

Jan. 19, 1971

V. F. ANDERSON

3,556,594

CUSHION ASSEMBLY FOR CHAIRS AND OTHER FURNITURE

Filed April 16, 1969

8 Sheets-Sheet 1

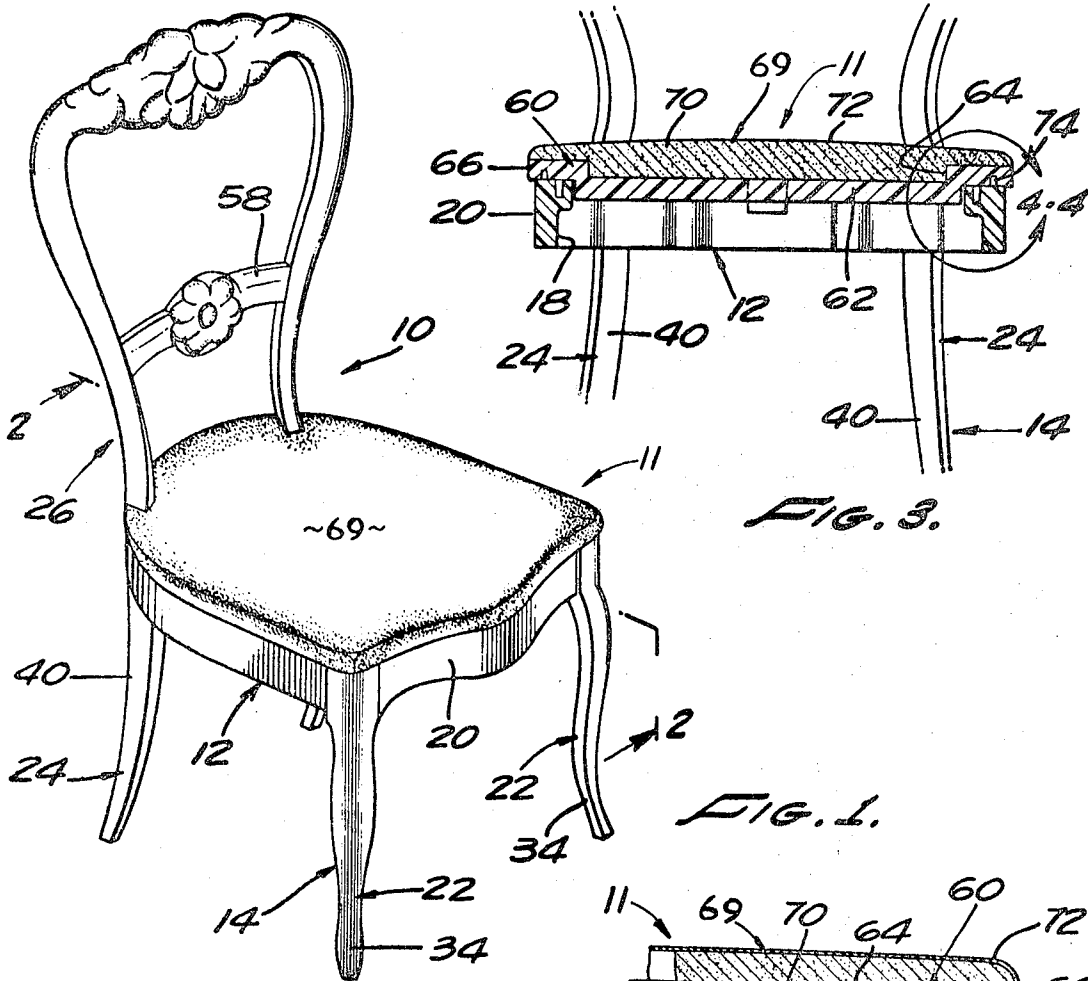


FIG. 4.

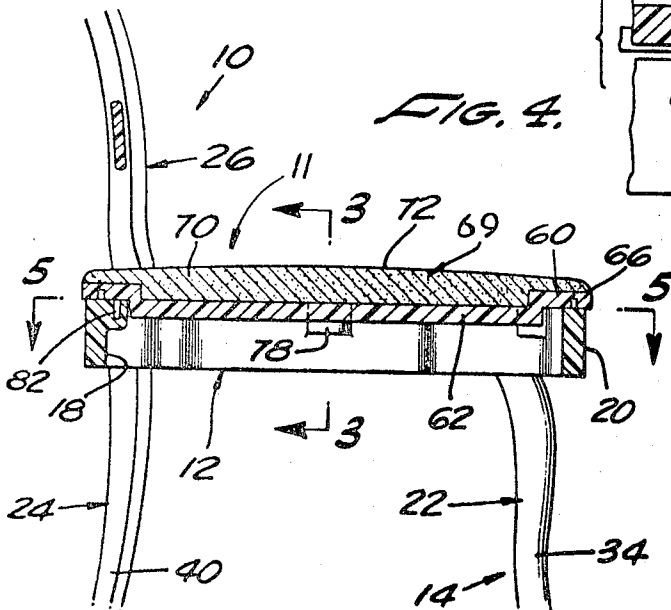
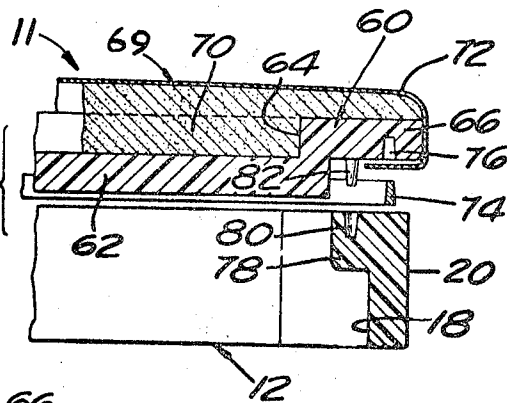


FIG. 3.



