March 17, 1959 W. J. REAVIS 2,877,832

COVER FOR CHAIRS AND THE LIKE

Filed Nov. 29, 1952 3 Sheets-Sheet 1

Fig. 1.

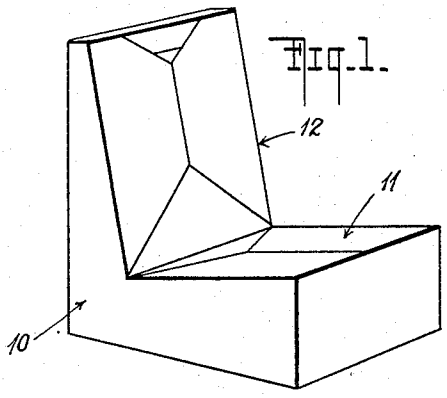


Fig. 2.

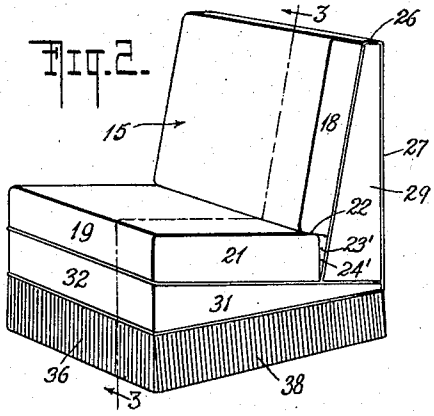


Fig. 4.

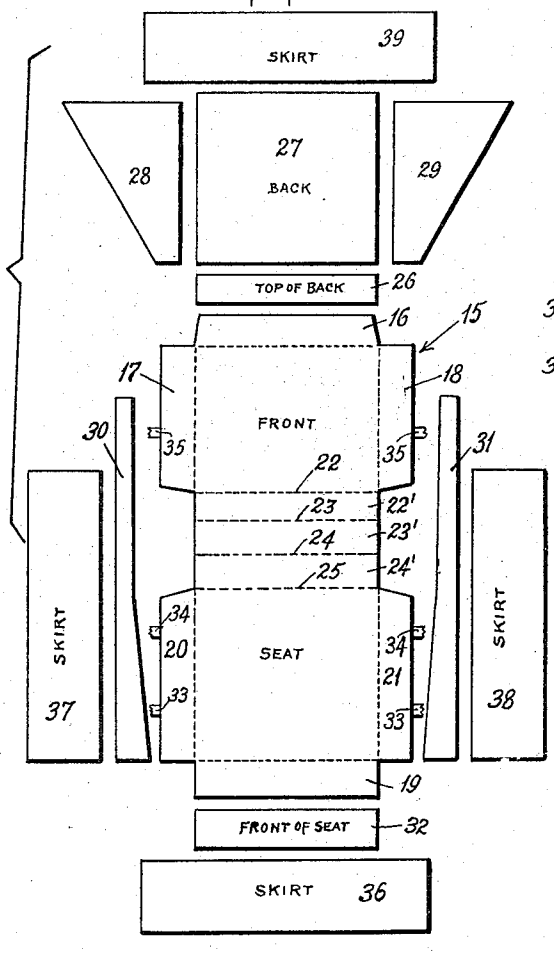
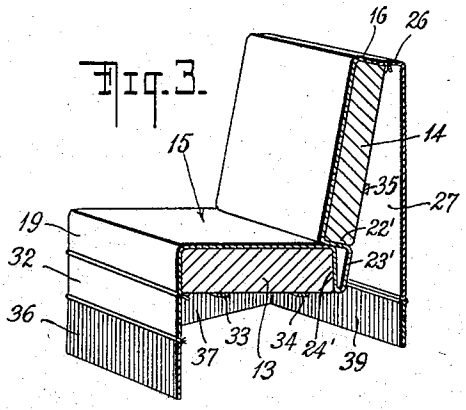


Fig. 3.



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COVER FOR CHAIRS AND THE LIKE

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Fig. 5.

