Aug. 14, 1962 R. BROWNE 3,049,388

PANELED TABLE TOP

Filed Sept. 8, 1958

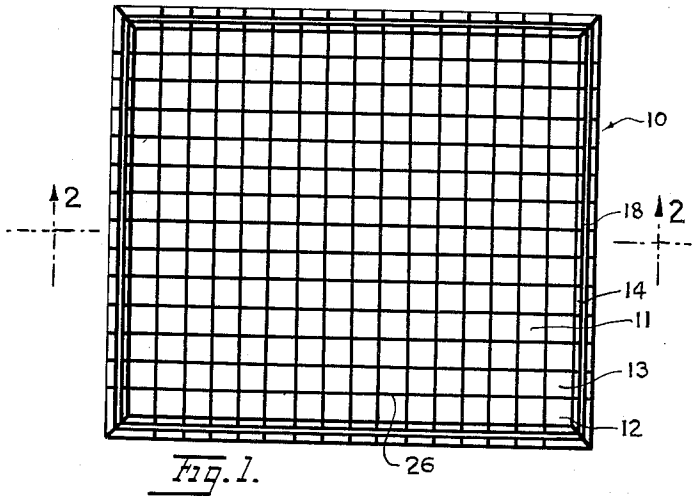


Fig. 1.

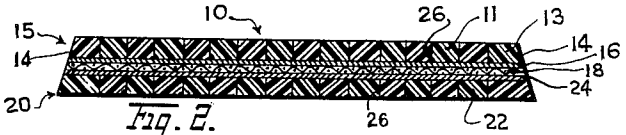


Fig. 2.

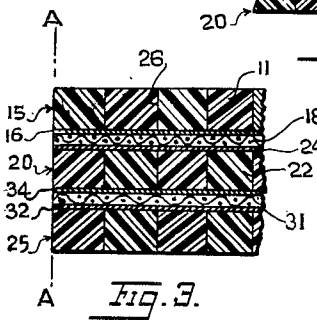


Fig. 3.

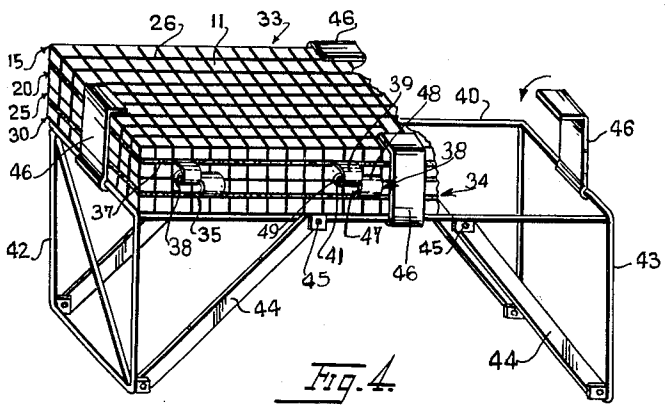


Fig. 4.

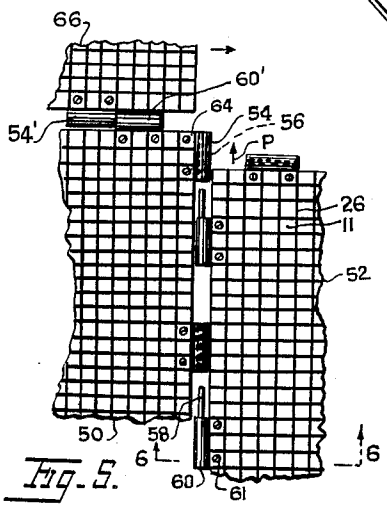


Fig. 5.

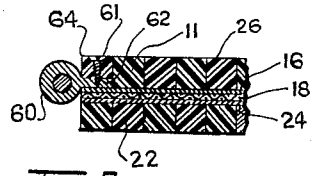


Fig. 6.

INVENTOR.
ROBERT BROWNE
BY
ATTORNEY

United States Patent Office 3,049,388
Patented Aug. 14, 1962

3,049,388

PANELED TABLE TOP

Robert Browne, 2420 7th Ave., New York, N.Y.

Filed Sept. 8, 1958, Ser. No. 759,590
1 Claim. (Cl. 311—106)

This invention concerns laminated flexible panel structures useful for table tops, floor covers, game boards, skating rinks, and the like.

