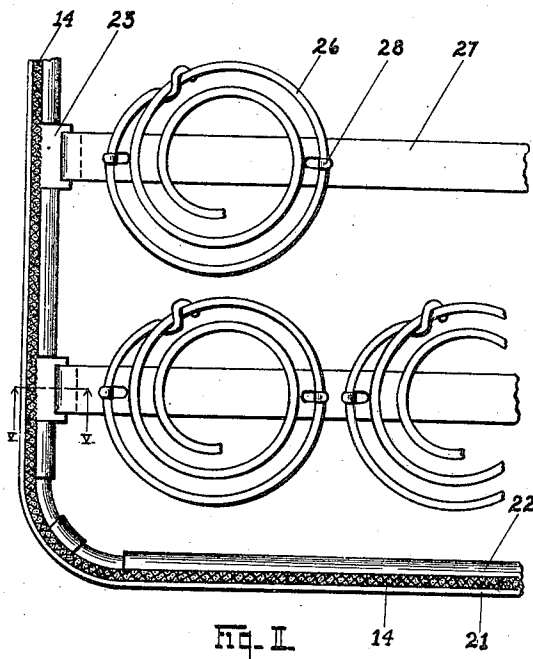
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C. F. GREEN

1,452,041

SEAT SPRING

Filed Nov. 18, 1918



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UNITED STATES PATENT OFFICE.

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SEAT SPRING.

Application filed November 18, 1918. Serial No. 262,990.

To all whom it may concern:

Be it known that I, CHARLES F. GREEN, a citizen of the United States, residing at Defiance, county of Defiance, and State of Ohio, have invented certain new and useful Improvements in Seat Springs, of which I declare the following to be a full, clear, and exact description.

This invention relates to cushion seats and has more particular reference to the means employed for quickly and permanently attaching the usual skirt of a cushion to the spring frame enclosed thereby, particularly to that type of frame in which a plurality of springs are held in position relative one to the other by means of relatively flat bands which extend across the bottom portion of the springs. One of the objects of the invention is to provide a metallic strip on the skirt for the purposes referred to, said strip being located on the outside lower edge of the skirt extending entirely around the periphery thereof, so as to form a protecting means therefor as well as means for attaching the skirt to the spring frame.

Further objects of this invention relate to the details of construction having the objects of providing an economical method of assembling a spring cushion seat. I accomplished the objects of my invention in one instance by the devices and means described in the following specification, but it is evident that the same may be widely varied without departing from the scope of the invention, as pointed out in the appended claims. A structure constituting one embodiment of my invention, which may be the preferred, is illustrated in the accompanying drawings forming a part hereof in which:

Figure I is a vertical section through an assembled cushion with my improved type of attaching strip shown therein.

Figure II is a transverse partial sectional view.

Figure III is a perspective view of a portion of the strip employed in this invention, while

Figure IV is a perspective view of one of the strips which may be used in an ordinary seat.

Figure V is a sectional view taken on the line 5—5 of Figure II.

The upholstering member of the cushion seat includes the seat cushion 10 having the

padded portion 11 secured between the top most covering 12 and the lower supporting member 13, a depending skirt 14 being connected with the top seat portion 12 by any suitable means as a beading 15 extending circumferentially around the lower edge of the outermost portion of the seat cushion 12. The manner in which the lower edge of the skirt 14 is provided with a protecting metallic strip 20 extending entirely around the same and located exteriorly thereof, to connect the cushion and skirt with the spring unit constitutes an important structural feature of this invention which may be so arranged as to particularly facilitate the assembling of the entire cushion seat in the manner hereinbelow set forth.

The strip 20 is provided with a continuous unbroken face plate 21 adapted to be located exteriorly of the lower portion of the skirt 14, and has an inwardly and upwardly curled flange portion 22, as clearly shown in Figure III. In the curled flange portions 22, are formed the inwardly extending flanges 23 integral with the plate 21 and located at certain portions thereof, formed by cutting the flanges at certain intervals, leaving between two adjacent curled portions 22 a straight portion 23. The cars 23 may be provided with a slot 24 of proper width to receive the bent over end of a transverse base supporting band 27 for a plurality of spring units as will hereinafter appear.

The curled over flange 22 forms means for attaching the strip 20 to the corded bead 14' at the lower edge of the skirt 14, as will be readily understood by those skilled in the art; and also acts to crimp and bind the bead 14' of the skirt 14 against the outer face 21 of the skirt strip 20 as clearly shown in Figure V.