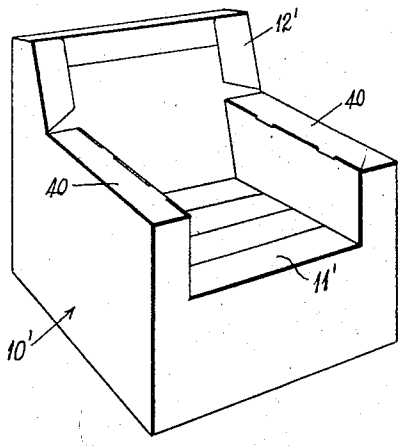


Fig. 6.

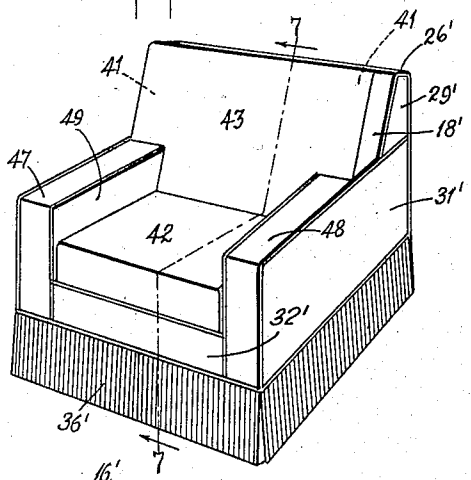


Fig. 7.

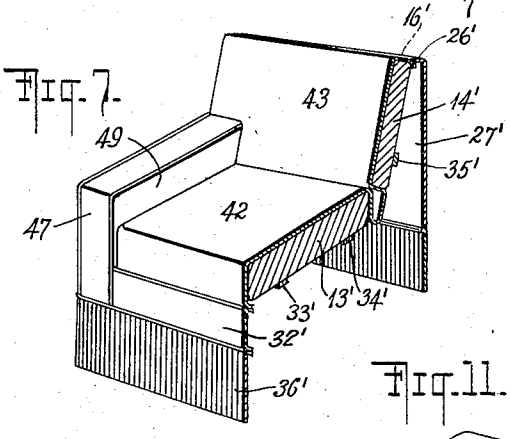
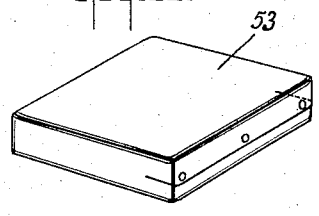


Fig. 11.



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COVER FOR CHAIRS AND THE LIKE

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Fig. 8.

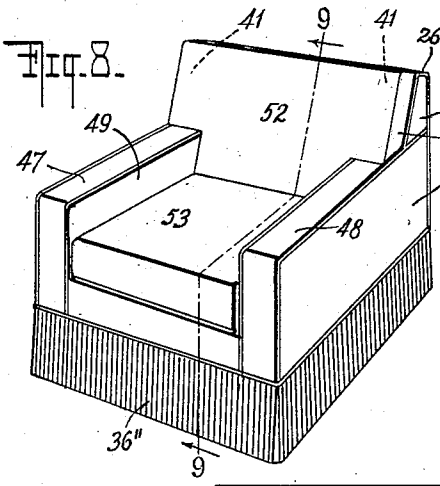


Fig. 9.

