June 8, 1954 G. P. HARPER 2,680,327

TOY BUILDING BLOCK CONSTRUCTION

Filed Aug. 15, 1951 3 Sheets-Sheet 1

Fig. 1.

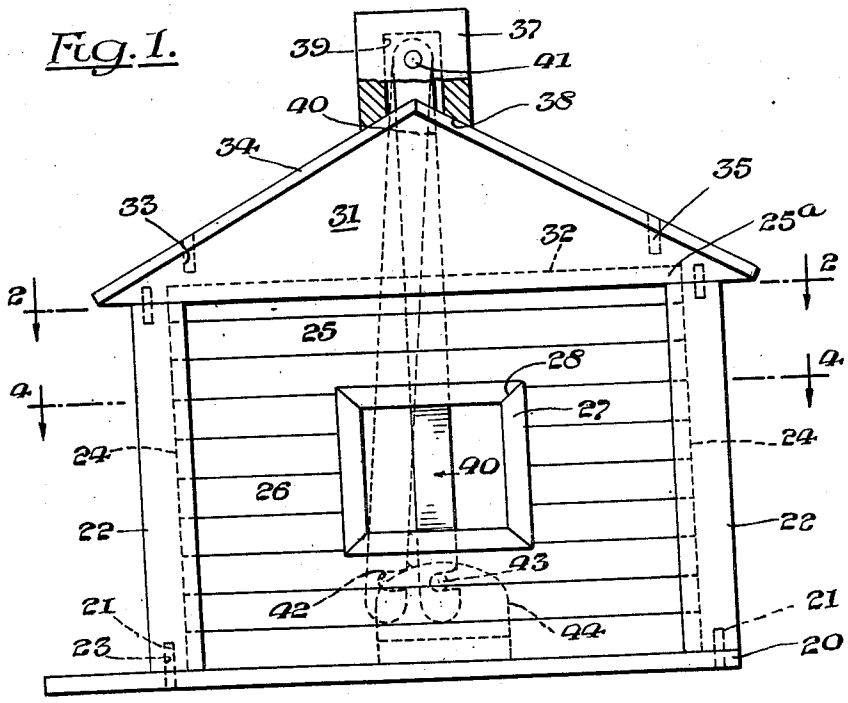


Fig. 2.

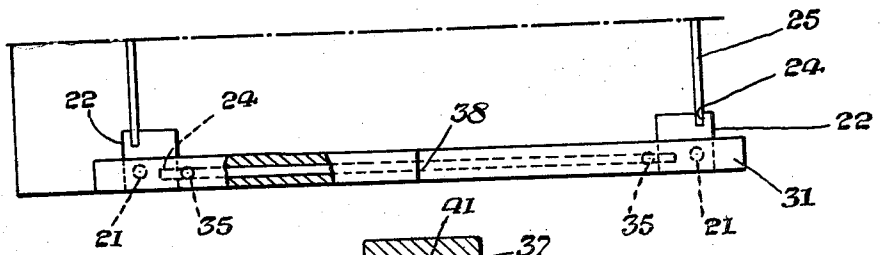
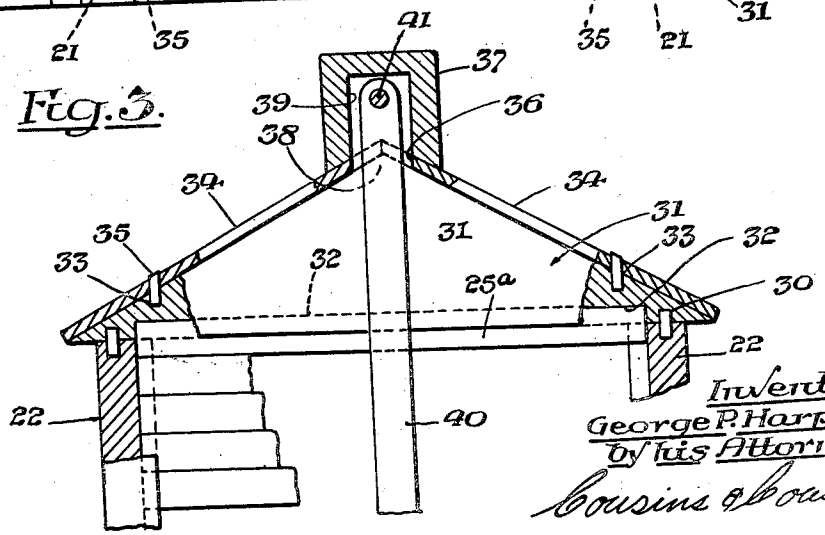


Fig. 3.



