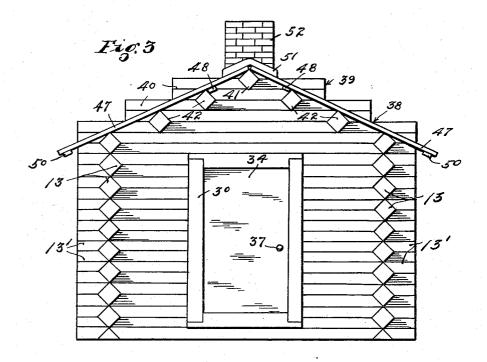


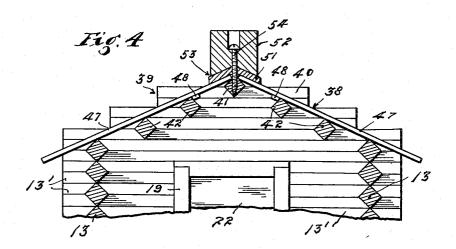
Feb. 16, 1954

L. J. KALVIG TOY LOG CABIN 2,669,060

Filed April 13, 1949

4 Sheets-Sheet 2





INVENTOR. I ewis J. Kalvig By Harry K. Kilgon Mitorney

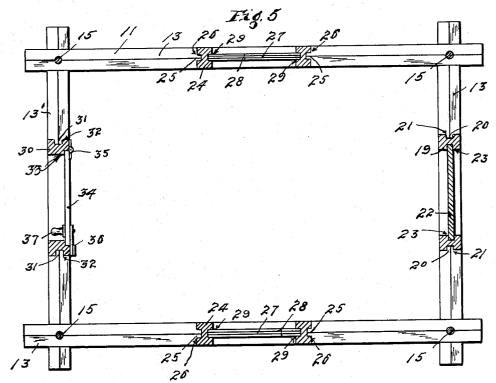
Feb. 16, 1954

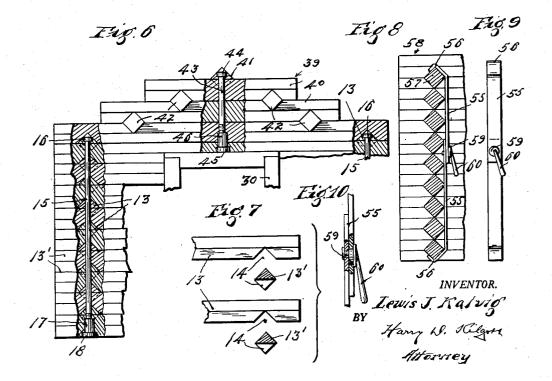
L. J. KALVIG TOY LOG CABIN

2,669,060

Filed April 13, 1949

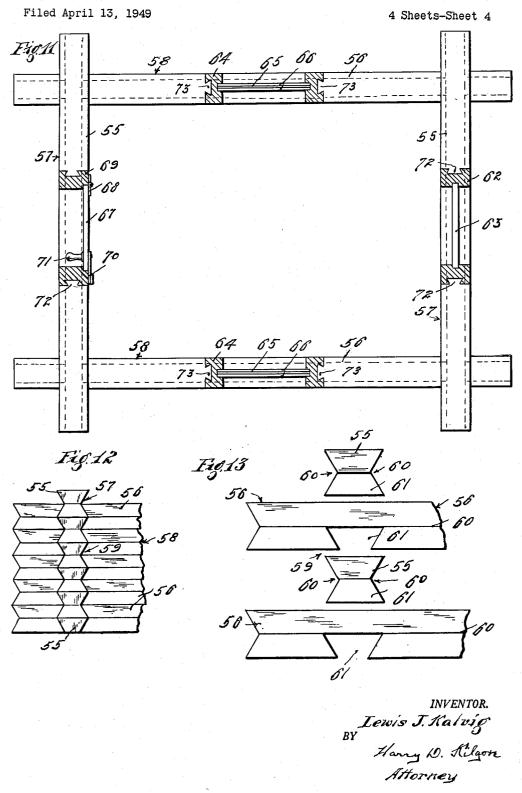
4 Sheets-Sheet 3





Feb. 16, 1954

L. J. KALVIG TOY LOG CABIN 2,669,060



Patented Feb. 16, 1954

Section 1

UNITED STATES PATENT OFFICE

2.669.060

TOY LOG CABIN

Lewis J. Kalvig, Hackensack, Minn.

Application April 13, 1949, Serial No. 87,153

15

3 Claims. (Cl. 46-20)

1 My present invention relates to toys and, more specifically, to a toy log cabin.

The object of this invention is to provide a toy log cabin, the sides and end walls of which are constructed of interlocked members supporting 5 a novel roof structure and novel means for holding the interlocked side and wall members and the roof structure in assembled relation.

