Nov. 2, 1943. M. GREITZER 2,333,311

CHAIR BACK

Filed Jan. 7, 1942

Fig. 1.

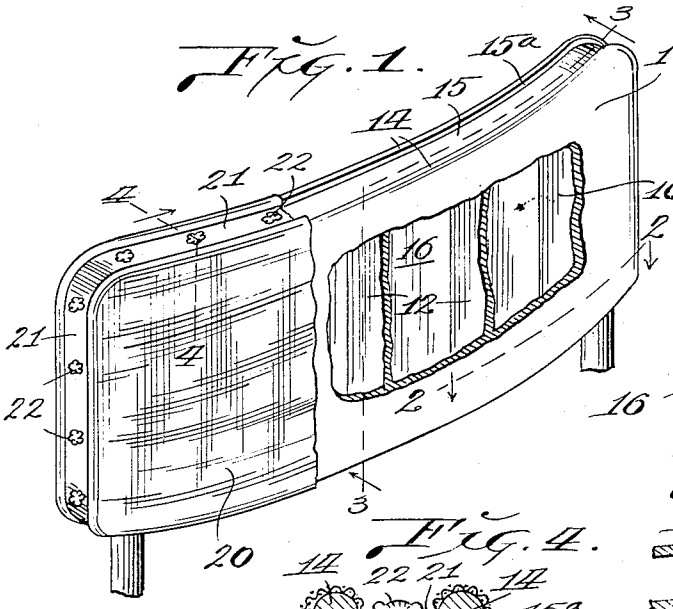


Fig. 3.

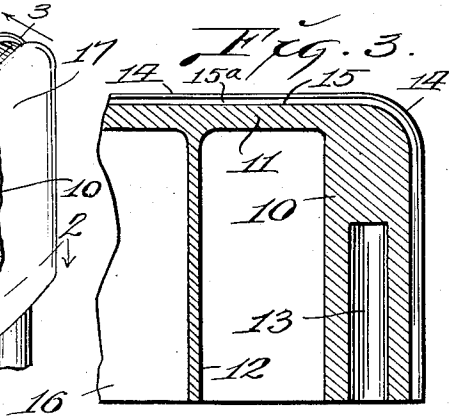


Fig. 2.

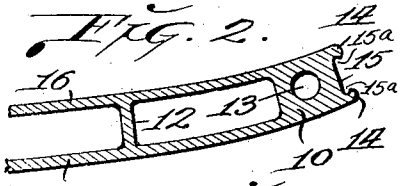


Fig. 4.

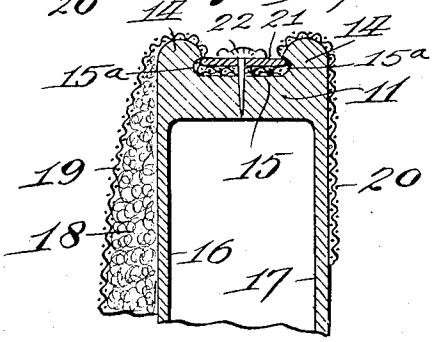


Fig. 9.

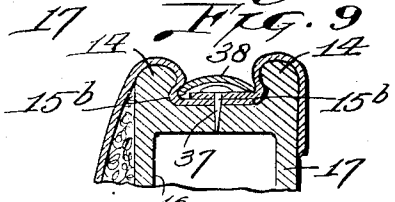


Fig. 5.

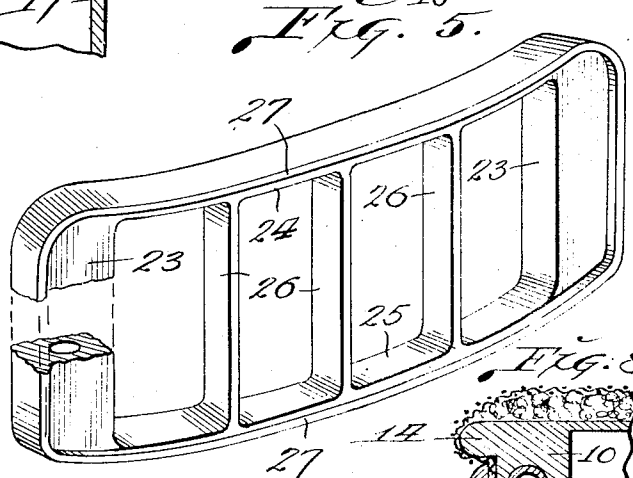


Fig. 6.

