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KNOCKDOWN CHAIR AND SOFA

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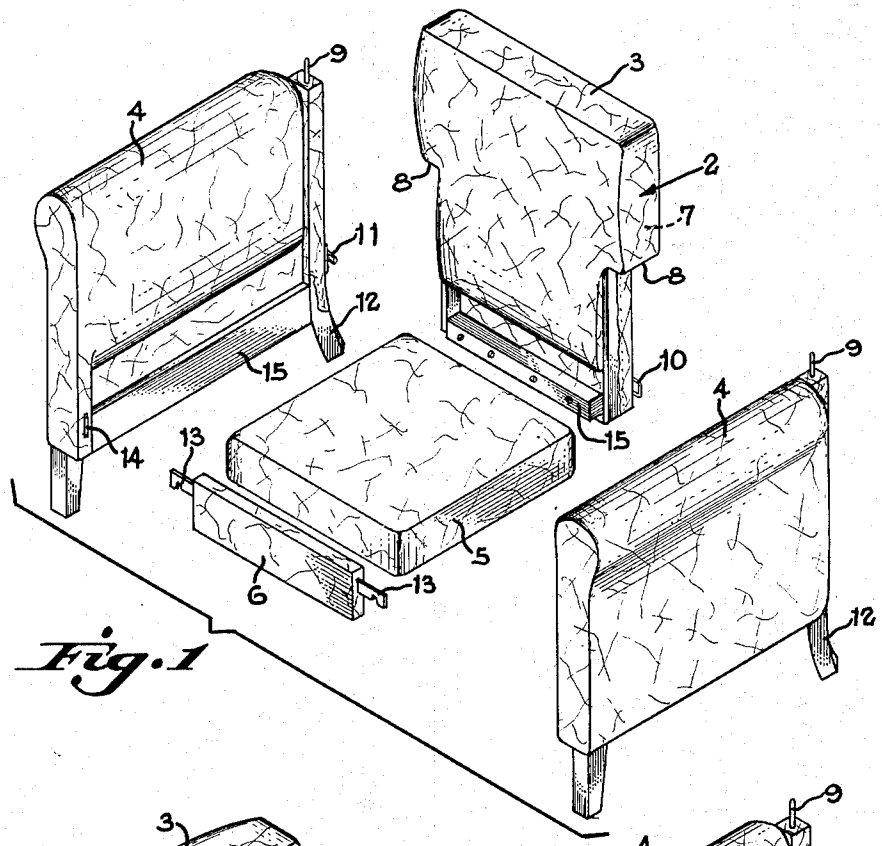


Fig. 1

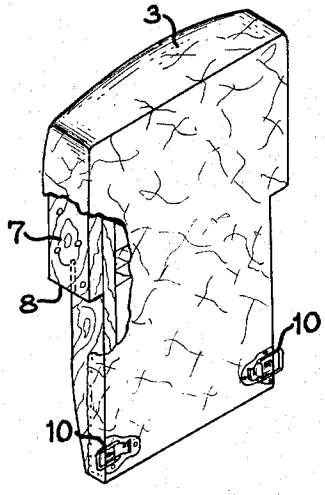


Fig. 2

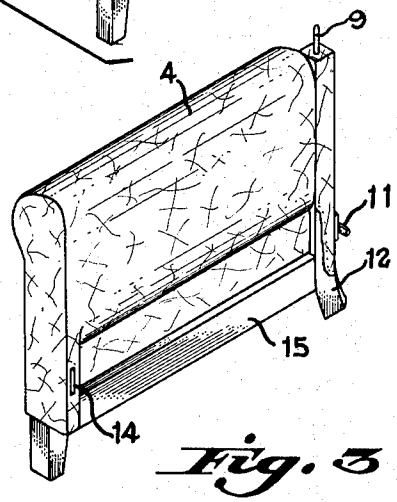


Fig. 3

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KNOCKDOWN CHAIR AND SOFA

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6 Claims. (Cl. 155—196)

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This invention relates to the manufacture of certain articles of furniture, such as seats, particularly chairs and sofas, of knock-down construction, with the parts standard or custom made so that if one or more parts are broken or worn, new parts can be obtained readily from the manufacturer, dealer or some source of supply and easily replaced by the owner for the worn or broken parts with minimum delay in obtaining the new parts and having them substituted for the broken parts. There is now not only the delay in getting the broken and worn parts of furniture repaired but there is the high cost of repair because the parts are neither standard or custom made nor adapted to be readily disassembled. The conventional furniture is of permanent assembly.

