June 2, 1942. S. J. GEDRIS 2,284,957

THEATER SEAT BACK

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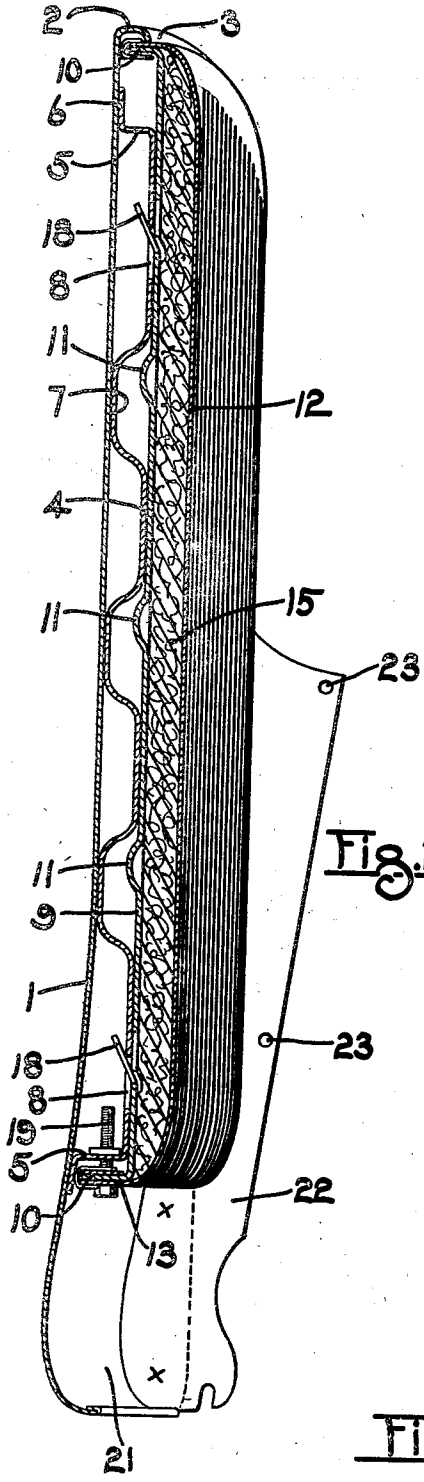


Fig. 2.

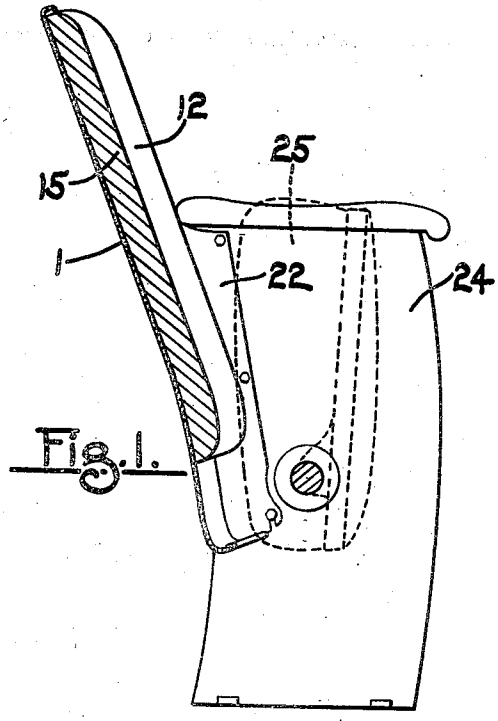


Fig. 1.

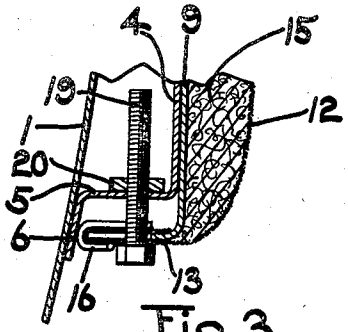


Fig. 3.

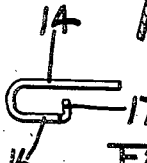


Fig. 4.

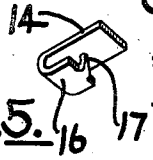


Fig. 5.

