Feb. 16, 1932. J. B. FORBES 1,845,258

BUILDING SET

Filed Aug. 8, 1931 3 Sheets-Sheet 1

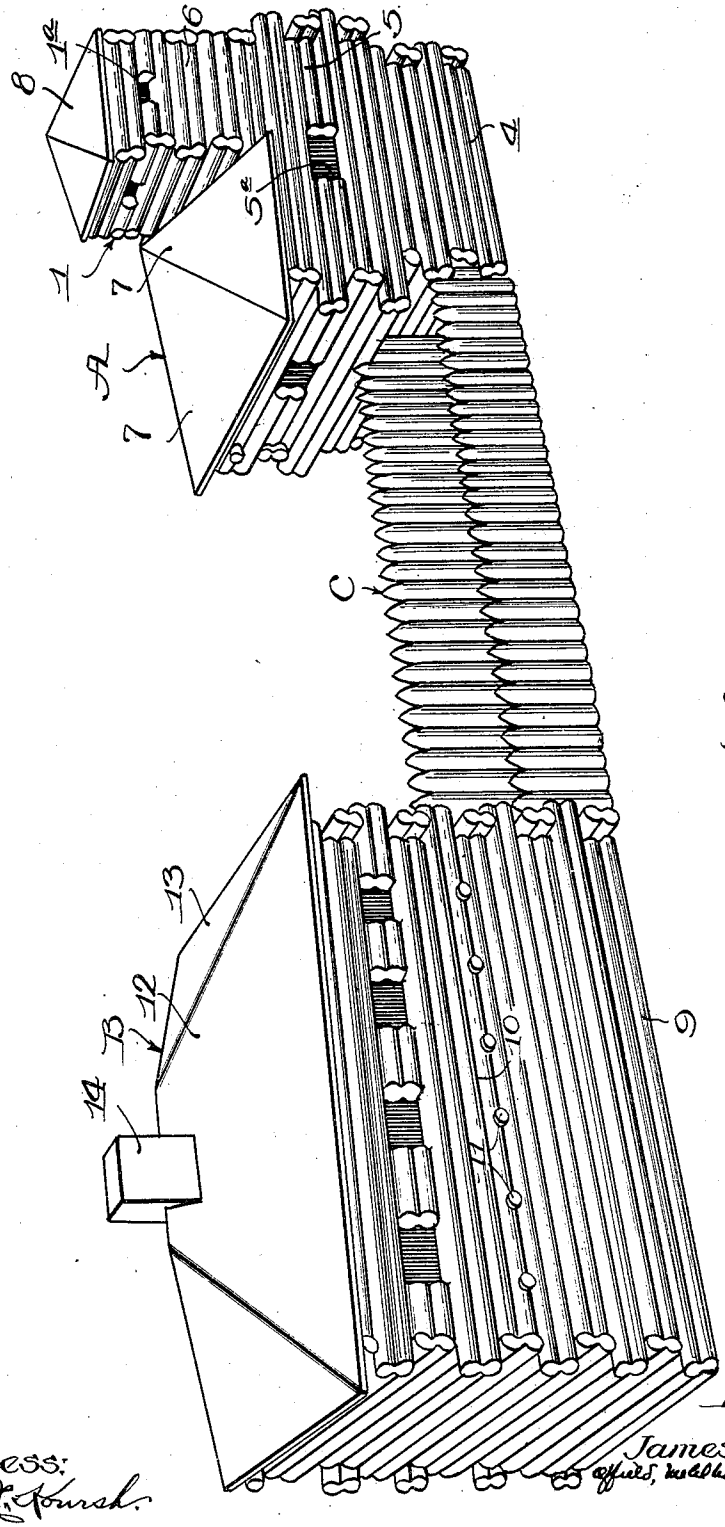


Fig. 1

Witness:
Chas. L. Kourek.

Inventor.
James B. Forbes,
by Wells, Wallace, Hood & Cook
Ellis

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BUILDING SET

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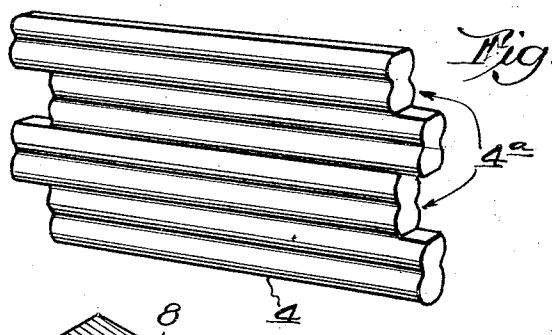


