F. P. D'ARCY.

CUSHION STRUCTURE.

APPLICATION FILED SEPT. 28, 1914.

1,199,247. Patented Sept. 26, 1916.

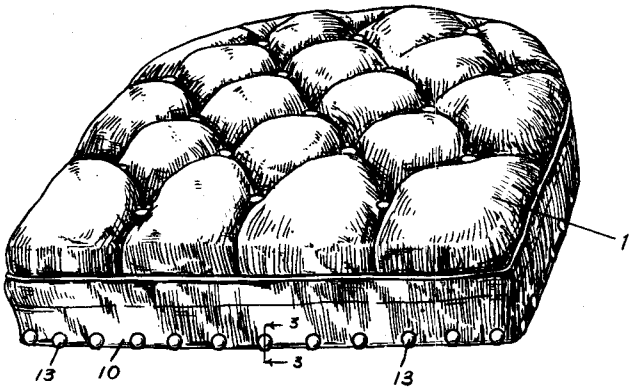


Fig. I.

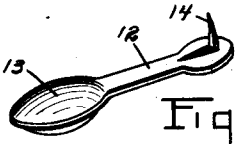


Fig. IV.

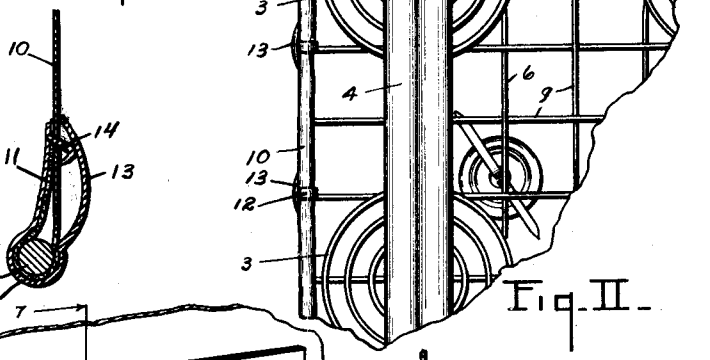


Fig. II.

Fig. III.

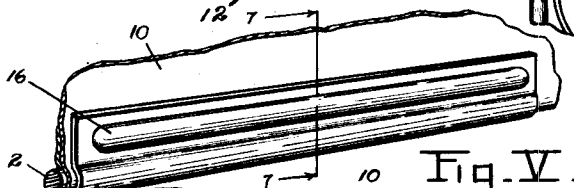


Fig. V.

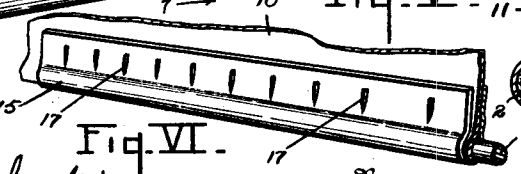


Fig. VI.

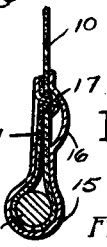


Fig. VII.

Inventor

Frank P. D'Arcy.

Witnesses

Boyd M. Sanders

Lem Gilman

By Chappell & Earl

Attorneys

UNITED STATES PATENT OFFICE.

FRANK P. D'ARCY, OF KALAMAZOO, MICHIGAN.

CUSHION STRUCTURE.

1,199,247. Specification of Letters Patent. Patented Sept. 26, 1916.

Application filed September 28, 1914. Serial No. 863,883.

To all whom it may concern:

Be it known that I, FRANK P. D'ARCY, a citizen of the United States, residing at Kalamazoo, Michigan, have invented certain new and useful Improvements in Cushion Structures, of which the following is a specification.

This invention relates to improvements in cushion structures.

The main objects of this invention are, first, to provide an improved cushion structure in which the cover is secured without the necessity of stitching or sewing; second, to provide an improved cushion structure having the above feature which is attractive in appearance and at the same time very economical to produce, the parts being easily and quickly assembled and secured in their assembled relation by unskilled labor.

Further objects, and objects relating to structural details, will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure which is a preferred embodiment of my invention is clearly illustrated in the accompanying drawing forming a part of this specification, in which:

Figure I is a front perspective of a seat cushion embodying the features of my invention. Fig. II is an inverted detail view of the structure appearing in Fig. I. Fig. III is a detail vertical section on a line corresponding to line 3—3 of Fig. I, showing details of the cover securing members. Fig. IV is an inside perspective view of one of the cover-securing members 12. Fig. V is a detail outside perspective view of a slightly modified form of my invention. Fig. VI is a detail inside view of the structure shown in Fig. V. Fig. VII is a detail vertical section on a line corresponding to line 7—7 of Fig. V.