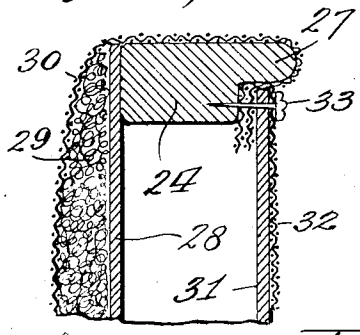
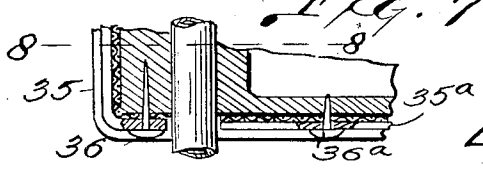


Fig. 8.

Fig. 7



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CHAIR BACK

Meyer Greitzer, Los Angeles, Calif.

Application January 7, 1942, Serial No. 425,835

9 Claims. (Cl. 155—178)

My invention relates to a chair back of the particular type disclosed in my copending application for Letters Patent filed January 22, 1941, Serial No. 375,404, also the chair back disclosed in the patent application of Morris Greitzer filed May 19, 1941, Serial No. 394,074, which became Patent No. 2,306,878, on Dec. 29, 1942, and which last mentioned application has been assigned to me, and the principal objects of my present invention are, to generally improve upon and simplify the construction of the chair backs disclosed in the aforesaid applications and to provide a simple, strong and durable chair back that is covered with thin, soft, flexible material, such as fabric, composition, or leather, and the heads of the tacks or like devices that are utilized in fastening the covering to the frame of the back being located so that they can not possibly contact with and consequently scratch or mar the surfaces of walls, woodwork and adjacent articles of furniture.

A further object of my invention is, to provide a simple, strong and durable form of chair back that may be of fabricated structure or molded in a single piece from suitable light weight material, for instance, self-hardening composition, or any of the well known plastics now readily obtainable in the open market.

A further object of my invention is, to provide a chair back that may be conveniently employed on chairs having frames formed of metal tubing and which frames include a pair of back supporting members which project upwardly from the rear portion of the seat supporting members of the frame, such frames being illustrated in the copending applications above referred to.

With the foregoing and other objects in view, my invention consists in certain novel features of construction and arrangement of parts that will be hereinafter more fully described and claimed and illustrated in the accompanying drawing in which:

Fig. 1 is a perspective view looking against the rear side of a chair back constructed in accordance with my invention and with parts broken away in order to more clearly illustrate the construction.

Fig. 2 is a horizontal section taken on the line 2—2 of Fig. 1.

Fig. 3 is a vertical section taken on the line 3—3 of Fig. 1.

Fig. 4 is an enlarged detail vertical section taken on the line 4—4 of Fig. 1.

Fig. 5 is a perspective view of the frame of a modified form of the chair back.

Fig. 6 is a vertical section taken through the upper portion of the form of chair back illustrated in Fig. 5 and showing the coverings applied to the back frame.

Fig. 7 is a fragmentary vertical section taken through the lower portion of one of the upright end members of the chair back frame and showing a modified arrangement for securing the edges of the covering material to the frame.

Fig. 8 is a horizontal section taken on the line 8—8 of Fig. 7.

Fig. 9 is a detail section similar to Fig. 4 and showing a modified construction for securing the edges of the chair back covers to the back frame.

Referring by numerals to the accompanying drawing and particularly to the construction illustrated in Figs. 1 to 4 inclusive, the frame of the chair back comprises a pair of upright end members 10, a top rail 11, with a plurality of upright braces 12 disposed in parallel spaced relation between the upright end members 10 and the upper ends thereof being connected to the top rail 11. The frame thus constructed may be of fabricated structure although I prefer to mold said frame in a single piece from plastics or light weight composition in order to impart to said frame the desired degree of strength and rigidity, at the same time minimizing production costs.

Formed in the upright end members 10 and extending upwardly from the lower ends thereof are elongated recesses or bores 13 that are adapted to receive the upper portions of the upright tubular back supporting members of the chair frame, or said bores may receive plugs that project a substantial distance below the lower ends of the members 10 and enter the upper ends of the tubular back supporting members.

Formed on the upper surface of the upper rail 11 of the frame and on the outer end faces of the upright end members 10 adjacent the front and rear edges thereof are parallel ribs 14 and which arrangement provides between said ribs a continuous groove or channel 15.

At the sides of the bottom of groove or channel 15 small continuous grooves 15a are formed in the inner faces of the ribs 14.

Formed integral with or fixed to the front portions of the rail 11, upright end members 10, and braces 12, is a panel 16 of thin material, and a similar panel 17 is formed integral with or fixed to the rear portions of the top rail 11, upright end members 10, and braces 12.

The back frame constructed as just described may be of any desired size although I prefer to make the frames with a length of approximately fifteen inches and a height of approximately eight inches and said frame is curved lengthwise with the concave face in front so as to afford convenience to the back of the occupant of the chair which is equipped with my improved back.

