Sept. 1, 1925.

1,551,666

R. F. JENSEN ET AL

TOY BUILDING

Filed March 10, 1922 2 Sheets-Sheet 1

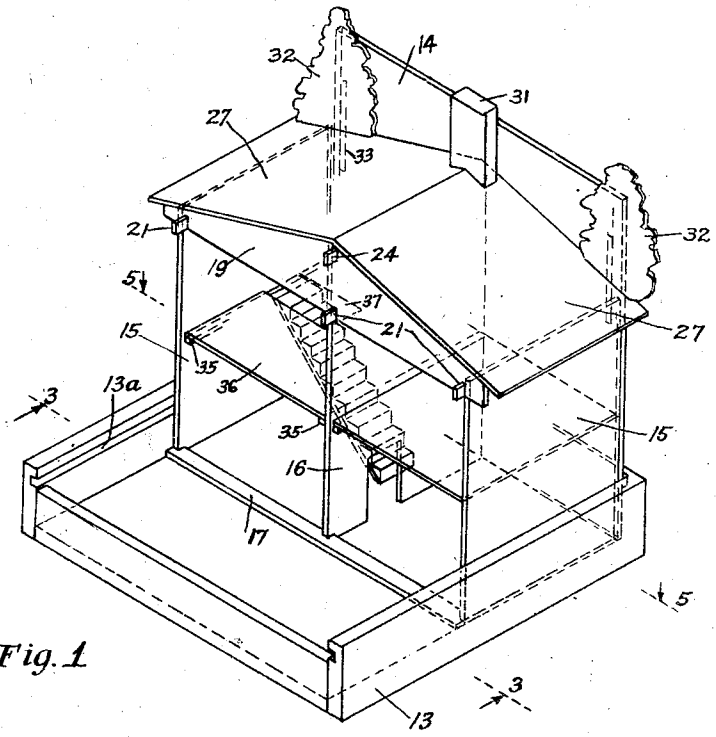


Fig. 1

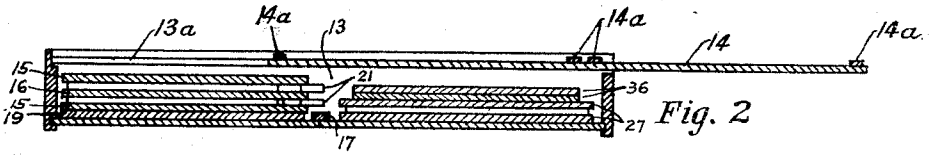


Fig. 2

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2 Sheets-Sheet 2

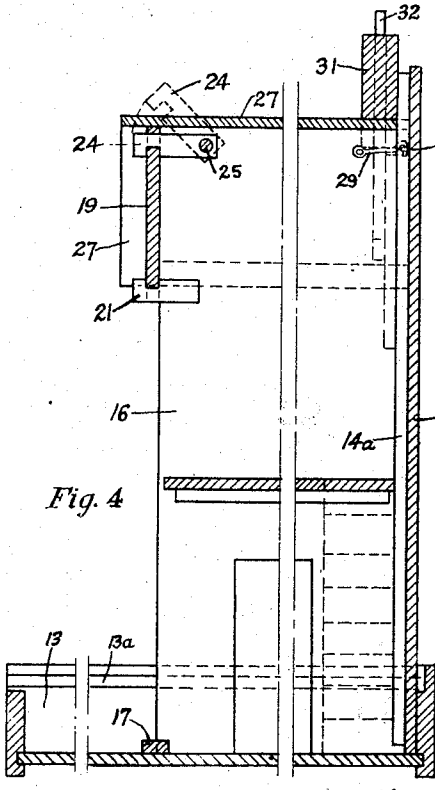


Fig. 4

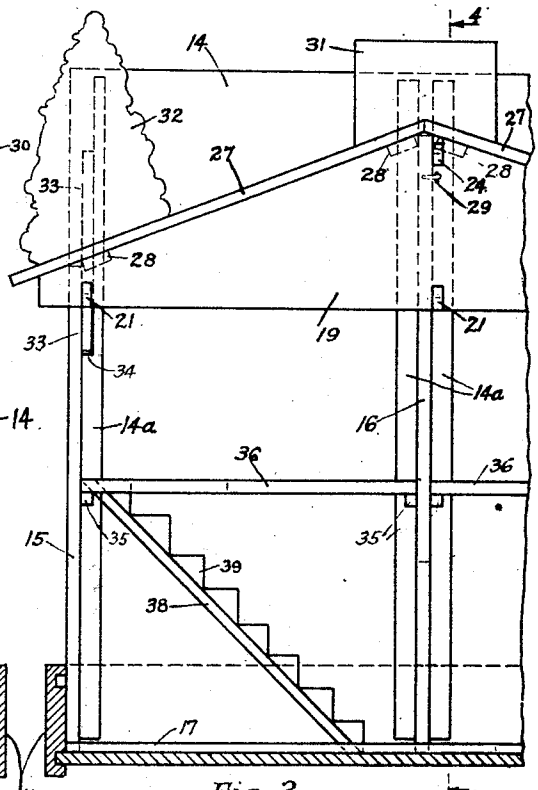


Fig. 3

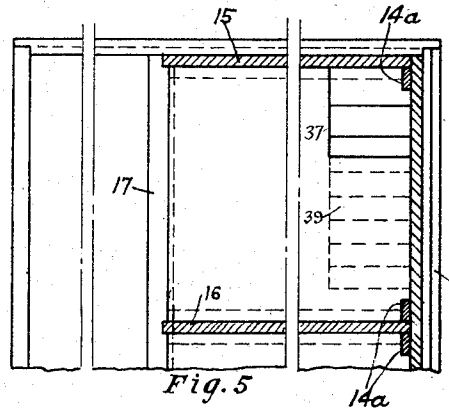


Fig. 5

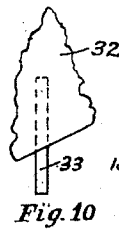


Fig. 10

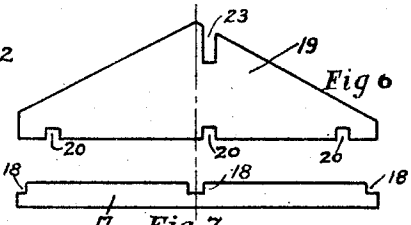


Fig. 6

Fig. 7

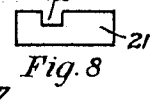


Fig. 8

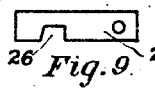


Fig. 9

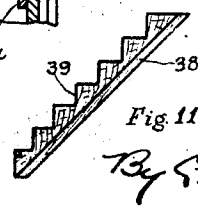


Fig. 11

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UNITED STATES PATENT OFFICE.

RAYMOND F. JENSEN AND FRED S. JENSEN, OF CHICAGO, ILLINOIS.

TOY BUILDING.

Application filed March 10, 1922. Serial No. 542,605.

To all whom it may concern:

Be it known that we, RAYMOND F. JENSEN and FRED S. JENSEN, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Toy Buildings, of which the following is a specification.

This invention relates to toy buildings, and the general object of the invention is to provide an improved knock-down toy building of simple construction which is inexpensive to manufacture, and which can be easily and quickly assembled or disassembled by a child, and is securely held in position when assembled.

Another object of our invention is to provide a box for packing the building when disassembled, so constructed that the box may be used as a foundation of said building, and the lid of said box may be used as one wall of the building.

A further object of our invention is to so construct the building that the members are all flat pieces and so designed that when disassembled and packed they form a compact mass.

Another object of the invention is to provide an improved stairs and a novel method of making same.

The invention also contemplates a novel manner of correlating the various sections of the building and an improved means for securing them together.

Ancillary and advantageous objects of the invention will be understood from the following detailed description.

A preferred embodiment of this invention is illustrated in the accompanying drawings, wherein Figure 1 is a perspective view of the building in its assembled position.

Fig. 2 is a longitudinal sectional view showing the building disassembled and packed in the box as a compact mass, the box forming the foundation and support in Fig. 1.

