United States Patent [19]

Loth

[11] **3,854,237**

[45] **Dec. 17, 1974**

[54] **TOY BUILDING BLOCK**

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[21] Appl. No.: **303,524**

[52] **U.S. Cl.** **46/26**
[51] **Int. Cl.** **A63h 33/10**
[58] **Field of Search** 46/16, 17, 25, 26, 24

[56] **References Cited**

UNITED STATES PATENTS

3,636,230	1/1972	Tacey	46/26 X
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[57] **ABSTRACT**

Each block of a set of blocks is formed as a cube with an integrally connected half cube section, so that, two blocks can be nested together to form a rectangle. Each block may be hollow and provided with a dowel receiving aperture in each plane surface. Short dowels or pins may be lodged in adjacent apertures to removably fasten adjacent blocks together.

4 Claims, 6 Drawing Figures

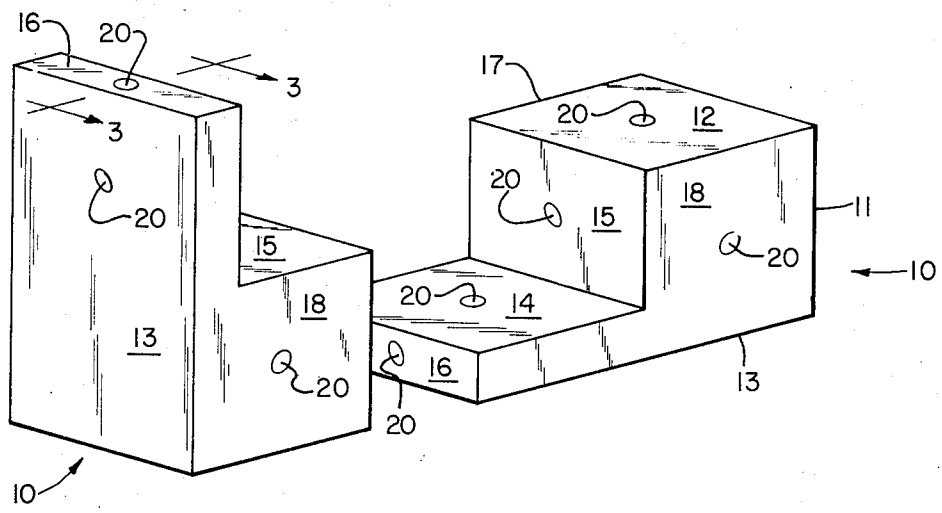
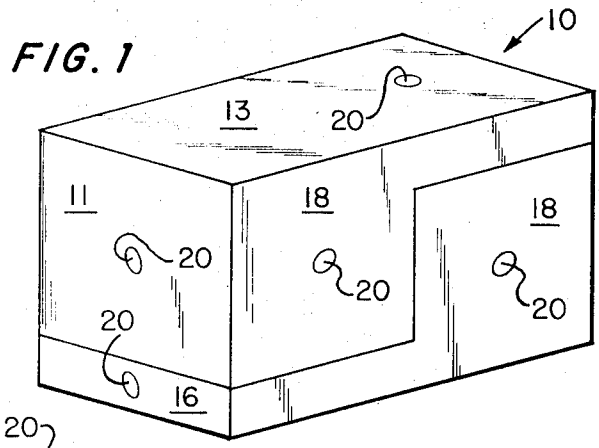