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8 Sheets-Sheet 3

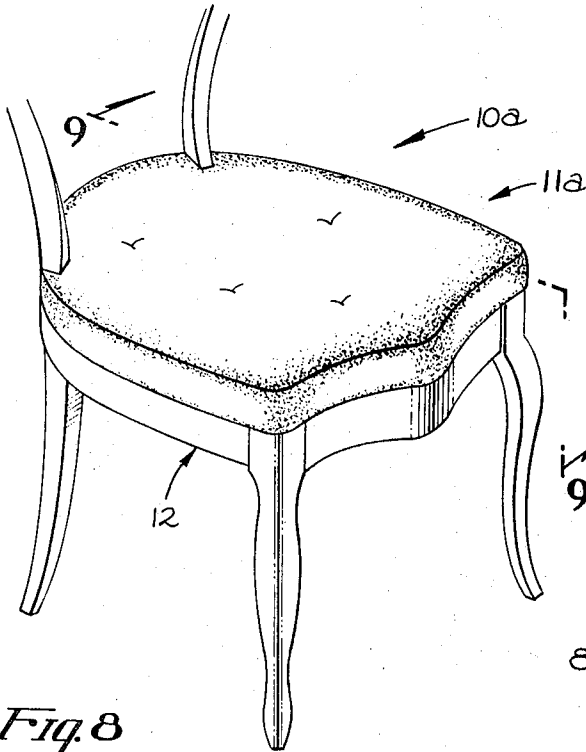


Fig. 8

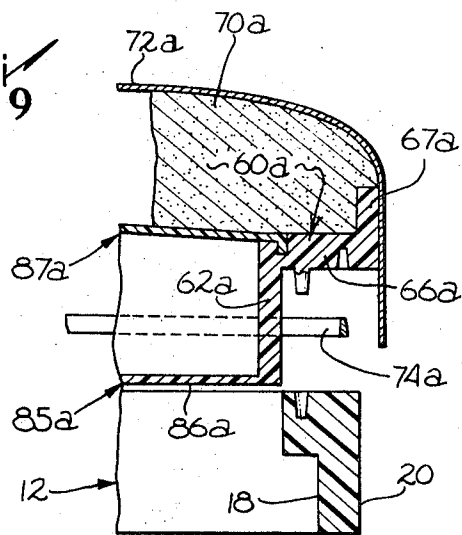


Fig. 10

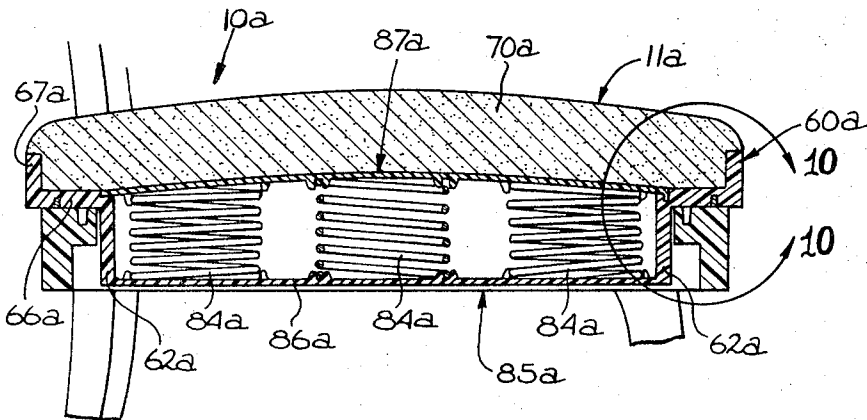


Fig. 9

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Fig. 11

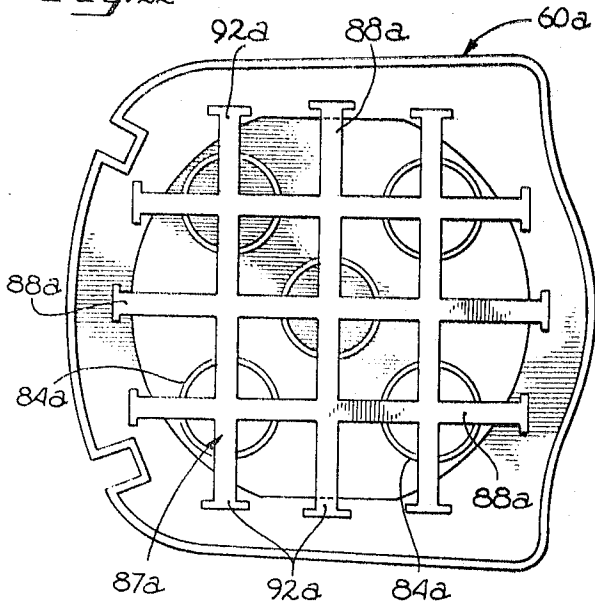


Fig. 13

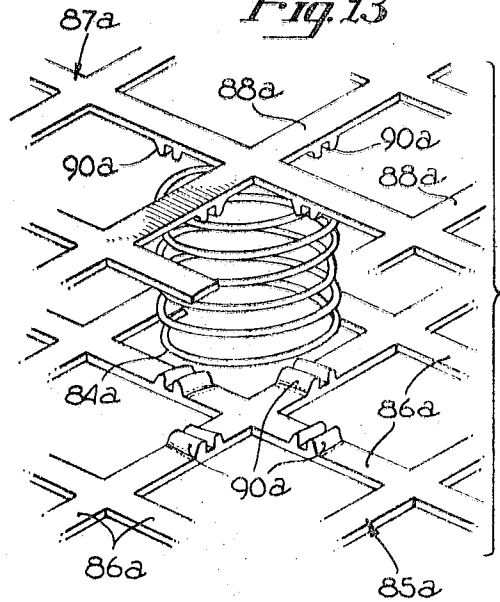


Fig. 12

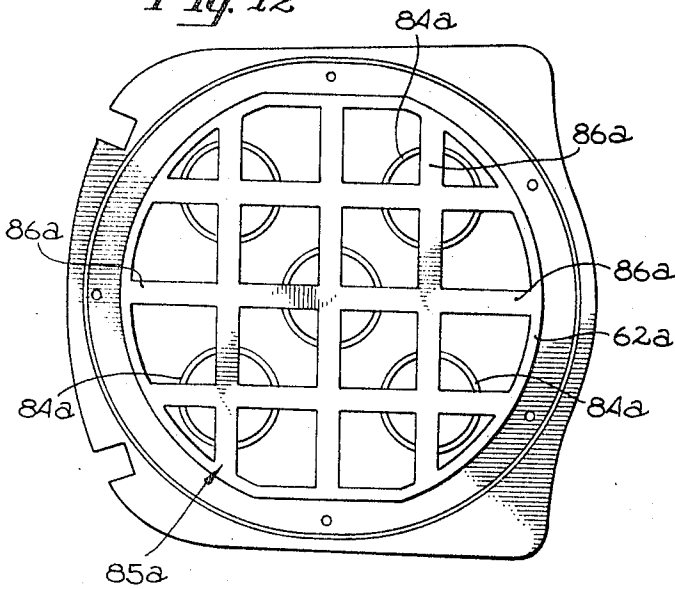


Fig. 14

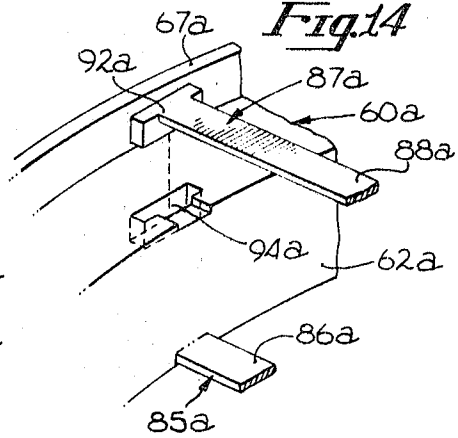


Fig. 15

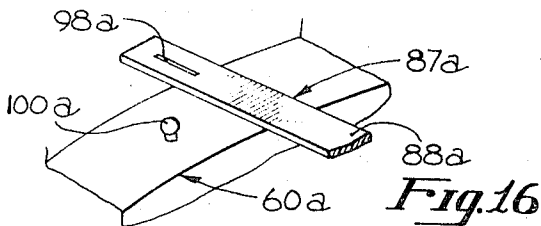
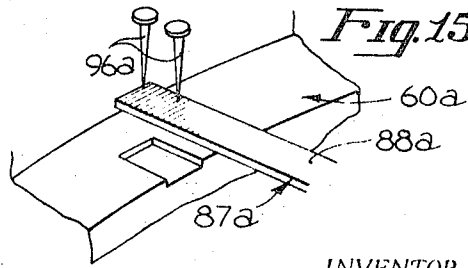