Fig. 3 is a vertical fragmental sectional view in the plane of lines 3—3 of Fig. 1 showing part of the building in front elevation.

Fig. 4 is a vertical sectional view taken in the plane of lines 4—4 in Fig. 3.

Fig. 5 is a fragmental sectional plan view taken in the plane of the lines 5—5 of Fig. 1.

Fig. 6 is a detail view showing the gable.

Fig. 7 is a detail view showing a notched spacer used to space and secure the walls at the base of the foundation.

Fig. 8 is a detail view showing one of the joists which is attached to the upright walls and is used to secure the lower edge of the gable.

Fig. 9 is a detail view showing a joist used to secure the top of the gable, pivotally secured to the partition.

Fig. 10 is a detail view showing one of the ornamental trees which may be secured along the back wall of the building.

Fig. 11 is a fragmental sectional view showing the stairs used in connection with the building.

Referring to the drawings, the box which contains the house sections when packed is indicated by reference numeral 13 and the cover by the numeral 14. The preferred manner of associating the box and cover is to provide guides on opposite sides of the box which are herein shown in the form of inwardly facing grooves 13^a adapted to receive the opposite edges of the cover 14. The cover is of greater dimension from side edge to side edge than it is from front to rear, the latter dimension being approximately equal to or just slightly less than the distance between the inner faces of the box sides which have the grooves 13^a, so that the cover may stand in upright position with its lower edge within the box adjacent to the rear wall thereof. In this position the cover serves as the rear wall of the house.

Preferably the box and the cover are made of wood and the cover is provided with a plurality of reinforcing ribs which are herein shown in the form of wood cleats 14^a, the grain of which runs crosswise of the grain of the wood in the cover so that the cleats serve to prevent warping of the cover. The two cleats which are adjacent to the front and rear edges of the cover are spaced inwardly slightly from said edges, so that when the cover stands upright they serve, in conjunction with the box sides to provide recesses or grooves to receive the rear edges of the side walls 15 of the house. When an intermediate partition 16 is to be used in the house two cleats are applied to the cover adjacent its midportion, being spaced apart to provide a groove to receive therebetween the rear edge of the partition.

The side walls 15 are positioned adjacent to the inner faces of the sides of the box, and a brace in the form of a strip 17 notched as at 18 (Fig. 7) to receive the front lower corners of the side walls 15 and partition 16 is

secured to the bottom of the box and holds said side walls and partition in proper position. The cover or rear wall 14 is held against the rear side of the box 13 by the side walls 15 and partition 16 which abut against said cover 14.

The upper forward corners of the side walls and partition are secured together and braced apart by a gable 19 which is notched as at 20 (Fig. 6) at its lower edge to receive pieces 21 (Fig. 8) that are fixed to the said walls and partition and project forwardly therefrom to simulate joists, said pieces being notched as at 22 at their upper edges so that the gable 19 interlocks therewith and is supported thereon.

The upper edge of the gable is also notched as at 23 adjacent to its middle to receive a latch 24 (Fig. 9) which is pivoted at 25 (Fig. 4) to the partition 16 and is notched as at 26 to interlock in the notch in the gable.

A pair of roof sections 27 is supported upon the partition and side walls each of said sections having reinforcing ribs in the form of cleats 28 secured to its under face, the cleats adjacent to the remote edges of the sections being arranged to engage with the upper edges of the side walls 15 to hold the roof sections in place. The adjacent edges of the roof sections rest upon the partition 16, while the rear edges of the said sections abut against the cover 14.

Preferably a detachable connection is provided between certain of the upright walls of the house and the rear wall or cover 14. We have herein shown a hook 29 which is pivoted to the partition and detachably engages in a screw eye 30 seated in the wall 14. A chimney 31 is recessed at its lower end to fit upon the abutting edges of roof sections.