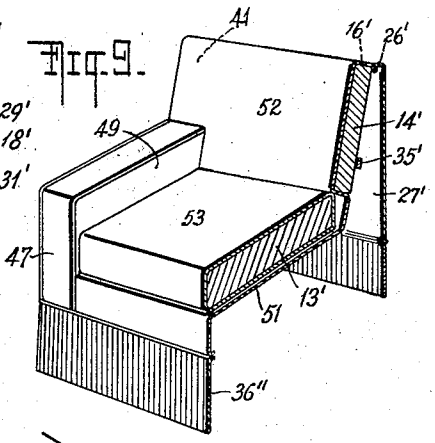
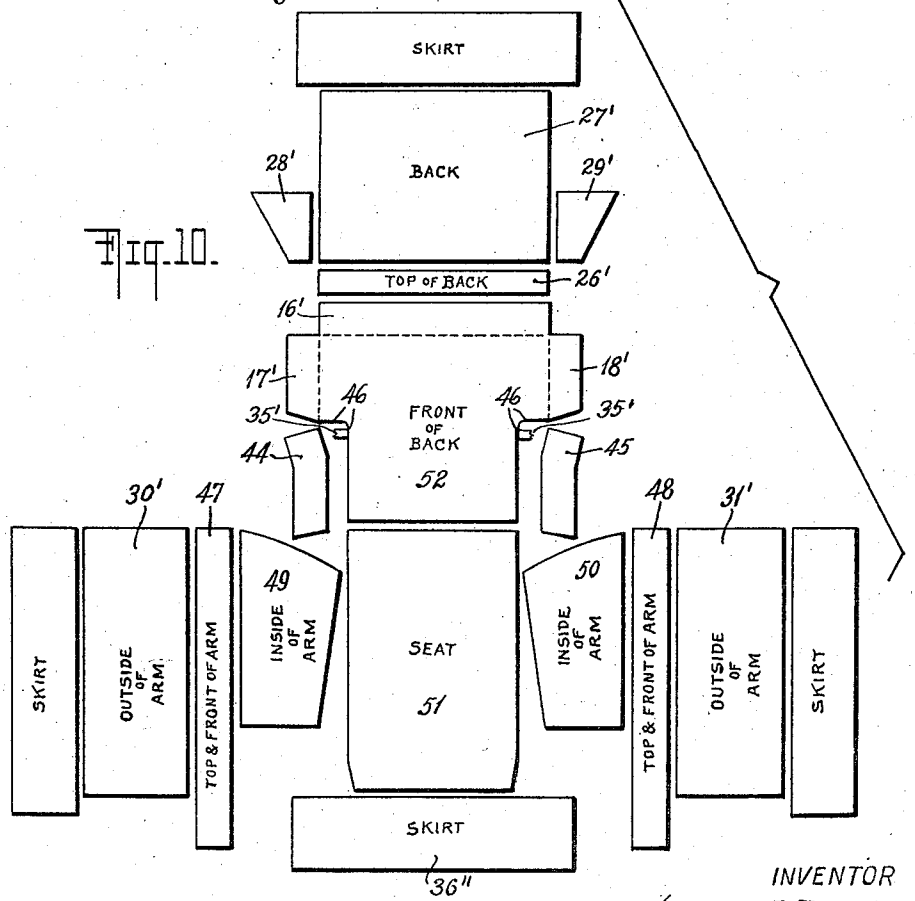


Fig. 10.



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2,877,832

COVER FOR CHAIRS AND THE LIKE

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Application November 29, 1952, Serial No. 323,201

6 Claims. (Cl. 155—182)

This invention relates to chairs and the like, and more particularly to a chair construction consisting essentially of corrugated fiberboard and fabric material.

It has been found that sturdy chairs may be made of corrugated fiberboard. The chief advantages of this type of chair are that it may be made at considerably less cost than a chair of usual construction, can be shipped in collapsed condition to the buyer, and is substantially lighter than a chair of the customary type. This fiberboard chair, however, does not possess a comfortableness and feel comparable to upholstered furniture of the usual construction, and its appearance is such that it does not lend itself readily to acceptance as a living-room piece. It is the primary purpose of this invention to provide a complete practical chair made of corrugated cardboard which has the appearance and the comfortableness of an upholstered chair of usual construction.

Other objects of the invention, as well as the features of novelty thereof, will appear after a perusal of the following specification when read in connection with the accompanying drawings, in which:

Fig. 1 is a perspective view of a corrugated fiberboard construction which may form the base of an armless chair made in accordance with the invention;

Fig. 2 is a perspective view of a complete chair embodying the base of Fig. 1;

Fig. 3 is a sectional view taken along the line 3—3 of Fig. 2, the base of the chair being omitted in this view for the sake of clearness;

Fig. 4 is an exploded diagrammatic plan view of the parts contained in the covering for the base of Fig. 1;

Fig. 5 is a perspective view of a corrugated fiberboard construction which may form the base of an arm chair made in accordance with the invention;

