April 2, 1957 J. R. JOHNSON 2,787,029

SIMULATED LOG BUILDING

Filed Oct. 19, 1955 3 Sheets-Sheet 1

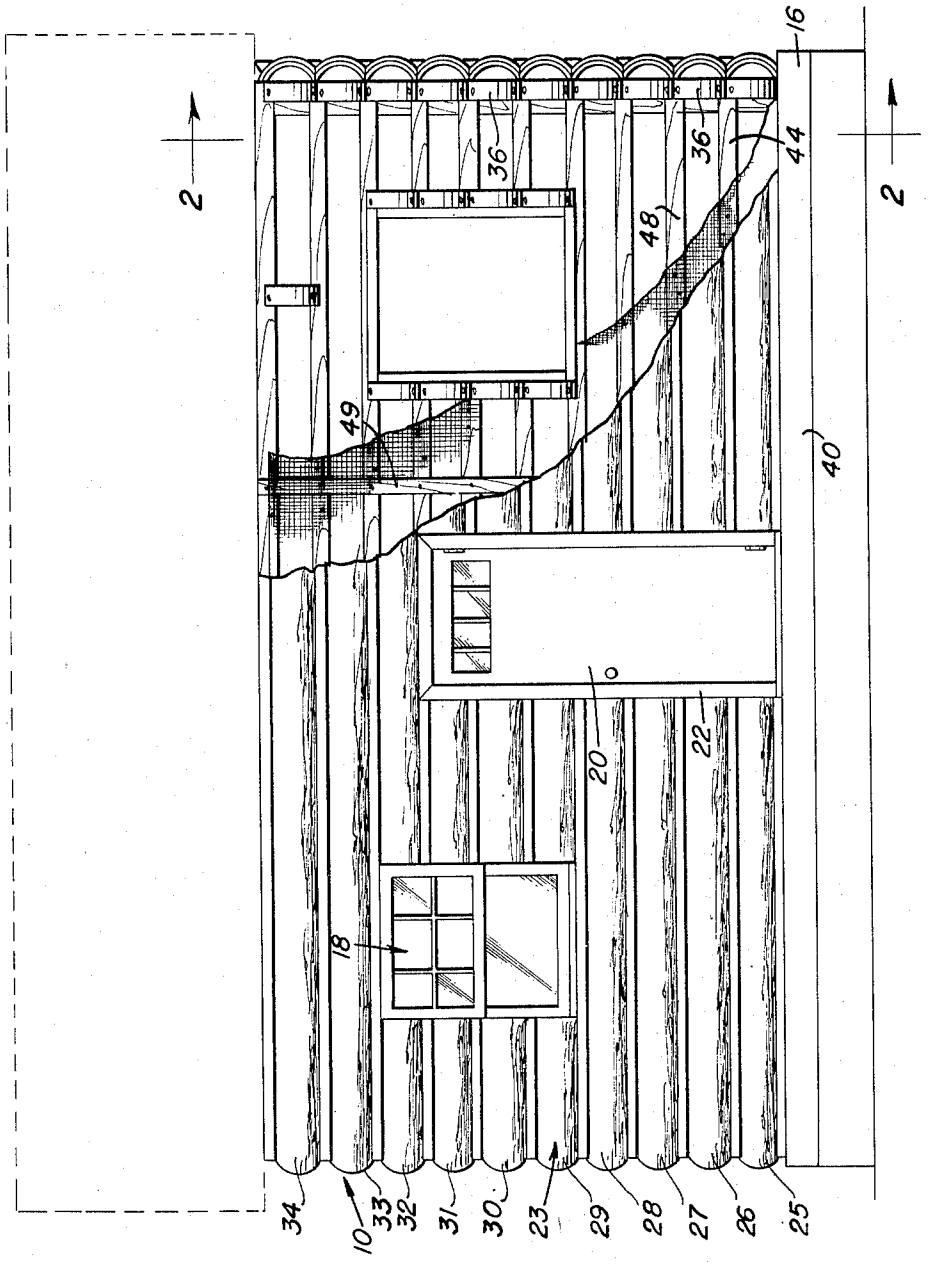

Fig. 1

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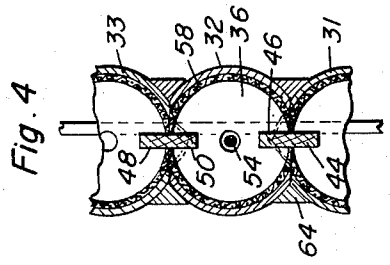