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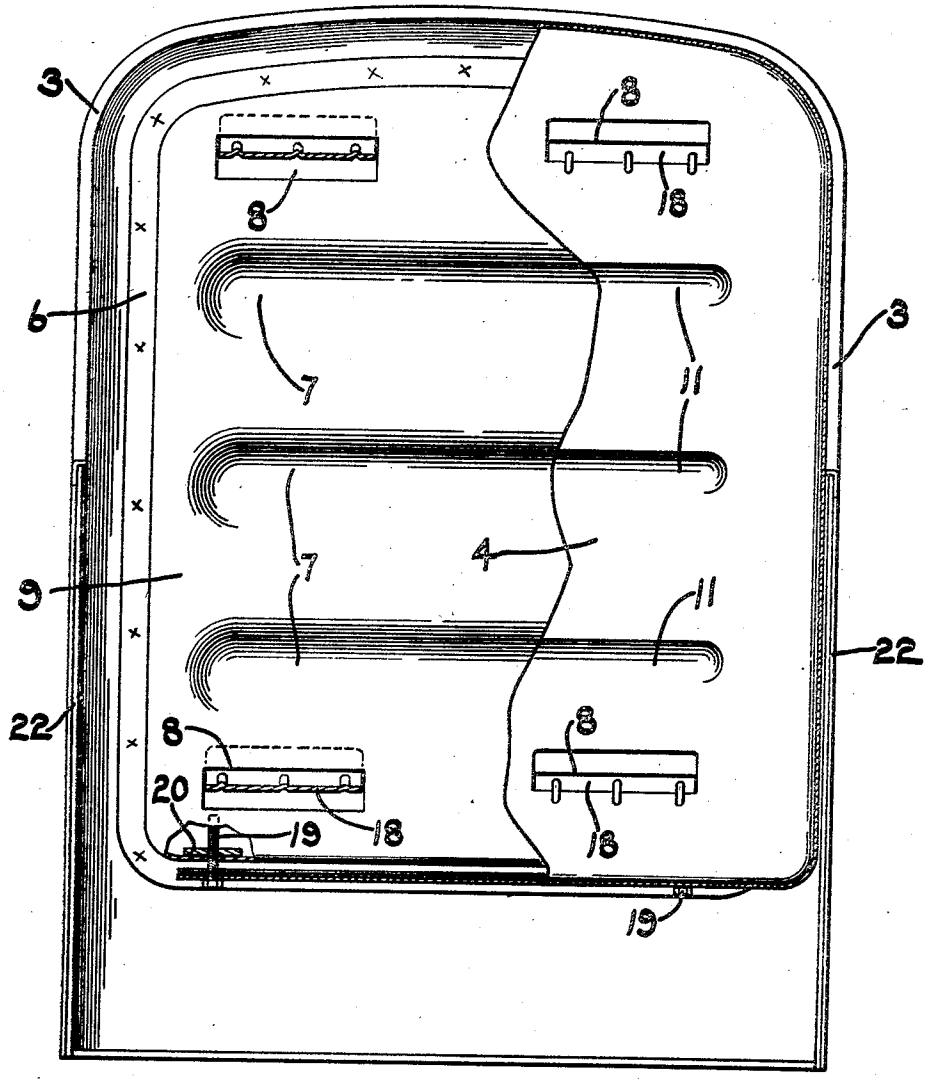


Fig. 6.

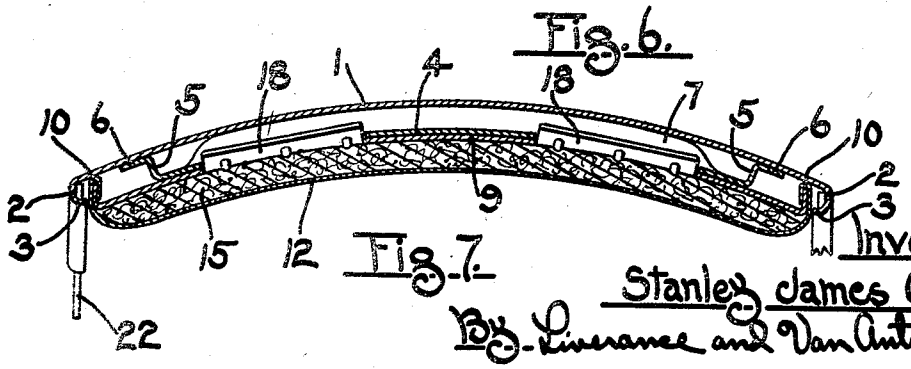


Fig. 7.

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THEATER SEAT BACK

Stanley James Gedris, Grand Rapids, Mich., assignor to Ideal Seating Company, Grand Rapids, Mich., a corporation of Michigan

Application January 8, 1940, Serial No. 312,890

6 Claims. (Cl. 155—184)

This invention relates to chairs or the like, and in particular, theatre chairs or seats. The object of the invention is to provide an improved back for chairs or seats and it is concerned with a construction and method for practically, simply and economically applying an upholstered front to a back support. Seats of a character to which the invention is applicable and in particular, theatre seats, are provided with backs which preferably are upholstered at their fronts for the comfort of those occupying them. The present invention is directed to a novel and practical construction wherein the upholstering may be connected with a rigid and reinforced support and thereafter said support with the upholstering thereon very quickly applied and secured to a permanent back member, yet in such a manner that it may be easily removed for repair or replacement if it becomes necessary. And when it is attached in place an attractive and commercial structure is produced and one which can be manufactured economically and will be strong and durable in service.

