April 24, 1951 A. C. HOVEN 2,550,479

CHAIR BACK CONSTRUCTION

Filed Feb. 21, 1947 2 Sheets-Sheet 1

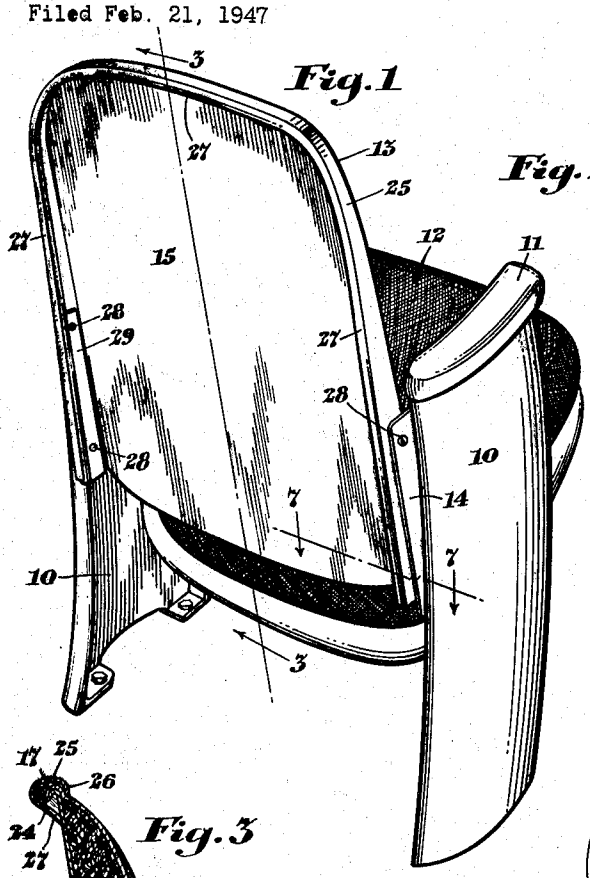


Fig. 1

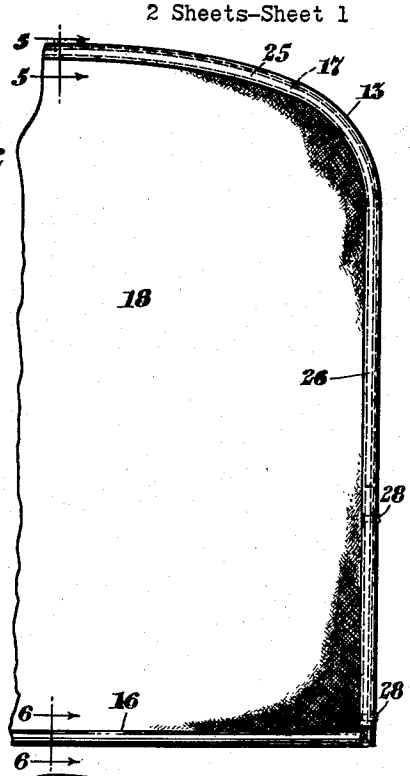


Fig. 2

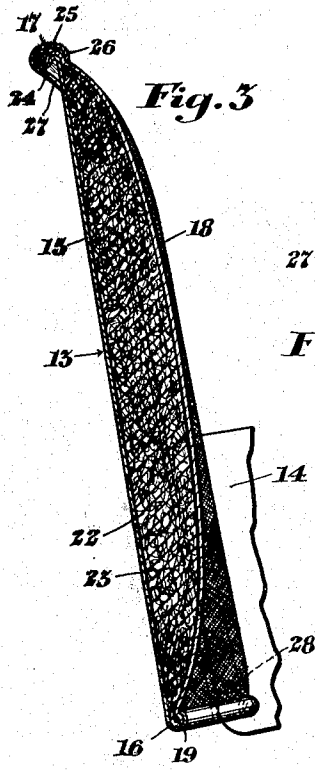


Fig. 3

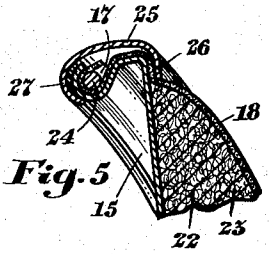


Fig. 5

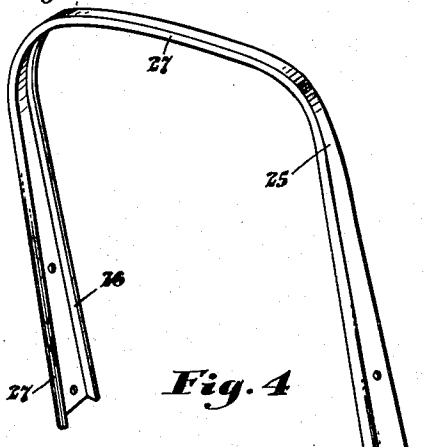


Fig. 4

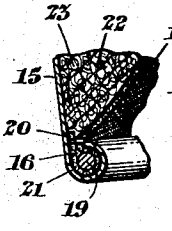


Fig. 6

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April 24, 1951 A. C. HOVEN 2,550,479

CHAIR BACK CONSTRUCTION