The spring unit or spring element of my improved type of seat cushion may be composed of a plurality of helical spring units 26, a series of which are supported, as is clearly shown, on one of the transversely or longitudinally extending supporting bands 27 provided with upstanding clips 28 formed by properly cutting the body portion of the band 27, which may be used as means to clamp the band 27 to the base ring of a plurality of coiled springs 26. Each end of the band 27 is provided with a downwardly extending end or hook 29 to fit in the slot 24 on

the ears 23 of the metallic skirt strip 20, and when inserted therein is bent over as shown in Figure V to securely and permanently attach the spring unit to the skirt strip 20.

5 It will thus be seen that the band 20 or strip for the skirt 14, which extends entirely around the lower strip or edge of the skirt forms a protecting means therefor at the point where the cushion seat is inserted and
10 held in the frame on the motor vehicle or other type of seat with which the spring cushion is to be used. It is further evident that the strip 20 has integral means there-
15 with for attaching the same securely and permanently to the skirt 14 as well as means whereby the same may be secured to the spring unit 26. Any desired means of assembly may be employed but it is evident that a plurality of springs 26 carried by the
20 band 27 may be readily inserted in the slot 24 in the ears 23, and thereupon clamped into position. Furthermore, the springs 26 when assembled tend to hold the flexible skirt 14 tight and always therefore, main-
25 tain the assembled cushion seat in proper position under use. The strip 20 forms a continuous metallic spacing for the outer lower edge of the skirt 14 notwithstanding the fact that the crimped flange 22 as well
30 as the supporting ears 23 are stuck out integrally from a portion of the strip 20.

While I have described my invention more or less minutely in regards to details of construction and the arrangement of the parts,
35 and as being embodied in certain form, yet I do not desire to be limited thereto unduly any more than is pointed out in the appended claims, since on the contrary I contemplate all proper changes in the form,
40 construction and arrangement together with possible omissions of immaterial parts and the substitution of equivalents therefor as circumstances may suggest or necessity render expedient.

45 Having thus described my invention, what I desire to secure by Letters Patent of the United States and claim is:

1. In combination with a cushion and a depending skirt therefor, of a spring unit
50 assembly including a plurality of springs and a transverse supporting band therefor, said spring unit enclosed by said skirt, a strip of continuous metal extending around the lower edge of said skirt and provided
55 with inwardly extending means to clamp said strip to said skirt, said strip being also provided with inwardly extending ears having slots therein for receiving portions of said transverse bands of said spring unit,

said bands being adapted to be crimped
60 around and clamped to said supporting ears.

2. The combination with a cushion and a depending skirt therefor having a corded
65 lower edge, of a spring unit enclosed by said skirt including a plurality of springs and a transverse supporting base band therefor, a metallic strip extending around the outer
70 face of said skirt and forming a protecting means therefor; said strip having inwardly curled means adapted to embrace said
75 corded edge and secure said strip to said skirt, said strip being provided with inwardly extending ears having slots therein to receive and support said base band.

3. The combination with a cushion and a
75 depending skirt therefor, of a spring unit assembly enclosed by said skirt, including a plurality of springs and a base supporting band, a strip extending exteriorly of and
80 around the lower edge of said skirt having integral means inwardly extending and clamped around a portion of said skirt to secure said strip to said skirt, said strip be-
85 ing provided with inwardly extending integral ears offset inwardly from and located in substantially the same horizontal plane as the said clamping means and having slots
90 therein to receive the down turned ends of said band to support and secure said strip to said spring unit.

4. A strip for use in connecting the cushion
95 portion with the spring unit of a cushion seat comprising a metallic plate having a facing adapted to be secured at the outside
100 edge of the skirt portion of said cushion, said strip being provided with an integral inwardly curled portion for binding said strip to said skirt and integral inwardly extending supporting ears offset inwardly
105 from and located in substantially the same horizontal plane as the curled portion and having slots therein to receive the base supporting flanges of said spring unit.

5. In a spring seat having a depending
110 corded skirt and a spring unit including a plurality of spring supporting bars, a single member for supporting said bars and for connecting said skirt thereto, said member having one edge portion forming an upright
115 flange enclosing and contiguous to said skirt and having another edge portion slitted transversely to form a plurality of sections, certain of which are bent back against the cord of said skirt to secure the same and others are provided with slots to receive and to secure the ends of said bars.

In testimony whereof I affix my signature.
CHARLES F. GREEN.