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Filed Aug. 15, 1951 3 Sheets-Sheet 2

Fig. 4.

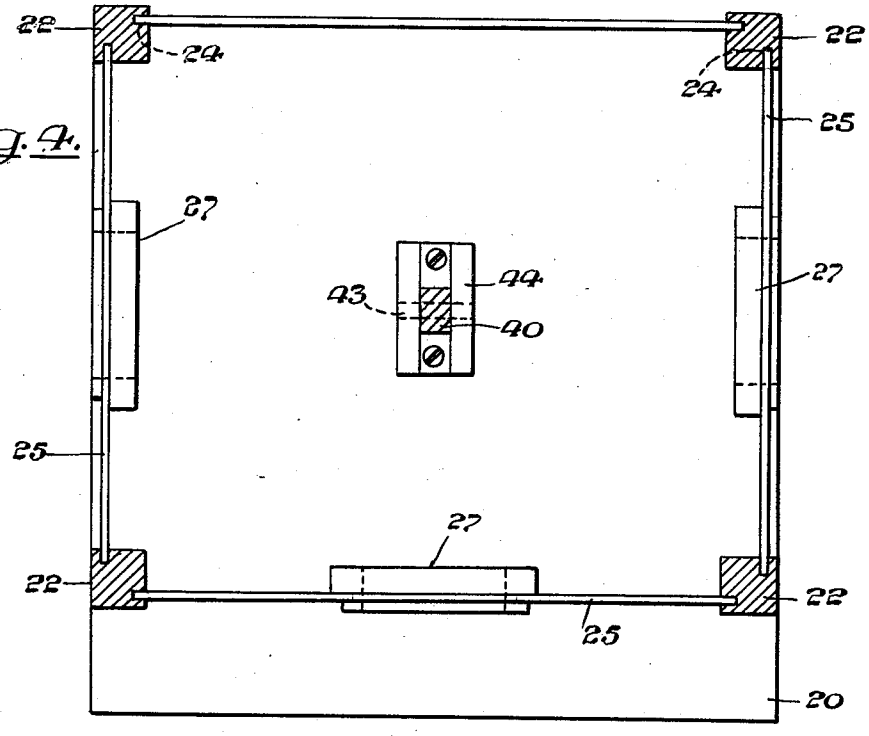
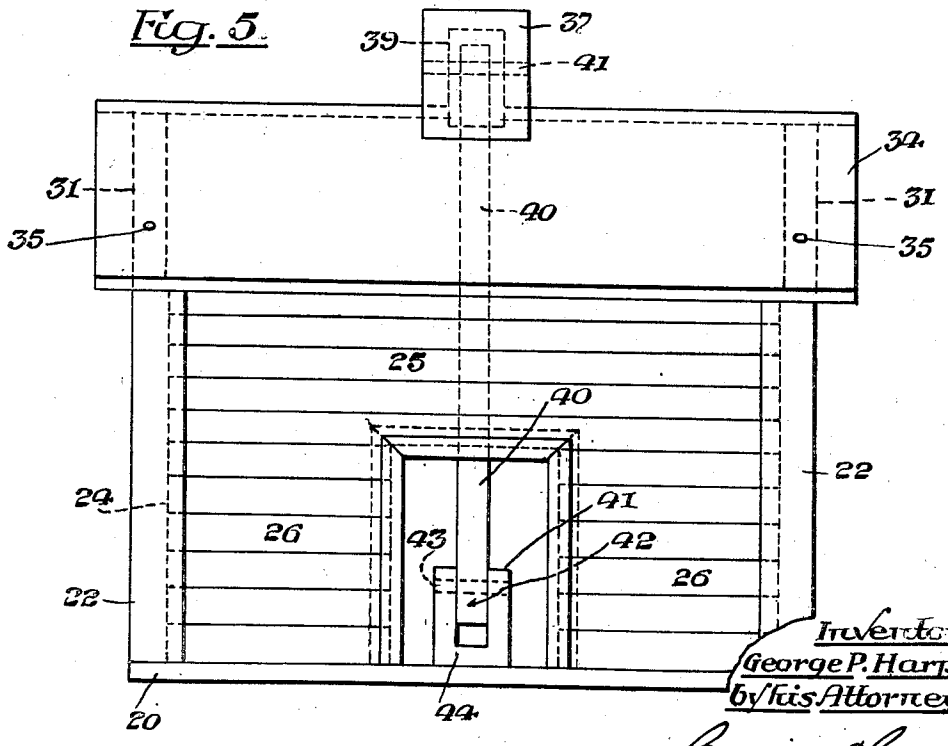


Fig. 5.