For purposes of ornamentation devices 32 (Fig. 10) which simulate the upper ends of trees may be mounted at the rear corners of the house. In the present instance, we have shown trees each of which is provided with a stem 33 that is arranged to seat in a recess or groove 34 formed by cutting away the upper ends of the reinforcing cleats 14^a on the rear wall or cover 14, the cut-away portion coacting with the side walls 15 to provide grooves to receive said stems.

For a two-story house the side walls 15 and partition 16 may have fixed thereon supporting cleats 35 on which floors 36 rest. One of the floors may have a stair case opening 37 therein to which a stairway leads, the lower end of the stairway resting upon the bottom of the box 13 which constitutes the floor of the first story of the house.

We have provided stairs of improved construction and an improved method of making the same. The stairs consist of a backing strip or plate 38 which may be of wood and a serrated or corrugated set of steps 39 which may be formed individually or separately, but preferably are cut from a solid block of wood which is then suitably fixed to the backing strip 38. In manufacturing the stairs a backing and step-section of many times the width of the ultimate stairway may be secured together and this unit then severed into sections in planes running transversely of the steps to provide a plurality of stairs, one for use in each house.

We claim as our invention:

1. A toy building having, in combination with a box and a cover therefor, the cover being adapted to stand in an upright position and form the rear wall of the house, side walls arranged to stand upright within the box adjacent to the sides of the box, means for bracing apart the lower edges of the side walls, a gable extending between the front upper corners of said side walls, means providing a detachable connection between the gable and said walls, and a roof cooperating with said side walls and cover.

2. A toy building comprising upright side walls and an inner partition parallel therewith, a gable extending between said side walls, members attached to said side walls and said partition and having upwardly opening notches, said gable having notches in its lower edge to engage with the notches in said members, and a piece pivoted to the said partition and having a downwardly opening notch arranged to engage the upper edge of said gable.

3. A toy building comprising a box having a cover arranged to stand upright at the rear of the box and provide the rear wall of the building, a pair of side walls and an intermediate partition arranged to stand upright within the box, the side walls being closely adjacent to the inner sides of the box, a strip arranged to lie along the bottom of the box and being notched to engage with said side walls and partition to hold them in place, a gable notched at its lower edge to engage parts on the front upper portions of said side walls and partition, a device movably mounted on said partition and arranged to engage the upper edge of said gable, and a roof cooperating with said gable, side walls and cover, the said parts being arranged to be compactly piled within the box and be enclosed by the box and its cover.

4. In a toy building a pair of upright side walls, each having a notched member secured thereto, a gable extending between said side walls and being notched to engage and cooperate with said notched members on the side walls to secure the gable and the side walls together, an intermediate wall extending to the top of the gable, and a hinged notched member on said wall near the top of the gable, the gable being provided with a cooperating notch.

5. A toy building comprising upright

walls and an intermediate partition, said walls and said partition having pieces projecting forwardly therefrom, a gable resting on said pieces, said pieces and the gable being constructed to interlock, a movable locking piece mounted on said partition and arranged to engage and secure the upper edge of said gable, a pair of roof sections sloping in opposite directions, the adjacent edges of said sections being supported by said partition, and said sections having ribs or cleats secured to their under sides adjacent their remote edges to engage the upper edges of said side walls.

6. A toy building comprising a box having a cover made of wood, reinforcing cleats secured to the cover with the grain of the cleats running crosswise of the grain of the cover the cover being adapted to extend upright in the box, said cleats providing grooves, and side walls having their edges engaging in said grooves and their faces parallel to the sides of the box, a cleat in the box to retain the side walls in position, and a roof for the building, the bottom of the box being the floor.

7. A toy building comprising a box with upright sides, the bottom of the box constituting the floor of the building when set up, the cover of the box being arranged to stand upright within the box adjacent to the rear wall of the box, said cover having reinforcing ribs or cleats which provide upright grooves, side walls standing adjacent to the inner faces of the box sides and having their rear edges engaging in said grooves, a brace extending along the bottom of the box and engaging the lower front corners of the side walls to hold them in place, and a roof cooperating with said side walls and cover.

In testimony whereof we have hereunto affixed our signatures.

RAYMOND F. JENSEN.
FRED S. JENSEN.