To the above end, the invention consists of the novel construction, arrangement of parts and 10 combination of devices hereinafter described and defined in the claims.

In the accompanying drawings, which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings:

Fig. 1 is a side elevation of the toy log cabin; Figs. 2 and 3 are rear and front elevations, respectively, of the same;

Fig. 4 is a fragmentary view in transverse ver- 20 tical section taken on the line 4-4 of Fig. 1;

Fig. 5 is a view partly in plan and partly in horizontal section taken on the line 5-5 of Fig. 1;

Fig. 6 is a fragmentary front elevation with 25some parts broken away and sectioned;

Fig. 7 is a fragmentary detail view partly in elevation and partly in section of certain of the side and end members segregated;

Fig. 8 is a fragmentary view partly in elevation and partly in section showing a modifica- 30 tion of the clamping device for side, end and gable members;

Fig. 9 is a side view of the tie shown in Fig. 8 removed from the side and end members;

Fig. 10 is a fragmentary detail edge view of 35the clamping device shown in Fig. 9, some parts being sectioned;

Fig. 11 is a view corresponding to Fig. 5, but showing different forms of longitudinal and 40 transverse members with a different type of interlocking joint;

Fig. 12 is a fragmentary elevational view of one corner portion of the structure shown in Fig. 11; and

Fig. 13 is a fragmentary view showing a plu- 45 rality of the longitudinal and transverse members segregated.

The side walls 11 and the end walls 12 are each formed of horizontal members 13 and 13', respectively, held interlocked, at the corner por- 50 tions of the cabin, by notches 14. These side members 13 and the end members 13' are square in cross-section, positioned with their sides oblique to vertical planes with their upper and lower longitudinal edges supporting one another 55 to form a tight structure.

2

The side members 13 and the end members 13', at each corner of the cabin, are rigidly connected and held in assembled relation by a long rod 15 which extends through aligned holes in said members where they cross one another. These rods 15 have heads 16 on their upper ends that are countersunk in the uppermost side members 13. The rods 15, at their lower end portions, have screw-threaded engagement with sleeve-like nut-acting members 17 provided with heads 18 countersunk in the lowermost side

members 13. In the rear wall of the cabin is a frame 19 held

in place by tongues 20, on the ends of the members 13', that abut said frame and extend into grooves 21 in the upright members of the frame 19. A panel 22, in the frame 19, has its edge portions mounted in grooves 23 in said frame. In each side wall of the cabin is a window frame 24 held in place by tongues 25 on the ends of the side members 13 that abut said frame and extend into grooves 26 in the upright members of the frame 24. In the frame 24 is a transparent pane 27 held between two thin sashes 28. These sashes 28 are mounted in grooves 29 in the frame 24.

In the front end wall of the cabin is a door frame 30 held in place by tongues 31, on the ends of the end members 13 that abut said frame and extend into grooves 32 in the upright members of the frame 30. This frame 30 is rabbeted at 33 for a door 34 attached by hinges 35 to said frame for inward swinging movement. The door 34 is held closed by a latch 36 that is operated by a door knob 37.

The cabin has a gabled roof 38 and end gables 39 formed by members 40, similar to the end members 13', that are progressively shorter from the uppermost end member 13' to the ridge of said roof. The roof structure 38 includes a ridge member 41 and two similar intermediate roof members 42. The ridge member 41 and intermediate member 42 are identical with the side members 13 and have notched interlocking engagement with the gable members 39. These gable members 39, at each end of the cabin, are rigidly connected, held assembled the one upon the other, and anchored to the uppermost end member 13' by a rod 43 like the rods 15 except that they are shorter. The rods 43 extend through aligned holes in the gable members 39 and the uppermost end member 13' at the transverse centers thereof. The heads 44 of the rods 43 are countersunk in the ridge member 41 and the heads 45, of the nut-acting members 46, with which the rods 43 have screw-threaded engage3

ment, are countersunk in the under side of the uppermost end member 13'.

Individual roof boards 47 removably rest on the ridge member 41, the intermediate roof members 42 and the two uppermost side members 13. 5Each roof board 47 has on the under side of its upper end portion a transverse cleat 48 that engages the upper intermediate roof member 42 and holds said roof board from slipping downwardly out of place. The end roof boards 47, 10 which are considerably wider than the intermediate roof boards 47, each has an aperture 49 through which the adjacent end portions of the gable members 39 project. These apertures 49 have irregular outlines that closely follow the 15 contours of the gable members 39 that project The end roof boards 47, below therethrough. the apertures 49, have on their under sides reinforcing cleats 50.

