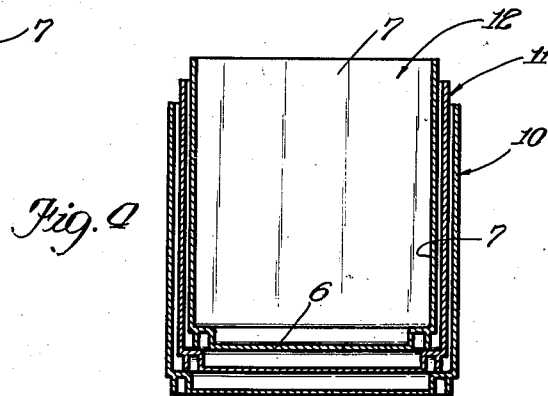
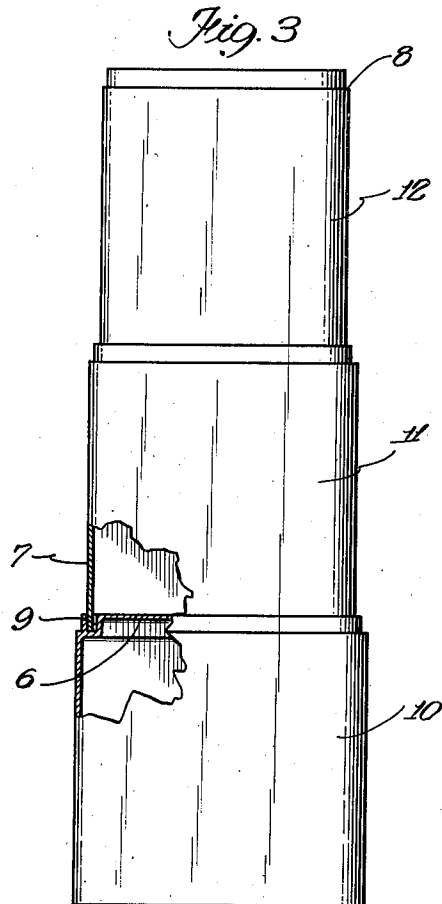
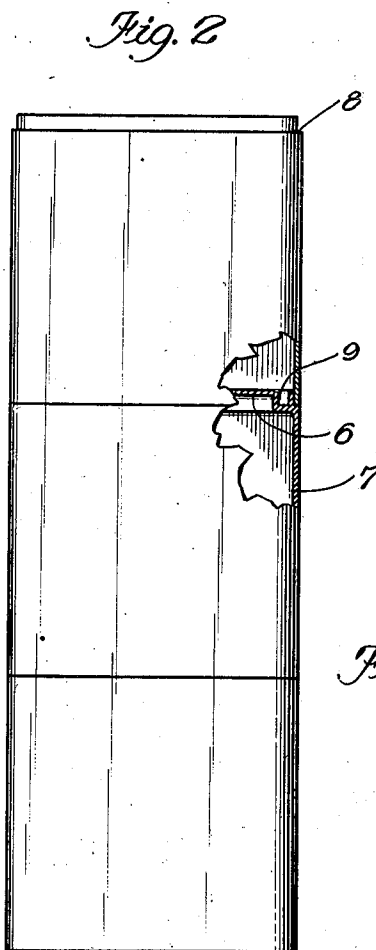
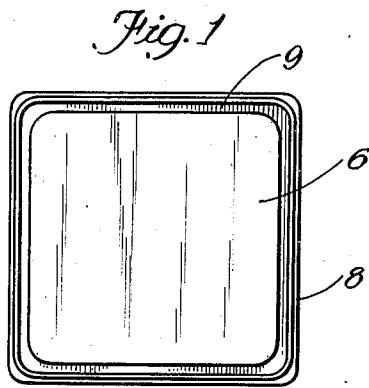


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N. I. PAULSON
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6 Inventor:
Nili I. Paulson
By: Leslie W. Trice
Attorney

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TOY BUILDING BLOCK

Nils I. Paulson, Chicago, Ill., assignor, by mesne assignments, to Elgo Plastics, Inc., Chicago, Ill., a corporation of Illinois

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3 Claims. (Cl. 46—25)

My invention relates to toy building blocks and one of my aims is to provide an improved hollow toy building block open at one end and closed at its other end by an end wall integrally formed with the side walls.

It is another object of my invention to provide improved toy building blocks which will aid in developing a child's ability to differentiate between colors and between blocks varying in size and weight.

A further object of my invention is to provide toy building blocks which will cooperate one with another in such manner that, when the blocks are used to erect a column, any one of the blocks of the column will be prevented from turning or shifting laterally with respect to the blocks engaged by it, and thereby increase greatly the stability of the column.

My improved blocks are furnished in sets, and it is another object of my invention to make the blocks of such relative transverse size that columns uniform in transverse size and having sides generally straight, or columns gradually diminishing in transverse size and having sides generally tapered, or a column one section of which has generally straight sides while another section has sides generally tapered may be built as desired, thereby increasing the usefulness of the blocks and the interest of a child in building columns of different designs.

It is a further object of my invention to provide as a new article of manufacture a hollow building member open at one end and closed at its other end and having its end wall integrally formed with the side walls of a suitable molded plastic material.

My invention consists in the novel constructions and arrangements to be hereinafter described and claimed for carrying out the above stated objects and such other objects as will appear from the following description of certain preferred embodiments illustrated in the accompanying drawing, wherein—

Fig. 1 is a plan view of a building member or block embodying the principles of my invention;

Fig. 2 is a side view of a column of blocks similar to that shown in Fig. 1, a portion of the column being broken away to show how one block engages an adjacent block;

Fig. 3 is a side view of a column of blocks similar to that shown in Fig. 1 but of gradually diminishing or graduated transverse size, the column having generally tapered sides; and

Fig. 4 is a sectional view of the blocks shown in Fig. 3 nested one within another.