Fig. 16

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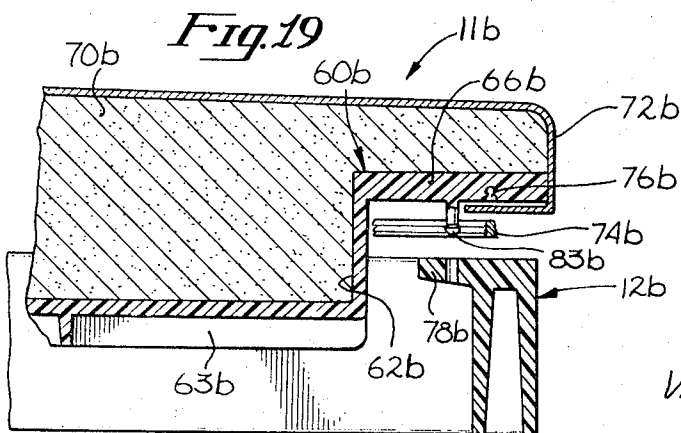
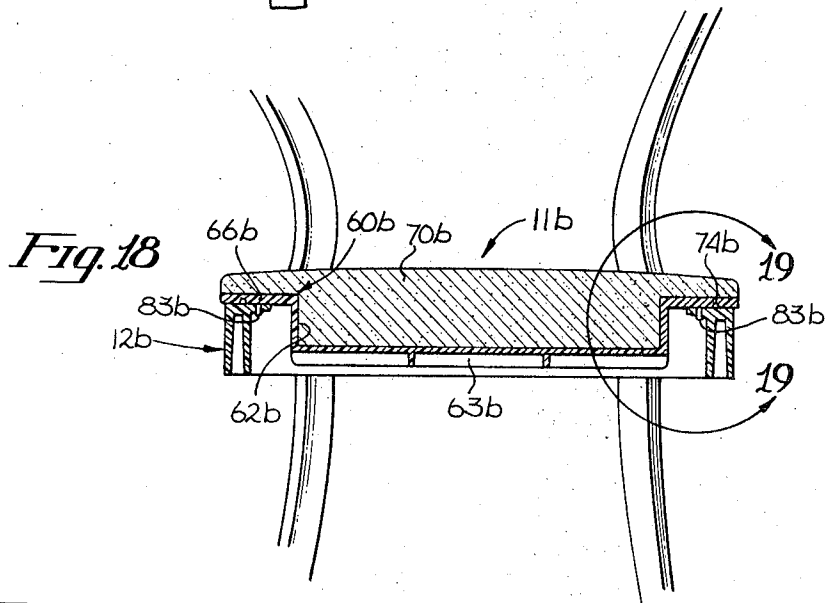
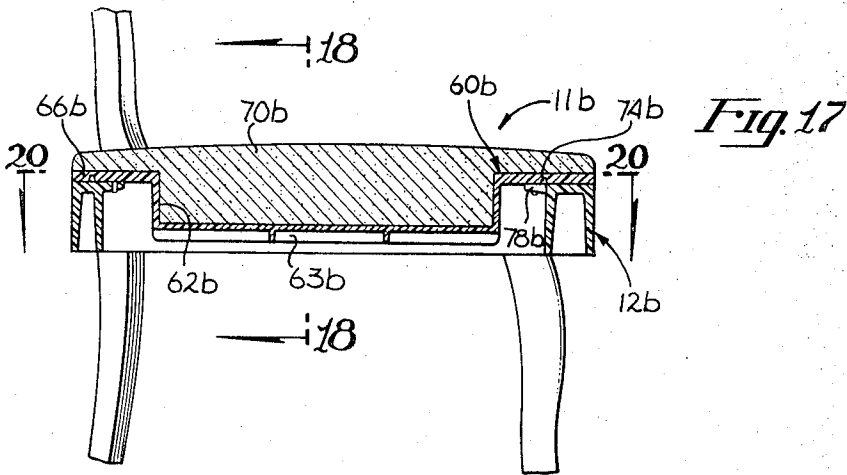
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CUSHION ASSEMBLY FOR CHAIRS AND OTHER FURNITURE

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CUSHION ASSEMBLY FOR CHAIRS AND OTHER FURNITURE

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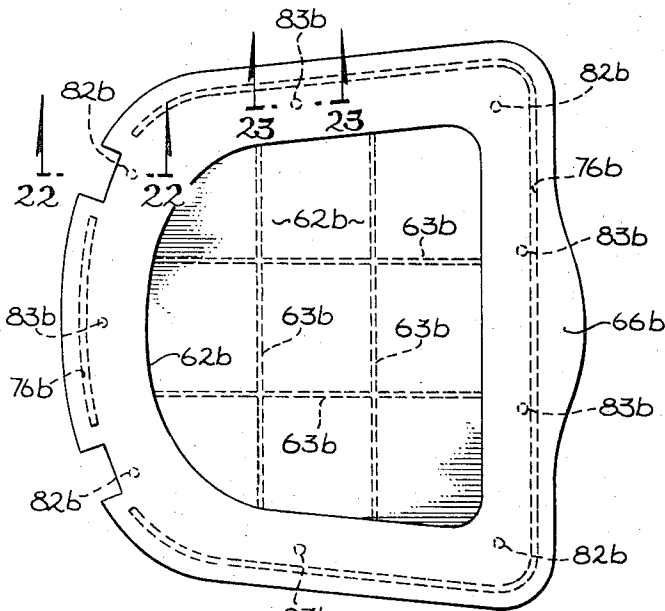