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Filed Aug. 15, 1951 3 Sheets-Sheet 3

Fig. 6.

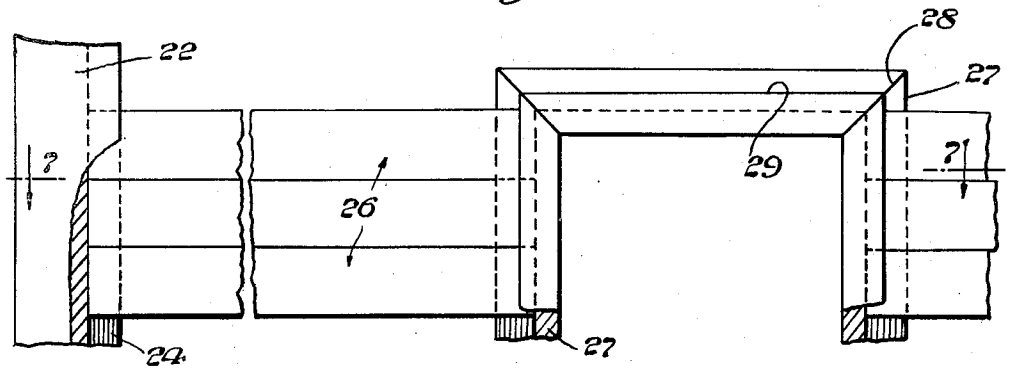


Fig. 7.

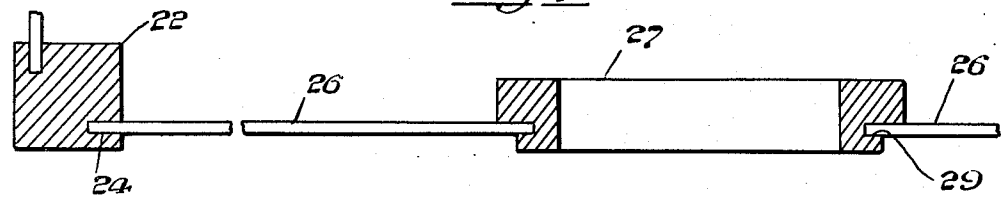


Fig. 8.

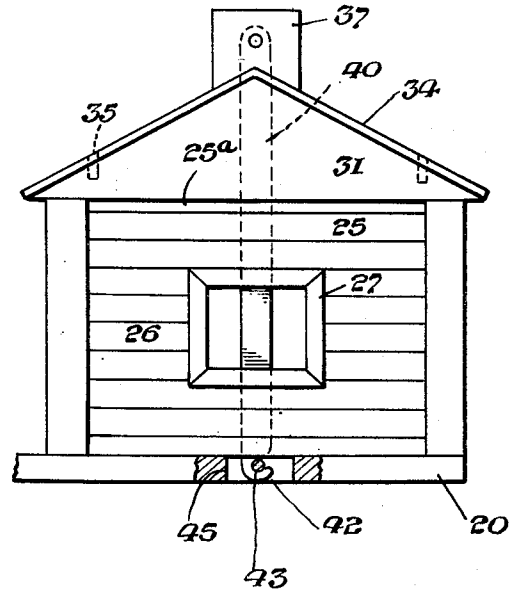
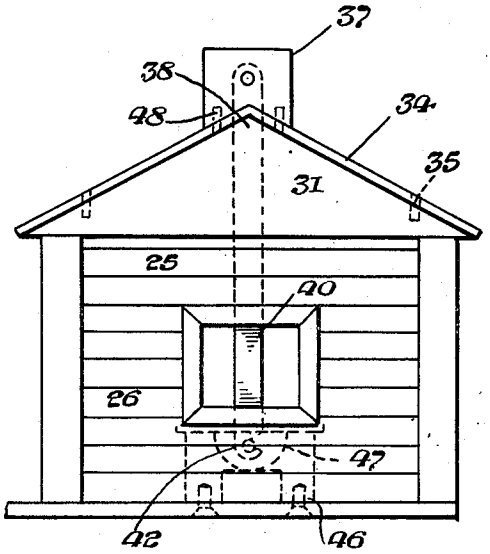


Fig. 9.



