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C. W. UTZMAN

COMPOSITE BUILDING BOARD AND METHOD OF MAKING SAME

Filed June 14, 1922

FIG. 1.

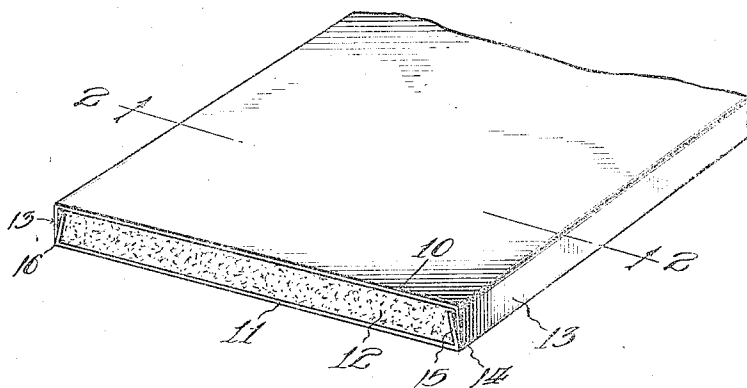


FIG. 2.

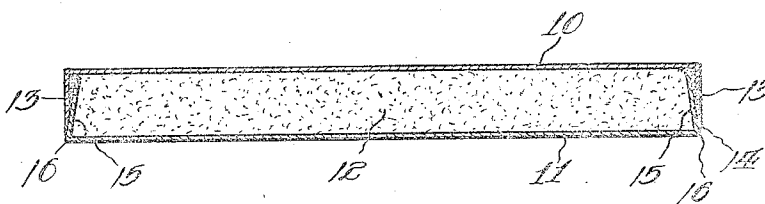
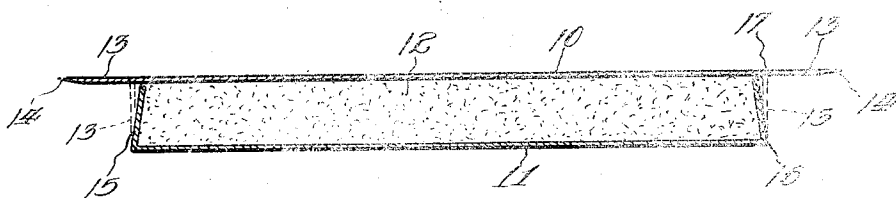


FIG. 3.



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UNITED STATES PATENT OFFICE.

CLARENCE W. UTZMAN, OF BUFFALO, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS,
TO THE BEAVER PRODUCTS COMPANY, INC., A CORPORATION OF NEW YORK.

COMPOSITE BUILDING BOARD AND METHOD OF MAKING SAME.

Application filed June 14, 1922. Serial No. 568,273.

To all whom it may concern:

Be it known that CLARENCE W. UTZMAN, a citizen of the United States, and a resident of the city of Buffalo, in the county of Erie, State of New York, has invented an Improvement in Composite Building Board and Methods of Making Same, of which the following is a specification.

This invention relates to composite building board, such as plaster board or the like, and to the method of making it.

Among other objects, the invention is intended to provide an improved building board, such as plaster board, the edges of which are protected by the margins of the covering material and which are finished off in such a manner that the edges of the covering material are not readily loosened or torn.

The invention consists in the novel constructions, combinations and methods, hereinafter described or claimed, for carrying out the above stated object and such other objects as will hereinafter appear.

The invention may be more readily understood by reference to one illustrative method and construction embodying the invention and shown in the accompanying drawing.

In said drawing:

Fig. 1 is a perspective view of a portion of the plaster board.

Fig. 2 is a cross section thereof taken along the line 2—2 of Fig. 1.

Fig. 3 is a cross section similar to Fig. 2 but illustrating the board as it appears at an intermediate stage of manufacture.

This application is a continuation in part of my prior application Ser. 374,833, filed April 19, 1920.

The invention is illustrated as applied to a double-face plaster board, that is, a board either side of which may be employed as the face side of the board. In the drawing, 10 and 11 designate cover sheets, which may be termed for convenience top and bottom cover sheets, respectively. Such cover sheets are preferably of fibrous material of the proper weight and quality, such as paper. Between the cover sheets is a body 12 of plaster or the like to which the cover sheets preferably adhere.

Preferably, a cover sheet 10 somewhat wider than the intended width of the board is employed to provide margins 13 which

may be folded over the edge of the board. The edges 14 of the cover sheet are preferably beveled or otherwise reduced in thickness to a thin edge so that, when the margins are cemented in place, the free edges of the cover sheet merge into the edge of the board and are practically obliterated. They do not therefore present any projecting edges which might become caught and result in loosened or torn paper.

In the illustrative board, the cover sheet 11 is also somewhat wider than the intended width of the board, providing margins 15 which are folded over the edge of the plaster body. In this arrangement the margins 13 are folded over the margins 15 and cemented in place by any suitable adhesive, such as plaster or glue, which will resist the action of moisture and heat to which it may be exposed during the various steps in the manufacture of the board. If desired, the margins 13 may be made of such a width as to extend substantially across the entire edge of the board.