Fig. 6 is a perspective view of a complete chair embodying the base of Fig. 5;

Fig. 7 is a sectional view taken along the line 7—7 of Fig. 6; the base in this view being omitted;

Fig. 8 is a perspective view of a complete armchair and illustrates another embodiment of the invention;

Fig. 9 is a sectional view taken along the line 9—9 of Fig. 8; the base in this view being omitted;

Fig. 10 is an exploded diagrammatic plan view of the parts contained in the covering for the chair shown in Fig. 8, and

Fig. 11 is a perspective view of the seat cushion for the chair shown in Fig. 8.

Referring more particularly to Figs. 1 to 4 of the drawings, the base 10 of the chair is composed of an outer frame or container made of corrugated fiberboard and constructed to form a seat 11 and a chair back 12; the frame or container being provided with flaps to form a closed bottom and the bearing surfaces for the seat 11 and back 12, as indicated in Fig. 1 of the drawings. As is known, the flaps which form the bearing surfaces for the seat 11 and back 12 are supported by a plurality of fiberboard partitions suitably located within the container. The particular construction of the fiberboard base 10 of

the chair forms no part of the present invention, which is concerned with the combination of such a base with the covering and cushions therefor to make a complete chair having the appearance and comfortableness of the usually constructed upholstered chair. Accordingly, it is believed that the aforesaid general comments as to the construction of the base 10 are sufficient for an understanding of the present invention. It might however be stated further, that the base 10 can be used as a chair, but in itself it is not a complete chair suitable for use as a living-room piece, nor does it provide the comfort one would require in a living-room piece.

In accordance with the present invention, there is loosely mounted on the base 10 a seat cushion 13 and a back cushion 14 which may consist of sections of soft rubber or spring-constructed cushions. The cushions 13 and 14 are preferably arranged in the manner shown in Figs. 2 and 3 of the drawings and are maintained in proper position on the base 10 by means of the fabric portion of the chair now to be described.

As shown in Figs. 2 to 4 of the drawings, the fabric part of the chair is in the nature of a slipcover and comprises a main panel 15 of such area and form as to extend from the top of the back to the front of the seat and to provide two compartments or pockets for the reception of the cushions 13 and 14. As shown more clearly in Fig. 4 of the drawings, the body of the main panel 15 is substantially rectangular in form and is provided at its upper or back end with a top flap 16 and side flaps 17 and 18 and is provided at its lower or seat end with a bottom flap 19 and side flaps 20 and 21. The side edges of top flap 16 are stitched to the adjacent side edges of the side flaps 17 and 18 to form the upper end of the compartment which houses the back cushion 14. The bottom of such compartment is formed by folding in the intermediate portion of the main panel along the dotted line 22 and stitching the bottom side edges of the flaps 17 and 18 to the side edges of the section 22' of panel 15, indicated by the dotted lines 22 and 23. In a similar fashion the compartment for receiving the seat cushion 13 is formed by stitching the side edges of the bottom flap 19 to the bottom edges of the side flaps 20 and 21 and by stitching the top edges of such side flaps 20 and 21 to the side edges of the intermediate section 24' of panel 15, designated by the dotted lines 24 and 25. It will thus be seen that the material of panel 15 is utilized to form two compartments for the seat and back cushions and that such compartments are connected together by a centrally-disposed section 23' of panel 15, designated by the dotted lines 23 and 24. The several flaps and sections of which such compartments are formed have a width substantially the same as the thickness of the cushions enclosed, so that when the cover is on the base 10 such cushions will be maintained against the seat and back supporting surfaces of such base. The central panel section 23' between the dotted lines 23 and 24 has sufficient width to enable the bottom edge of the back compartment with the cushion 14 therein to rest on the rear end of the seat compartment with the cushion 13 therein, as shown in Figs. 2 and 3 of the drawings.