FIG. 1



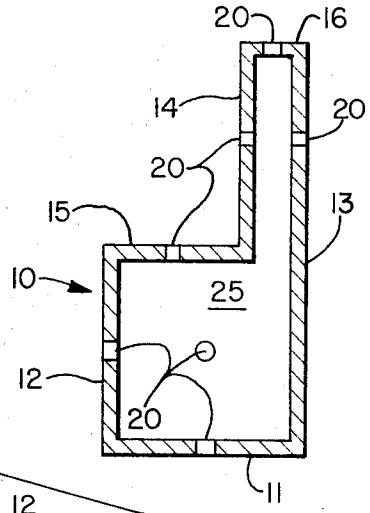


FIG. 3

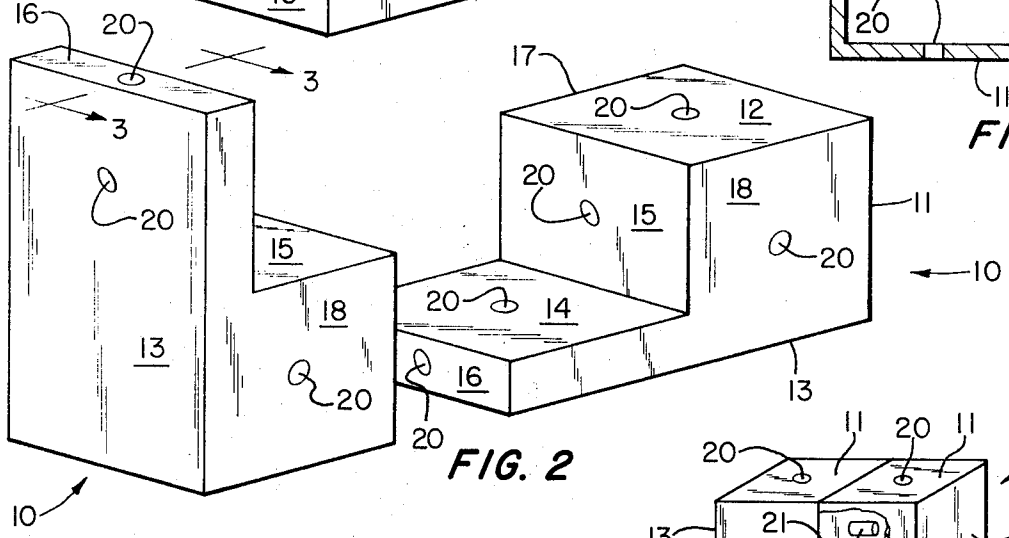


FIG. 2

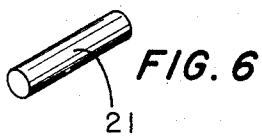


FIG. 6

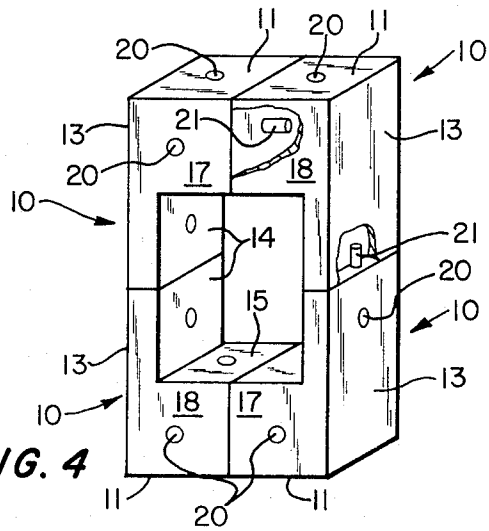


FIG. 4

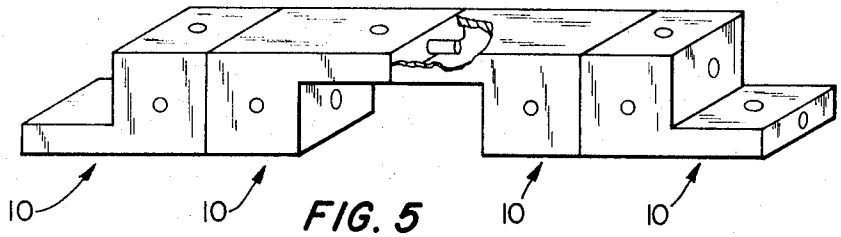


FIG. 5

TOY BUILDING BLOCK

This invention relates to modular design blocks and, more particularly, to a set of blocks of novel construction which can be nested together to form a multiplicity of different patterns.

An object of the present invention is to provide a set of blocks for easy construction, and taking apart by children, so they can create an infinite variety of designs and thereby exercise creative ability and amusement.