In the drawing similar reference characters refer to similar parts throughout the several views, and the sectional views are taken looking in the direction of the little arrows at the ends of the section lines.

Referring to the drawing, 1 represents the outer casing or cover of the cushion, which is shown as suitably tufted. The cushion is provided with a bottom frame or border wire 2 shaped to correspond to the bottom edge of the cushion. The springs 3, in the structure illustrated, are of the spirally coiled type and are mounted on the supports 4 which are rigidly secured at 5 to the border wire 2. The springs are supported in their upright position on the supports 4 by the wires 6 having loop-like hooks 7 engaging the upper coils of the springs and the cross wires 8 threaded through these hooks above the coils. Wires 9 are interwoven with these spring supporting wires 6 and 8 to form a suitable support for the top of the cushion which is suitably filled and tufted as shown. As the details of these features form no part of my present invention I do not illustrate or describe the same in further detail herein.

The side portions or skirts 10 of the cushion cover are brought down on the outside of the border wire 2 and their edges 11 folded inwardly over the same and lapped on the inner sides of the side portions, as clearly shown in Fig. III.

I secure the edges in place over the border wire by means of the bar-like clips or securing members 12 which are preferably formed of sheet metal and provided with concavo-convex head portions at one end and with brads 14 struck up from the other end. These securing members are clamped or folded over the border frame with the cover thereon. The brads 14 are driven or forced through the lapped portions and clenched within the heads 13, as shown in detail in Fig. III.

The frame embracing portions of the securing members exceed a half circle so that the securing members effectively clamp the cover to the frame and the securing members are retained. The brads also serve to retain the securing members but are subject to little stress.

The heads 13 are disposed on the outside of the cushion and in addition to the feature of clenching the brads as the securing members are clamped in place they serve to ornament or add to the finish of the cushion. These securing members may be quickly applied by even an unskilled workman and hold the covering very securely to the frame, avoiding the necessity for stitching. The securing members may be quickly applied and are very effective in securing the cover in place.

In the modified structure shown in Figs. V, VI and VII, the securing members 15 are

in the form of strips having rib-like portions 16 struck up in the head portions thereof to provide the chamber for the brad portions 17. A number of brads are struck from the opposite ends of these securing members. The securing members 15 are clamped over the frame wires and embrace and secure the cover thereto substantially as do the securing members 12.

I have illustrated and described my improvements in embodiments which I find very satisfactory. I have not attempted to illustrate or describe certain other modifications which I contemplate as I believe the disclosure made will enable those skilled in the art to which my invention relates to embody or adapt the same as conditions may require.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. In a spring cushion, the combination of the springs, supports on which said springs are mounted, a wire border frame to which said spring supports are rigidly secured, a cushion cover having its lower edges folded inwardly over said border frame and lapping the inner sides of said cover, and sheet metal bar-like securing members having integral concavo-convex head portions at one end and brads struck inwardly at the other, said securing members being clamped over said border frame and cover thereon with their heads on the outside, the frame embracing portions of said securing members exceeding a half circle, the said brads being passed through the lapped portions of said cover and clenched within said heads, substantially as described.

2. In a spring cushion, the combination of the springs, supports therefor, a wire border frame, a cushion cover having its lower edges folded inwardly over said border frame and lapping the inner sides of said cover, and sheet metal bar-like securing members having integral concavo-convex head portions at one end and brads struck inwardly at the other, said securing members being clamped over said border frame and cover thereon with their heads on the outside, the said brads being passed through the lapped portions of said cover and clenched within said heads, substantially as described.

3. In a spring cushion, the combination of the springs, supports therefor, a wire border frame, a cushion cover having its lower edges folded inwardly over said border frame and lapping the inner sides of said cover, and securing members having chambered head portions at one end and brads at the other, said securing members being clamped over said border frame and cover thereon with their heads on the outside, the frame clamping portions of said securing members exceeding a half circle, the said brads being passed through the lapped portions of said cover and clenched within said heads, substantially as described.

4. In a spring cushion, the combination of the springs, supports therefor, a wire border frame, a cushion cover having its lower edges folded inwardly over said border frame and lapping the inner sides of said cover, and securing members having chambered head portions at one end and brads at the other, said securing members being clamped over said border frame and cover thereon with their heads on the outside, the said brads being passed through the lapped portions of said cover and clenched within said heads, substantially as described.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

FRANK P. D'ARCY. [L. S.]

Witnesses:
LUELLA G. GREENFIELD,
MARGARET L. GLASGOW.