The top edge of flap 16 is stitched to the bottom or front edge of a panel 26, which panel together with flap 16 covers the top surface of the chair back. The top or rear edge of panel 26 is stitched to the top edge of a back panel 27, which covers the back of the chair. The sides of the chair back are covered by the flaps 17 and 18 and two end panels 28 and 29, each having a reduced top edge and an enlarged bottom edge. The top edges of panels 28 and 29 are secured by stitching to the side edges of the top panel 26. The rear edges of panels 28 and 29 which are perpendicular to the top and bottom edges thereof, are secured by stitching to the side edges

of the back panel 27. It will be noted from Figs. 2 and 4, that the height of panels 28 and 29 is less than that of the back panel 27, so that they terminate short of the bottom edge of the back panel 27. The front inclined edges of end panels 28 and 29 are secured by stitching to the side edges of the flaps 17 and 18 and to the side edges of the central section 23' of panel 15 (note Fig. 2). The bottom edges of end panels 28 and 29 are secured by stitching to the rear portion of the top edges of side panels 30 and 31, which taper from the front of the seat to the rear of the chair; the remainder of such top edges of side panels 30 and 31 being secured by stitching to the side edges of flaps 20 and 21, respectively. The rear reduced edges of panels 30 and 31 are secured to the side edges of the back panel 27 beneath the end panels 28 and 29. The front edges of panels 30 and 31 are secured by stitching to the end edges of a front seat panel 32, the upper edge of which is stitched to the lower edge of the bottom flap 19.

It will be observed that the casing formed by panels 26 to 32 is cut to conform fairly closely to the top, back, side and front surfaces of the base 10 which it overlies and fits quite snugly on such base surfaces to form a means for anchoring the cushion compartments as well as the cushions 13 and 14 enclosed therein to the base 10, without the necessity of providing any means for directly attaching or securing either the cover or the cushions to the base 10. This result is also accomplished by constructing the cover of a flexible material which is substantially non-stretchable, such as a fabric material which has been preshrunk to a tolerance of 2%. It has been found that a cotton twill which has been preshrunk to the desired tolerance, is suitable for the purposes of the invention. It has also been found desirable to connect the side edges of the flaps 20 and 21 of the seat compartment to the ends of relatively short elastic tapes 33 and 34, which are required to be stretched when the seat cushion 13 is placed in such compartment, and to connect the side edges of the flaps 17 and 18 of the back compartment to the ends of one or more relatively short elastic tapes 35 which are required to be stretched when the back cushion 14 is placed in such compartment, to increase the snug fitting of the cover on the base 10 and on the cushions and to hinder any possibility of shifting of the cushions 13 and 14 on the supporting surfaces of the base 10 in the use of the chair.

A skirt panel 36 is secured along its top edge, by stitching, to the bottom edge of the front seat panel 32 and to the front portions of the bottom edges of the side panels 30 and 31. The ends of skirt panel 36 are secured to the front ends of skirt panels 37 and 38 whose top edges are secured to the bottom edges of the side panels 30 and 31, respectively. A rear skirt panel 39 is secured by stitching and along its top edge to the bottom edge of the back panel 27 and to the rear portions of the bottom edges of the side panels 30 and 31, the ends of such rear skirt panel 39 being secured by stitching to the rear ends of the side skirt panels 37 and 38.

In assembling the several chair parts together, the cushions 13 and 14 are first preferably placed on the resting surfaces of the seat 11 and back 12, respectively, of the base 10. The top panel 26 is then placed on the top of the back 12 and the cover pulled down over the back and cushion 14 until the latter is fully inserted in the back cushion compartment of the cover by placing the bottom corners of the back cushion 14 into the pockets at the bottom end of such compartment. Before drawing the cover down over the back cushion 14 and the back 12 of the base, the elastic strap 35 is inserted between the cushion and back 12. The material of sections 23' and 24' of panel 15 is then tucked under the compartment containing cushion 14. The cushion 13 is then inserted into the seat cushion compartment with the elastic tapes 33 and 34 associated with such compartment underlying the cushion 13. The front of the cover

is then pulled over the cushion 13 and over each side of the front of base 10. The cover parts are then smoothed over the exterior surfaces of base 10 and over the exterior surfaces of the cushions 13 and 14 to make sure that the cover panels properly follow the contours of the cushions and base. It will thus be seen that the parts of the chair are readily assembled and when so assembled, have the appearance of the usual upholstered chair and its comfort. In use, the cushions 13 and 14 and the cover part will retain their positions on the base 10 by reason of the compartmented construction of the cover, the close fitting attachment of the cover to the sides of the base 10 and the non-stretchable characteristics of the fabric material from which the cover is formed.

