March 4, 1969 P. O. HEYER 3,430,588

NESTABLE STOOLS

Filed June 16, 1967

FIG. 1

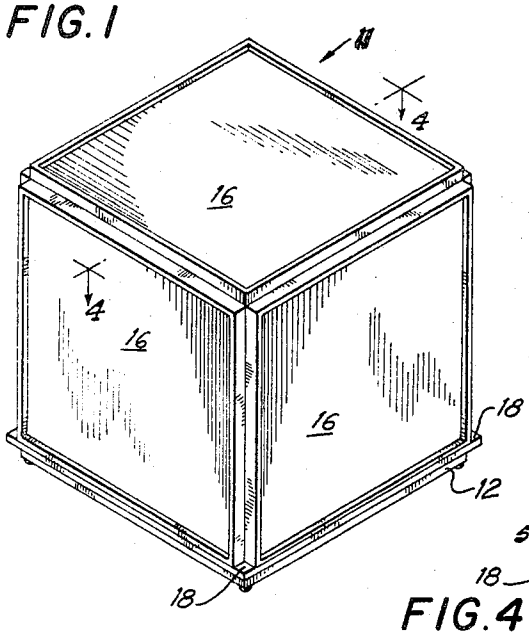



FIG. 2

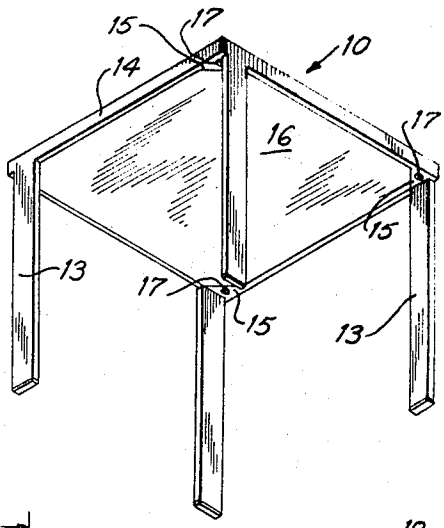



FIG. 3

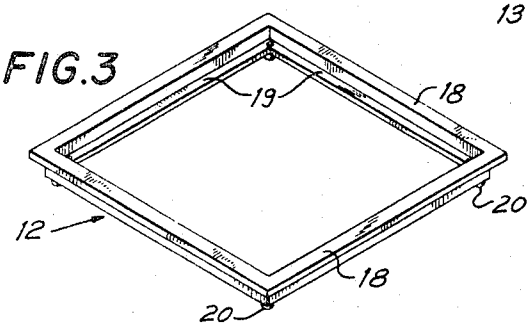



FIG. 4

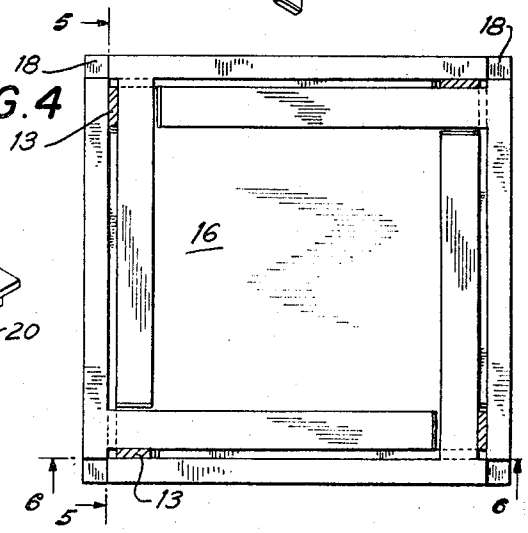



FIG. 5

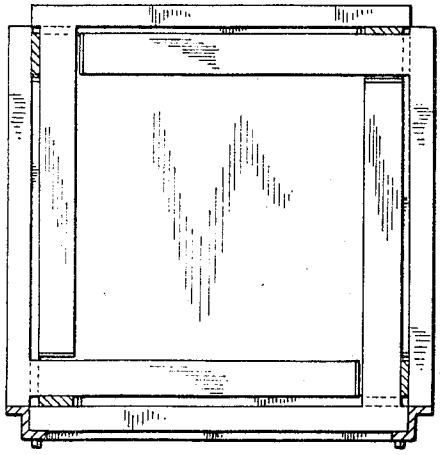
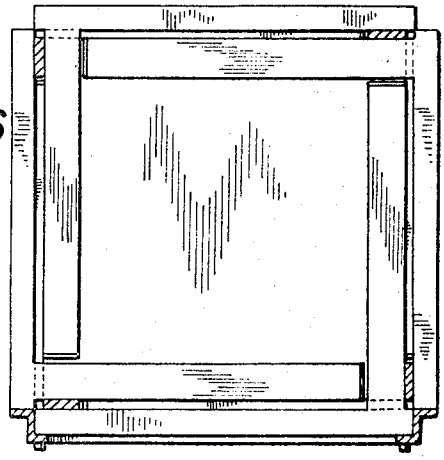


FIG. 6



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# NESTABLE STOOLS

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U.S. Cl. 108—91 4 Claims
Int. Cl. A47b 7/02; A47c 3/04

## ABSTRACT OF THE DISCLOSURE

This invention relates to six identical stools each having four legs disposed in a pinwheel sequence, said stools being nestable to form a cube. Also, a base or tray for the cube may be provided to keep the cube furniture away from the floor surface.