Fig. 4

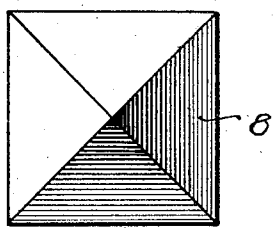


Fig. 5

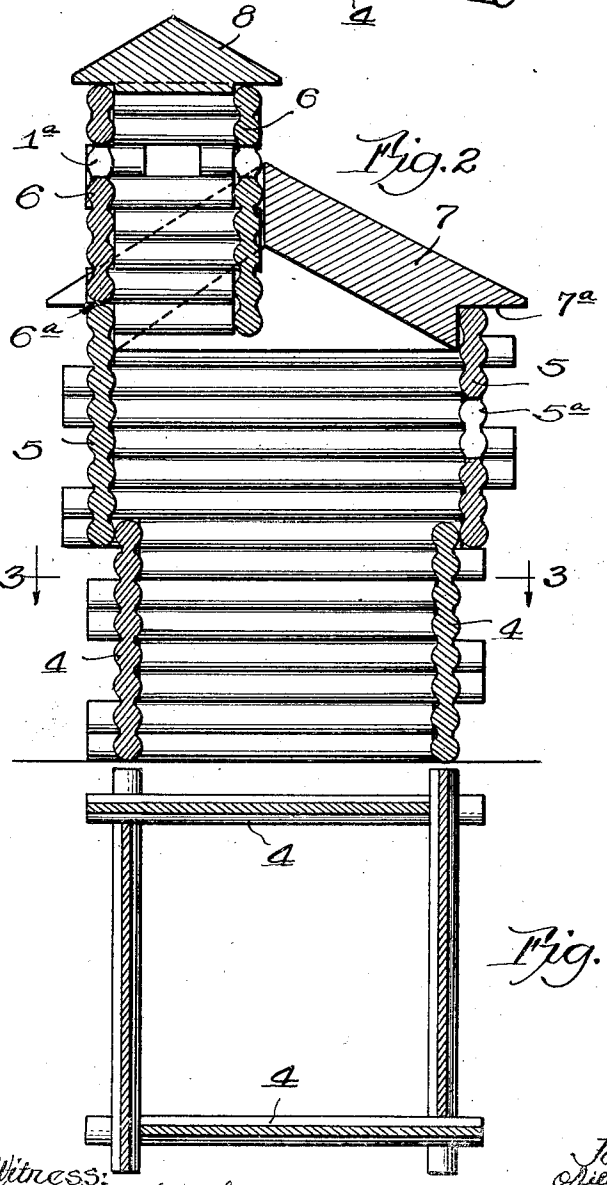


Fig. 2

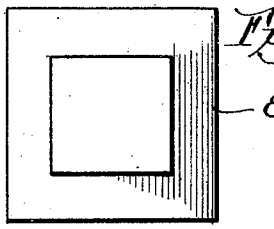


Fig. 6

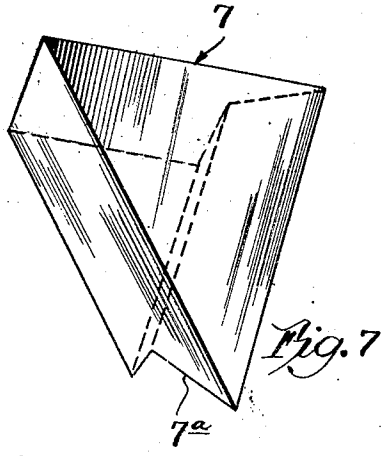


Fig. 7

Fig. 3

Witness:
Chas. R. Knowles.

