March 17, 1931. O. A. PEDERSEN 1,796,476

ROOF CONSTRUCTION

Filed March 11, 1927

Fig. 1.

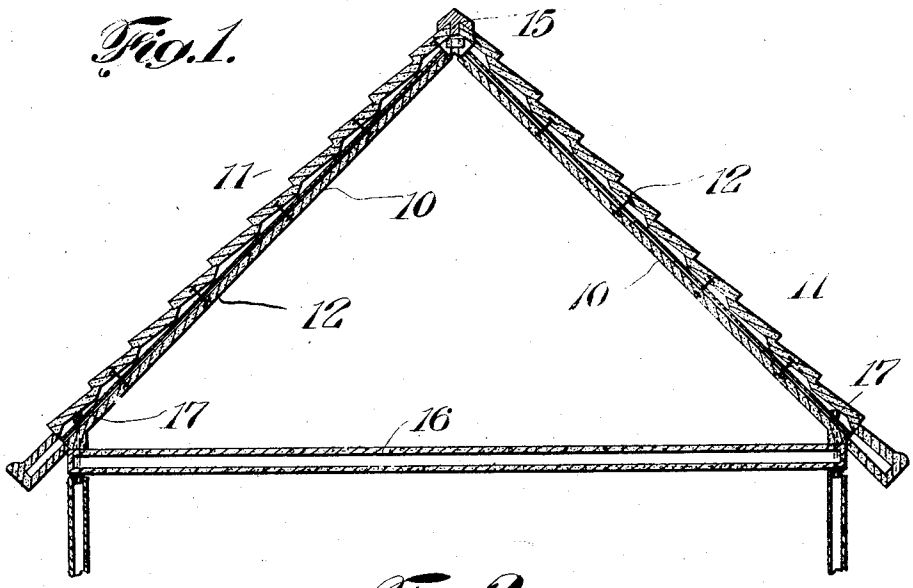


Fig. 2.

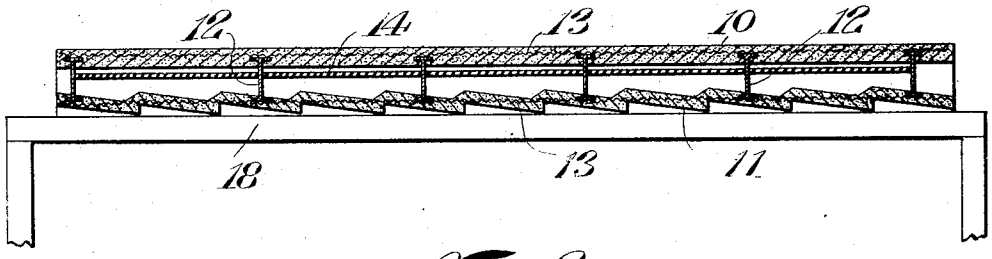
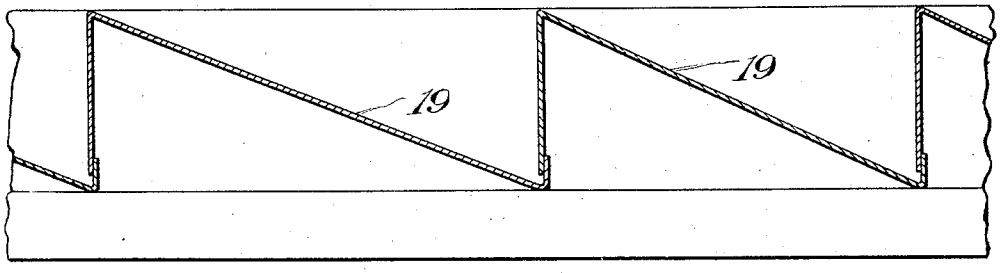


Fig. 3.



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Patented Mar. 17, 1931 1,796,476

UNITED STATES PATENT OFFICE

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ROOF CONSTRUCTION

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The present invention relates to an improved method of forming roofs and more particularly to a method of forming a building unit with a tile formation so as to adapt the same for use in roofs.

