Sept. 11, 1928. 1,684,127

J. E. DE BAUN

BUILDING CONSTRUCTION

Filed June 21, 1927

Fig. 1.

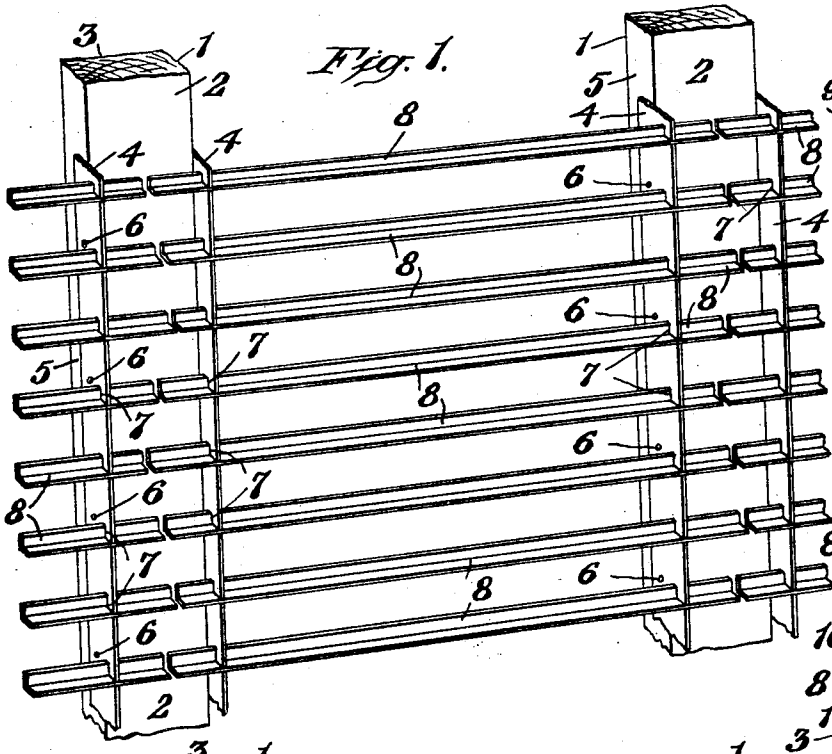
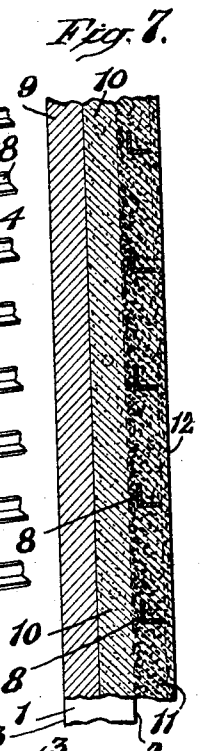


Fig. 7.



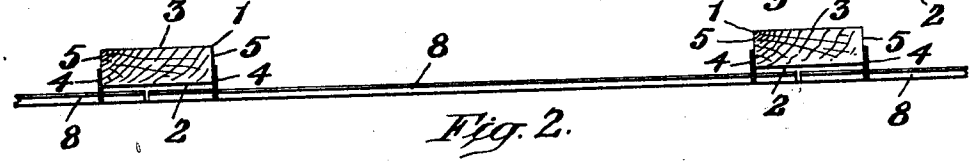


Fig. 2.

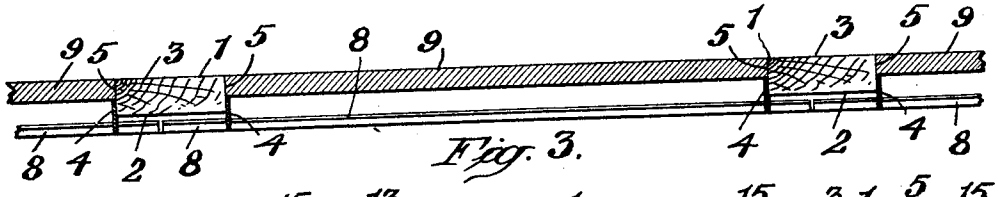


Fig. 3.

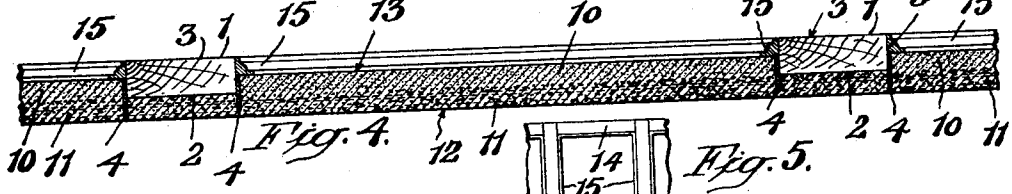


Fig. 4.