Fig. 20

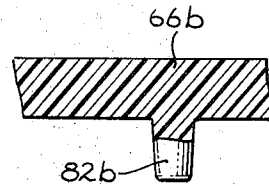


Fig. 22

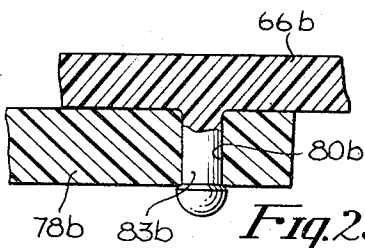


Fig. 23

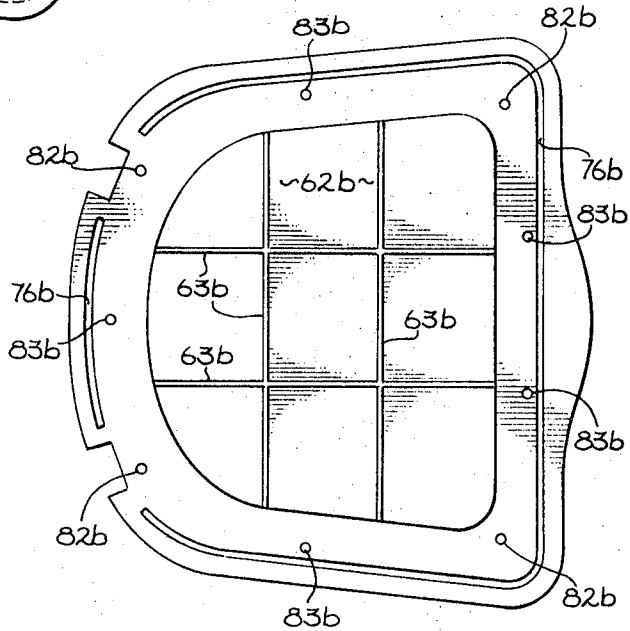


Fig. 21

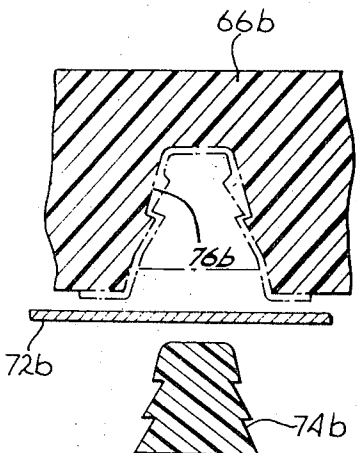


Fig. 24

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Fig. 25

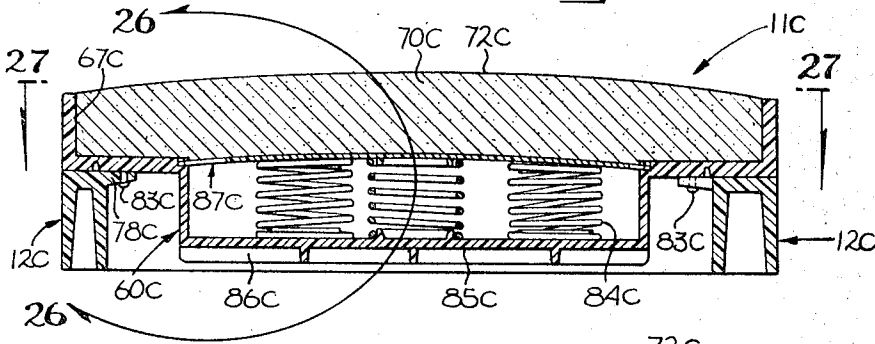


Fig. 26

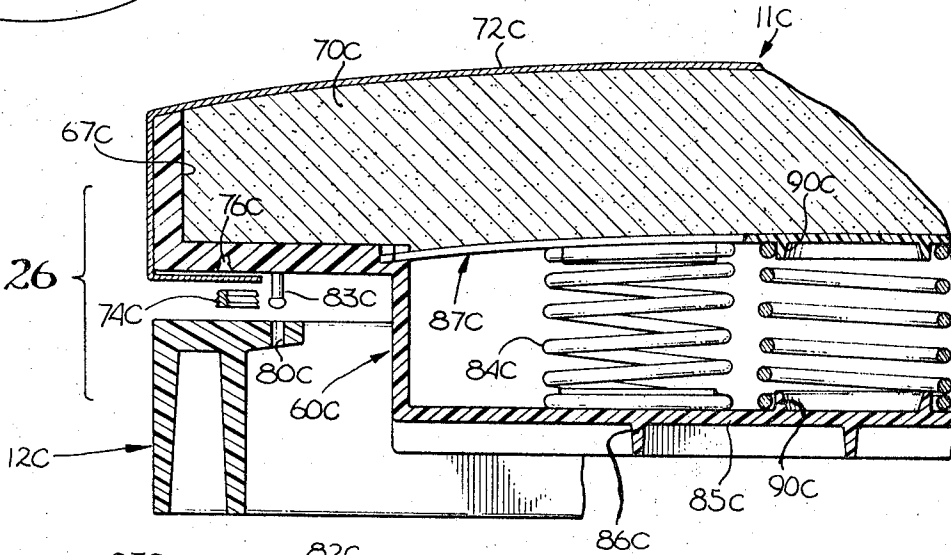
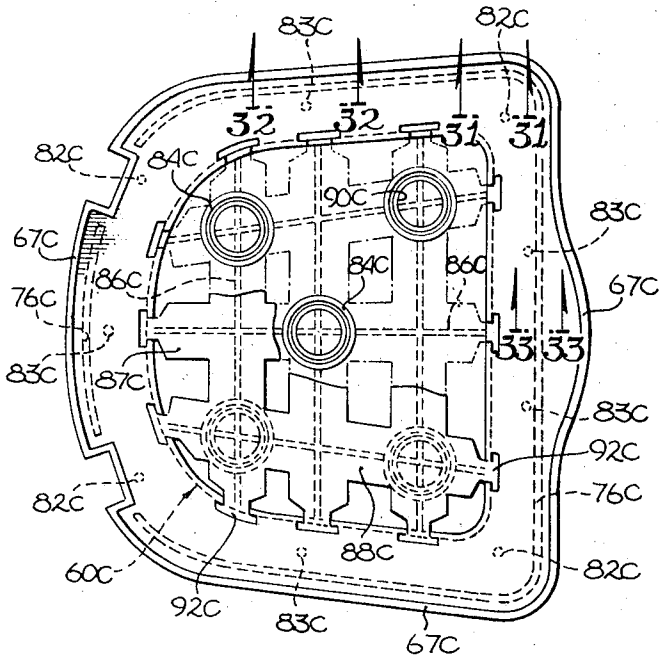


Fig. 27



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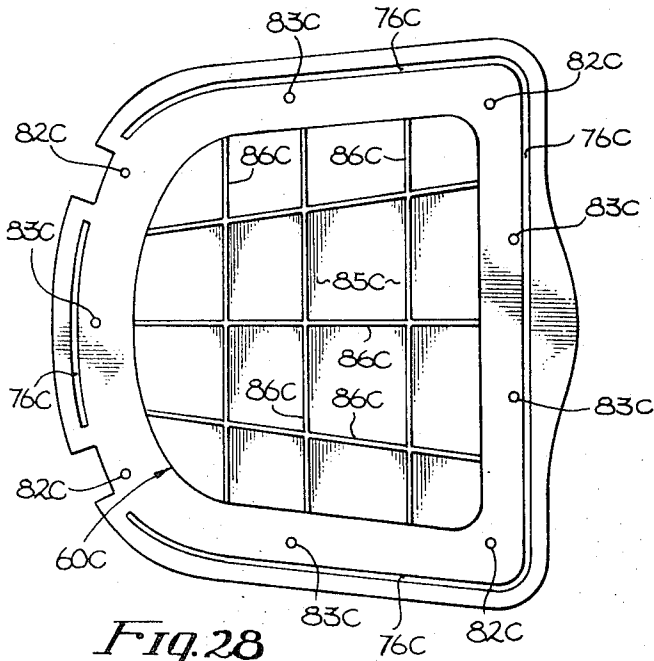