The construction, by means of which the objects and purposes stated are attained, as well as many others not at this time specifically enumerated, may be understood from the following description, taken in connection with the accompanying drawings, in which,

Fig. 1 is a partial elevation and vertical section illustrative of a theatre seat to which the back of my invention is adapted to be applied.

Fig. 2 is an enlarged vertical section through the back made in accordance with my invention.

Fig. 3 is a fragmentary enlarged similar section at the lower part of the back where the upholstering is connected thereto.

Fig. 4 is a side elevation of one of the cover retaining clips, a number of which are used with my invention.

Fig. 5 is a perspective view of the clip of Fig. 4.

Fig. 6 is a front elevation partly in section of the construction, and

Fig. 7 is a horizontal section through the back.

Like reference characters refer to like parts in the different figures of the drawings.

In the construction shown, a main supporting back member 1 of flat metal is provided of the necessary length and width which, at its upper and side edges, is reinforced by an inwardly turned web 2 terminating in a flange 3 which is turned inwardly and parallels substantially the back member 1. Associated with and secured to the back member 1 within the border provided by the web 2 and flange 3, is a plate 4 curved to substantially parallel the back member 1, and which at its edges has rearwardly turned webs 5 from which outturned terminal flanges 6 extend which are adapted to lie against and be welded to the member 1. The plate 4 is horizontally pressed rearwardly at spaced apart points to make the troughs 7, the bottoms of which come against the front side of the member 1 and may be welded or otherwise permanently secured thereto. Above and below the respective upper and lower troughs 7 a plurality of spaced openings 8 are cut as shown.

The upholstering unit adapted to be applied to the back structure described comprises a base plate 9 of sheet metal which is rearwardly flanged at its sides and ends as at 10. The body of the base plate 9 is curved in substantial parallelism with the plate 4 against which it is adapted to be placed. The base member 9 is provided with a plurality of rearwardly bent portions 11 providing troughs for strengthening purposes. The upholstering cover 12 of fabric or the like has its edges, at 13, turned inwardly to lie against the outer sides of the flanges 10 and to bend around the inner edges thereof, and it is secured in place on said flanges 10 by a large number of U-shaped spring clips 14 which clamp the fabric in place as best shown in Fig. 3, it being understood that upholstering padding 15 fills the space between the front side of the base member 9 and the fabric cover 12.

The clips 14 are each provided with a return-bent portion 16, which in turn has a tooth 17 which extends upwardly and slightly rearwardly to the perpendicular. Each tooth is adapted to be embedded in the upholstery adjacent the flanges 10 to prevent the upholstery from being withdrawn.

From the base member 9 a plurality of tongues 18 are struck rearwardly. The entire unit consisting of the base member 9 and the upholstering padding and cover is applied to the main supporting back by inserting the ends of the tongues 18 into the openings at 8 and moving the unit upwardly. The upholstering fabric 12 at its upper portions will come against the lower edges of the downwardly turned flanges 3. At its sides it will be between the inturned edges of the side flanges 3. At the bottom a plurality of bolts 19 extend through the lower flange 10 and thence upwardly through the lower horizontal web 5 of the plate 4 threading through threaded plates or nuts 20 above said flange. The heads of the bolts are fitted for the reception of a screwdriver so that by turning the bolts

the unit described may be pressed upwardly until stopped by engagement against the upper flange 3 previously mentioned. The plates or nuts 20 through which the bolts 19 pass may be secured at the upper side of the lower horizontal web 5 before the plate 4 is connected to the main back member 1, and in proper positions such that the screw-threaded ends of the bolts 19 will readily pass therethrough.

The back construction described may, at the lower portions of its sides, have forward extensions 21 either integral with or connected to the forwardly turned webs 2 of the back plate 1, to which are secured, such as by welding, the side plates 22 having openings 23 therein for connection to the spaced standards 24, the lower end of the back having a pivotal support on and between the standards, at the rear of the usual hinged seat member 25. The standards 24 and the seat 25 are indicative of the environment where the back structure made in accordance with my invention is to be used and specifically form no part of the present invention.

The construction described is of a very practical nature, the metal parts being readily stamped from sheet metal, the assembly being simple and easy and the connection of the upholstering unit to its supporting back structure being easily performed. Such connection, as is evident, permits a ready removal of the upholstering unit, for example in case it is desired to repair the same, or in certain other cases where the upholstering units in use are to be replaced by others.