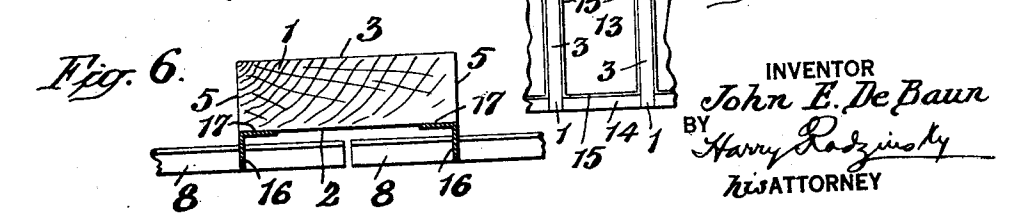
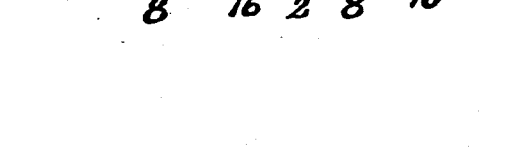


Fig. 5.

Fig. 6.



INVENTOR
John E. De Baun
BY Harry Radzinsky
his ATTORNEY

Patented Sept. 11, 1928. 1,684,127

UNITED STATES PATENT OFFICE.

JOHN E. DE BAUN, OF SADDLE RIVER, NEW JERSEY.

BUILDING CONSTRUCTION.

Application filed June 21, 1927. Serial No. 200,411.

My invention relates to an improvement in the construction of small frame buildings, particularly for use in small homes, garages, barns and the like where extreme strength or rigidity is not necessary or desirable, and it has for its object to provide a simplified and economical method of construction, whereby a light, yet sturdy structure will result.

A further object of this invention is to provide a building construction for walls or roofs, whereby a great saving of material is effected, yet a strong and insulated type of building wall will result.

With these objects and such other objects as may hereinafter appear, in view, I have devised the construction particularly disclosed in the accompanying drawing and more specifically pointed out in the claims appended hereto.

Reference is to be had to the accompanying drawing, forming a part hereof, in which

Figure 1 is a perspective view showing a pair of wall studs or uprights connected by a form of metal lath, which is employed in my improved construction;

Figure 2 is a transverse sectional elevation of the structure disclosed in Figure 1;

Figure 3 is a transverse sectional view of the structure disclosed in Figures 1 and 2, except that the temporary backing has been fitted in position in the spaces located between the studs;

Figure 4 is a similar sectional view of the finished wall;

Figure 5 is an elevation of the interior face of the finished section of wall made in accordance with my invention;

Figure 6 is a transverse sectional view of a stud showing a modified form of metal stanchion for supporting the lathing; and

Figure 7 is a vertical sectional view through a finished wall made in accordance with my invention, prior to the removal of the temporary backing plate.

In the preferred embodiment of my invention as disclosed in the accompanying drawing, I have shown spaced uprights or wooden studs 1. These studs may be of any suitable thickness, this being dependent upon the size of the building under construction. For moderately small buildings, such as bungalows, garages or the like, I have found it advisable to employ uprights or studs measuring approximately 2″ x 6″. When studs of this size are employed, the same are so placed that their wider faces 2 and 3 are located in the same plane as the surface of the wall to be produced. In ordinary small building construction, I have found it desirable to locate these studs approximately thirty inches apart although this may be varied as may be required to suit the particular building under construction.

At 4 are shown upright metal stanchions or supports which are, in the embodiment of my invention disclosed in Figures 1 to 4 inclusive, in the nature of flat metallic plates. These stanchions or supports 4 are placed flat against narrower edges 5 of the studs 1 and are secured thereto by nails 6 or other fastening means, the stanchions being suitably perforated so that nails may be driven through them and into the studs 1. The stanchions 4 are so positioned that they project for a considerable distance out beyond the flat outer surface 2 of the studs 1 and in these projecting parts of the stanchions 4 are located L-shaped slots 7, through which angle-shaped metallic strips may be placed. These strips which are shown at 8, are placed at short distances apart, the slots 7 being so located to receive them.

It will be seen from Figure 1 that when these strips or laths 8 are in position, that the same extend across the front face of the building and act to support a plastic material which co-operates with the lathing and studs 1 to produce the finished wall.

The strips 8 are preferably formed of substantially thin sheet metal and may be made of any suitable length. At the meeting ends of adjoining strips 8, the same may be overlapped if desired, so that no break in their continuity will be had. If desired however, the meeting ends of the two adjoining strips may be located substantially as is shown in Figure 1 and in order to avoid a continuous joint between the various pairs of adjoining strips, the ends in each pair may be staggered in respect to those of the next pair so that the effect disclosed in Figure 1 will be present.