The panels embodying the invention are useful indoors or out-of-doors. They can be used in homes, factories, and institutions as temporary or permanent floor covers requiring smooth, flexible panels. Out-of-doors they can be used as mats in patios, tent floors, etc. The panels are adapted for use underfoot as floor members and may also be used on suitable supports as picnic or game tables, theatrical stages, etc.

According to the invention there is provided a plurality of small blocks or plates made of hard fiber composition, plastic such as vinyl or acrylic, aluminum, magnesium and other metals, wood, linoleum, and the like. The blocks are assembled in a rectangular flat layer and cemented on one side to one side of a woven cloth sheet such as canvas or linen or other fabric. Another similar flat layer of blocks is assembled and cemented to the other side of the cloth sheet. The blocks are preferably square and of the same size. The blocks are arranged so that each block is superposed over another block in the lower layer with their edges in registration.

The cloth sheet is somewhat elastic in the directions of its length and width. The warp and woof of the cloth should be disposed parallel to the registering edges of the blocks if the cloth has maximum elasticity in this disposition. For some fabrics maximum elasticity extends in the bias of the fabric so that this fabric should be arranged with its bias parallel to the directions of registering edges of the superposed aligned blocks. The resulting structure is a flat highly finished or polished panel which is flexible underfoot when used as a floor member. The fabric yields slightly longitudinally and in width in its plane so that the several blocks or plate which are not attached to each other can move slightly. The fabric sheet also serves as a cushion between the two layers of blocks. Two or more layers of blocks can be used with a fabric sheet disposed alternately between the layers. The panel is reversible since the polished faces of the blocks are exposed at both sides. Two or more panels can be attached together by hinges or similar means for covering a large area such as a dance floor, skating rink, basement floor, or work area.

It is therefore a principal object of the invention to provide a panel structure which is formed of a plurality of layers of blocks attached to a fabric sheet disposed between the layers with individual blocks being separate from each other.

A further object is to provide a laminated panel having a plurality of layers of rectangular plates secured in juxtaposition to a fabric sheet.

A still further object is to provide a flexible panel formed of rigid pieces of hard, highly polished material, with the flexibility of the panel being provided by an interposed canvas sheet.

A still further object is to provide a panel of the character described with hinge means for attaching the panel to another one of similar character.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claim in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

FIG. 1 is a plan view of a panel embodying the invention.

FIG. 2 is a sectional view taken on line 2—2 of FIG. 1.

FIG. 3 is a fragmentary sectional view on an enlarged scale of another form of panel accordance to the invention.

FIG. 4 is a perspective view of a portion of another panel arrangement supported on a collapsible frame and providing a table top for the frame.

FIG. 5 is a fragmentary plan view of two panels provided with hinge means for attachment together, parts being shown detached.

FIG. 6 is a sectional view on an enlarged scale taken on line 6—6 of FIG. 5.

Referring to the drawings, there is shown in FIGS. 1 and 2 a panel 10 formed of a plurality of rectangular or square blocks or plates 11 disposed in a rectangular grid array. The outer blocks 13 at their outer sides, and blocks 12 at the corners may be formed with outer beveled edges 14. The blocks are disposed in a flat layer 15 and are secured at their undersides by a layer of a flexible cement 16 to a woven cloth sheet 18. Another similar layer 20 of blocks 22 is attached by cement layer 24 to the underside of the cloth sheet. This sheet may be canvas, twill or other strong fabric. Blocks or plates 22 are the same size as blocks 11 and are arranged in superposed alignment with blocks 11. The blocks are formed of hard fiber composition plastic such as vinyl or acrylic, aluminum, magnesium and other metals, wood, linoleum and the like. The blocks form a panel with a flat highly finished or polished surface.

Juxtaposed sides 26 of the blocks are unattached so that they can move slightly in the planes of the layers 15 and 20 as the fabric 18 is compressed by forces imparted by persons walking or dancing on the panel. The effect experienced by one walking on this panel is most unusual. There is none of the mechanical shock experienced as when walking or dancing on a rigid floor. The panel floor feels resilient or flexible even though it does not flex upwardly but is only compressed.

If greater rigidity of the panel is desired a third layer 25 can be provided as shown in FIG. 3 with a further fabric sheet 32 which can be thicker than sheet 18, and further cement layers 31 and 34. The outer edge A—A of the panel can be flat and perpendicular to the planes of the layers rather than beveled as shown in FIGS. 1 and 2.