In some instances, the front and rear panels 16 and 17 may be separately formed and secured to the parts 10, 11 and 12 by suitable means, for instance, fastening devices or an adhesive.

Overlying the concave front face of panel 16 is a layer 18 of soft, fibrous material, for instance, cotton or the like, that is generally used in the upholstering of furniture, and overlying this padding or cushioning material is a section 19 of fabric, Fabricoid, or other thin, flexible material, the upper and side edges thereof overlying the front ribs 14 and then being extended downward into the channel 15 and grooves 15a. The lower edge of the section of fabric 19 may be secured to the under side of the chair back in any suitable manner.

Overlying the rear face of the back panel 17 is a section 20 of fabric, Fabricoid, or other thin, flexible material, the upper and side edges thereof being extended over the rear ribs 14 and passing downwardly into the channel 15 and grooves 15a.

The flexible material 19 and 20 is cut and fitted to the chair back so that the edges thereof overlap each other in the bottom of channel 15 as illustrated in Fig. 4.

To secure the edges of the sections of material 19 and 20 on the frame, a narrow strip 21 of thin material, for instance, cardboard, leather, fiber, or the like, overlies the overlapping edges of the fabric that occupy the channel 15 and this retaining strip is secured to the frame preferably by upholstery tacks or nails 22, thus producing a neat and finished appearance.

The width of flexible strip 21 is such that its edges and those portions of the fabric adjacent the edges occupy the grooves 15a and which arrangement together with the tacks or nails provides a very secure anchorage for the edges of the coverings 19 and 20.

The depth of channel 15 is such that the edges of the sections of fabric 19 and 20, the retaining strip 21 and the heads of the tacks 22, all lie wholly below the outer portions of the ribs 14 and the material covering the same, and thus there is no possibility of the heads of the tacks or nails making contact with adjacent articles of furniture and walls to scratch and mar the same.

Further, there are no tack or nail heads utilized on the rear face of panel 17 and likewise none on the front face of panel 16. Consequently, these covered surfaces may contact with walls or adjacent furniture without marring the same.

In the modified construction illustrated in Figs. 5 and 6, the chair back frame which is preferably formed in a single piece by molding, comprises a pair of upright end members 23, a top rail 24, a bottom rail 25, and a plurality of upright parallel braces 26 disposed in spaced relation between the upright end members 23. This frame is curved lengthwise with the concave face thereof in front.

Formed integral with the rear faces of the upright end members 23 adjacent their outer edges and with the rear edges of the top and bottom rails 24 and 25 adjacent their outer edges, is a continuous rib or bead 27.

Positioned against the front faces of the frame members 23, 24, 25 and 26 is a panel 28 of thin material, for instance, cardboard, and positioned thereupon is a layer 29 of fibrous material in order to form a pad or cushion for the concave face of the chair back. Overlying this layer of fibrous material is a section 30 of thin, flexible material, for instance, fabric, the edges of which pass over the top of upper rail 24, beneath the bottom rail 25, and rearwardly on the outer end faces of the upright members 23, and the edges of this overlying fabric after being drawn over the rib 27, extend inwardly over the inner edge of said rib and against the adjacent rear faces of the rails 24 and 25 and upright end members 23.

To secure the edges of the fabric to the frame a rear panel 31 of cardboard or the like and which carries an outer covering 32 of fabric, overlies the rear concave face of the seat back within that area encompassed by the rib 27. Thus the edge of the panel 31 overlies the edges of the fabric section 30 that lie inwardly from the rib 27 and said back panel is secured to the end members 23 and rails 24 and 25 by tacks or nails 33. The heads of these tacks or nails lie wholly below or inwardly from the covered outer portion of rib 27 as illustrated in Fig. 6 and thus it is impossible for said heads to make contact with and scratch or mar walls or adjacent articles of furniture.

In Figs. 7 and 8 I have illustrated a modified arrangement for securing the edges of the chair back frame covers in the channel between the ribs 14 and this particular arrangement eliminates the use of fastening devices such as the upholstery nails 22 on the top of the upper rail 11 and on the outer end faces of the upright end members 10.

This construction comprises a narrow strap-like member 35 of flexible material, either half or quarter round in cross section, and which overlies the edges of the covering members that occupy channel 15. This retaining strap is drawn taut when applied to the chair back and its ends extended inwardly on the outer portions of the under faces of the end members 10 and secured thereto by suitable fastening means such as upholstery tacks or nails 36 (see Fig. 7).

The channel is extended the entire length of the under side of the chair back in this construction and the edges of the covering members are extended into this channel and secured therein by means of strips of flexible material 35a similar to the strips 35 and which strips 35a are secured to the lower member of the chair back frame by upholstery nails or tacks 36a.