Fig. 28

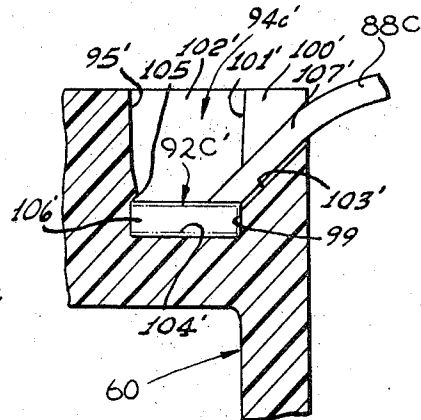


Fig. 30

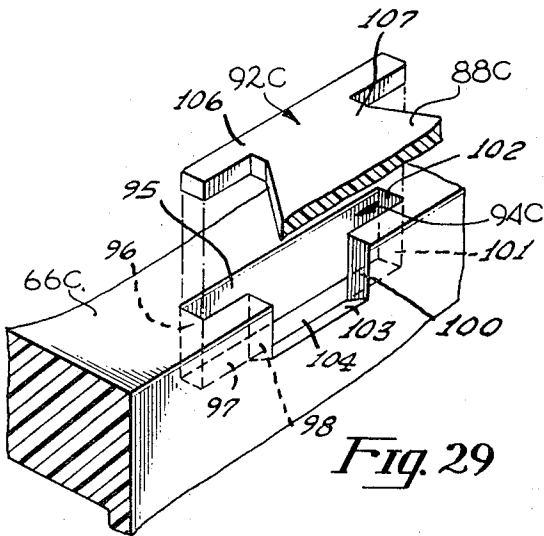


Fig. 29

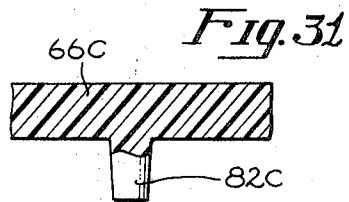


Fig. 31

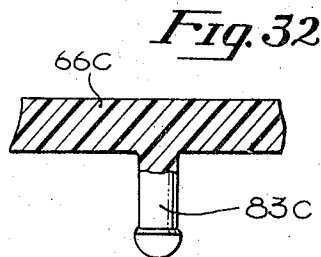


Fig. 32

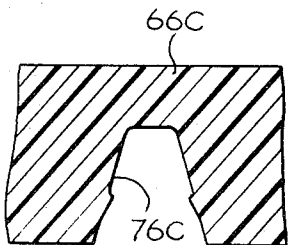


Fig. 33

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## CUSHION ASSEMBLY FOR CHAIRS AND OTHER FURNITURE

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Continuation-in-part of application Ser. No. 677,153, Oct. 23, 1967, now Patent No. 3,455,605. This application Apr. 16, 1969, Ser. No. 816,699

Int. Cl. A47c 7/00, 7/20

U.S. Cl. 297—452

22 Claims

### ABSTRACT OF THE DISCLOSURE

A cushion assembly for chairs and other furniture. The cushion assembly has a parametrically flanged base panel which is preferably molded from plastic and supports a covered cushion structure, such as a simple resilient pad or a resilient pad mounted on coil springs contained between a pair of spring positioning members joined to the panel. These spring positioning members have confronting spring engaging formations which locate the springs in such a way as to eliminate the necessity of hand tying of the springs. The bottom spring positioning member may be molded integrally with the base panel. The edge of the cushion cover is folded against the underside of the base panel flange and is secured to the flange by a retaining ring fitting within a groove in the flange so as to grip the cover between the ring and flange.

This application is a continuation-in-part of my co-pending application Ser. No. 677,153, filed Oct. 23, 1967, and entitled "Prefabricated Plastic Chair and Assembly Method", now Pat. No. 3,455,605.

### BACKGROUND OF THE INVENTION

#### Field of the invention

This invention relates generally to furniture and more particularly to a novel furniture cushion assembly which may be economically mass produced and then rapidly assembled and installed on a furniture frame without the aid of jigs, clamps, or other tools for retaining the parts in assembled relation.

As will appear from the ensuing description, the present cushion assembly may be used on various types of furniture. However, the cushion assembly is intended primarily for and will be disclosed in connection with a seat cushion for chairs.

#### Prior art

At the present state of development of the furniture manufacturing art, chairs and other furniture seats with padded or upholstered seat cushion have frames fabricated from wood and constructed in a multiplicity of separate pieces which are individually shaped by machine and then joined with glue, screws, or other fastening means while the pieces are held in assembled relation with the aid of jigs or clamps. Padded or upholstered seat cushions are assembled and installed on the frames largely by hand. This method of fabrication is quite laborious and lends itself to only limited mass production techniques. As a consequence, chairs and other furniture seats produced by the existing fabrication methods tend to be quite costly. This is particularly true of furniture with upholstered seat cushions including coil springs which have to be located and tied by hand.

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### SUMMARY OF THE INVENTION

The present invention provides a furniture cushion assembly which avoids the foregoing and other disadvantages of the current furniture manufacturing practices. The cushion assembly includes a base panel having a central recess bounded by an outwardly directed mounting flange. Contained within this recess is a cushion structure including a cover of sheet material, such as plastic or leather, whose edge portion is folded about and secured to the underside of the panel flange. One disclosed embodiment of the invention is a slip seat assembly for a chair in which the cushion structure is a simple resilient pad of foam rubber or other suitable resilient material having a flange-like portion which projects laterally over the base panel flange. Another disclosed embodiment is an upholstered seat cushion assembly for a chair in which the cushion structure comprises coil springs contained between top and bottom spring position members having aligned spring locating formations which receive the end of the coil springs to restrain the latter against lateral movement. Overlying the upper positioning member, so as to be supported by the coil springs, is a resilient pad of foam rubber or the like.

The base panel of the cushion assembly may be fabricated in various ways and of various materials. According to the preferred practice of the invention, the panel is injection molded in one piece from a suitable plastic material. A feature of the disclosed upholstered cushion assembly of the invention resides in the fact that the bottom spring positioning member is molded integrally with the base panel. The top spring positioning member is separately molded from plastic and is anchored to the panel.