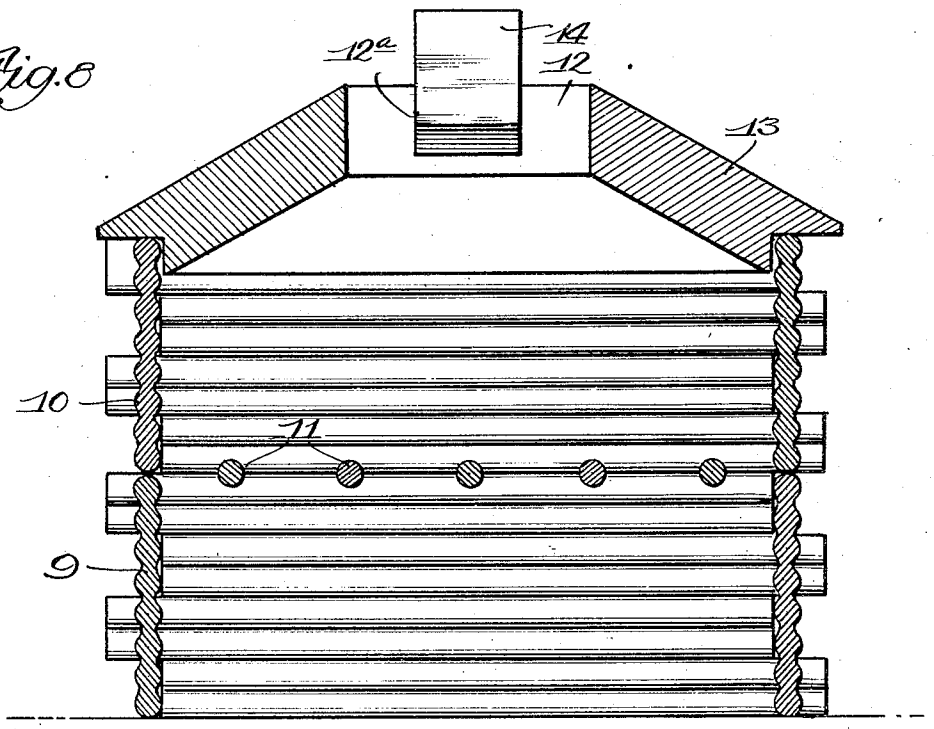
Inventor,
James B. Forbes,
Offield, Mould Lobo, Dewitt & Forbes
Attys.

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BUILDING SET

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Fig. 8



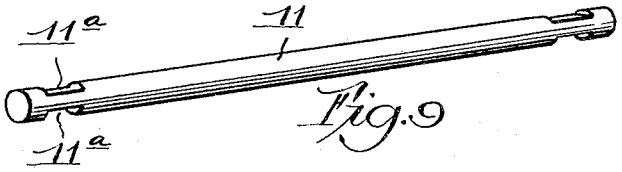


Fig. 9

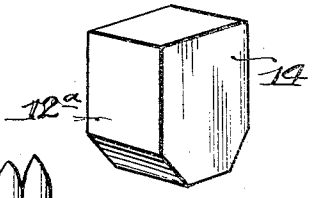
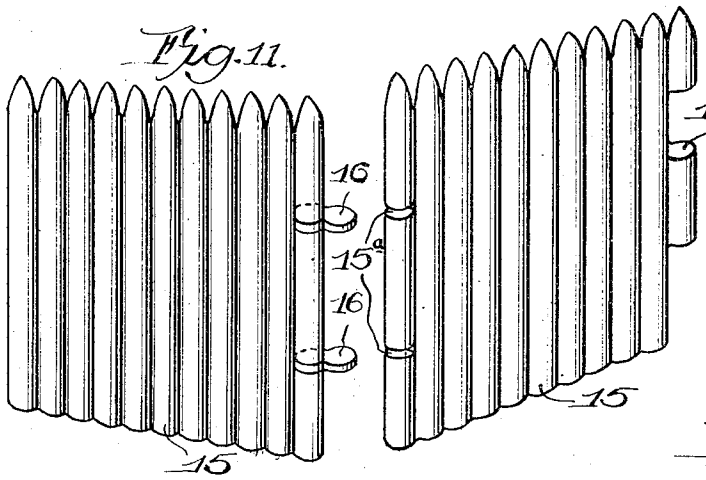


Fig. 10

Fig. 11.



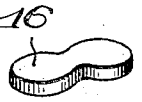


Fig. 12

Inventor,

James B. Forbes,

Witness:

Chas. R. Kousch.

Patented Feb. 16, 1932 1,845,258

UNITED STATES PATENT OFFICE

JAMES B. FORBES, OF CHICAGO, ILLINOIS, ASSIGNOR TO JOHN LLOYD WRIGHT, INC., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS

BUILDING SET

Application filed August 8, 1931. Serial No. 555,891.

This invention relates to improvements in building sets, and more particularly to sets of demountable pieces for erecting replicas of early frontier forts consisting of blockhouses, barracks and other buildings grouped together and enclosed within a stockade. These forts were largely of log construction and, as in the case of Fort Dearborn erected on the present site in the city of Chicago, the blockhouses were located at diagonally opposed corners of a diamond shaped enclosure, while the other buildings were located along the sides, their outer walls being exposed and the intervening spaces closed by a double stockade so arranged that in case attacking parties succeeded in scaling the outer stockade, they would be exposed to a flanking fire from the blockhouses in attempting to scale the inner and higher stockade. It may be stated in this connection that, while any one of the early forts may be reproduced, the present disclosure represents units of the original Fort Dearborn, which, as a matter of interest, has recently been reconstructed near its original site from the original plans in possession of the War Department of the United States Government.

