P. M. STEWART.

BUILDING CONSTRUCTION.

APPLICATION FILED MAY 12, 1919.

1,360,812. Patented Nov. 30, 1920.

Fig. 1.

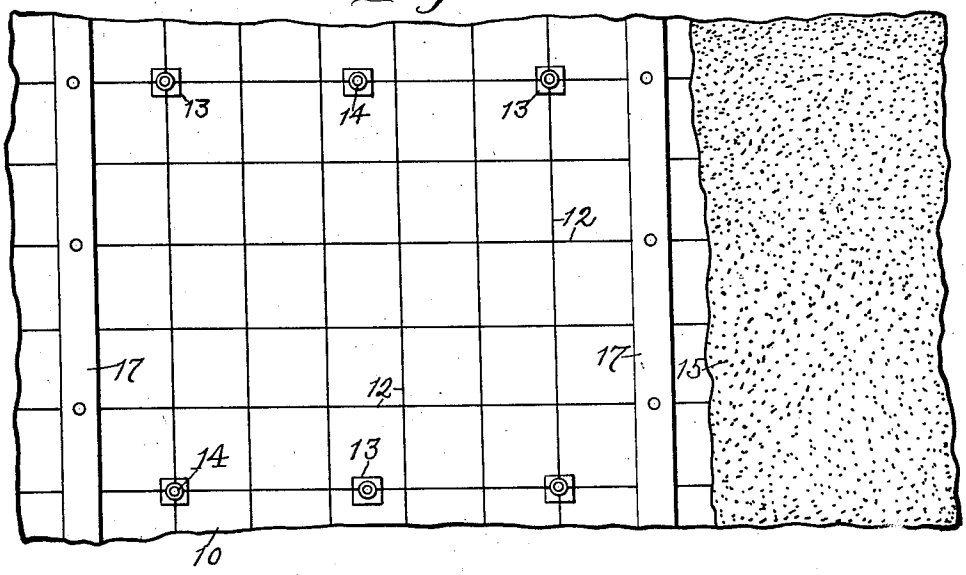
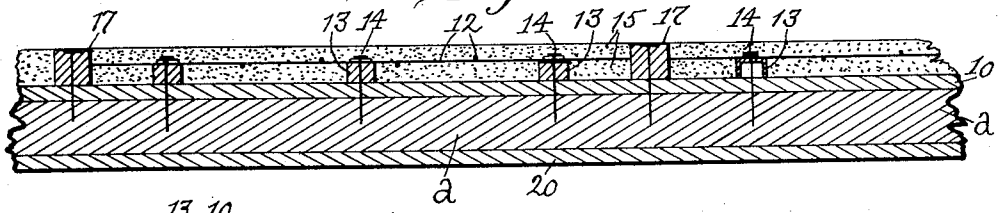


Fig. 2.



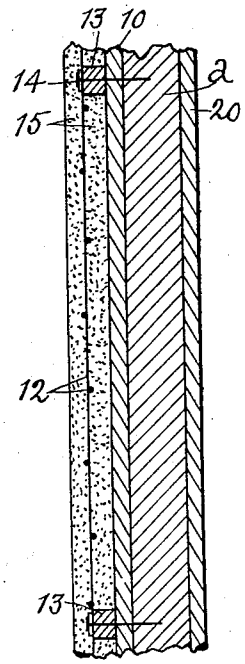


Fig. 3.

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UNITED STATES PATENT OFFICE.

PEREZ M. STEWART, OF PASADENA, CALIFORNIA, ASSIGNOR TO GERTRUDE F. STEWART, OF PASADENA, CALIFORNIA.

BUILDING CONSTRUCTION.

1,360,812. Specification of Letters Patent. Patented Nov. 30, 1920.

Application filed May 12, 1919. Serial No. 296,389.