The cushion assembly of the invention is designed for installation on a furniture frame having an opening to receive the central recessed portion of the base panel in such a way that the panel flange seats against a supporting surface on the frame about the opening. The frame and flange are provided with interfitting pin socket means for locating the cushion assembly relative to the frame. The disclosed embodiment of the invention is a seat cushion assembly for a chair.

### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a chair embodying a slip seat cushion assembly according to the invention;

FIG. 2 is a section taken on line 2—2 in FIG. 1;

FIG. 3 is a section taken on line 3—3 in FIG. 2;

FIG. 4 is an enlargement of the area enclosed by the circular arrow 4—4 in FIG. 3;

FIG. 5 is a section taken on line 5—5 in FIG. 2 showing the chair seat frame in top plan view;

FIG. 6 is a top plan view of the seat frame with a seat cushion supporting panel in position on the frame;

FIG. 7 is an exploded perspective view of the completed chair;

FIG. 8 is a perspective view of a chair embodying a modified upholstered seat cushion assembly according to the invention;

FIG. 9 is an enlarged section through the modified chair seat taken on line 9—9 of FIG. 8;

FIG. 10 is an enlargement of the area enclosed by the circular arrows 10—10 in FIG. 9;

FIG. 11 is a top plan view of the chair seat in FIG. 8

with the seat cushion pad omitted for the sake of clarity;

FIG. 12 is a bottom plan view of the chair seat;

FIG. 13 is an enlarged fragmentary perspective view of a coil spring and spring positioning members embodied in the modified seat cushion assembly;

FIG. 14 is an enlarged fragmentary perspective view illustrating the anchoring means for the upper spring positioning member in FIG. 13;

FIG. 15 illustrates a modified method of anchoring the upper spring positioning member of the seat cushion assembly;

FIG. 16 illustrates a modified method of anchoring the upper spring positioning member;

FIG. 17 is a section through a modified slip seat assembly according to the invention;

FIG. 18 is a section taken on line 18—18 in FIG. 17;

FIG. 19 is an enlargement of the area 19—19 in FIG. 18;

FIG. 20 is a section taken on line 20—20 in FIG. 17 showing the cushion base panel in top plan view;

FIG. 21 is a bottom plan view of the panel;

FIG. 22 is an enlarged section taken on line 22—22 in FIG. 20;

FIG. 23 is an enlarged section taken on line 23—23 in FIG. 20;

FIG. 24 is an enlarged exploded detail of the seat cover securing means;

FIG. 25 is a section through a modified upholstered cushion assembly according to the invention;

FIG. 26 is an enlargement of the area 26—26 in FIG. 25;

FIG. 27 is a section taken on line 27—27 in FIG. 25;

FIG. 28 is a bottom plan view of the base panel of the modified cushion assembly;

FIG. 29 is an enlarged detail of an anchorage for the top spring positioning member;

FIG. 30 is a sectional view of a modification of the anchorage in FIG. 29;

FIG. 31 is a section taken on line 31—31 in FIG. 27;

FIG. 32 is a section taken on line 32—32 in FIG. 27; and

FIG. 33 is a section taken on line 33—33 in FIG. 27.

#### DESCRIPTION OF THE PREFERRED EMBODIMENTS

In FIGS. 1 through 7 of these drawings there is illustrated furniture 10 embodying a resilient cushion assembly 11 according to the invention. In this instance, the furniture is a chair and the cushion assembly forms part of the chair seat assembly. In addition to the cushion assembly 11, the chair 10 includes a seat frame 12 and supporting legs 14. Seat frame 12 has a central opening 18 bounded by an annular wall 20. Chair legs 14 include front legs 22 and rear legs 24. Rear legs 24 extend above the seat frame to form the chair back 26. Legs 22, 24 have leg members proper 34, 40 respectively and, each leg is formed with a number of projecting attachment lugs at seat level. The seat frame 12 is formed with longitudinally slotted sockets 16 for receiving the legs and their attachment lugs. While the legs are shown to be solid in cross-section, they may be made hollow according to the disclosure in my copending application Ser. No. 797,616, filed Feb. 7, 1969, and entitled "Bipartite Tubular Molded Plastic Furniture Part with Internal Reinforcement."

The seat frame 12 and legs 14 are assembled by initially longitudinally aligning the legs with their respective receiving sockets 16 and then relatively moving the frame and legs toward one another in the longitudinal directions of the legs in such a way that the attachment lugs on the legs enter their respective socket slots. The lugs have a snug mating fit within their respective receiving sockets which is effective to firmly retain the legs and seat frame in assembled relation and to positively position the legs and frame relative to one another in such a way

as to permit permanent joining of the frame and legs without the aid of jigs, clamps, or other tooling. The seat frame and legs may be constructed of any suitable material and joined by any convenient means. Preferably, however, the seat frame and legs are molded from plastic and are joined by solvent welding, inert gas welding, or ultrasonic welding their abutting surfaces to one another.

Turning now to FIGS. 2 through 6, it will be observed that the seat cushion assembly 11 has a base or seat panel 60. This panel may be fabricated in various ways and of various materials but is preferably molded in one piece from plastic. A central circular portion 62 of this panel is stepped downwardly to fit within the central opening in the seat frame 12. Central panel portion 62 defines a generally circular upwardly opening recess 64 in the upper surface of the panel and is bounded by an outwardly directed mounting flange 66 surrounding the recess. The outer perimeter of this panel flange has the same contour as the seat frame 12 but projects slightly beyond the outer frame surface, as shown. Entering the rear edge of the panel flange 66 are slots 68 for receiving the rear chair legs 14. Seat panel 60 supports a resilient cushion structure 69 including a resilient seat pad or cushion 70. This seat cushion has a central circular portion which fits within and complements the seat panel recess 64 to provide an increased cushion thickness within the central region of the seat. Stretched over the seat cushion 70 is a cover 72 of sheet plastic or other suitable sheet material. The perimetrical edge portion of this seat cover is folded about the edge and against the underside of the seat panel flange 66, in the manner best illustrated in FIG. 4. The lower inturned edge of the cover is secured to the underside of the flange in any convenient way. In this instance, the cover edge is secured to the flange by a tapered retaining ring 74. As will be explained presently, this retaining ring and the cover edge are pressed into a mating tapered groove 76 in the underside of the seat panel flange to secure the cover to the flange with a gripping action. If desired, the retaining ring and the walls of the ring groove may be serrated or otherwise roughened to permit more effective gripping of the cover between the ring and flange.