Like characters of reference designate like parts in the several views.

Each block is hollow, being open at one end and closed at its other end by an end wall 6 integrally formed with the side walls 7. In the arrangement shown, the blocks have four side walls each being disposed at right angles to the adjacent walls.

Each building member exteriorly and adjacent the margin of its end wall is formed so as to provide a continuous ledge 8 as shown, which makes it possible to place the ends of the side walls at the open end of a building member of the same transverse size on the ledge in the building of a column having straight or parallel sides as shown in Fig. 2. By the use of a considerable number of such building members, a column of a substantial height may be erected, and it will be appreciated that the engagement at its open end of one block with the ledge of the block engaged by it makes it impossible for the blocks of the column to turn or to shift laterally relative to each other.

As is shown in the drawing, the end wall 6 of each block is formed so as to provide continuous outwardly open grooves 9 extending about the outer margin of the end wall. When some of the building members are of gradually diminishing transverse size, as the blocks 10, 11 and 12 shown in Figs. 3 and 4, they may be placed one on top of another with the ends of the side walls at the open end of a member, such as the member 11, disposed within the groove 9 of the block 10. Blocks of such construction may be used for building a column of a substantial height and having side walls generally tapering or converging from the base to the top of the column. Blocks of this type also have the advantage that a block of small transverse size may be nested within the next larger block as shown in Fig. 4. It will also be appreciated that with a relative large set of such blocks, that is to say, a number of blocks of each size, columns or column sections of many different designs may be built. For example, a column section of several blocks of the same transverse size having straight sides may be built, on the top of which may be built a second column section of several blocks of smaller but uniform transverse size, and on the top of the second column section an additional column section of several blocks may be built, and the latter section may be of blocks of smaller but uniform transverse size (as compared with the blocks of the second section) or of gradually diminishing or graduated transverse size.

In the production of my improved blocks I contemplate molding them of a suitable plastic material. I prefer to use a synthetic resinous material such as cellulose acetate, more particularly a material such as that commonly known as "Tenite."

Building members molded of a material such as I have mentioned have many advantages. The material is obtainable in many different colors. It is non-toxic, tasteless and odorless. The material is tough and durable and blocks made of it will stand considerable rough usage without damage. The material is not so brittle that it will easily crack even under substantial pressure such as might be applied by a child stepping on one side of a building member at or adjacent its open end. The material is light in weight and has substantial strength even when the side walls are quite thin, say .040" in thickness. The material is not cold or hot to touch. The material is homogeneous in color and requires no painting or other surface coating and, therefore, no portion of a wall is likely to chip, scale or peel off. Walls of the thickness mentioned will spring back into normal shape should a child step on or apply pressure to opposing side walls as by squeezing. The material is practically indestructible, even burning very slowly if a flame is applied to it. Blocks made of such material do not expand or contract to any substantial extent because of changing atmospheric conditions.

My improved building members are safe for even very young children to use, and the building members readily lend themselves to many different building operations. When blocks of several different colors are supplied in a set, a child readily learns to harmonize or differentiate between the different colors. When the building members are made in gradually diminishing or graduated transverse sizes a child playing with them readily learns to differentiate between the different sizes and becomes accustomed to the differences in weight between a block of relatively small transverse size as distinguished from a block larger in transverse size. A hollow block is also useful as a measure for sand. It will be appreciated that the exterior surface of the end wall for example may be molded so as to show in relief any desired object, and when that is done the closed end of a block may be used to produce an impression of the object in a material such as wet sand.

I wish it to be understood that my invention is not limited to the specific constructions shown and described, except so far as certain of the claims may be so limited, as it will be apparent to those skilled in the art that changes in the

constructions and arrangements may be made without departing from the principles of my invention.

I claim:

1. In a set of hollow toy building members each being of graduated transverse size for nesting one within another and for the building of a column having generally tapered sides, a new article of manufacture comprising a toy building member open at one end and having an end wall and side walls all integrally formed of molded plastic material, said end wall having exterior groove means to receive the ends of the side walls at the open end of a similar member of a transverse size adapted to nest within said first member.

2. In a set of hollow toy building members some being of uniform cross-sectional size and some being of varying cross-sectional size and smaller than others for nesting one within another for the building of columns, some columns having straight sides and some having generally tapered sides, a new article of manufacture comprising a toy building member open at one end and having an end wall and side walls all integrally formed of molded plastic material, said member adjacent the margin of said end wall having ledge means to support or be supported by the ends of the side walls at the open end of a similar member of the same cross-sectional size, and said end wall having exterior groove means to receive the ends of the side walls at the open end of a similar member of a smaller cross-sectional size adapted to nest within said first member.

3. In a set of hollow toy building members some being of uniform cross-sectional size and some being of varying cross sectional size and smaller than others for nesting one within another for the building of columns, some columns having straight sides and some having generally tapered sides, a new article of manufacture comprising a toy building member open at one end and having an end wall and side walls all integrally formed of molded plastic material, said member adjacent the margin of said end wall having ledge means to support or be supported by the ends of the side walls at the open end of a similar member of the same cross sectional size, and said end wall having laterally spaced and outwardly extending flanges defining groove means for receiving the ends of the side walls at the open end of a similar member of a smaller cross sectional size adapted to nest within said first member, the exterior surface of the central or main portion of said end wall being substantially flush with the outer edges of said flanges.

NILS I. PAULSON.