(No Model.)

W. E. CRANDALL.

TOY BUILDING BLOCKS.

No. 278,224. Patented May 22, 1883.

Fig: 1.

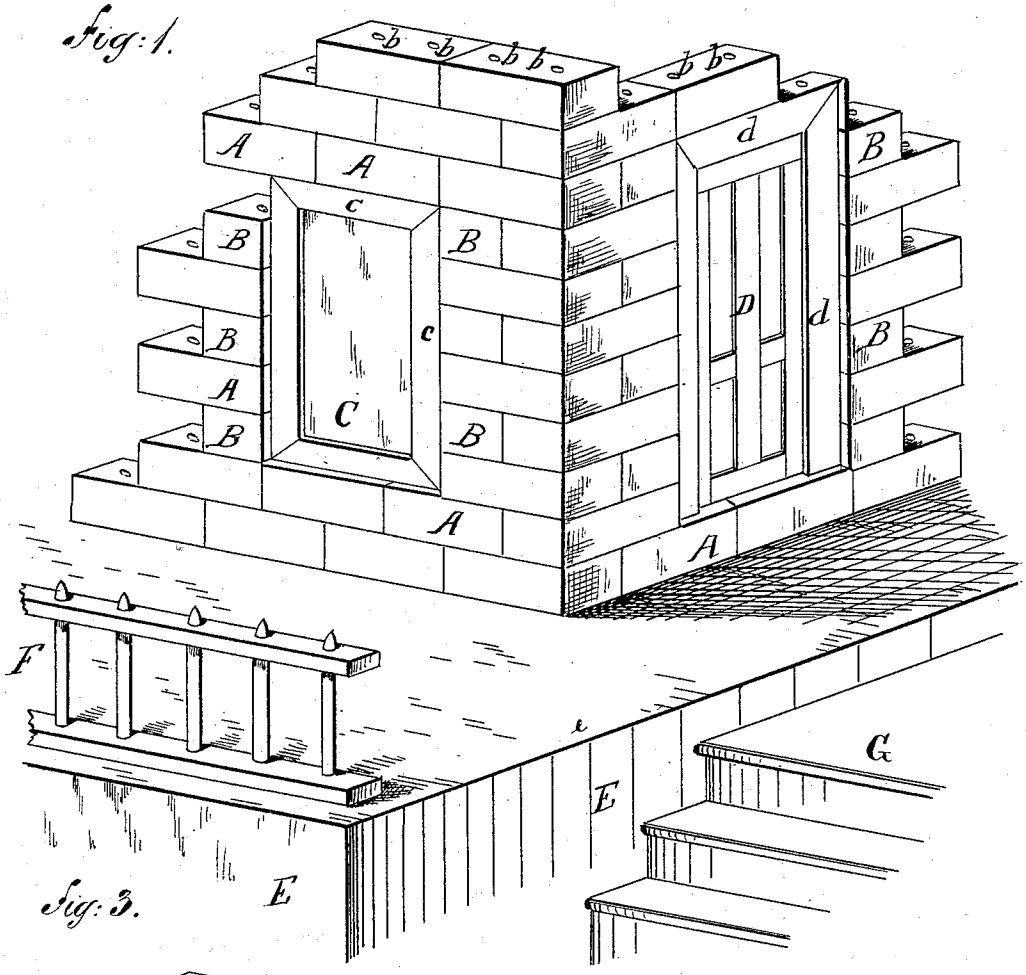


Fig: 3.

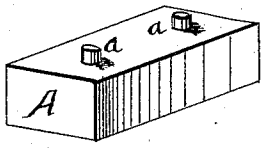


Fig: 2.

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TOY BUILDING-BLOCKS.

SPECIFICATION forming part of Letters Patent No. 278,224, dated May 22, 1883.

Application filed January 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. CRANDALL, of the city, county, and State of New York, have invented a new and useful Improvement in Toy Building-Blocks; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying sheet of drawings, forming part of this specification.

