PATENT SPECIFICATION

587,206

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(Patent of addition to No. 529,580 dated April 17, 1939.)

Complete Specification Accepted: April 17, 1947.

COMPLETE SPECIFICATION

Improvements in Toy Building Blocks

I, HARRY FISHER PAGE, a British Subject, of 66, Barkston Gardens, Kensington, London, S.W.5, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to toy building blocks and consists in an improvement in or modification of the invention claimed in the Specification of my prior Patent No. 529,580.

According to my said prior Specification there is provided a toy building block or like element of hollow form with a plurality of bosses or like projections on the face opposite the open face, the said bosses being disposed so as to engage within the inner surfaces of the lateral walls of a superimposed block and prevent lateral movement. The block particularly described by way of example in my said prior Specification is of cubical form and has four bosses, each boss being situated within a square quarter section of the cube face, the bosses being disposed approximately at the corners of an imaginary square to meet the four sides of such square.

The present invention aims at providing a toy building block or like element having the aforesaid manner of interlock of upper and lower blocks but which is of greater length than width and has a correspondingly greater number of bosses lengthwise than crosswise, thus providing for interlock of an upper and lower block by at least four bosses and at the same time presenting at least two additional bosses for locking engagement in the cavity of a third block.

According to this invention, a toy building block or like element comprises a hollow, elongated, parallel-sided body, the cavity therein being open at one face of the block and having a configuration corresponding to the external configuration of the said block face, two longitudinal rows of bosses provided and symmetrically disposed on the face opposite the open face, there being more than two bosses in each row in correspondence with the length of the block, the said bosses of the two rows being arranged in transverse pairs and the overall dimension over each pair closely approximating to the width of the cavity in the block so that when the bosses engage into the cavity in one or more superimposed identical blocks to effect interlock, relative lateral displacement of the blocks will be prevented.

Two blocks interlocked by the use of four bosses can be arranged either in the same plane or else disposed at right angles to one another, each block extending from the zone of engagement to provide for boss-and-cavity engagement with other blocks. Thus corner and T-joints can be built, and in the case of a simple wall the elongated form of the block enables conventional bonding of bricks to be simulated and realistic effects to be obtained. Further, by reason of their appreciable length, certain blocks can be caused to overhang window, doorway and like openings in the built-up toy structure and there will be no risk of collapse due to the interlock engagement of said blocks with adjacent blocks under the weight imposed from above.

A preferred form of toy building block according to the invention, and examples of the manner of using same, are illustrated in the accompanying drawings, wherein:—

Figure 1 is a perspective upper view of the block;

Figure 2 is a perspective underneath view;

Figure 3 is a cross section;

Figure 4 is an inverted plan;

Figure 5 is a part-sectional elevation showing interengaged blocks of two courses;

Figure 6 is a part-sectional plan of a wall corner formed from the blocks;

Figure 7 is a part-sectional plan of a T-joint formed from the blocks; and

Figure 8 is an elevation of a wall built from the blocks and having a window opening.

The block illustrated comprises a rectangular hollow body 10 having a length which is double its width. The cavity 11

within the block is open to the bottom of same and has a configuration corresponding to the external rectangular form of the block, the latter having a relatively thin continuous wall. On its upper face the block is formed integrally with two longitudinal rows of bosses 12 which may be circular as shown or of other suitable shape. The bosses 12 are symmetrically disposed as shown and are uniformly spaced both longitudinally and transversely on the block. There are four bosses in each longitudinal row, those of one row being transversely aligned with those of the other row to provide a number of pairs.

The overall width across each pair of bosses 12 closely approximates to the width of the cavity 11 so that when said bosses engage into the cavity 11 in one or more superimposed identical blocks, relative lateral displacement of the blocks will be prevented. The overall length of each longitudinal row of bosses likewise closely approximates to the length of the cavity 11.

Figure 5 illustrates how a model wall can be built up to give a half-bond effect of a brick wall, the cavity of each block (except those in the lowest course) engaging over four bosses of one block and four bosses of the block next thereto to provide interlock. Or the cavity of a block may engage over six bosses of a lower block and two bosses of the block next thereto in providing a differently staggered bond.

Figure 6 shows how a block 10*a* can serve to connect blocks 10*b*, 10*c* meeting one another at right angles to form a corner, four of the bosses of block 10*a* being engaged into the cavity of block 10*b* and the other four being engaged into the cavity in block 10*c*, the latter in turn providing locking engagement for block 10*d*.

Figure 7 shows how a block 10*e* can engage over two pairs of bosses provided on blocks 10*f* and 10*g* respectively, and will serve to lock same together as well as providing locking engagement for a block 10*h* in forming a T-joint.

The disposition of the bosses on the block is such that in building any of the wall structures above described, a block will drop freely over the bosses of the lower blocks, such bosses reaching intimately close to the side or end walls of the upper blocks so as to prevent relative displacing movement in either a longitudinal or a transverse direction.

In Figure 8 it is shown how two blocks 10*j* and 10*k* can be caused to overhang a window opening 13. Due to the elongated form of the blocks an opening of appreciable size can be formed, the blocks at the same time having their remaining end portions interlocked with the upper and lower courses and being supported by the weight imposed from above on such end portions. As shown, the blocks according to this invention can be used in conjunction with blocks of other shapes provided according to the Specification of my Patent No. 529,580.