In FIG. 4, there are shown two panels, an upper panel 33 and a lower panel 34 in superposed relation. The upper panel comprises layers 15, 20, each being formed of juxtaposed blocks or plates, the layers being separated by a fabric sheet 37, the blocks being cemented to the sheet. The lower panel 34 comprises layers 25, 30, each layer being formed of juxtaposed blocks or plates and the layers being separated by a fabric sheet 35, the blocks being cemented to the sheet.

The upper and lower panels 33, 34, respectively, are connected by hinge constructions 38 along their sides so that they may be folded and readily transported. Each hinge construction includes an upper hinge leaf plate 39 secured at one end between the layers 15, 20 of the upper panel 33 and formed with an outer downwardly curved end terminating in a knuckle 41 positioned in alignment with the juncture between the upper and lower panels. The hinge construction further includes a lower leaf plate 47 secured at one end between the layers 25, 30 of the lower panel 34 and formed with an outer upwardly curved end terminating in a knuckle 48 aligned with the knuckle 41. A hinge pin 49 extends through the aligned knuckles. Two hinge constructions are shown but any number desired may be used.

The panel is shown mounted on a collapsible rectangu-

lar frame **40** to provide a taole top. This can be used as a game table or as a table of general utility. The frame **40** is supported on rectangular end frames **42**, **43** provided with detachable or pivotable braces **44** secured by removable pins **45**. On frame **40** are pivotally mounted L-shaped clamp members **46** which prevent the panel from sliding off the frame **40**.

In the form of the invention shown in FIG. 5, panels **50** and **52** are provided with hinges for detachably engaging the panels together. Hinge members **54** on panel **50** each has a passage **56** therethrough into which fits the pin **58** of hinge member **60** mounted on the outer edge of panel **52**. Screws **61** secure the hinge members to the panels. As shown in FIG. 6, the hinge members have laterally extending plates **62** which are disposed under the apertured end blocks **64** in which screws **61** are inserted and screwed into plate **62**. Blocks or plates **64** are thinner than blocks **11** to provide room for the apertured plates **62**. The panels can be attached by moving panel **52** with respect to panel **50** as indicated by arrow P in FIG. 5 so that the aligned pins **58** enter the aligned passages **56**. With the hinges so engaged it is possible to turn one panel over the other in folded condition for ease in storing and shipping, without the panels becoming disengaged. In normal use the hinge members will permit a plurality of panels to be attached together. Further hinge members **54'** similar to members **54** are shown on the ends of the panels for attachment of additional panels such as panel **66**, thereto by means of hinge members **60'** which are similar to members **60**.

It is to be understood that the blocks or plates **11** and **22** are made of light weight material and may be conveniently stored at any desired location in a container or readily placed in a vehicle for transportation even by women and children. Any number of cloth sheets and corresponding layers of blocks may be provided to form a laminated structure of any desired thickness.

A preferred size for blocks or plates **11** and **22** is about one inch square and one-eighth to one inch thick. Other sizes of blocks or plates can be used. Tempered fiberboard or vinyl plastic are preferred materials. The blocks can also be made of plywood and painted in desired decorative fashion.

If desired, the blocks or plates may have different colors which can be arranged to form checkerboards, and other game layouts.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claim.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

A paneled table top comprising a rectangular-shaped frame, a laminated panel construction supported on the frame, said panel construction including a pair of superimposed panels, each panel consisting of two flat rectangular layers and a cloth sheet therebetween, each of the layers composed of juxtaposed flat rigid plates, the plates of one layer having one side secured to one side of the sheet and the plates of the other layer having one side secured to the other side of the sheet, each plate in said one layer being superimposed on a plate in the other layer with edges of the superposed plates in registration, hinge members mounted on edges of adjacent layers of the superimposed panels, and L-shaped clamps hinged to opposite ends of the frame, hinge pins carried by said hinge members of one panel interlocking with said hinge members of the other of said panels, the other ends of the clamps engaging the outermost layer of plates for clamping the panels onto the frame.

References Cited in the file of this patent

UNITED STATES PATENTS

101,638	McAlister	Apr. 5, 1870
691,214	Webb	Jan. 14, 1902
1,173,678	Munro	Feb. 29, 1916
1,854,512	Heppes	Apr. 19, 1932
2,019,692	Mueller	Nov. 5, 1935
2,123,409	Elmendorf	July 12, 1938

FOREIGN PATENTS

20,538	Great Britain	Sept. 28, 1898
35,802	Switzerland	Dec. 6, 1905