In Figures 1 and 2 is shown the studding in position with the metal stanchion or supports affixed thereto and the spaced strips of lath supported by the studding as was heretofore mentioned. The framework in this form is then ready for the application

of plastic filling material and in order to properly apply the same, the spaces between the studs 1 are filled in by temporary filling members 9 which may be in the nature of wide boards or metallic plates, since the same are only temporarily fitted to enable a plastic filling substance to be applied and compacted against them. These filler members 9 are disclosed in Figure 3 and when the same have been fitted as shown, a plastic layer 10 is applied, the same being applied in back of the lathing strips 8. This inner layer of plastic material 10 may be of any suitable material such as a combination of paper pulp and asbestos fibre or it may be made of any other material suitable for the purpose, which material shall possess the faculty of supplying insulation against heat and cold. The substance to be used however, should preferably be of an absorbent nature and slow drying so that it supplies, while in its moist state, preparatory to drying out, sufficient moisture to a subsequently applied outer layer of stucco or similar cement mixture.

The first plastic mixture just described, and shown at 10 is so applied so that it is compacted in back of the lathing strips 8 and it bears firmly against the filling members 9 and may be of such thickness that it partly surrounds and encloses to some extent the strips 8. After this first or inner layer 10 has been applied, the outer layer of stucco or other cement mixture 11 is applied and this latter mixture completes the enclosure of the lathing 10 and extends slightly beyond the same to provide an outer wall surface 12 which may be finished off, smoothed or otherwise treated, as desired.

It will be seen that the two layers of plastic material shown at 10 and 11 thus co-operate to completely enclose the lathing 8 and the same cover over and render invisible, the outer faces 2 of the studs 1. It will also be seen that the inner faces 3 of the studs 1 are not covered over by the mixtures just described, so that when the temporary filling members or backings 9 are removed, the faces 3 of the studs 1 stand out slightly from the inner surface 13 of the finished wall and provide the effect of a panelled wall. This effect may be heightened by the utilization of horizontally extending beams 14, as shown in Figure 5, and after the fillings or backings 9 have been removed, a molding strip 15 may be nailed or otherwise secured in place against the inner edges 5 of the studs 1, so that a finished panelled effect will result.

It will be seen that I have provided a very simple wall construction in which the inner portion of the plastic layers is of an absorbent insulating material and the outer part of such layers is of a weather-resisting material. The resultant wall is therefore one which resists dampness, heat and cold, yet provides a light and strong building with a minimum of materials used.

In Figure 6 of the drawing, I have shown a modification of the stanchions employed, wherein I have used angle irons 16, such angle irons having one of their webs 17 placed flat against the outer surface 2 of the stanchions and secured thereto.

It will also be understood that many modifications and adaptations of my invention may be made and various forms of metal lathing can be employed to produce similar results, without departing from the spirit of my invention.

Having described my invention, what I claim is:

1. In a building construction, a wall formed of a plurality of spaced studs, metal stanchions secured to the edges of said studs, said stanchions being provided with a plurality of L-shaped slots, L-shaped lathing extending through said slots and supported by the stanchions, and plastic covering placed over and surrounding said lathing.

2. In a building construction, a wall formed of a series of spaced studs, metallic stanchions secured to the edges of said studs, slots in said stanchions, metal lathing consisting of metallic strips extending through said slots in the stanchions and bridging the spaces between the studs, plastic covering supported by the metallic lathing, said covering extending over the outer faces of the studs and making a uniform and smooth finish for the outer face of the wall, said covering being interrupted or broken on the inner face of the wall by the studs so that the inner faces of said studs are uncovered to form the appearance of interior wall panelling.

3. In a building construction, spaced studs, and a support for a plastic covering consisting of metallic stanchions secured to the edges of said studs, slots in said stanchions, and L-shaped metallic strips extending through said slots and bridging the spaced studs.

4. In a building construction, a plurality of spaced studs so placed that their wider faces are located in the plane of the wall to be formed, metallic stanchions secured to the edges of said studs with parts of said stanchions projecting beyond the outer faces of the studs, recesses in the projecting parts of said stanchions, metallic strips carried in said recesses and bridging the spaces between the studs, a plastic covering applied over the outer faces of the studs and over and about the strips, said covering extending into and closing the spaces between the studs.

5. In a building construction, a wall formed of a series of spaced studs, metallic stanchions secured to and projecting in ad-

vance of one of the faces of said studs, lathing in the form of a series of strips supported by said stanchions and projecting across the front faces of the studs and bridging the spaces between said studs, a plastic covering supported by the lathing, said covering extending over and enclosing the lathing and stanchions with the inner surface of said covering terminating at a distance in from the inner surface of the studs so that the inner surface of said studs are visible and present a panelled effect.

Signed at the city, county, and State of New York, this 20th day of June, 1927.

JOHN E. DE BAUN.