Another object of the present invention is to provide blocks for building furniture and the like, which is light in weight, for easy handling by children, strong, and inexpensive to manufacture, without limitation as to the material used to fabricate the blocks.

Other objects of the present invention will become apparent in part and be pointed out in part in the following specification and claims.

Referring to the drawings in which similar characters of reference refer to like parts:

FIG. **1** is a perspective view of two blocks nested together;

FIG. **2** is a perspective view of the blocks of FIG. **1**, shown taken apart;

FIG. **3** is a vertical cross sectional view taken on line 3—3 of FIG. **2**;

FIG. **4** is a perspective view, partially broken away, showing a structure which may be made by connecting a plurality of blocks of the present invention;

FIG. **5** is a view, similar to FIG. **4**, showing another structure which may be made by connecting a plurality of blocks of the present invention;

FIG. **6** is a perspective view of a dowel or connecting pin.

Referring to the drawings, the new and improved toy building block comprises a geometric modular figure having eight sides, generally indicated by reference numeral **10**. A back side **11**, square in shape and having an area created by a selected unit of measure, which may be approximately (by way of explanation and not limitation) 12 inches on each side of the square when used as children's furniture and approximately 3 inches on each side of the square when used as a building block. A top side **12** square in shape and at right angles to said back side **11** and having an area equal to the area of said back side **11**. A bottom **13** opposite and parallel to said top side **12** and at right angles to said back side **11**, rectangular in shape and equal to twice the area of said top side **12**. A platform face **14**, square in shape and equal in area to said top side **12**, parallel and opposite to said bottom **13**. An end wall **15** opposite and parallel to said back side **11** and located at right angles to said top side **12** and platform face **14**. Said end wall **15** being rectangular in shape and having an area approximately two thirds of the area of said back side **11**, to provide a recess area of cut-out in said block **10**. A front wall **16** parallel to said back side **11** and end wall **15** and at right angles to both said platform face **14** and bottom **13**. A left side **17** perpendicular to said top side **12**, and bottom **13**, platform face **14**, end wall **15**, back side **11** and front wall **16**. A right side **18** opposite and parallel to left side **17**.

A plurality of aperatures **20** are provided with at least one aperature in each of the eight sides. A dowel or pin **21** is adapted to be inserted into two adjacent aperatures **20** as shown in FIGS. **4** and **5**.

Building block **10** may be fabricated from any structural material. When plastic is used and the module block **10** molded, a core may be used to provide a hollow area or chamber **25**, as shown in FIG. **3**.

In use, a multiple number of blocks **10** as shown in FIG. **2**, may be nested as shown in FIG. **1** or blocks **10** may be arranged in creative fashion as shown in FIGS. **4** and **5** with pins **21** removably inserted in aligned aperatures to removably secure the blocks **10** together.

Having shown and described a preferred embodiment of the present invention by way of example, it should be realized that structural changes could be made and other examples given without departing from either the spirit or scope of this invention.

What I claim is:

1. A set of blocks, each block of which comprises a geometric figure having eight sides, a back side square in shape and having an area with a selected unit of measure, a top side square in shape and at right angles to said back side and having an area equal to the area of said back side, a bottom opposite and parallel to said top side and at right angles to said back side, rectangular in shape and equal to twice the area of said top side, a platform face, square in shape and equal in area to said top side, parallel and opposite to said bottom, an end wall opposite and parallel to said back side and located at right angles to said top side and platform face, said end wall being rectangular in shape and having an area approximately two-thirds of the area of said back side, to provide a recess area in said block, a front wall parallel to said back side and end wall and at right angles to both said platform face and bottom, a left side perpendicular to both said top side and bottom and a right side opposite and parallel to said left side.

2. The structure of claim **1** wherein a plurality of apperatures are provided, at least one in each of the eight sides.

3. The structure of claim **1** wherein said toy building block is hollow.

4. A set of blocks, each block of which comprises the structure of claim **2**, wherein a set of blocks form elements of a modular unit wherein said blocks nest together, dowel pins aligned and insertable in adjacent apertures of parallel blocks to removably secure said blocks together, whereby a multiplicity of different patterns can be formed.

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