Although I consider that my method may be applied to any building unit, I have in mind using it particularly with a building unit, such as disclosed in U. S. Patent 1,700,512, issued to me on January 29, 1929, comprising spaced slabs of building material, such as concrete, reinforced and insulated to prevent passage of moisture and cold therethrough.

In carrying out the invention, I preferably cast the building unit on a suitable form placed on a horizontal casting table, thereby to provide tiles in the building unit shaped in correspondence with the forms and after the material of the building unit has set, remove the unit from the forms. The forms accurately shape the tiles into the finished configuration desired and it is not necessary to subsequently perform any work in shaping or smoothing the tiles.

In the drawings:

Figure 1 is a sectional view through a roof showing the application of the invention in practice;

Figure 2 is a sectional view through a building unit showing the manner in which the unit is cast on forms placed on a horizontal table, the table being indicated in side elevation; and

Figure 3 is an enlarged view similar to Figure 2 of casting forms adapted to be employed in my method.

Referring now to the drawings in which I have disclosed an embodiment of the invention for the purpose of illustration and to the details of which I do not intend to be confined, the roof is composed of a plurality of building units, suitably connected and joined together and having on their upper surface tiles of any desired form or configuration. The building unit preferably employed has an inner smooth slab, 10, of building material such as concrete and an outer tiled slab, 11, the two slabs being spaced and reinforced as by means of steel I-beams, 12. In each slab I preferably incorporate reinforcement, 13, such as chicken wire, or a metal lathe, and between the slabs I preferably insert sheets of insulating material, 14, which may be of wood, cork, fibrous or any other insulating material and which serves to prevent the passage of cold and moisture through the roof. As shown in the drawings, the two sides of the roof are jointed together at the peak, 15, by a waterproof joint and the lower ends of the sides are tied to the top floor, 16, of the building as by means of bolts, 17, or the like, thus providing a sturdy, strong, and rigid construction.

In the process of casting the building unit I employ forms shaped to give any desired type or style of tiles and lay the same on a horizontal casting table, such as indicated at 18. I then cast the building unit on top of the forms, preferably using the method disclosed in my patent mentioned above, first by casting the slab, 11, on the forms then by placing the spacing means, 12, over the slab, 11, and finally by casting the slab, 10, on top of the spacing means. The particular method employed in casting the slab 10 on top of the spacing means is discussed in U. S. Patent 1,700,512, issued to me on January 29, 1929. The result of this operation is that the outer slab 11 of the building unit is shaped by the forms so as to give the desired tile formation. After the casting has properly dried and set, the entire casting together with the forms can be run off the table and the forms picked off, leaving the building unit with the desired tile formation and ready to be incorporated in the roof of a building.

While I consider my invention is applicable for obtaining any style or shape of tiles and that it may be used in conjunction with any suitable forms, for the purpose of illustration, I have shown in Figure 3 a form construction that may be employed in the practice of the process. By reference to said figure, it will be noted that the construction disclosed comprises a plurality of Z shaped form members, 19, preferably of metal and interengaging one another in the manner indicated to provide tiles of shingle conformation. The entire form may be built up by

putting together a number of these form members on the table and thus may be obtained units of various sizes to provide building units of various sizes.

It is obvious that the characteristic feature of the invention is susceptible of wide variations in constructional embodiments and I desire to be limited only by the state of the prior art and the scope of the appended claim.

I claim:

The method of forming a roof construction which comprises casting a slab of building material on a form placed in horizontal position, to provide tiles of shingle conformation in the slab, shaped in correspondence with the form, placing spacing means above said slab, lining the area between said spacing means with insulating material, casting another slab on said spacing means and removing the structure thereby resulting as a unit from the form after the material of the slabs has hardened.

In testimony whereof, I have signed my name to this specification this 10th day of March, 1927.

OSCAR A. PEDERSEN.