The object of the invention is to provide sets of demountable members or pieces which can be readily assembled by children to reproduce replicas of the original buildings of the fort. The replicas are necessarily quite small and of two-story construction, and therefore to erect them of pieces simulating the separate logs would be too difficult a task for the average child, and hence the pieces for the walls have the form of thin slabs grooved to represent a log construction, these pieces or sections forming, for instance, one wall section of a building or a section of the stockade with interlocking notched ends to simulate the projecting ends of the logs in the case of the buildings, and for the sections of stockade, suitable connections are provided to permit them to be assembled in different angular relation. Likewise, the roofs of the buildings, which in the original fort were covered with hand-cut shingles, are reproduced by solid pieces cut and mitered to meet at the corners and sustain themselves as well as a chimney, where such is used. In this way, the buildings can be faithfully reproduced with a relatively few pieces and erected in quite a substantial manner.

Bearing in mind, therefore, that the same general type of construction is used for all of the buildings, the invention is illustrated by disclosing one of the blockhouses and the barracks, with a portion of the stockade.

In the drawings, therefore,

Figure 1 is a perspective view of one of the blockhouses, the barracks, and a section of the stockade between them;

Figure 2 is a view of the blockhouse in vertical section taken through the look-out tower;

Figure 3 is a section through the blockhouse as taken on line 3—3 of Figure 2;

Figure 4 is a perspective view of one of the pieces used for the walls of the buildings;

Figures 5 and 6 are top and bottom views, respectively, of the roof piece for the blockhouse look-out tower;

Figure 7 is a perspective view of one of the roof pieces;

Figure 8 is a view in longitudinal section through the barracks showing the rafter and roof construction;

Figure 9 is a perspective view of one of the rafter pieces for the barracks;

Figure 10 is a perspective view of the barracks chimney;

Figure 11 is an enlarged detail view of the stockade sections showing one method of joining them, and

Figure 12 is a perspective view of the key for connecting the stockade sections.

Referring first to the blockhouse A (Figures 1 and 2), the same represents a square structure of two stories, the upper being carried outwardly beyond the lower with a slight overhang. At one corner of the second story is a small tower 1 with look-out openings 1^a, having the appearance of projecting upwardly through the roof which slopes in four directions from the central peak. The second story has windows on all sides while the lower story has an entrance door on only one side facing in toward the enclosure. The blockhouse in the miniature

is erected of wall and roof pieces, no attempt being made to duplicate the interior. For the walls then, flat pieces of wood 4 are used, such as shown in Figure 4. These pieces, cut to length, are grooved lengthwise to simulate a group of logs placed one above another to the height of one story. At the ends of the pieces are square notches 4ª of a width equal to the height of two logs and of a depth somewhat greater than the thickness of the logs. The notches at opposite ends are staggered so that the pieces are interchangeable when joined by interlocking their notched ends. Thus to form the lower story, four pieces of equal length would be joined to form a hollow square, as shown in Figure 3, with the portions between notches projecting outwardly to simulate the extended log ends, which are grouped in twos instead of each log projecting alternately from the corners as is common in ordinary log cabin construction.

Having completed the first story, the second is assembled of similar pieces 5 slightly longer and having window openings 5ª therein, the assembled square being placed upon the lower square and supported at the corners upon the projecting ends of the latter. The tower 1 is then assembled of four short pieces 6 but otherwise similar to those used for the walls of the lower and upper stories, although two of them have their lower edges cut away to the depth of one log as at 6ª, Figure 2, and placed end-to-end along adjacent sides, so that by placing the square forming the tower walls upon one corner of the upper story, with the cut-away edges along the outside and resting upon the edges of the upper story walls, it will stand without additional support.

To form the roof, four triangular pieces 7 of wood are used, these having generally the form shown in Figure 7. The material from which the roof pieces are cut is approximately twice as thick as the wall material, and each has an L-shaped rabbet 7ª along its base edge, while its side edges are beveled so that when the pieces are asembled their base edges rest with the rabbets bearing upon the top edges of the upper story walls and their beveled edges abutting flush against each other to form a self-supporting roof sloping in four directions from the peak or central point. To accommodate the tower, two of the roof pieces flanking the inner sides of the tower are but half sections with one side edge cut square to abut against the side walls of the tower, which has a roof similar to that of the blockhouse, but being smaller is preferably formed by a single piece of wood 8 (Figures 5 and 6) flat on its underside with grooved or rabbeted edges for seating within the opening at the top of the wall pieces and beveled on its top surface to simulate the same style of sloping roof.