The invention especially relates to stuffed or upholstered seats which are more often covered with removable or slip covers that can be removed and be more conveniently laundered than the seats. Skilled labor is required to make and fit the covers to have them tight fitting, and they are not easily placed on and removed from the seats since they are made in one piece for the entire seat or article of furniture. Knockdown seats or sofas of standard or custom built parts may also have the covers for the parts standard or custom made so that they, too, can be obtained readily and easily fitted over the parts, the seats being knocked down or disassembled readily for placing on or removing the covers from the parts.

The chairs or sofas are stored and shipped in knock-down condition to be assembled by the user. The knock-down parts can be more compactly packaged or crated and stored than can be the assembled chairs or sofas. Accordingly, they are more economically and easily handled and stored in knock-down condition and can be carried in stock in much less space than would be required for the assembled articles.

Since the slip covers are separate from the chairs or sofas and are custom or standard make, retailers or dealers can carry a large stock of them in stock in various styles and colors from which selections can be made by the customers. As the sofas or chairs are of uniform or standard construction, large numbers of them do not need to be carried in stock, but even should a large stock be carried, they can be stored in knock-down or disassembled condition so that they do not require as large warehouse space as if they were stored in permanent assembled condition.

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For a better understanding of the invention, reference is made to the accompanying drawings, in which:

Fig. 1 is an exploded view of an upholstered chair embodying the invention;

Fig. 2 is a perspective view of the back of the chair; and

Fig. 3 is a perspective view of one of the side arms.

Referring specifically to the drawings in which like numerals are used to designate like parts, the knock-down chair, designated generally by numeral 2, is composed of a back 3, two side arms 4, a bottom 5, and a cross piece 6, each of which is separately constructed of a standard form so that all parts can be assembled readily and disassembled. The two side arms are of duplicate construction generally, the only difference being in the shape of the arms. One is a left and the other is a right arm.

The back 3 is composed of wood or suitable composition material that can be fastened together to form a frame. On the opposite outer edges of the frame, a piece 7 is secured in place with the bottom end terminated part way down the height of the back to form an overhanging abutment at the end 8. These pieces may be secured to the back by any suitable fastening means. A dowel socket is formed in the bottom end of the piece 7 to receive a dowel 9 which is fitted on the side arm 4. Ordinarily one dowel is sufficient for holding the corner of the side arm against the back but a plurality of dowels may be provided if desired. Moreover, it is within the scope of the invention to reverse the doweled parts, if desired, and have the dowel in the piece 7 and the dowel socket in the side arm. The dowels may be of any material but are preferably of strong metal, such as steel. Mating clamp pieces 10 and 11 are provided on or adjacent to the side edges of the back and the ends of the side arms in position to be interconnected when dowels of the side arms are fitted into the dowel sockets of the back. The ends of the side arms fit into the spaces beneath the pieces 7 against the frame, and bear against the overhanging abutments, thereby having the pieces 7 and the rear ends of the side arms form a continuous support with the rear legs 12. The pieces 7 provide firm supports for the rear ends of the side arms and give continuity of form as well as providing means for doweling the part together. After the parts are fitted together with dowels of the side arms inserted into the dowel sockets of the back, the part 10 of the clamp is clamped

over the part 11 to secure the side arms and back in position. There are two clamps, each comprising the part 10 on each of the opposite side edges of the back rest and the part 11 on the rear end of each of the two side arms 4. These clamps are not limited to any particular construction, but they may be of the conventional construction of a trunk clamp with the ring part 10 pivotally mounted and drawn tightly against part 11 over which it is fitted.

