Feb. 10, 1925. 1,525,797

E. BLUM

PROCESS FOR MOLDING WALL SECTIONS

Filed March 17, 1924

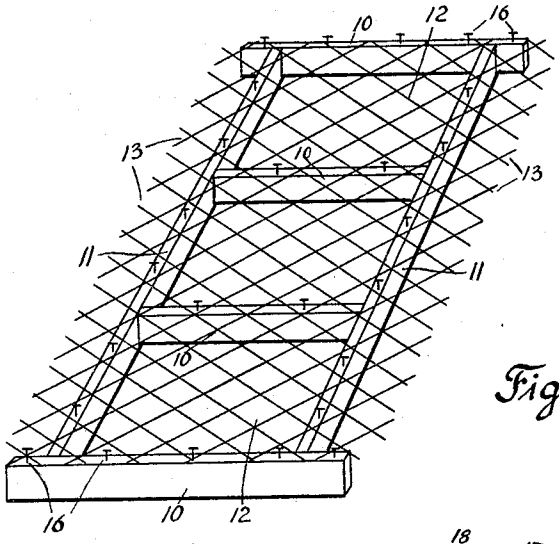


Fig. 1

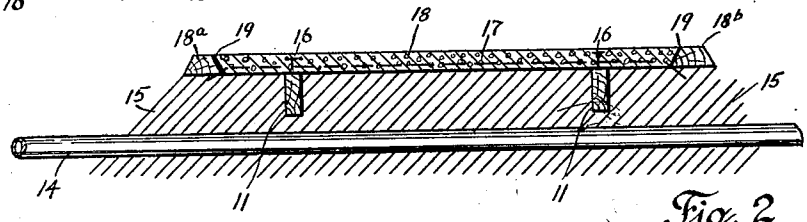


Fig. 2

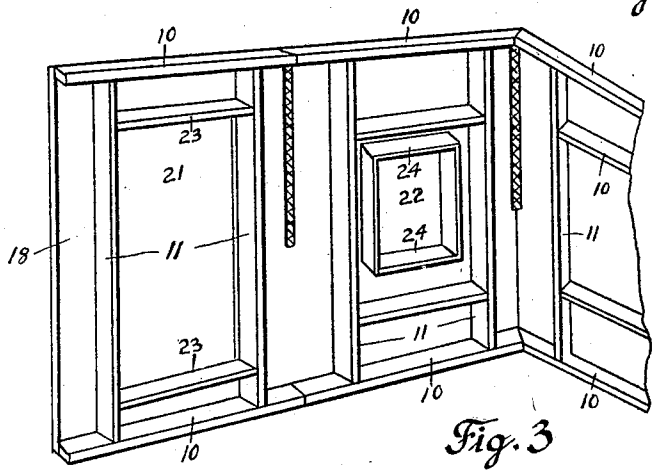


Fig. 3

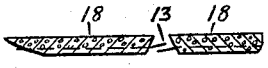


Fig. 4

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UNITED STATES PATENT OFFICE.

ERNEST BLUM, OF SPOKANE, WASHINGTON.

PROCESS FOR MOLDING WALL SECTIONS.

Application filed March 17, 1924. Serial No. 699,695.

To all whom it may concern:

Be it known that I, ERNEST BLUM, a citizen of the United States of America, residing at Spokane, Spokane County, State of Washington, have invented new and useful Improvements in Processes for Molding Wall Sections, of which the following is a specification.

This invention pertains to walls formed of concrete, cement, plaster and the like, and has for its object to provide an improved process for molding walls of the character mentioned.

The process is adapted for the formation of side walls, partitions, roofs, floors, porches, platforms and the like.