Filed Feb. 21, 1947 2 Sheets-Sheet 2

Fig. 7

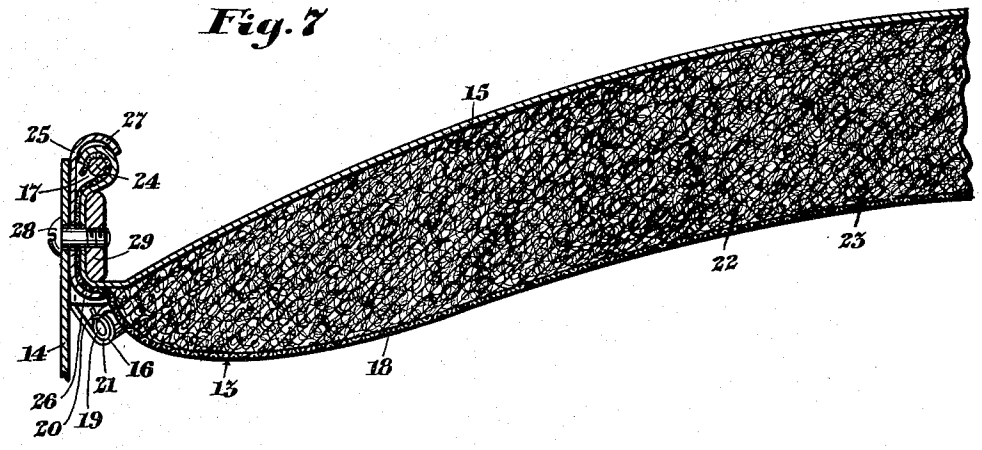
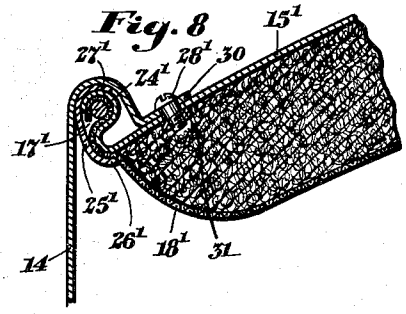


Fig. 8



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CHAIR BACK CONSTRUCTION

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4 Claims. (Cl. 155—184)

1

The present invention relates to chair back constructions and more particularly to such as are used in theatre chairs, and the object of the invention is to provide an improved chair back of sturdy, attractive and economical construction.