The invention is defined in the appended claims and is not to be limited because of specific detail of construction described, other than is required by the terms of such claims.

I claim:

1. A chair back comprising, a back plate of metal, a second plate of metal at the front side of and spaced from the back plate, having rearwardly turned webs terminating in outwardly extending flanges at its sides and ends, said flanges bearing against the back plate and secured thereto, said second plate being longitudinally recessed toward said back plate and engaging thereagainst at the bottom of said recessed portions, said second plate having a plurality of openings therethrough, an upholdstering unit comprising a third plate of metal having rearwardly turned flanges therearound at its edges, padding located against the front side of said third plate, a fabric covering over said padding extending around the inner edges of the flanges of the third plate and connected therewith, a plurality of tongues struck rearwardly from said third plate adapted to pass through said openings in the second plate to mount the upholstering unit upon said second plate, and bolts passing upwardly through the lower end flange of said third plate and through the lower end web of the second plate and threading through nuts located above said lower end web of the second plate, as specified.

2. A chair back comprising, a back plate of metal, a second plate of metal at the front side of and spaced from the back plate having rearwardly turned webs terminating in outwardly extending flanges at its sides and ends, said flanges bearing against the back plate and secured thereto, said second plate having a plurality of openings therethrough, an upholstering unit comprising a third plate of flat metal having rearwardly turned flanges therearound at its edges, padding located against the front side of said third plate, a fabric covering over said padding extending inwardly and around the inner edges of the flanges of the third plate and connected therewith, a plurality of tongues struck rearwardly from said third plate adapted to pass upwardly through said openings in the second plate to mount the upholstering unit upon said second plate, and bolts passing upwardly through the lower end flange of said third plate and through the lower end web of said second plate and threading through nuts located above said lower web of the second plate, as specified.

3. A chair back comprising, a back plate of metal, a second plate of metal at the front side of and spaced from the back plate, having rearwardly turned webs terminating in outwardly extending flanges at its sides and ends, said flanges bearing against the back plate and secured thereto, said second plate having a plurality of openings therethrough, an upholstering unit comprising a third plate of flat metal having rearwardly turned flanges around its edges, padding located against the front side of the third plate, a fabric covering over said padding extending inwardly around the inner edges of the flanges of the third plate and connected therewith, means on said third plate passing through said openings in the second plate and upwardly back of said second plate, and bolts passing upwardly through the lower edge flange of the third plate and through the lower end web of said second plate and threading through nuts located above said lower end web of the second plate, as specified.

4. A chair back comprising, a back plate of metal having a forwardly extending web terminating in an inturned flange at its upper edge, a second plate of metal at the front side of and spaced from the back plate having rearwardly turned webs terminating in outwardly extending flanges at its sides and ends, said flanges bearing against the back plate and secured thereto, an upholstering unit comprising a third plate of flat metal having rearwardly turned flanges therearound at its edges, padding located against the front side of said third plate, a fabric covering over said padding extending inwardly around the inner edges of the flanges of the third plate and connected therewith, means for releasably mounting said third plate on said second plate and for permitting a limited upward movement of said third plate and connected upholstering elements, and bolts passing upwardly through the lower end flange of said third plate and through the lower end web of the second plate, said bolts operating to move the upholstering unit in an upward direction on turning said bolts in one direction to bring said upholstering unit at its upper end against the inturned flange of the back plate, as specified.

5. A chair back comprising, a back plate of metal having a forwardly extending border at its side and upper edges, a second plate of metal at the front side of and spaced from the back plate, means for permanently connecting said second plate to the back plate in spaced relation thereto, an upholstering unit comprising a third plate of metal having rearwardly turned flanges therearound at its edges, the area of the third plate being greater than that of the second plate, padding lying against the front side of the third plate, a fabric covering over said padding extending at its edges inwardly and at the outer side of the flanges of the third plate and around the inner edges thereof, means for securing said

fabric to said flanges of the third plate, means for releasably connecting said third plate to the second plate and permitting a limited upward movement of the upholstering unit on said second plate, and means between the lower end of said upholstering unit and the lower portion of said second plate for moving said upholstering unit upwardly to bring it at its upper end against the upper end border of the back plate.

6. A chair back construction comprising, a back plate having a forwardly extending border at its upper portion, an upholstering unit adapted to be located in front of the back plate comprising, a panel and upholstering covering the front thereof, means for releasably connecting the upholstering unit to said back plate comprising, cooperating slots and hooks, one on the back plate and the other on the panel, said hooks extending angularly away from the part to which they are attached whereby the upholstering unit may be connected with the back plate by an upward movement, and means for forcing the back plate upwardly to engage its upper end against said forwardly extending border, said upward movement also drawing said panel and plate together.

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