Figs. 5 to 7 of the drawings illustrate the application of the invention to an arm chair. As shown in Fig. 5, the base 10' is composed of an outer frame or container made of fiberboard, and constructed to provide a seat 11', a back 12' and arms 40, 40. Like the above described chair, the chair of this embodiment includes a seat cushion 13' and a back cushion 14', which differs from cushion 14 in that it is provided with side extensions 41, 41, which rest on the arms 40, 40. Thus, in this embodiment, the back cushion 14' is supported by both the seat cushion 13' and the arms 40, the latter coacting with the cover part of the chair to prevent any possible displacement of the cushions in the use of the chair. As in the chair previously described, the cover part of the instant embodiment is provided with two compartments 42 and 43 to receive the cushions 13' and 14' respectively; compartment 43 conforming in form to the T-shaped form of cushion 14'. The two compartments 42 and 43 are also provided with elastic strips 33', 34' and 35'; the latter being arranged so that it grips the cushion 14' just under the upper enlarged portion thereof. In addition, the cover part is provided with additional panels to provide coverings for the arms of the base 10'.

It will be seen from the foregoing that the several parts which go to make up an armchair embodying the invention are essentially the same as in the armless chair and differ by reason of the change in form of the cushion 14' and the addition of arms to the chair. Thus, in this embodiment, the upper part of the main panel covering the seat and front of the back of the chair is T-shaped, as shown in Fig. 10 of the drawings, and is provided with flaps 16', 17' and 18' which correspond with flaps 16, 17 and 18 of the previously described construction and are stitched to panels 26' to 31' in the same manner as the flaps 16, 17 and 18 are connected to panels 26 to 31. It will be noted however, that inasmuch as the side panels 30', 31' have been made large enough to cover also the outside surfaces of the arms 40 of this embodiment, the panels 28', 29' are correspondingly shorter in height than the corresponding panels 28, 29. In this embodiment also, the compartment for the back cushion 14' is completed by means of side panels 44, 45, which are secured by stitching along their top edges to the bottom edges of flaps 17' and 18', respectively, along their inner edges to the edge portions of the main panel designated 46 in Fig. 10 of the drawings, and along their bottom edges to the side edges of a transverse section of the main panel corresponding to the section 22' in Fig. 4 of the drawings. The outer edges of the panels 44, 45 are connected by stitching to the rear edges of the top arm panels 47 and 48, respectively, and to the rear edges of the inside arm panels 49 and 50, respectively. The remainder of the rear edges of the inside arm panels 49 and 50 are secured by stitching to the side edges of a transverse section of the main panel corresponding to the section 23' in Fig. 4 of the drawings. The outer edges of the side flaps for the seat cushion instead of being secured to the side panels 30 and 31 as previously described, are secured by stitching to the bottom or inner

edges of the inside arm panels 49 and 50, respectively (note Fig. 10). The top and front edges of the inside arm panels are secured by stitching to the inner side edges of the arm panels 47 and 48, which extend along the tops and front of the chair arms 40, 40. The outer side edges of the arm panels 47 and 48 are secured by stitching to the portions of the top edges of panels 30' and 31' in the region of the arms 40, 40 and to the front edges of such panels 30' and 31'. The ends of the front seat panel 32' (see Figs. 6 and 7) are secured by stitching to the inside edges of the lower front portions of arm panels 47, 48, instead of to the outer side panels as in the previously described embodiments. The skirt panels of this embodiment are connected to the cover in the same manner as previously described with respect to skirt panels 36 to 39, except that the front skirt panel 36' is additionally secured to the bottom edges of the arm panels 47 and 48.