This object and any other and more specific objects hereinafter appearing are attained by the preferred embodiments of the invention hereinafter described, and illustrated by the accompanying drawings, wherein:

Figure 1 is a rear perspective view of a theatre chair whose back is constructed and mounted according to the present invention;

Figure 2 is a fragmentary front elevational view of the left half of the chair back per se;

Figure 3 is a sectional view of the chair back taken on line 3—3 of Figure 1;

Figure 4 is a rear perspective view of a channel rim member of the chair back assembly;

Figure 5 is an enlarged, fragmentary, sectional view of parts of the chair back, taken on line 5—5 of Figure 2;

Figure 6 is an enlarged, fragmentary sectional view of parts of the chair back, taken on line 6—6 of Figure 2;

Figure 7 is an enlarged, fragmentary, horizontal, sectional view of parts of the chair back and mounting bracket therefor, taken on line 7—7 of Figure 1; and

Figure 8 is a fragmentary, horizontal sectional view of a modified form of chair back and mounting bracket therefor.

Referring now in detail to these drawings, the chair shown in Figure 1 is of the type used in theatres, auditoriums and the like, and generally comprises a pair of spaced, upright, supporting standards 10 having conventional arm rests 11, a chair seat 12 mounted on and between the standards 10 in any known manner, and a chair back generally designated 13 mounted on and between the standards 10 by means of brackets 14. The chair back is secured to the brackets 14 as hereinafter described, and said brackets may be secured to the standards 10 in various ways. If the chair back is to be fixedly mounted on the standards, the brackets 14 are fixedly secured to the standards as by means of screws (not shown) passing through apertures in the brackets and threaded in the standards. If, however, the chair is of the retracting type wherein the seat and back are mounted for forward and rearward movements, the brackets 14 may be slidably mounted on the standards in any known manner.

2

The chair back 13, as shown in Figures 1–7 inclusive, comprises a back panel 15 of sheet metal which is bowed rearwardly to provide a comfortable back rest. The bottom peripheral edge of the back panel 15 is curled forwardly, upwardly and then rearwardly to form a retaining groove 16 of greater than semicircular cross-section. The top and side peripheral edges of the back panel 15 are curled rearwardly, inwardly and then outwardly to form an outwardly opening continuous groove 17 extending across the top and down the sides of the back panel.

An upholstery covering 18 of leather, fabric or other suitable material, has an elongated member—preferably a compressible fiber cord 19 of round cross-section—hemmed into the bottom marginal edge thereof by means of stitching 20. (See Figures 6 and 7.) This cord 19 and the upholstery hem 21 surrounding it are securely assembled to the back panel 15 by sliding them longitudinally into the groove 16, and the upholstery covering 18 thus forms with the back panel 15 a pocket 22 open at the sides and the top. This pocket 22 is filled with padding 23 of cotton, hair, moss or the like, and the pocket is then sealed by pressing the marginal top and side edges of the upholstery covering 18 into the continuous groove 17 of the back panel, inserting a continuous compressible fiber cord 24 into the groove 17 between the folds of the upholstery covering, and applying a channel rim 25 (see Figure 4) to the outer peripheral edges of the chair back. The rim 25 has its front marginal edge 26 flanged inwardly to engage the outer surface of the upholstery covering 18 at the top and sides of the chair back, and said rim 25 has its rear marginal edge 27 flanged inwardly and then formed to engage the curled periphery of the back panel 15. In assembling the rim 25 to the chair back, the lower ends of the rim's side portions are guided onto the side edges of the chair back, and the rim is then slid downwardly until its top portion embraces the top edge of the chair back.

The chair back above described is mounted on the brackets 14 by means of screws 28 which are passed through aligned apertures in the rim 25, the upholstery covering 18, and the rearwardly extending portions at the sides of the back panel 15, and said screws 28 have their inner ends threaded in reinforcing bars 29.