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UNITED STATES PATENT OFFICE

2,680,327

TOY BUILDING BLOCK CONSTRUCTION

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Application August 15, 1951, Serial No. 241,984

1 Claim. (Cl. 46—19)

1

This invention relates to toy building blocks, such as may be assembled to form a small structure for the amusement of a child.

Where building block assemblies have been provided for the purpose of constructing toy houses and the like, they have been unsatisfactory because of the fact that they become disassembled while the child is playing with them. Thus, when the child attempts to move the assembled structure from one place to another, or even while handling the toy, the component parts become disconnected, thereby reducing the enjoyment to the child of the toy house.

Accordingly, it is an object of the present invention to provide a building block system which may be locked together when assembled.

Another object of the present invention is to provide a building block system simple enough for manipulation by a small child, which will provide a realistic toy house.

A further object of the present invention is to provide a building block system which lends itself to a variety of structural assemblies.

Another object of the present invention is to provide a building block system having simplified structural elements.

Another object of the present invention is to provide a building block system which does not contain metallic parts which might prove injurious to a child.

The invention consists of the construction, combination and arrangement of parts, as herein illustrated, described and claimed.

In the accompanying drawings, forming a part hereof, are illustrated three forms of embodiment of the invention, in which drawings similar reference characters designate corresponding parts, and in which:

Figure 1 is a side elevational view of one complete embodiment of the present invention, with certain internal portions shown in dotted lines.

Figure 2 is a horizontal fragmentary section taken on lines 2—2 of Figure 1, looking in the direction indicated by the arrows.

Figure 3 is a fragmentary view in side elevation, showing the roof assembly of the toy house, with certain portions cut away.

Figure 4 is a horizontal section taken on line 4—4 of Figure 1, looking in the direction indicated by the arrows.

Figure 5 is a front elevational view of the assembled toy house, in accordance with the present invention, with certain internal structures shown in dotted lines.

Figure 6 is a fragmentary view somewhat enlarged, showing the assembly of the various building components in the formation of the doorway or window.

2

Figure 7 is a horizontal section taken on line 7—7 of Figure 6, looking in the direction indicated by the arrows.

Figure 8 is a side elevation of a second embodiment of the present invention.

Figure 9 is a side elevation of a third embodiment of the present invention.

Referring to the drawings, and particularly Figures 1, 2, 3, 4 and 5, 20 indicates a platform or base having at the four corners thereof upstanding dowels 21. The vertical corner members 22 are mounted upon the base 20 by slipping the said vertical members 22 upon the dowels 21. The dowels 21 slip within bores 23 provided within the corner members 22 for this purpose. The corner members 22 are provided with longitudinal slots 24, best shown in Figures 2 and 4, for the purpose of receiving therein a plurality of slats 25.

The slats 25 are so constructed that they will slide between opposed corner members 22 and enclose the intervening space. Shorter slat members 26 are provided where windows or doors are desired.

Windows or doors are defined by slat receiving members 27 having mitered ends 28 thereon, as best shown in Figures 6 and 7. The members 27 are also provided with longitudinal slots 29 to receive the said slats 25, 26. It will be seen that the tops of the doors or windows are locked in place by reason of the slats 25 slipping within the slots 29 therein.

The toy building is thus constructed in any desired manner, depending upon the pleasure of the child. It will thus be seen that various combinations are possible by employing various construction elements, or by omitting elements at certain parts of the building. When the slats 25 have reached the top of the corner members 22, and the house is enclosed in the desired manner, it will be found that the topmost slat 25a will project above the top of the corner members. Dowels 30 are provided in the top of the corner members and project therefrom. Side roof supporting members 31 are incorporated within the system, adapted to be slipped upon the dowels 30 and to receive therein the edge of the top slat 25a. A suitable groove 32 is provided in underside of the roof supporting member 31 to receive the slat 25a.