A ridge roll 51 is mounted on the roof boards 20 47 and a block representing a chimney 52 rests on the ridge roll 51 and is notched at 53 to fit onto said ridge roll. A long wood screw 54 extends through a central vertical aligned bore in the chimney 52 and the ridge roll 51, between $_{25}$ in cross-section being in the form of a V hav-the upper ends of the roof boards 47, and has ing an angle at the intersection of the two legs threaded engagement with the ridge member 41. The head of the screw 54 is countersunk in the chimnev 52.

the four rods 15 rigidly hold the horizontal members 13 and 13' interlocked in assembled relation, that the two rods 43 hold the ridge member 41 and the intermediate members 42 interlocked with the gable members 40 and with said $_{35}$ gable members in assembled relation and anchored to the end walls 13'. It is also evident that the screw 54 rigidly holds the chimney 52, the ridge roll 51 and roof boards 47 in assembled relation and anchored to the end gables 39. $_{40}$

In place of the rods 15 and 43, clamping devices, one of which is shown in Figs. 8, 9 and 10, may be used. Each of these devices comprise a pair of flat bars 55, the outer ends of which are bent to form hooks 56 that extend trans- $_{45}$ versely over and engage the two outermost horizontal members 57 of a cabin wall structure 58 in one corner and inner side thereof. The inner end portions of the clamping members 55 are overlapped and adjustably connected by an eccen- 50tric 59 having a handle 60 by which it may be operated.

End portions of the gable members 40 projecting through the end roof boards 47 give the toy log cabin a pleasing and artistic appear- $_{55}$ ance.

In the structure shown in Figs. 11. 12 and 13. the transverse members 55 and the longitudinal members 56 form, respectively, the end walls 57 and the side walls 58 of the cabin. These mem- $_{60}$ bers 55 and 56, where they cross one another at the corners of the cabin, are connected by dovetail joints 59. These joints 59 are formed by longitudinally recessing the inner and outer sides of each member 55-56 to the form of a $_{65}$ flat V 60. As shown in Fig. 13, the dovetail joints 59 are formed by the upper halves of the members 55-55 and transverse notches 61 having outwardly converging sides in the lower halves of said members. 70

In the rear end wall 57 is a frame 62 in which is mounted a panel 63 and in each side wall 58 is a window frame 64 in which is mounted a transparent panel 65 between two sashes 66. A door 67 is hinged at 68 to a door frame 69 in the 75

front end wall 57 and held closely by a latch 70 operated by a door knob 71. The ends of the transverse members 56, abutting the upright members of the frames 62 and 69, are secured thereto by dovetail joints 72 and the ends of the longitudinal members 58 abutting the frame 64 are connected thereto by dovetail joints 73.

The drawings illustrate a commercial form of the invention, but it will be understood that the same is capable of certain modifications as to details of construction, arrangement and combination of parts within the scope of the invention herein disclosed.

While the invention has been described as a toy or miniature log cabin, the structure is equally well adapted for play houses and full size cabins. What I claim is:

1. A structure of the class described having side and end walls, each wall comprising a tier of horizontal longitudinal members, the end portions of the members at each corner of the structure being crossed, the inner and outer sides of said members each having a longitudinal groove that extends the full length thereof, each groove thereof of more than 90°, each member in each of said corners having a transverse notch the sides of which are in outwardly converging rela-From the above description, it is evident that 30 tion, said notches being in corresponding horizontal surfaces of the members, in each of said corners, the members in one wall at each of said corners extending endwise through the notches in the members in the other wall with a sliding working fit and thereby interlocking the members in each of said corners.

2. The structure defined in claim 1 in which the apexes of the grooves in each member are in a plane equi-distant between the top and the bottom of said members, and the bottoms of the notches are in the same plane with said apexes, whereby the members in each wall rest the one upon the other.

3. A structure of the class described having side and end walls each comprising a tier of horizontal longitudinal members, the end portions of the members in each corner of the walls being crossed and connected by separable interlocking joints, said joints comprising a longitudinal groove in at least one side of each member that extends the full length thereof, and a transverse notch in each end portion of each member, the members in one wall at each corner slidably extending through the notches in the members of the other wall, said notches being interlocked with the grooves.

LEWIS J. KALVIG.

References Cited in the file of this patent UNITED STATES PATENTS

N

Number	Name	Date
1,287,771	Schmitt	Dec. 17, 1918
1,425,166	Bergman	Aug. 8, 1922
1,510,326		Sept. 30, 1924
1,935,256	Wessel	Nov. 14, 1933
1,936,571	Bumann	Nov. 28, 1933
2,238,039		Apr. 15, 1941
	FOREIGN PAT	ENTS

Number	Country	Date
27,400	Denmark	1919
644,712	France	1928
677.190	France	Dec. 7, 1929

a,