To all whom it may concern:

Be it known that I, PEREZ M. STEWART, a citizen of the United States, residing in Pasadena, in the county of Los Angeles and State of California, have invented an Improvement in Building Construction, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to a building construction and more particularly to a novel construction of roof, siding or floor therefor. The invention has for its object to provide a construction whereby plastic material can be applied to a backing member so as to have embedded in it a metal reinforcement for said plastic member, which is secured to and spaced apart from the backing member, with the result that a superior building and especially a wood frame building may be produced at a minimum cost, and be well insulated against heat and cold and protected against fire, as will be described.

Figure 1 is a plan of a roof or floor construction embodying the invention, with parts broken away.

Fig. 2, a section on the line 2—2, Fig. 1, and

Fig. 3, a sectional view of a modified form of siding embodying the invention.

Referring to the drawing *a* represents the frame of the building, which frame may be of any suitable construction now commonly employed. To facilitate description, the structure shown in Figs. 1 and 2, may be supposed to be a floor of a wooden building such as a dwelling house, in which case *a* represents the wood joists or stringers which usually extend transversely of the building and are suitably spaced apart to form the supporting member for the floor proper.

In accordance with this invention the floor proper is composed of a backing member 10, which may be of substantially rigid material, such as plaster board, or of flexible material, such as waterproof paper, asbestos felt or the like, which has secured to it a metal reinforcement 12, which may be wire mesh, rods or the like, and which is separated from the backing member a material space by devices 13, which are fastened to the backing member 10 and to the supporting member *a* by nails 14 or other suitable fastening devices. The backing member 10 has applied to it a layer 15 of plastic material, such as concrete, stucco, or the like, which plastic material can be applied by hand or machinery and which fills the space between the metal reinforcement and the backing member 10 and which also covers the said reinforcement, so that the latter is embedded in the plastic material which is firmly anchored thereto.

The backing member 10 may also have secured to it members or strips 17 of wood or other suitable material, to which the usual floor boards not shown may be nailed or otherwise fastened, and between which the metal reinforcement 12, the spacing devices 13 and the plastic material 15 are located, within or behind the outer surfaces of said nailing strips.

By reference to Fig. 2, it will be seen that the layer 15 of plastic material contacts with the backing member 10 and thoroughly protects the metal reinforcement 12 which is embedded therein, and this is also true when the improved structure is used as a siding as shown in Fig. 3.

By fastening the metal reinforcement 12 to the spacing devices 13, which are fastened to the backing member 10, these parts may be assembled as a unit in a factory and shipped to the job ready to be secured to the framework and have the plastic material applied to the backing member so that the plastic material envelops the metal reinforcement and protects the same against corrosion, all of which tends to the production of buildings which are economical to construct, of increased strength and fire resisting, durable, and insulated against heat and cold, thereby producing a warm winter house and a cool summer house.

This insulating feature may be augmented by securing to the rear side of the frame a member 20 of plaster board, waterproof paper, asbestos felt and the like, (see Figs. 2 and 3), which forms with the backing member 10 an air space between the members of the frame *a*.

The spacing devices 13 may be made of any suitable material, and may be solid or

channeled as shown in Fig. 2. The invention is also applicable to the construction of roofs and when so used roof boards or other coverings may be secured to the nailing strips.

Claims:

1. In a building of the character described, in combination, a supporting member, a backing member secured thereto, nailing strips spaced apart and secured to said backing member, spacing devices located between the said nailing strips and of less depth than the latter, a metal reinforcement located between said nailing strips and separated from said backing member by said spacing devices, means for securing said metal reinforcement and spacing devices to said backing member, and plastic material applied to the backing member between said nailing strips and in which the metal reinforcement is embedded.

2. A floor, roof or siding unit for buildings, comprising a portable backing member of substantially rigid material, nailing strips of substantial depth spaced apart and secured in fixed relation to said backing member, spacing devices of less depth than said nailing strips located between the latter and secured in fixed relation to said backing member, a metal reinforcement located between said nailing strips within the outer surface of the latter and secured in fixed relation to said backing member and separated from the latter by said spacing devices.

In testimony whereof, I have signed my name to this specification.

PEREZ M. STEWART.