Fig. 4

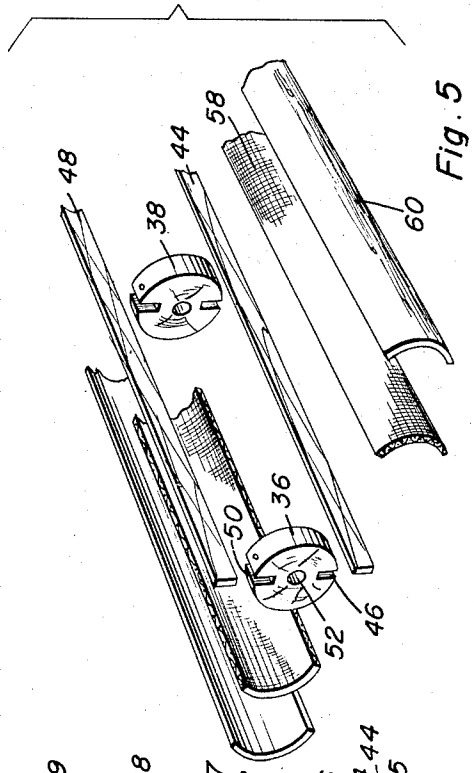

Fig. 5

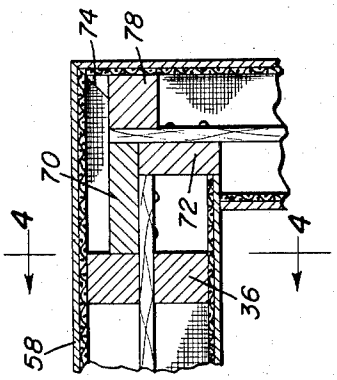

Fig. 3

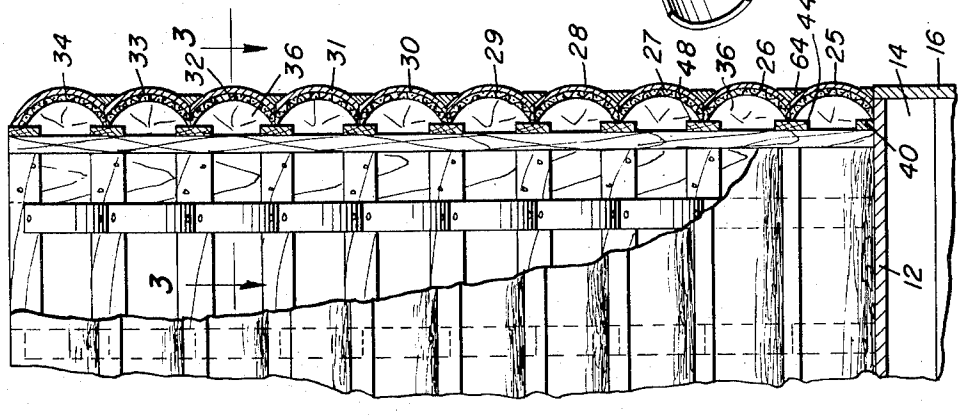

Fig. 2

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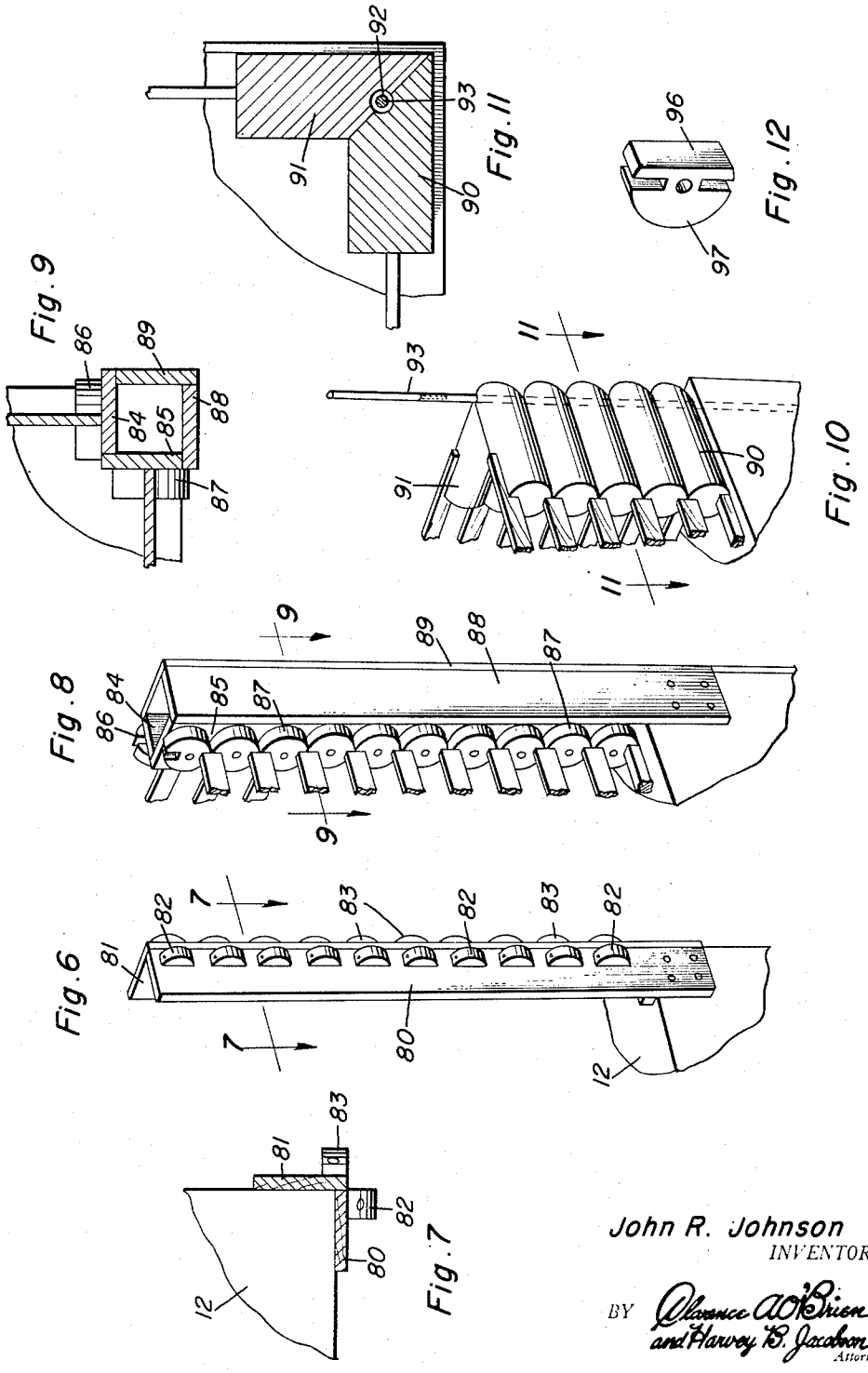

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SIMULATED LOG BUILDING

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Application October 19, 1955, Serial No. 541,385

3 Claims. (Cl. 20—4)

This invention relates to building structures, and particularly to simulated log buildings, as cabins.

An object of this invention is to provide a simulated log building which is easily constructed, utilizing a number of spacers having curved outer surfaces on which lath is attached, there being applied on the lath sheets of curved inexpensive weather-proof material, such as asphalt roofing material. In this way, cementitious products are wholly avoided, and particularly those cementitious products which have a Portland cement base. A completely dry wall is made in the practice of the invention, and yet, the resulting structure is authentic in appearance and highly resistant to the weather.

A further object of the invention is to provide a simulated log building wall which is rapidly constructed by vertically stacking successive simulated logs, each log utilizing a cross-sectionally curved sheet of water-resistant material beneath which there is a metal lath or screen support, the support being carried by and connected to a number of spacers and held in place at least partially by parting strips which simulate log cabin chinking or calking between the logs.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is an elevational view of a wall of a building made in accordance with the invention, the roof of the building being shown schematically;

Figure 2 is a fragmentary sectional view taken approximately on the plane of line 2—2 of Figure 1 and in the direction of the arrows;

Figure 3 is an enlarged fragmentary sectional view taken on the line 3—3 of Figure 2;

Figure 4 is a sectional view taken on the line 4—4 of Figure 3;

Figure 5 is an exploded perspective view of the components which form a part of one log in the wall of Figure 2;

Figure 6 is a perspective view of one corner of the wall of Figure 1;

Figure 7 is a sectional view taken on the line 7—7 of Figure 6;

Figure 8 is a perspective view of a modified corner for the wall of Figure 1;

Figure 9 is a sectional view taken on a line 9—9 of Figure 8 and in the direction of the arrows;

Figure 10 is a fragmentary perspective view of another corner construction for the wall of Figure 1;

Figure 11 is a transverse sectional view taken on the line 11—11 of Figure 10; and

Figure 12 is a perspective view of a modified spacer usable in the wall of Figure 1 in order to finish the interior of the wall in a manner different from that which would be used in connection with the spacers shown in the other views.