The present invention also contemplates the provision of blocks having three, or more than four, bosses in each longitudinal row.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A toy building block or like element constituting an improvement in or modification of the invention claimed in the Specification of my prior Patent No. 529,580 and which comprises a hollow, elongated, parallel-sided body, the cavity therein being open at one face of the block and having a configuration corresponding to the external configuration of the said block face, two longitudinal rows of bosses provided and symmetrically disposed on the face opposite the open face, there being more than two bosses in each row in correspondence with the length of the block, the said bosses of the two rows being arranged in transverse pairs and the overall dimension over each pair closely approximating to the width of the cavity in the block so that when the bosses engage into the cavity or cavities in one or more superimposed identical blocks to effect interlock, relative lateral displacement of the blocks will be prevented.

2. A toy building block or like element according to Claim 1, in which all of the bosses are uniformly spaced apart in both longitudinal and transverse directions and the length of the cavity approximates to the overall length over each longitudinal row.

3. A rectangular toy building block or like element according to Claims 1 and 2, having four bosses in each longitudinal row, the block having a length which is double its width.

4. A toy building block constructed as herein described with reference to the accompanying drawings.

Dated the 7th day of December, 1944.

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FIG. 1.

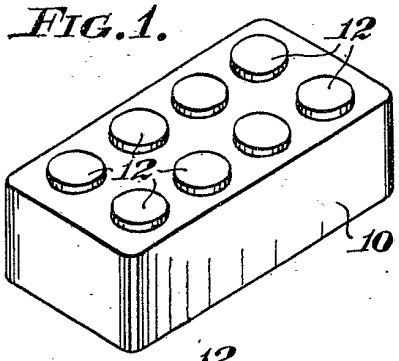


FIG. 2.

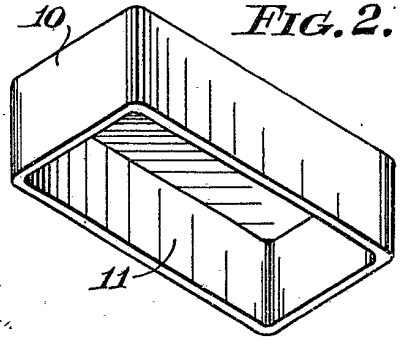


FIG. 3.

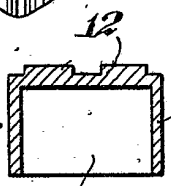


FIG. 4.

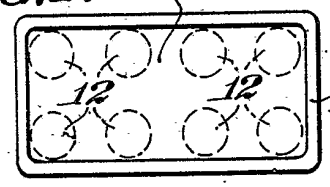


FIG. 5.

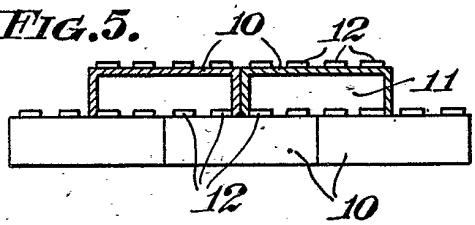


FIG. 6.

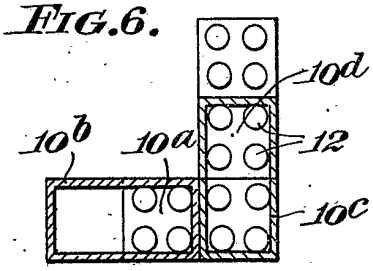


FIG. 7.

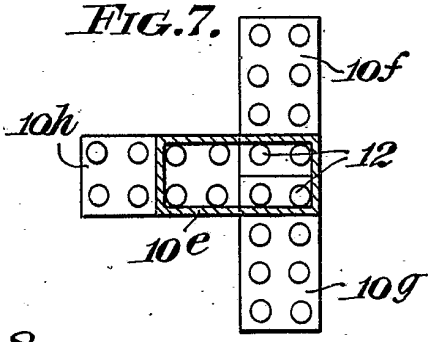
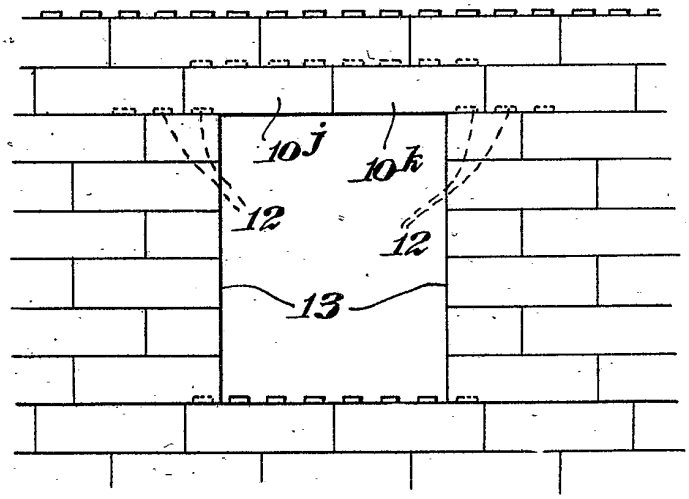


FIG. 8.



H.M.S.O. (Ty.P.)