The barracks B (Figures 1 and 8) is also a two-story building but elongated in one direction and having straight walls instead of the offset walls as in the case of the blockhouse A. The wall sections 9 and 10 for the lower and upper stories, respectively, of this building are similar to those used for the blockhouse, except as to length. Moreover, a different method of supporting the rectangularly assembled upper story wall pieces upon the lower is used inasmuch as both are of the same size. Thus a series of rafters 11 in the form of miniature logs are laid crosswise of the lower story assembly, these being notched on opposite sides as at 11ª at each end, so that the downwardly facing notches engage the edges of the lower story front and rear wall pieces 9, and the upwardly facing notches engage the lower edges of the upper story wall pieces 10, the ends of these rafters projecting a short distance beyond the walls. The roof pieces 12 and 13 for the barracks are similar to those used for the blockhouse, except that they are cut to proper size and shape to form a shallow sloping roof having a longitudinal ridge instead of a pointed peak as in the blockhouse. Hence the longitudinal roof pieces 12, 12 are truncated triangles and at the center of their shorter parallel edges square notches 12ª, 12ª are cut, which, when brought into contact to form the ridge line, form a seat for a block 14 (Figure 10) simulating the chimney.

The stockade C is made up of flat pieces or sections 15, 15 of wood similar to the material used for the walls of the building, and grooved to simulate logs set on end in the ground and their upper ends pointed. The stockade sections are comparatively short, taking in say 10 or 12 logs, and are capable of being joined end-to-end by a suitable hinged connection, so that the stockade can be extended in different directions. Thus a suitable form of connection would be to cut two or more wide slots 15ª at right angles into the end edges of the sections and to the depth of the endmost logs, and provide flat keys 16 with rounded ends which may be inserted with a tight fit into the corresponding pairs of slots in the edges of the sections to be joined. In case the stockade sections are to extend from and form a continuation of the outer walls of the buildings, one edge of several of the sections may be provided with wide notches 15ᵇ so that they may be joined directly to the corners of the buildings, by interlocking the notches with the projecting log ends, as shown in Figure 1.

The sets may contain pieces for erecting one, two, or more of the buildings, and the details elaborated upon if desired, although the simplest form of the sets would consist of material for erecting one building with provisions for adding other buildings and

extending the area of the enclosure by increasing the number of stockade sections. All of the pieces are preferably stained in a dark color to carry out a weathered appearance of the buildings.

Manifestly these sets may be made to reproduce other pioneer structures of rough log construction, and hence the invention is not limited to any particular type or period, but is directed to structural features common to all.

I claim as my invention:

1. A building set for erecting structures of the character described, comprising a plurality of wood pieces adapted to be assembled into a rectangle to form the outside walls of the structure, and wood blocks adapted to be assembled to form a sectional roof, said pieces having grooves along their base edges to interlock with the top edges of the wall pieces, and inclined beveled side edges bearing against each other.

2. A building set for erecting structures of the character described, comprising a plurality of wall sections consisting of thin rectangular wood pieces having interlocking engagement at their ends whereby the same may be assembled to form the outside walls of a structure, and roof pieces consisting of wood blocks cut with their base edges grooved to engage the top edges of the wall pieces and their other edges beveled to bear flatwise against each other.

3. A building set for erecting structures of the character described, comprising a plurality of wall sections consisting of thin rectangular wood pieces grooved to simulate groups of logs extending parallel with each other, said pieces having interlocking engagement at their ends whereby the same may be assembled to form the outside walls of a structure, and a roof consisting of relatively thick pieces of wood, cut to form the sloping sections with their base edges supported upon the edges of the wall sections and their remaining edges abutting in self-supporting contact.

4. A building set for erecting structures of the character described, comprising a plurality of wall sections consisting of thin rectangular wood pieces grooved to simulate groups of logs extending parallel with each other, said pieces having interlocking engagement at their ends whereby the same may be assembled to form the outside walls of a structure, roof pieces consisting of relatively thicker pieces of wood cut to form the sloping sections, with their base edges supported upon the top edges of the wall sections and their remaining edges abutting in self-supporting contact, and stockade sections consisting of thin pieces grooved and pointed to represent groups of vertical logs, and means for detachably connecting said stockade sections together at their ends and to the notched ends of the walls sections.

Signed at Chicago, Illinois, this 31st day of July, 1931.

JAMES B. FORBES.