United States Patent

Grant, Sr.

[15] **3,658,381**

[45] **Apr. 25, 1972**

[54] FURNITURE WITH DISCONNECTABLE PARTS

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[22] Filed: **Feb. 4, 1970**

[21] Appl. No.: **8,535**

[52] **U.S. Cl.** **297/440**

[51] **Int. Cl.** **A47c 7/00**

[58] **Field of Search** 297/440, 442, 416

[56] **References Cited**

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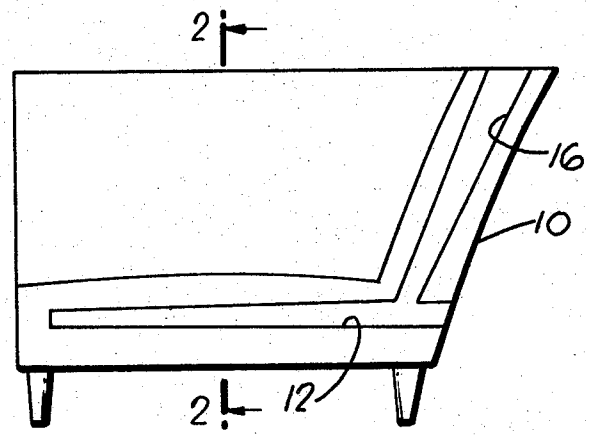
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[57] **ABSTRACT**

Furniture such as chairs, sofas and tables are provided with parts having slides or rails which can be assembled by interconnecting slides and rails and can be disassembled by disconnecting slides and rails.

1 Claims, 7 Drawing Figures



PATENTED APR 25 1972

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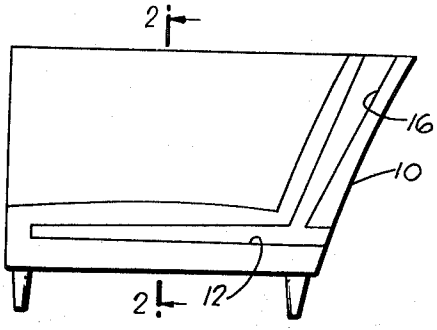


Fig. 1.

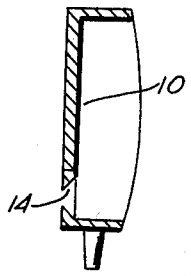


Fig. 2.

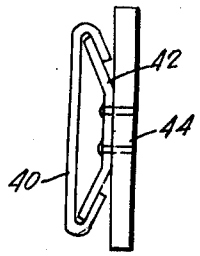


Fig. 8.

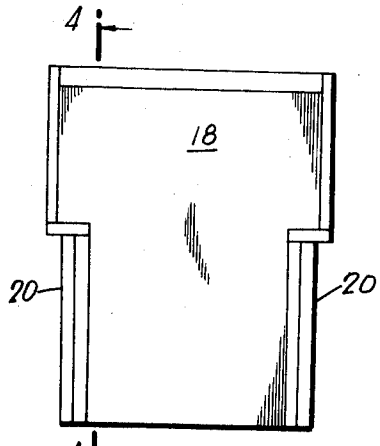


Fig. 3.

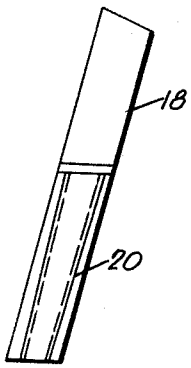


Fig. 4.

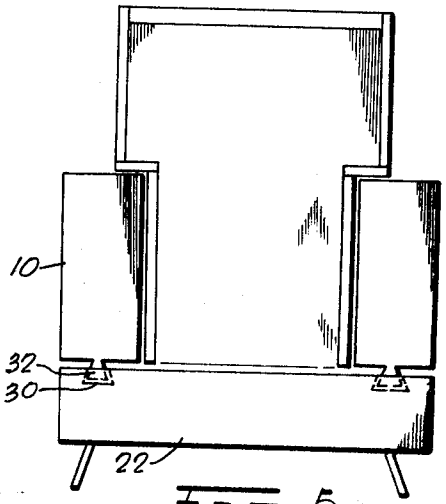


Fig. 5.

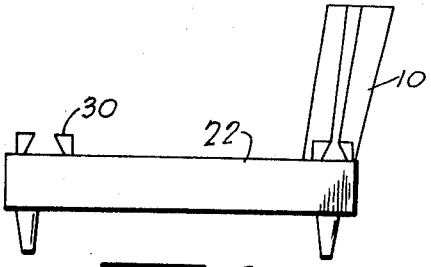


Fig. 6.