This invention is in the nature of an improvement in toy building-blocks; and the invention consists in a series of toy building-blocks proportioned to represent miniature bricks and half-bricks, with dowel-pins fitted thereto, and corresponding holes to receive said pins formed therein; and the invention also consists in the aforesaid blocks, in combination with windows and doors having dowel-pins fitted into the frames thereof, and steps, base-bars or sills, cornices, and railings.

The invention further consists, in combination with the aforesaid blocks, of a box to contain the same when not in use and to afford a foundation for the same when in use.

In the accompanying sheet of drawings, Figure 1 is a perspective view of my blocks as used in a structure, showing a door, window, railing, steps, and box-foundation. Fig. 2 is a section of same, showing dowel-pins. Fig. 3 is a detailed view of detached block.

Similar letters of reference indicate like parts in the several figures.

To enable children to produce in miniature many of the objects with which they are familiar—such as houses, towers, forts, &c.—thereby affording amusement and instruction by assisting their ingenuity, is the purpose of this invention.

Toy building-blocks of many different sizes and forms are well known; but they have not been made of a form that would enable the child, if sufficiently ingenious, to reproduce in miniature substantially a correct representation of many familiar structures.

To that end I make my toy blocks A of the exact proportion of the ordinary building-brick, but in miniature, the blocks A representing the full size of the building-brick, and the blocks B the half-size of the same. These blocks may be made of any suitable material, preferably wood, which is light and easily handled, and to each block A are fitted two dowel-pins, *a*, and in their under side are formed two holes, *b*, to receive the dowel-pins of the block next adjacent, and to each of the half-blocks is in like manner fitted a dowel-pin and formed a hole. In addition to the blocks described above, a series of base-bars or sills may be provided having dowel-pins and holes corresponding with those attached to and formed in the blocks; and windows C and doors D may be made of convenient size, to the frames *c* and *d* of which are also fixed dowel-pins, and formed holes to receive the dowel-pins in adjacent blocks.

A box, E, to contain these blocks when not in use, is provided. In the top or cover *e* of this box are formed a series of holes, which will receive the dowel-pins of the blocks, so that when a structure is formed from the blocks this box then becomes its foundation, as shown in Fig. 1.

Now, when my blocks are constructed substantially as described, the dowel-pins *a* are inserted into the holes *b* in the cover of the box, and the blocks therein are placed one upon another, so as to "break joints," the dowel-pins in one block entering into the holes in the blocks next below or next above it, and so on until the structure has attained the size and form desired. As the blocks are in this way built up, the windows *c* and doors *d* at proper places are built in with the blocks and kept in position by the dowel-pins of the blocks entering into the holes in the frame of the windows and doors, respectively; and when the structure has reached the required height it may be finished with a cornice placed around the top course of blocks, the cornice being also provided with dowel-pins for that purpose. A railing, F, suitably placed in position, and also steps G by its side, complete the structure.

Instead of using the top or lid *e* of the box E for a foundation, as described, base-bars or sills consisting of strips of wood provided with dowel-pins or holes may be used for that purpose. These base-bars or sills will be particularly useful in constructing bridges. Around the doors and windows the half-blocks B may be employed with advantage, as they may be also when building up structures having any irregular front. The blocks may be colored to represent the usual brick color.

From the foregoing it will be readily seen

that with my blocks any ordinary brick building can be reproduced in miniature to the infinite satisfaction and amusement of the user.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A toy consisting of a series of miniature whole and half blocks having the proportions of ordinary building-bricks, and provided with dowel-pins and holes to receive the same, substantially as shown and described.

2. In a series of whole and half blocks with dowel-pins and holes, the combination of doors and windows with the frames thereof also provided with holes and dowel-pins, as and for the purpose described.

3. In a series of whole and half building-blocks provided with dowels and holes, a box to receive said blocks when not in use, with holes in its lid, and adapted to form a foundation for structures built from said blocks, substantially as shown and described.

4. In a series of whole and half building-blocks with dowels and holes formed thereon, the combination of a cornice and sills, also having dowels and holes in the same, substantially as shown and described.

5. In a series of whole and half building-blocks with dowels and holes formed thereon, the combination of a foundation-box, E, with steps G, and structure built from said blocks, as and for the purpose described.

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