Plaster board of this character may be manufactured in any suitable manner. If what is termed as the continuous process be employed, plaster is placed in suitable quantities upon a traveling cover sheet, called the bottom sheet. As illustrated, the cover sheet 11 may conveniently be employed as the bottom sheet and the margins 15 thereof turned up at some stage of the manufacture of the board to confine the plaster between the up-turned margins. The top cover sheet is applied and the plaster spread to an even depth across the board.

At some stage in the manufacture of the board, either before or after the application of the top cover sheet to the plaster, though preferably before, the margins 13 thereof are beveled or suitably reduced in thickness at the extreme edges to provide a thin edge which when cemented in place will provide no means by which the margins may become caught and torn or loosened. In the construction illustrated in Fig. 3, the under side of the margins 13 is beveled. This may be conveniently accomplished by passing the margins over grinding devices, such as rapidly rotating emery wheels, having grinding surfaces arranged at the proper angle to produce the required bevel. After this treat-

ment of the margins 13, they are cemented in place firmly so as practically to obliterate any exposed cover sheet edge. The grinding or beveling of the cover sheet edges removes the surface gloss or finish and so roughens it as to enable it to be substantially united with or merged into the edges of the board.

Obviously, the construction, conformation or shape of the edges of the board may be varied according to particular requirements. If desired, the cover sheets may be scored to weaken the paper along the lines 16 and 17 to permit the margins to be folded over sharply and to form sharp or square edges on the finished plaster board.

Obviously, the invention is not limited to any particular construction and the details of the illustrative board and method of making it may be variously modified. Moreover, it is not indispensable that all features of the invention be used conjointly as certain features may be employed to advantage in various different combinations and sub-combinations.

Having thus described my invention, I claim:

1. The method of making plaster board of the kind described, which comprises providing covering material for enveloping a body of plaster or the like, providing certain cover sheet margins for folding over the body, reducing the thickness of said margins so as to provide a thin edge therefor and cementing said margins in place, whereby the edges of said margins substantially merge into the surface of the board.

2. The method of making plaster board of the kind described, which comprises providing covering material for the opposite faces of a body of plaster or the like, folding certain cover sheet margins to envelop the edges of the body and cementing the same in place, said margins being so treated as to substantially obliterate any exposed cover sheet edge.

3. The method of making plaster board of the kind described, which comprises providing covering material for the opposite faces of a body of plaster or the like, providing cover sheet margins for folding over the edge of said body, and treating said margins so as substantially to obliterate any exposed cover sheet edge when said margins are folded in place.

4. The method of making plaster board of the kind described, which comprises providing covering material for the opposite faces of a body of plaster or the like, providing cover sheet margins for folding over the edge of said body, reducing the thickness of said margins so as to provide a thin edge, and cementing said margins in place so that said thin edge substantially merges into the surface of the edge of said board.

5. The method of making plaster board

which comprises applying cover sheets to the opposite faces of a body of plaster or the like, folding the cover sheet margins over the edge of the board and cementing the same in place, certain cover sheet margins having been reduced in thickness so as to obliterate any exposed cover sheet edge.

6. The method of making plaster board which comprises applying cover sheets to the opposite faces of a body of plaster or the like, beveling the edges of certain cover sheet margins to produce a thin edge, folding the cover sheet margins over the edge of said body in overlapping relation with said beveled margins on the outside and cementing the same in place.

7. The method of making plaster board which comprises applying top and bottom cover sheets to a body of plaster, or the like, of greater width than the intended width of the board, grinding the margins of one sheet to produce a thin edge, folding said cover sheet margins over the edge of the board with said thin-edge margins exposed, and cementing the same in place.

8. The method of making plaster board which comprises applying top and bottom cover sheets to a body of plaster, or the like, of greater width than the intended width of the board, grinding the under surface of the margins of said top sheet to produce a beveled edge, folding said sheet margins over the edges of said body in overlapping relation, with said top sheet margins exposed, and cementing said margins in place.

9. A plaster board comprising, in combination, a body, cover sheets covering the opposite faces of said body and adhering thereto to reinforce said body from edge to edge, certain of said cover sheet margins being folded over the edges of said board and being beveled to make a thin edge which substantially merges into the plane of the edge of said board.

10. A plaster board comprising, in combination, a substantially rigid body, cover sheets covering the opposite faces of said body and adhering thereto to reinforce said body from edge to edge, certain of said cover sheet margins being folded over edges of the body and reduced in thickness and cemented in place so as to obliterate substantially any exposed edge of said folded margins.

11. A plaster board comprising, in combination, a substantially rigid body, cover sheets covering the opposite faces of said body and adhering thereto to reinforce said body from edge to edge, the margins of the cover sheets being relatively constructed and arranged to cover the edge of said body, certain of said margins being reduced in thickness to provide thin edges therefor which substantially merge into the plane of the edge of said board.

12. A plaster board comprising, in combination, a plaster body; fibrous sheets covering opposite faces of the body and adherent thereto; the marginal portions of the sheets being folded one over the other and united at the body edge; the outer marginal portion being tapered adjacent its edge sub-

stantially to obliterate the line of demarcation between it and the underneath marginal portion.

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

CLARENCE W. UTZMAN.