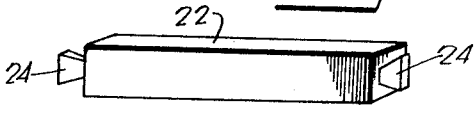


Fig. 7.

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FURNITURE WITH DISCONNECTABLE PARTS

SUMMARY OF THE DISCLOSURE

In my invention, a piece of furniture is formed of a small plurality of constituent parts which are each provided with one or more slides or rails. Each slide is adapted to fit slidably and removably into a corresponding rail whereby the piece of furniture is assembled. Alternatively, the assembled piece of furniture can be easily taken apart by removing each slide from its associated track by sliding same apart.

The advantages of my invention are considerable. Furniture can be shipped and stored apart, taking up slightly more than 50 percent of the space. Each part can be covered separately with plastic to prevent damage. Furniture can be covered with considerable less material, and covered in half the time. Furniture can be taken apart in a few seconds in the event of a spark or cigarette getting into it. Furniture can be moved very easily by the housewife by taking apart, and upholstered by her if necessary.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. **1** is a side view of an arm of a chair as used in my invention;

FIG. **2** is a view taken along line **2—2** in FIG. **1**;

FIG. **3** is a front view of the back of a chair as used in my invention;

FIG. **4** is a view taken along line **4—4** in FIG. **3**;

FIG. **5** shows in front view a chair assembled in accordance with my invention;

FIG. **6** shows a partially assembled chair in accordance with my invention;

FIG. **7** shows the seat of a chair as used in my invention; and

FIG. **8** shows a modified type of slide-rail connection used in my invention.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

Referring first to FIGS. **1–4** and **7**, arms **10** of a chair can have interior horizontal rails **12** extending from front to rear and in cross section having an opening **14** having the shape of a truncated V or trapezoid. These arms can also have vertically inclined rails **16** of similar construction at the rear interior. A back **18** can have inclined slides **20** at opposite edges, these slides having the same contour as opening **14**. When slides **20** engage rails **16**, the chair is partially assembled. Seat **22** has slides **24** at opposite sides, slides **24** having the same contour as rails **12**. When slides **24** engage rails **12**, the chair is completely assembled.

An alternate structure as shown in FIGS. **5** and **7** uses a seat **22** with horizontal rails **30** engaged by bottom slides **32** of arms **10**.

FIG. **8** shows a modified type of connection using rails **40** and slides **42**, the slides being secured to a part **44**.

While I have described my invention with particular reference to the drawings, such is not to be considered as limiting its actual scope.

Having thus described this invention, what is asserted as new is:

1. A disconnectable chair comprising

A. a seat unit having
   1. a first side edge surface;
   2. a second side edge surface opposite the first side edge surface and cooperating with the first side edge surface to define the seat unit width;
   3. a front edge surface;
   4. a rear edge surface opposite the front edge surface and cooperating with front edge surface to define the seat unit length;
   5. a lower surface with a plurality of leg members extending downwardly therefrom; and
   6. an upper surface opposite the lower surface and having thereon means defining first and second dovetail slots, each dovetail slot closely adjacent an uniquely associated side edge surface and with a center axis substantially parallel the associated side edge surface and extending substantially the length of the seat unit and extending to one of said front edge surface and said rear edge surface and having a uniform taper over the dovetail slot length with a larger cross-section adjacent said one of said front edge surface and said rear edge surface;

B. first and second arm units, each having
   1. a front edge surface;
   2. a rear edge surface;
   3. an upper surface;
   4. a bottom surface opposite said upper surface and cooperating with the upper surface to define the arm unit height and including means defining a projection adapted to mate with a dovetail slot of the seat unit upper surface, permitting engagement of the projection in the dovetail slot to secure said arm unit to said seat unit;
   5. an exterior side surface; and
   6. an interior side surface having thereon means defining a dovetail slot located adjacent the arm unit rear edge surface and extending from the arm unit upper surface at least a portion of the height of the arm unit, said arm unit dovetail slot being uniformly tapered over the length thereof and having a larger cross-sectional area at said arm unit upper surface; and

C. a back unit having
   1. an upper edge surface;
   2. a lower edge surface opposite said upper edge surface and cooperating with the upper edge surface to define the back unit height;
   3. a rear surface;
   4. a front surface;
   5. a first side edge surface having means defining a projection adapted to mate with the dovetail slot on the interior side surface of the first one of the first and second arm units, permitting the dovetail slot to secure said back unit to said first arm unit; and
   6. a second side edge surface opposite said first side edge surface and cooperating with the first side edge surface to define the width of the back unit and including thereon a projection adapted to mate with the dovetail slot on the interior side surface of the second one of the first and second arm units, permitting the dovetail slot to secure said back unit to said second arm unit.

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