The seat cushion assembly 11 is installed on the seat frame 12 by placing the assembly over the frame in such a way that the seat panel flange 66 rests on the upper annular surface of the frame and the central panel portion 62 projects downwardly into the central frame opening. This central portion of the seat panel is externally dimensioned to fit snugly within the frame opening, thereby, to locate the seat assembly relative to the seat frame. The seat assembly may be secured to the seat frame in various ways. For example, the seat panel 60 may be releasably secured to the seat frame by screws or other fasteners to permit removal of the seat assembly for repair or replacement. In the particular chair illustrated, the seat frame is provided with a number of internal bosses 78 having tapered sockets 80 entering their upper surfaces for receiving tapered pins 82 depending from the underside of the seat panel flange 66. The bosses 78 are integrally formed with the seat frame 12 and the pins 82 are integrally formed with the seat panel 60. The seat assembly 11 may be permanently secured to the seat frame 12 by adhesively bonding, solvent welding, or heat welding the seat panel pins 82 in their respective seat frame sockets 80 or removably secured to the frame by sizing the pins to have an interference fit in the sockets.

Prior to installation of the seat cushion assembly 11 on the seat frame, the edge of the seat cover 72 and the retaining ring 74 are pressed into the receiving groove 76 to initially grip the cover edge. During installation of the seat assembly on the seat frame, the seat panel 60 is pressed firmly against the seat frame to force the retaining ring to its final cover gripping position in the groove. The seat assembly described above is commonly referred to in the trade as a slip seat.

FIGS. 8-16 illustrate a chair 10a embodying an upholstered seat cushion assembly 11a according to the invention. This seat assembly includes a base or seat panel 60a having a central opening bounded by a depending annular wall or flange 62a on the panel to accommodate coil springs 84a. Extending laterally outward from the upper end of the wall 62a in surrounding relation to the wall is a mounting flange 66a bounded by an upstanding lip 67a. Extending across the bottom of the seat panel opening is a bottom spring positioning member or grid 85a having a number of mutually joined intersecting straps 86a which support and locate the lower ends of the springs. Extending across the top of the opening is a similar top spring positioning member or grid 87a having a number of mutually joined intersecting straps 88a which rest on and locate the upper ends of the springs. Referring to FIG. 13, it will be seen that the spring locating function of the spring positioning grids 85a, 87a is accomplished by providing the confronting surfaces of their straps 86a, 88a with raised spring locating means or ribs 90a at the strap intersections which straddle the adjacent coils of the springs 84a. In the particular chair illustrated, the straps 86a of the bottom positioning grid are integrally joined at their ends to the lower edge of the depending seat panel flange 62a. The top positioning grid is formed separately from the seat panel 60a and the ends of its straps 88a are anchored to the panel in any convenient way. The seat panel and the bottom positioning grid may be molded from plastic as one integral part. The top positioning grid may also be molded from plastic.

FIGS. 14 through 16 illustrate three possible methods of anchoring the strap ends of the top spring positioning grid 87a. In FIG. 14, the positioning straps 88a are formed with T-shaped ends 92a which fit within mating recesses 94a in the upper surface of the seat panel 60a about its central opening. In FIG. 15, the upper strap ends are secured by tacks 96a to the seat panel which is recessed, as shown, to receive the ends. In FIG. 16, the ends of the upper straps are slit at 98a to receive headed fasteners 100a secured to the seat panel.

Supported on the top spring positioning grid 87a is a resilient seat pad or cushion 70a. This seat cushion extends outwardly over the seat panel flange 66a to its lip 67a and is stepped to overlap the upper edge of the lip, as shown. Over the seat cushion is a cover 72a having its edge folded under and secured by a retainer ring 74a to the underside of the seat panel flange. It will now be understood that the springs 84a, spring positioning grids 85a, 87a, seat cushion 70a, and its cover 72a together constitute the seat cushion structure of the upholstered seat cushion assembly 11a. This seat cushion assembly is installed on the chair seat frame 12 in the same manner as the slip seat cushion assembly 11.

Referring next to FIGS. 17-24, there is illustrated a modified slip seat cushion assembly 11b according to the invention which is generally similar to the earlier slip seat cushion assembly 11. The cushion assembly 11b differs from the cushion assembly 11 in that the base or seat panel 60b of the assembly 11b has a somewhat deeper central recessed portion 62b. Also, the side and bottom walls of this recessed portion are somewhat thinner than those of the earlier seat panel 60 and the bottom wall is reinforced by intersecting ribs 63b depending from the underside of the bottom wall. Seat panel 60b supports a resilient seat pad or cushion 70b having a cover 72b whose edge is secured to the underside of the panel flange 66b by a retainer 74b. In this case the retainer is a snap device whose sides and the walls of its receiving groove 76b are serrated, as shown, to more effectively lock the retainer in the groove.

Depending from the underside of the seat panel flange 66b are a set of tapered locating pins 82b and a set of holding pins 83b. The lower end of the holding pins are slightly enlarged to form locking heads on the pins. The modified seat cushion assembly 11b is installed on a chair seat frame 12b which is similar to the earlier described

seat frame 12 except that the frame wall is cored or recessed, as shown, and the apertured frame lugs 78b that receive the seat panel holding pins 83b are sized to receive the holding pins to positions wherein the lower heads on the pins are located below the lugs, as shown in FIG. 23, to lock the seat panel to the frame. In this regard, it will be understood that the diameter of the lug sockets 80b is slightly less than the diameter of the holding pin heads, and the latter are sufficiently yieldable to be forced through the sockets.

FIGS. 25-33 illustrates a modified upholstered cushion assembly 11c according to the invention which is generally similar to the earlier upholstered cushion assembly 11a. The cushion assembly 11c differs from the cushion assembly 11a in that the base or seat panel 60c of the cushion assembly 11c has a bottom spring positioning member 85c in the form of a solid wall which is molded integrally with the panel. Depending from the underside of this bottom wall are a number of intersecting reinforcing ribs 86c. Rising from the upper side of the wall, at the rib intersections, are coil spring locating means 90c which, in this instance, comprise annular spring locating ribs. Locating ribs 90c are sized to fit closely within the lower ends of the cushion springs 84c. The top spring positioning member 87c is a grid similar to the top spring positioning grid 87a of the seat cushion assembly 11a. However, the top spring positioning grid 87c has annular spring locating ribs 90c like those on the bottom spring positioning wall 85c. The locating ribs of the upper positioning grid are located at the intersections of the straps 88c. These straps have T-shaped ends 92c, FIG. 29, which fit in mating recesses 94c in the upper surface of the seat panel flange 66c to anchor the grid to the panel. Each recess 94c has seven mutually parallel side walls 95, 96, 97, 98, 100, 101, and 102, an oblique side wall portion 103 and a bottom wall 104. The walls of the recess cooperate to retain the crossbar 106 of the T-shaped end 92c while the stem 107 will abut the oblique wall 103 when the straps are connected to the seat panel. FIG. 30 illustrates a slight modification of the recess and the T-shaped end. Each recess 94c' has eight mutually parallel side walls, only five of which are shown, 95', 102', 101', 100', and 99, an oblique side wall portion 103' which is a continuation of side wall 99, and a bottom wall 104'. A slight projection 105 extends across the wall 95' between the wall 102' and its opposing wall (analogous to wall 96 in FIG. 29). The recess is so constructed that the side walls, the bottom wall, and the projection abut the crossbar 106' of the T-shaped end of 92c to cause retention, while the stem 107' is adjacent the oblique wall 103' when the straps are connected to the seat panel as shown in FIG. 30.