The embodiment shown in Figs. 8 to 11 of the drawings is for a chair with a separable seat cushion. In this construction the cover part is substantially similar to the part above described in relation to Figs. 5 to 7 of the drawings, but differs from the latter in that the main panel is separated into two panels 51 and 52 which are stitched together along their respective rear and bottom edges. Sufficient material is provided in the front of the back panel 52 to form a compartment for the back cushion 14' in the manner explained in the description of Figs. 5 to 7. The seat panel 51, however, is not provided with flaps for forming a compartment for the cushion 13', but has an area such that it substantially snugly covers the back 12' beneath the cushion 14', the top of the seat 11' of the base and a part of the front of the base; the front skirt section 36'' being attached to the front or lower edge of seat panel 51, all as is clearly shown in Fig. 9 of the drawings. The seat cushion 13' which overlies the seat panel 51 is provided with a separate cover 53 which may be of any suitable construction so as to snugly cover such cushion.

While I have hereinabove described several preferred embodiments of my invention it will be apparent to those skilled in the art that changes and modifications may be made without departing from the spirit of the invention or the scope of the appended claims.

I claim:

1. A cover for a chair having a back and seat, and composed of a base having front, side and back surfaces, a seat rest and a back rest extending down to said seat rest, and composed of a seat cushion separate from and loosely mounted on the seat rest and a back cushion separate from and loosely engaging the back rest, said cover being constructed to unite said base and said separate back and seat cushions into a complete upholstered chair and comprising a compartment for receiving the seat cushion, a compartment for receiving the back cushion and a base covering part having panels connected to the sides and front end of the seat cushion compartment and having other panels connected to the sides and top end of said back cushion compartment, said seat cushion compartment having top, side, front and rear walls providing a box-like enclosure for covering the top, side, front and rear surfaces of the seat cushion leaving the bottom surface of such seat cushion exposed to enable the seat cushion to seat directly on the seat rest, said back cushion compartment having front, side, top and bottom walls providing a box-like enclosure for covering the front, side, top and bottom surfaces of the back cushion, leaving the rear surface of such back cushion exposed to enable the back cushion to seat directly on said back rest, said panels connected to said seat cushion compartment being connected to the lower edges of the side and front walls of such compartment, and said panels connected to said back cushion compartment being connected to the rear edges of the side and top walls of such compartment, all said panels being connected together and with said compartments forming a unitary envelope for uniting the cushions to the base of the chair, said panels, by themselves, being adapted to continuously envelope the entire outer circumference of said chair so that said panels snugly cover the front, side and back surfaces of said base and by their engagement with said base surfaces anchoring said compartments and the seat and back cushions contained therein to the base in such relation on the seat and back rests thereof that said back cushion compartment and the back cushion enclosed thereby rest on the rear end of said seat cushion compartment and the seat cushion enclosed thereby, and a panel connected to the lower edge of the rear wall of said seat cushion compartment and to the rear edge of the bottom wall of said back cushion compartment, said connecting panel having a width substantially equal to the height of the rear wall of said seat cushion compartment and such as to maintain the rear end of the seat cushion compartment beneath the back cushion compartment, said compartments and said panels being formed from substantially non-stretchable flexible material to retain the cushions in proper relation on the seat and back rests of the chair during usage.

2. A cover for a chair having arms, a back and a seat, and composed of a base having top, front, side and back surfaces and having a seat rest and a back rest extending down to said seat rest, and composed of a seat cushion separate from and loosely mounted on the seat rest and a back cushion separate from and loosely engaging the back rest and having extended side portions resting on the chair arms, said cover comprising a compartment configured to receive the back cushion and having front, side, top and bottom walls providing a box-like enclosure for the back cushion, said cover including a base covering part having panels connected to the rear edges of the side, top and bottom walls of said back cushion compartment so that when the cover is on the chair with the back cushion located in said compartment, said back cushion compartment will form with the seat rest of the chair a recess into which the rear end of the seat cushion may be inserted to coact with the chair arms to support the back cushion in said compartment in raised position, said back cushion compartment having a width greater than the length of the space between the chair arms, the panels of said base covering part being connected together and, by themselves, being adapted to continuously envelope the entire outer circumference of the chair so that exterior panels thereof connected to said side and top walls of said back cushion compartment snugly cover the top, back and side surfaces of the back of the chair and by their engagement with said chair surfaces maintaining said compartment so that the back cushion is retained against the back rest in the said raised position, said compartment and said panels being formed from substantially non-stretchable material to retain the back cushion in proper relation on the back rest in usage.