In the accompanying drawings, the cabin **10** includes a foundation, as a footing, on which a masonry slab is poured. Alternatively, wood or masonry pilings or pillars may be used and a masonry or wood floor placed thereon. In this regard, the embodiment of Figure 2 illustrates a wood floor **12** supported by utilizing usual building construction techniques, for example, by having floor joists **14** on which the flooring is nailed, the joists having a face plate **16** at the ends thereof.

Standard windows, as the double hung sliding sash **18** are used. The same holds true for door **20** and its frame **22**. The roof construction will be conventional and in keeping with the motif of the simulated log building.

Each wall of the building **10** is constructed in a similar manner. Considering the front wall of the building **10**, it is made of a plurality of superposed simulated logs. For example, the front wall **23** consists of logs **25**, **26**, **27**, **28**, **29**, **30**, **31**, **32**, **33** and **34** respectively. Any number of logs may be used as required by the diameter of each log and the height of the wall **23**. Each log consists of a plurality of spacers (Figure 5), for example, the spacers **36** and **38** in the typical fragmentary log of Figure 5. Each spacer has an arcuate front surface and an arcuate rear surface, being generally disk-shaped. In fabrication, the plate **40** is secured to the floor **12** and a plurality of the spacers, for example, spacers **36** and **38** are placed thereon with the lower notches of each fitted over the plate **40**. The upper notches or slots in the spacers accommodate connecting strips which hold the spacers of the lower simulated log **25** connected to the adjacent spacers of the adjacent log **26** thereon. All of the spacers are built up in this way for all of the logs. In this connection, attention is invited to Figures 3 and 4 where the spacer **36** is shown in detail, it accommodating lower connecting strip **44** in its lower slot **46** and accommodating upper connecting strip **48** in its upper slot **50**. Each disk is centrally apertured, as at **52**, so that a connecting rod **54** may be passed therethrough in order to help to support the wall. There need not be rods through all of the spacers, inasmuch as such support will not be required. However, one or more of the logs having a rod **54** extending through it will materially strengthen the construction of the building.

At spaced places along the walls there are uprights **49** which make the walls rigid and straight. The uprights rise upwardly through the center of the wall and are nailed to each connecting strip **44** and **48** as each strip is placed in a series of spacers **36** and fastened to the spacers by nails driven through drilled holes in discs **36** into the strips. The uprights **49** are placed and nailed to the connecting strips **44** and **48** in the spaces between the spacers so that uprights **49** do not come in contact with the spacers.

The front surface of each of the spacers in a single log is curved in order to accommodate the curved lath, as at **58** for the log **32**. This lath in made of wire mesh in order to be strong when curved so that it is approximately arcuate in cross-section. For the log **32**, there is a sheet **60** of water-repellant material of the type used for roofing and having an asphalt base. Such roofing material is already available in shades and hues which resemble closely the color of the logs of a log cabin. Sheet **60** is curved in cross-section similar to the curvature of the lath **58** and is placed thereover.

In fabrication, after the lowermost disks are placed on the plate **40** and nailed in place, the first connecting strip is inserted in the upper slots of the lowermost spacers. These are nailed in place and then the next log is begun by placing its spacers with their lowermost notches or slots interfitted with the previously mentioned connecting

strip. This procedure is continued until the entire wall framing is made in this way. When window openings are required or door openings are deemed necessary, appropriate provision is made by arranging the spacers properly for arranging this (Figure 1). Then, the lath in strips is placed on the outer surfaces of the spacers. This lath is nailed in place or simply tacked. Thereafter, the sheets, as sheet 60, of roofing material are placed on the laths. In doing this, parting strips, as those at 64, are placed between the sheets and at the junctions thereof. These parting strips are preferably triangular in cross-section, and the apex portion thereof is inserted first. Then, the strips 64 are nailed in place with the nails going through the lath and the outer sheets 60 and into the spacers and/or the connecting strips. This forms a typical wall.

There are several variations of corners and interior finish for such a wall. For example, in Figure 3, the corner construction comprises a pair of vertical posts 70 and 72 arranged at right angles to each other and connected, as by being nailed. The ends of the connecting strips for each of the walls are nailed to the vertical posts 70 and 72. The ends of the outer surface forming lath and sheet material are mitered, as at 74. Inasmuch as the corner posts 70 and 72 are offset with respect to the line of miter, the spacers of one wall forming this corner may remain intact, but the spacers for the other of the walls forming this mitered corner are formed as half-rounds 78 so that they may be placed as close as possible to the actual junction of the walls. In this way, strength of construction is achieved.