Supported on the top spring positioning grid 87c is a resilient seat pad or cushion 70c. In this case, the upper edge of the seat cushion, in its normal uncompressed state, is flush with the upper edge of the seat panel boundary lip 67c. Over the cushion is a cover 72c whose edge is folded under and secured to the underside of the panel flange 66c by a serrated snap retainer 74c fitting in a serrated groove 76c in the flange, as in the seat cushion assembly 11b. Depending from the underside of the flange are locating pins 82c and holding pins 83c for securing the seat cushion assembly 11c to a seat frame like the earlier frame 12b.

What is claimed is:

1. A chair seat assembly comprising:

a seat panel having a central opening bounded by a peripheral flange depending from the underside of said panel,

a number of intersecting straps extending across the bottom of said opening and integrally secured at their ends to the lower edge of said flange,

a number of intersecting straps extending across the top of said opening and secured at their ends to said seat panel about said opening,

- coil springs positioned between and supported by said straps,  
 means on said springs and straps for co-operating to locate said springs relative to one another, and a seat cushion overlying said seat panel and supported on said springs.
2. A chair seat assembly according to claim 3 wherein: said seat panel and lower straps comprise a unitary molded plastic part, and engaging means on said seat panel and the ends of said upper straps for securing said upper straps to said panel.
3. A furniture cushion assembly comprising:  
 a base panel,  
 a resilient cushion structure supported by said panel,  
 a cover overlying said cushion structure and having its edge portion folded about the edge and against the underside of said panel,  
 said panel having a groove in its undersurface adjacent said panel edge, and  
 a retainer engageable with the folded edge portion of said cover for engaging said groove to grip said cover between said retainer and the walls of said groove, thereby to secure said cover to said panel.
4. A cushion assembly according to claim 3 wherein: the walls of said groove and the sides of said retainer ring are serrated.
5. A cushion assembly according to claim 3 wherein: said base panel comprises a unitary molded plastic part having a central cavity bounded by an annular wall, a bottom wall extending across the bottom of said cavity and integrally joined to the bottom edge of said wall, and a mounting frame extending outwardly from the upper edge of said wall,  
 said cushion structure comprises a resilient pad having a central portion positioned within said cavity and supported on said bottom wall, and an upper flange-like portion extending outwardly over said panel flange, and  
 said groove enters the undersurface of said panel flange.
6. A cushion assembly according to claim 3 wherein: said base panel comprises a unitary formed part having a central cavity bounded by a peripheral wall, a bottom spring positioner extending across the bottom of said cavity and integrally joined to the bottom edge of said wall, and a mounting flange extending outwardly from the upper edge of said wall,  
 said cushion structure comprises a number of coil springs situated in said cavity and supported at their lower ends on said bottom spring positioner, a top spring positioner extending over said cavity and engaging the upper ends of said springs, means joining the edge of said top spring positioner to said panel flange, and a resilient pad overlying and supported on said panel flange and said upper spring positioner.
7. A cushion assembly according to claim 6 wherein: at least said top spring positioner comprises a grid of integral intersecting straps, and means joining the ends of said straps to said panel flange.
8. A cushion assembly according to claim 7 wherein: said top and bottom spring positioners include spring locating formations engageable with the ends of said springs to locate the springs laterally relative to said base panel.
9. A cushion assembly according to claim 8 wherein: the bottom spring locating formations are formed integrally with said bottom spring positioner, and said top spring positioner comprises a unitary part having the top spring locating formations formed integrally therewith.
10. A furniture cushion assembly comprising:  
 a unitary formed panel having a central cavity bounded by a peripheral wall, a first spring positioner extend-

- ing across one end of said cavity and integrally joined to said wall,  
 a second spring positioner extending across the opposite end of said cavity,  
 means joining said second spring positioner to said wall, and  
 coil springs positioned between and engaging said first and said second spring positioners.
11. A cushion assembly according to claim 10 wherein: said spring positioners have aligned spring locating formations formed integrally therewith.
12. A cushion assembly according to claim 11 wherein: said spring positioners each comprise grids of integral intersecting straps,  
 the intersections of each of said grids are aligned, and said spring locating formations are situated at said intersections.
13. A cushion assembly according to claim 11 wherein: said first spring positioner comprises a relatively thin wall having intersecting reinforcing ribs molded integrally on the side of said wall remote from said second spring positioner,  
 said second spring positioner comprises a grid of intersecting straps,  
 the intersections of said grid straps and the intersections of said reinforcing ribs are aligned, and said spring locating formations are situated at said intersections.
14. A furniture connector of resilient material comprising:  
 a first object having a cylindrically shaped socket, and  
 a second object having an extending pin, said pin having a cylindrical portion of diameter substantially identical with the diameter of said socket, said cylindrical portion extending essentially the length of said socket, and an enlarged head portion at said pin's extended end,  
 whereby said head portion extends beyond said socket when said objects are connected and said first object is sandwiched between said head portion and the remainder of said second object with said cylindrical portion being located within said socket.
15. A furniture connector of resilient material comprising:  
 a first object having a serrated side wall; and  
 a second object having a socket, said socket having a serrated side wall whereby said first and said second objects are connectible by having said socket receive said first object.
16. A furniture connector as claimed in claim 15 wherein said first object is a retainer having two serrated side walls; and  
 said socket is a groove having two serrated side walls.
17. A furniture connector of resilient material comprising:  
 a first object having a T-shaped end portion; and  
 a second object having a T-shaped recess whereby said first and said second objects are connectible by having said recess receive said T-shaped end portion of said first object.
18. A furniture connector as claimed in claim 17 wherein said T-shaped recess comprises a plurality of mutually parallel side walls, an oblique side wall portion and a bottom wall, one of said side walls having a slight projection; and  
 the crossbar section of said T-shaped end portion is positioned when connected adjacent said bottom wall of said recess in abutting engagement with at least some of said side walls and said slight projection, and the stem section of said T-shaped end portion is adjacent said oblique wall portion.
19. A cushion assembly according to claim 5 including depending pins adapted to be received by sockets in said panel flange.

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20. A cushion assembly as claimed in claim 6 wherein said joining means includes a recess formed in said panel flange having a shape to receive said edge of said top spring positioner.

21. A cushion assembly as claimed in claim 20 including said edge having a T-shaped end for attaching said edge of said spring positioner to said panel flange when said edge is received by said recess.

22. A cushion assembly as claimed in claim 6 wherein said joining means includes a projection extending from said panel flange and said top spring positioner edge having a slit opening for receiving said projection.

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CASMIR A. NUNBERG, Primary Examiner

U.S. Cl. X.R.

297-445