Nestable tables forming a cube are known to the prior art but the construction thereof does not require six identical stools or tables, so that the nesting procedure must follow a predetermined coded plan or system.

This invention uses identical stools so that no coding or numbering of the stools is required as in the prior art.

This invention is illustrated in the accompanying drawing of an embodiment thereof and in which;

FIG. 1 is a perspective view of the assembled cube disposed upon a base or tray,

FIG. 2 is a bottom perspective view of a single stool,

FIG. 3 is a perspective view of a tray for holding the assembled cube away from the floor,

FIG. 4 is a section view taken on line 4—4 of FIG. 1,

FIG. 5 is a section view taken on line 5—5 of FIG. 4, and

FIG. 6 is a section view taken on line 6—6 of FIG. 4.

The embodiment shown herein is made of metal, preferably of steel, having a laminated wood panel secured thereto by screws. However, the stools may be made of lightweight alloys such as the magnesium or aluminum alloys or it may even be made of wood. Also, the stools are provided with square cushions which are stored within the cube before inserting the final stool to form the closed cube.

An important feature of this invention is the disposing of the legs of said stools in a successive sequence or pinwheel fashion, so that each leg is located around the corner from its previous leg. Where flat or planar legs are used, the planes of the successive legs are perpendicular to one another.

Turning to the drawing, a plurality of four legged stools **10** are assembled in a nested configuration to form a cube **11** adapted to be disposed on a base or tray **12**.

The individual stools **10** of this invention are identical, so that they are interchangeable in the nesting procedure, an important feature of this invention, since it results in an easy and rapid nesting of the stools into a cube.

The metal work of the stools are preferably of integral or one-piece construction, with the legs **13** being welded to the square frame **14**. The frames **14** are provided with welded in place triangular plates **15** in each of the corners at the frame bottom.

A square panel **16**, preferably of laminated wood, of suitable thickness is disposed on the four triangular plates **15** and is secured thereto by wood screws **17**. As shown in FIG. 1, the top surface of panel **16** is disposed below the top edge of frame **14** so that a suitable square cushion (not shown) of foam rubber or the like, having the dimensions of the panel **16** may be placed on said panel and immovably against the recessed sidewalls of the frame.

In order to keep the nested cube away from the floor, a square tray **12** having a square recess adapted to receive a square frame **14** is used. The tray **12** is provided with a top square horizontal planar ledge **18** and with an inner square ledge **19** adapted to receive a square frame **14** with the bottom surface of the panel being in flush or planar relationship to the ledge **18** of tray **12**.



The tray **12** is preferably of frame construction and is provided with a central aperture. Footings **20**, preferably of plastic, are secured at each corner by screws. In lieu of footings **20**, casters may be used to give the tray and the cube thereon easy mobility.

In nesting the stools **10** onto the tray **12**, a first stool is disposed on the ledge **19** with its legs **13** disposed upwardly. A second stool **10** is then inserted so that its legs are at a right angle to the upright legs of the first stool. The edge **14** of the second stool rests on the edge **18** of the tray with the flat side of a leg **13** resting on the underside of the panel **16** of the first stool. Next a third stool is inserted, preferably in opposed relationship to the second stool. Next a fourth stool is inserted in one of the remaining two open sides. Then the fifth stool is inserted opposite to the fourth stool. Now the cushions are placed on the panel **16** of the first stool in the cavity formed by the other four stools. Lastly, the sixth or top stool is inserted opposite the first stool to close the cavity and thus form the cube (FIG. 1).

Since the individual stools can be nested legwise in but one manner relative to one another due to the pinwheel construction, it is possible to nest the stools in place in only one way. In other words, it is impossible to nest the stools wrongly since the legs of adjacent stools slide past one another in only one manner. Thus the sections in FIG. 4, FIG. 5 and FIG. 6 of the cube are identical.

This invention uses only identical stools. Of course, the stools in the absence of cushions can be used as a set of six tables. Clearly, this invention is of a broad scope and is not limited to the illustrations shown and described herein.

I claim:

1. A furniture cube formed from six identical stools, each stool comprising a top frame and four depending legs, said frame having a square configuration, and said legs secured to said frame adjacent a corner thereof in a successive pinwheel sequence.

2. A composite cube formed from six identical stools, each stool having a square top frame, each side of which is provided with a depending leg adjacent a respective corner, said legs being disposed in a successive pinwheel manner whereby said cube is assembled in only one way.

3. The cube of claim 2 comprising a square tray having a square recessed ledge therein adapted to receive a stool frame of said cube.

4. The cube of claim 3 comprising legs of planar construction.

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