The general idea involved is the forming of a horizontal bed of sand or the like, imbedding the studding or frame for the wall in the sand, laying re-inforcing or lath on the studding and then filling in with concrete, cement, plaster or the like, to envelop the re-inforcing or lath in the plastic material, thereby forming a wall of the studding or frame, re-inforcing or lath and the plastic material. After the plastic material has cured sufficiently, the wall comprising the assembled parts is removed. The wall is formed in sections for convenience in moving and placing, the reinforcing or lathing extending out beyond the wall, and after the sections have been adjusted to their proper positions to form the wall, plastic material is filled in over the outstanding re-inforcing or lath and after the same has cured, the building may be completed. I prefer to cure the wall sections while they are in a horizontal position in the sand by having the sand wet and running pipes through the sand and supplying the same with steam. The radiation from the steam pipes through the sand to the wall sections, cures the plastic material in from twenty-four to thirty-six hours in such a manner that the same is impervious to moisture and the sections may then be removed from the sand.

I accompany this specification with drawings illustrative of the method and steps involved in the formation of the wall.

Figure 1 is illustrative of studding formed into a frame for a wall section, with a metal re-inforcing extending over the same and overlapping the same on the sides thereof and with nails spaced through the re-inforcing and driven into the studding and which will be imbedded in the plastic material.

Figure 2 is a broken-away sectional view of a sand bed with a wall formed therein and showing a pipe for steam imbedded in the sand,

Figure 3 is a view of several wall sections raised to vertical position in alignment and abutment with each other and partially permanently connected with each other by the partial filling of the overlapping re-inforcing with a plastic filling and

Figure 4 is a broken-away sectional view of two wall sections, showing the positioning of the same and the arrangement for permanently joining the two sections.

With reference to the details of the illustrations, studding portions 10 and 11, Figure 1, are shown joined together, reinforcing 12 placed over the same with portions 13 extending over and beyond the sides thereof.

In Figure 2, pipes 14 are shown imbedded in sand 15, studding 11 imbedded in the sand, and re-inforcing 12 and nails 16 imbedded in concrete 17. A complete wall section 18 is shown in the center and partial wall sections 18^a and 18^b, one on each side thereof, separated from the wall section 18 by means of metal strips 19, in order that the sections may be molded and removed separately. I find that a wall section of concrete substantially one inch thick is sufficient for cottage wall construction. The thickness of the walls is to be governed by the use the same are to be put to. If the wall sections are to be used for roofing, flooring, porches or platforms, the thickness must be made accordingly. I aim to form the wall sections of such width that two men may handle them in moving and placing the same. In the laying of the frame for the walls in the sand 15, the openings in the wall are provided for, for instance, the windows 21 and 22 are provided for by imbedding the frames 23 and 24 in the sand and forming the wall around them.

What is claimed is:

1. The process of molding wall sections comprising the embedding of studding in sand or the like with the upper surface of the studding exposed above the sand, the securing of re-inforcing or lathing over the exposed surface of the studding and over the surface of the sand, then filling in the re-inforcing or lath with concrete or the like down to the sand and enveloping the upper surface of the studding and the re-inforcing or lath with the concrete, and then removing

the wall sections and joining them together and forming them into a wall.

2. The process of molding wall sections comprising the embedding of studding in sections in sand or the like with the upper surface of the studding exposed above the sand, the securing of re-inforcing or lathing over the exposed surface of the studding and the surface of the sand, then filling in the re-inforcing or lath with concrete down to the sand and enveloping the upper surface of the studding and the re-inforcing or lathing with the concrete and leaving the edges of the re-inforcing or lathing exposed, and then removing the wall sections and joining them together and forming them into a wall.

3. The process of molding wall sections comprising the embedding of studding in sand with the upper surface of the studding exposed above the sand, the securing of re-inforcing over the exposed surface of the studding and over the surface of the sand, then filling in the re-inforcing with concrete down to the sand and enveloping the upper surface of the studding and the re-inforcing with concrete, and conveying steam in conduits through the sand to cure the concrete, and then removing the wall sections and joining them together and forming them into a wall.

In testimony whereof, I affix my signature.

ERNEST BLUM.