The roof supporting member 31, in one embodiment of the present invention, is further sup-

plied with bores 33, which are drilled into the upper surface thereof at a point spaced from the outer ends of said roof supporting member 31. The roof consists of two rectangularly shaped boards 34 which span the distance between the roof supporting members 31. The boards 34 are provided with downwardly depending dowels 35 which are adapted to slip into the bores 33 in the roof supporting members 31. In this manner the roof boards 34 are prevented from sliding off the top of the building.

In the embodiment of the toy building shown in Figure 1, the roof members 34 are cut away, as idicated at 36, at a point which is defined by the center of the peak of the roof. A chimney member 37, best shown in Figures 1 and 3, consisting of a block of wood having a V-shaped base 38 in the bottom thereof, is provided to overlie the opening 36 in the roof boards 34. The V-shaped member 38 of the chimney 37 corresponds to the pitch of the roof and fits snugly over the peak of said roof.

The chimney member 37 is centrally bored, as indicated at 39 in Figures 1 and 2, to receive a locking arm 40. The locking arm 40 is pivotally mounted at its upper ends upon a dowel 41, transversely carried within the chimney 37. The lower end of the locking arm 40 is cut away to form a hook-like structure 42. The hook 42 is adapted to engage a pin 43. The pin 43 is carried within a bracket 44, which in turn is secured to the base 20 of the toy house. When the chimney 37 has been placed upon the roof, and the locking arm 40 slipped through the opening 36 in said roof, it is possible, by reaching through the doorway of the house, or by reaching through any opening which has been provided during the construction of the house, to engage the pin 43 with the hook 42 of the locking arm 40.

The entire structure is then secured together and may be carried from place to place and played with, without disrupting the construction. The dowels 35 in the roof 34 hold the outer ends of the roof down, so that the child can not pick up the building by the roof and split the chimney member. After the child has finished playing with the toy building, it can be disassembled for storage purposes, or for reassembly into another structure.

Referring to Figure 8, there is shown a second embodiment of the present invention, in which the pin 43 is carried within the base member 20. In this construction the base 20 will be of a thickness suitable to accommodate the pin 43 and the hook 42 of the arm 40. The base 20 is cut away, as indicated at 45, so that the hook may be inserted therethrough and engage the pin 43. In this embodiment of the present invention, the floor space of the toy house is not encumbered by the bracket 44, previously described.

Referring to Figure 9, there is shown a third embodiment of the present invention, in which the house is provided with two chimneys 37, located one at each side of the house. A fireplace 46 or other interior article, such as a cabinet or the like, is provided directly below the point where the chimney is located. The fireplace 46 is cut away, as indicated at 47, to receive the hook member 42.

In this embodiment of the invention the roof boards 34 are further secured to the chimney 37 by dowels 48, which are carried within suitable bores provided in the boards 34 and the base 38 of the chimney 37.

From the foregoing, it will be seen that there has been provided a toy building block system which not only provides an educational and amusing plaything for children, but also incorporates a locking feature which enables the assembled toy to be held in its completed state while being played with. In addition, the system lends itself to a wide variety of constructions for the child's enjoyment and diversion.

Having thus fully described the invention, what is claimed as new and desired to be secured by Letters Patent of the United States is:

A toy building construction system comprising, a base, upright members detachably secured to the base, said upright members having longitudinal grooves therein, a dowel at the bottom of each upright member receivable by the base, a second dowel at the top of each upright member, a plurality of slats engaging the grooves in the opposed upright members and normal thereto so as to form an enclosure, spaced roof supporting elements carried upon the tops of the upright members and detachably secured thereto by the said second dowels, vertically disposed pins spaced from each end of the roof support members and projecting from the upper edges thereof, roof defining members overlying the enclosure and supported by the roof supporting elements, said roof elements being provided with bores on the underside thereof to receive the pins of the roof supporting members, an opening through an intermediate portion of the roof at a point normally covered by a chimney and locking means for securing the system together comprising a hollow chimney-simulating member overlying the peripheral margin of the roof opening, a hook member pivotally attached to the inside of said chimney member and depending therefrom through said opening to a point adjacent said base, said hook member having a hook at its lower end and a hook receiving element consisting of a horizontal bar carried by a bracket secured to the base, said locking means engaging the roof and base to secure the entire assembly together.

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