Figure 8 illustrates a slightly modified construction in which the back panel 15^1 has its top and side peripheral edges curled rearwardly and inwardly, then outwardly and forwardly to

form a groove 17[1] for the retention of the marginal edges of the upholstery covering 18[1] and compressible cord 24[1]. The rim 25[1] has a slightly different cross-section than that shown in Figures 1–7, but is characterized by similar flanges 26[1] and 27[1] which engage respectively the outer surface of the upholstery covering 18[1] and the curled edge of the back panel 15[1]. The brackets 14[1] are also here shown slightly modified, being turned forwardly and inwardly to form a flange 30 to which the chair back is secured as by screws 28[1] passing through aligned apertures in the flange 30 and the back plate 15[1] and provided with nuts 31 on the inner ends thereof.

It will thus be seen that the present invention provides a chair back comprising a single rigid back panel of sturdy and economical sheet metal construction, attractively upholstered and assembled by means of a finishing rim which conceals the upholstery-attaching means, and which rim may be of attractively polished sheet metal.

The invention being intended to be pointed out in the claims is not to be limited to or by details of construction of the embodiments illustrated by the accompanying drawings or hereinbefore described.

I claim:

1. In a chair structure: spaced, upright supporting standards; back-supporting brackets on the standards; a chair back comprising a back panel having its top and side peripheral edges curled rearwardly, inwardly and then outwardly to form a continuous groove extending across the top and down the sides of the back panel, said back panel having its bottom peripheral edge curled forwardly, upwardly and then rearwardly to form a bottom retaining groove; padding disposed directly over the entire front surface of the back panel; an upholstery covering disposed directly over the padding and having its top and side marginal edges secured within said continuous groove and having its bottom edge secured within said bottom retaining groove; a channel rim extending around the top and sides of the chair back, said rim having inwardly extending flanges one of which flanges engages the outwardly curled portions of the back panel's top and side peripheral edges and the other of which flanges engages the outer surface of the upholstery covering to press the covering against the back panel; and fastening means passing through said back-supporting brackets and said back panel for securing the panel to the brackets.

2. In a chair structure: spaced, upright supporting standards; back-supporting brackets on the standards; a chair back comprising a back panel having its top and side peripheral edges curled rearwardly, inwardly and then outwardly to form a continuous groove extending across the top and down the sides of the back panel, said back panel having its bottom peripheral edge curled forwardly, upwardly and then rearwardly to form a bottom retaining groove; padding disposed directly over the entire front surface of the back panel; an upholstery covering disposed directly over the padding and having its top and side marginal edges secured within said continuous groove and having its bottom edge secured within said bottom retaining groove; a channel rim extending around the top and sides of the chair back, said rim having inwardly extending flanges one of which flanges engages the outwardly curled portions of the back panel's top and side peripheral edges and the other of which flanges engages the outer surface of the upholstery covering to press the covering against the back panel; and fastening means passing through said back-supporting brackets and through the side portions of the channel rim, the upholstery covering and the back panel for securing said parts in assembly.

3. The method of upholstering a substantially rectangular chair back panel, which method comprises: curling the bottom edge of the back panel forwardly, upwardly and then rearwardly to form a retaining groove; curling the top and side edges of the back panel rearwardly, inwardly and then outwardly to form an outwardly opening continuous groove; hemming an elongated element in the bottom edge of an upholstery covering; sliding said hem and element longitudinally into said retaining groove; filling the pocket formed between the upholstery covering and the back panel with padding; and compressing the top and side marginal edges of the upholstery covering into said outwardly opening continuous groove.

4. The method of upholsterying a substantially rectangular chair back panel, which method comprises: curling the bottom edge of the back panel forwardly, upwardly and then rearwardly to form a retaining groove; curling the top and side edges of the back panel rearwardly, inwardly and then outwardly to form an outwardly opening continuous groove; hemming an elongated element in the bottom edge of an upholstery covering; sliding said hem and element longitudinally into said retaining groove; filling the pocket formed between the upholstery covering and the back panel with padding; compressing the top and side marginal edges of the upholstery covering into said outwardly opening continuous groove; and sliding a generally U-shaped channel rim downwardly into snug engagement with the top and side edges of said upholstered back panel.

ALFRED C. HOVEN.

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