3. A cover for a chair having a back and seat, and composed of a base having front, side and back surfaces, a seat rest and a back rest extending down to said seat rest, and composed of a seat cushion separate from and loosely mounted on the seat rest and a back cushion separate from and loosely engaging the back rest, said cover comprising a compartment configured to receive the back cushion and having a height substantially less than that of the back rest, said compartment being located on said cover so as to be positioned completely in front of said back rest and to be spaced above said seat rest when the cover is assembled on the chair with the back cushion inserted therein, into which space the rear end of said seat cushion is adapted to be inserted to provide a support for said compartment and said back cushion, said compartment having front, side, top and bottom walls providing a box-like enclosure for covering the front, side, top and bottom surfaces of the back cushion, leaving the rear surface of the back cushion exposed to en-

able such cushion to seat directly on the back rest, said cover including a base covering part having panels connected to the rear edges of the side, bottom and top walls of said compartment, the panel connected to said bottom wall extending down from said compartment to the seat rest and located adjacent to the back rest, the panels of said base covering part, by themselves, being adapted to continuously envelope the entire outer circumference of the chair so as to cause the panels thereof connected to said side and top walls of said compartment to snugly cover the top, back and side surfaces of the back of the chair and by their engagement with such chair surfaces and with the coaction of the panel connected to said bottom wall maintaining said compartment so that the back cushion is retained against said back rest in the said raised position, said compartment and the said panels of said cover being formed from a substantially non-stretchable material to retain the back cushion in proper relation on the back rest in usage.

4. A cover for a chair such as defined in claim 3, including means secured to the side walls of said compartment and located in major part between said compartment and the back rest when the cover is assembled on the chair, for maintaining such side walls in engagement with the sides of the back cushion and for anchoring on said base the panels adjoined to such side walls.

5. A cover for a chair such as defined in claim 3, including a compartment configured to receive the seat cushion and having top, side, front and rear walls providing a box-like enclosure for covering the top, side, front and rear surfaces of the seat cushion, leaving the bottom surface of such seat cushion exposed to enable such cushion to seat directly on the seat rest, the area of the top wall thereof being substantially greater than the area of the exposed seat of the chair so that the rear edge portion of such wall and the rear wall of said seat cushion compartment are located under said back cushion

compartment when the cover is assembled on a chair, said rear wall being connected along its bottom edge to the bottom edge of the panel connected to the bottom wall of said back cushion compartment, the side and front walls of said seat cushion compartment being connected at their lower edges to front and side panels of said base covering part, and said base panels by their engagement with the top, back and side surfaces of the base when the cover is assembled on a chair maintaining said seat compartment on the seat rest so that the front wall thereof is substantially flush with the front edge of the seat rest and the rear portion thereof is located under said back cushion compartment with the seat cushion in supporting relation to the back cushion.

6. A cover for a chair such as defined in claim 5, including means secured to the side walls of said seat cushion compartment and located in major part between said compartment and the seat rest when the cover is assembled on the chair, for maintaining such side walls in engagement with the sides of the seat cushion and the panels adjoined to such side walls in proper position relative to the base.

References Cited in the file of this patent

UNITED STATES PATENTS

1,889,662	Hyman	Nov. 29, 1932
1,970,820	Schoellkopf	Aug. 21, 1934
2,083,236	Levi	June 8, 1937
2,098,684	Fry	Nov. 9, 1937
2,123,667	Trubitz	July 12, 1938
2,366,833	Clark	Jan. 9, 1945
2,367,450	Trubitz	Jan. 16, 1945
2,411,915	Waranch	Dec. 3, 1946
2,728,382	Baranski	Dec. 27, 1955

FOREIGN PATENTS

642,758	Great Britain	Sept. 13, 1950