The opposite front ends of the side arms are secured by the cross brace 6 which has any suitable means on its opposite ends for interfitting with the front ends of the side arms. Suitable means for interfitting the ends of the cross brace 6 is typified by hooks 13 on one of the members engaging with a socket 14 in the other member.

The hook and socket are constructed so that the parts will be securely fastened and maintained in fastened position by forcing the hooks into the sockets.

Supporting strips 15 for the bottom may be attached to and disposed near the bottom edges of the back and the side arms so that their top surfaces will be flush with the top edge of the cross brace to provide equalized and even support for the bottom 5 which can be inserted in place on top of the supporting strips and the cross brace after the back, side arms and cross brace have been assembled, and the parts secured by the clamps 10 and 11.

From the above description, it will be readily understood that the parts may be assembled in position by fitting the hooked ends of the cross brace into the sockets adjacent the front ends of the side arms and clamping the rear ends of the side arms to the back. The parts may be as readily taken apart by loosening the clamps, and then disengaging the interfitting connections. The construction is such that any unskilled person may put the parts together and take them apart.

While I have described in detail the embodiment which has been shown for carrying the invention into effect, it will be understood that there may be various changes in details of construction without departing from the spirit of the invention.

I claim:

1. A knock-down seat comprising a back rest having opposite side pieces attached to its opposite edges with the bottom ends of said pieces terminating above the bottom edge of the back rest to provide overhanging abutments, opposite side arms each having one end detachably connected to one of the side edges of the back rest beneath the abutments, a cross piece between the opposite ends of the side arms, means for detachably connecting said opposite ends of the side arms to the cross piece, a bottom supporting means provided on the back rest, and a removable bottom having one end seated upon the bottom supporting means and its opposite end supported on the cross piece.

2. A knock-down seat comprising a back rest having opposite side edge pieces attached to its opposite edges with the bottom ends of said side pieces terminating above the bottom edge of the back rest to provide overhanging abutments, opposite side arms each having one end

connected to one of the side edges of the back rest beneath the abutments, a dowel between each of the abutments and the adjacent end of the side arm, a cross piece between the opposite ends of the side arms, means for clamping said opposite ends of the side arms to the cross piece, a bottom supporting means disposed in position to support one end of a bottom, and a removable bottom having one end supported on the bottom supporting means and another end supported on the cross piece.

3. A knock-down seat comprising a back rest having opposite side edge pieces attached to its opposite edges with the bottom ends of said side pieces terminating above the bottom edge of the back rest to provide overhanging abutments, opposite side arms each having one end connected to one of the side edges of the back rest beneath the abutments, a dowel between the abutments and the said ends of the side arms, a cross piece between the opposite ends of the side arms, hooks for connecting the cross piece to said opposite ends of the side arms, a clamp for securing the side arms to the back rest, a bottom supporting means disposed in position to support one end of a bottom, and a removable bottom having one end supported on the bottom supporting means and another end supported on the cross piece.

4. A knock-down seat comprising a T-shaped back rest, opposite side pieces detachably connected to the opposite edges of the back rest with the rear ends of the side arm pieces abutting the edges of the back rest below its overhanging portions, a cross front piece detachably connected to the front ends of the side arm pieces, means for detachably connecting the back rest and side arm pieces, a bottom supporting means mounted in position remote from the cross piece and a removable bottom having one end seated on the bottom support means and its opposite ends supported on the front cross piece.

5. A knock-down seat comprising a back rest, opposite side arm pieces, means for detachably connecting the back rest and the rear ends of the side arm pieces, a front cross piece between the front ends of the side arm pieces, means for detachably connecting the cross piece to and from the side arm pieces, readily releasable means for clamping the back rest and the side arm pieces, and a bottom supporting means remote from the cross piece mounted in position to support one end of a removable bottom when its opposite end is supported on the cross piece.

6. A knock-down seat as set forth in claim 5 having a removable bottom, and the bottom supporting means mounted on the back and side arms for cooperating with the cross piece for supporting the removable bottom.

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