In Fig. 9 I have illustrated a modified construction wherein the ribs 14 are provided on their inner faces at the bottom of the channel 15 with grooves 15b which receive portions of the flexible covering members 19 and 20 adjacent the edges that overlap each other on the bottom of channel 15. Suitable fastening means such as tacks 37 pass through the overlapping edges of the covering members into the upper rail of the chair back frame and a retaining member 38 in the form of a strip of thin, flexible material, for instance, plastics, Fabricoid, or metal, is bowed upwardly by transverse pressure applied to its edges and inserted in the channel over the overlapping edges of the covering members and the tacks 37, with the edges of said retaining strip

projecting into the grooves 15b so as to exert pressure against those portions of the covering members that occupy said grooves.

Such arrangement entirely hides from view the overlapping edges of the covering members 19 and 20 in channel 15, together with the tacks 37 used in securing said edges to the chair back frame, and consequently imparts to the completed chair back a neat and finished appearance.

As hereinbefore stated, the various parts of my improved chair back frame may be separately formed and after assembled, firmly secured to each other by suitable means, or the entire back may be formed by molding or otherwise in a single piece. Further, it may be found advantageous in some instances to form the ribs 14 and 27 separately from the chair back frame and secure said ribs to the frame by suitable fastening means, either tacks, nails, or glue.

Thus it will be seen that I have provided a chair back that is relatively simple in construction, inexpensive of manufacture and very effective in performing the functions for which it is intended, namely, the elimination of the possibility of contact between the heads of the upholstery nails or tacks used on the chair back with walls and furniture and the consequent marring and scratching thereof.

It will be understood that minor changes in the size, form and construction of the various parts of my improved chair back, may be made and substituted for those herein shown and described, without departing from the spirit of my invention, the scope of which is set forth in the appended claims.

I claim as my invention:

1. In a chair back, a skeleton frame including upright end pieces, in the lower portions of which are formed recesses for the reception of the chair back supporting members of a chair frame, a pair of spaced beads formed on the marginal edges of said frame, a padded panel mounted on the front side of said frame, a panel mounted on the rear side of said frame, coverings of thin, flexible material for said panels and said beads, the edges of which coverings are positioned in the channel between the beads and means overlying the portions of the coverings within said channel for securing said covering to said frame, the outer portions of which fastening means are positioned wholly below the outer portions of said beads and the coverings therefor.

2. As a new article of manufacture, a chair back frame molded in a single piece and including upright end members in the lower portions of which are formed recesses for the reception of the back supporting members of a chair frame front and rear panels formed integral with said end members and a bead formed on the marginal edge of said frame.

3. As a new article of manufacture, a chair back frame molded in a single piece and including upright end members in the lower portions of which are formed recesses for the reception of the back supporting members of a chair frame front and rear panels formed integral with said end members and a pair of spaced beads formed on the marginal edge of said frame.

4. As a new article of manufacture, a chair back formed in a single piece and comprising a pair of upright end members, a top rail connecting the upper ends of said upright end members, a series of spaced parallel braces depending from the top rail and disposed between said upright end members and marginal beads formed on the outer faces of said upright end members and said top rail.

5. As a new article of manufacture, a chair back frame formed in a single piece and comprising upright end members, a top rail connecting the upper portions of said upright end members, a plurality of spaced braces depending from said top rail and arranged between said upright end members, a panel on the front side of said frame, an integral panel on the rear side of said frame and a pair of spaced beads formed on the outer edges of said upright end members and the upper face of said top rail.

6. A chair back comprising a skeleton frame including upright end members and a top rail, spaced beads formed on the outer edges of said upright end members and the upper surface of said top rail, an integral panel on the front side of said frame, an integral panel on the rear side of said frame, coverings of thin, flexible material overlying said panels, the outer faces of said upright end members, the upper face of said top rail, and the beads on said upright end members and top rail, the edges of which coverings are positioned between the beads on said upright members and top rail and fastening means overlying the edges of said coverings and seated in the upright members and top rail of the frame, the outer portions of which fastening means are located wholly below the outer portions of said beads and their coverings.

7. In a chair back, the combination with a skeleton frame formed in a single piece and comprising a pair of vertically disposed end rails, a top rail, spaced braces depending from the top rail between said end rails, front and rear panels integral with said end rails, top rails and braces, spaced ribs formed on the outer faces of said top and end rails to form a channel and there being grooves formed in the inner faces of the ribs adjacent the bottom of the channel between same, of covering members applied to said frame with the edges of said covering members occupying said channel in overlapping relation and a flexible retaining member positioned in said channel over the overlapping edges of said retaining member projecting into said grooves.

8. A chair back as set forth in claim 7 and with fastening means seated in said frame and passing through the overlapping edges of said covering members.

9. A chair back as set forth in claim 7 and with fastening means seated in said frame and passing through the overlapping edges of said covering members and through the retaining strip that overlies the edges of said covering ering members.

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