As an alternative construction for the corner, it may be formed by vertical posts 80 and 81 which are joined at right angles to each other (Figures 6 and 7) and nailed in place. A vertical series of spaced half-rounds 82 are secured, as by nailing, to the post 82. A similar row of half-rounds 83 on the post 81 are attached by nailing or other ways. The half-rounds 82 and 83 function as spacers for the corners of the lath and sheet material.

A further corner construction is seen in Figures 8 and 9 and includes a box construction having vertical posts 84 and 85 arranged at right angles to each other and joined. A vertical row of spacers 86 that are identical to spacers 38 are nailed or otherwise rigidly secured to the post 84. A vertical row of spacers 87 is secured to the post 85. Vertical face boards 88 and 89 are nailed at right angles to each other and at right angles to the posts 84 and 85. Moreover, they are anchored to the foundation construction in order to hold them rigid and erect. In use of the corner shown in Figures 8 and 9, the lath and the outer sheet material is cut at right angles at the ends thereof and butted against the posts 84 and 85.

Figures 10 and 11 illustrate a further corner modification wherein the spacers 90 for one wall are elongated, as are the spacers 91 for the joining wall. The elongated spacers 90 and 91 have mitered ends which are abutted and joined as by spiking. Otherwise, the spacers 90 in one wall are connected together by means of connecting strips, as described in connection with the shorter spacers. The same construction prevails for the wall in which the spacers 91 are disposed. A vertical bore 92 is formed at the mitered junction of the spacers 90 and 91 in order to accommodate a sectional riser 93. This riser is anchored in the floor and/or foundation for the building and retains the corner fixed in place. This riser may be hollow in order to accommodate electrical service, plumbing and other rods or conductors. The same holds true for the aligned openings 52 in the smaller spacers. They may accommodate electrical service, as conduits or cable, or may accommodate gas and plumbing lines.

The interior finish of the walls is optional. It may be simulated log building construction as would be the case where the spacers have the curved inner surface (Figure

4) and these inner surfaces are fashioned with lath and covering material. For the interior, the covering need not be roofing, but may be selected from a group of other commercially available wall coverings, depending upon the texture and the finish desired. Parting strips 64 are used on the interior surface of the wall for the same purposes that they are used on the exterior wall. Where a flat inner wall is desired, the spacers are fitted with flat inner surfaces, as at 96 for the spacer 97. Of course, customary wall construction may be used, as studs or firring strips on which wallboard, lath in addition to plaster and other types of interior finish are supported.

Inasmuch as this construction is essentially a hollow type, the voids between the outer surfaces and the inner surfaces of the wall may be filled with insulation to reduce heat losses.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. In a simulated log building, a wall comprising a plurality of superposed pairs of spacers separated from each other, each spacer having a curved outer surface, a separate lath extending across each pair of said spacers and mounted on the curved surfaces thereof, a layer of sheet material on each lath, said lath and said sheet material on each pair of spacers being curved in cross-section to simulate a log, a parting strip between each adjacent pair of spacers and over adjacent edges of adjacent layers of sheet material, said parting strip simulating the chinking between logs of a log building wall, the confronting parts of adjacent spacers having slots, and connecting strips extending between the spacers of each pair and disposed in said slots.

2. A simulated log building having walls, at least one of said walls comprising two vertical rows of spacers, structural means supporting said spacers, said spacers being made of wood and arranged in generally horizontal pairs, the spacers of each pair having an arcuate face, metal laths on each pair of spacers, there being one metal lath for each of said pairs and each metal lath being in the shape of a segment of a cylinder, a layer of sheet material on each of said laths, each layer being made of water repellent material and being in the shape of a segment of a cylinder, adjacent layers of sheet material and adjacent laths having confronting edges in the region of the spacers which are adjacent to each other, a parting strip over each of said pairs of confronting edges, said parting strips being approximately triangular in cross-section, fasteners extending through said parting strips to anchor them to said spaced wooden spacers, said parting strips simulating the chinking or calking in a log building wall, the confronting areas of said pairs of said wooden spacers having confronting slots, connecting strips in said confronting slots and located behind said confronting edges of said lath and said layers of sheet material.

3. The combination of claim 2 wherein at least some of said spacers have apertures through which service lines and devices are adapted to pass.

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