March 9, 1926. 1,575,842

R. J. JOHNSTON

WALL PLASTER BOARD

Filed Oct. 8, 1923

Fig. 1.

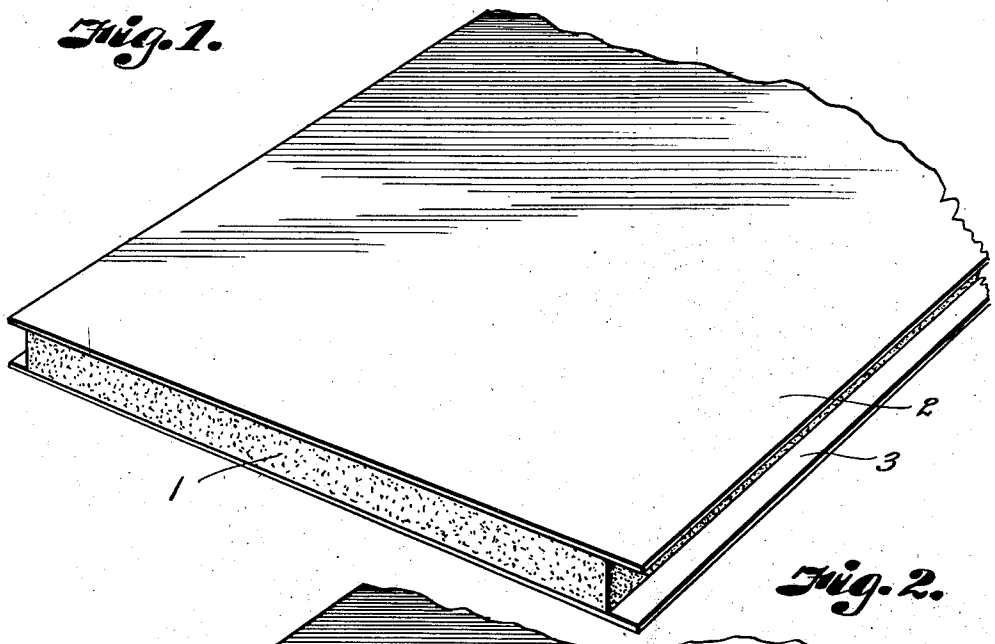


Fig. 2.

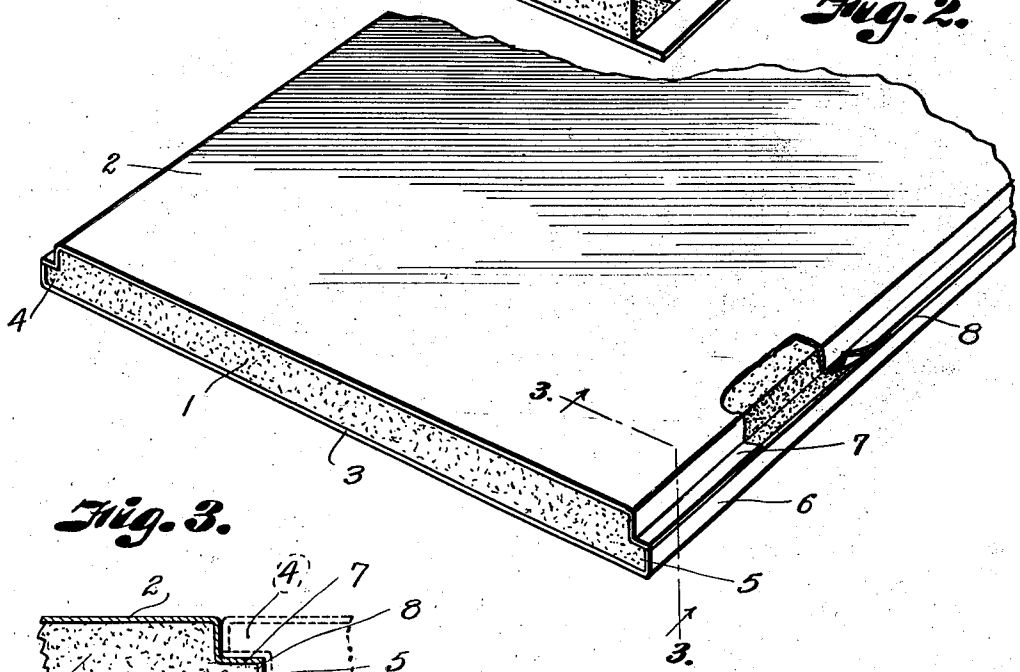
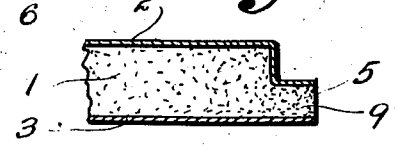


Fig. 3.

Fig. 4.



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ROBERT J. JOHNSTON, OF KANSAS CITY, MISSOURI.

WALL PLASTER BOARD.

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To all whom it may concern:

Be it known that I, ROBERT J. JOHNSTON, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Wall Plaster Board; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to wall plaster board and the primary object of the invention is to provide a plaster board unit formed with lap tongues which may be faced with the facing sheets on opposite faces of the plaster board unit. Plaster board as its name indicates is usually made of plastic material which is rolled to form sheets of the desired thickness. These sheets are generally rectangular and in order to protect the surfaces they are provided with flexible facing sheets of paper or fabric. It is the purpose of this invention to provide edge tongues on the plaster board unit preferably of such shape that when two units are brought together end to end a ship-lap joint is provided and it is the prime object of this invention to face the lap joint tongues with the same material that is used to provide the face for the major portion of the plaster board unit. The novel manner in which I accomplish the result will be apparent from the following description in connection with the accompanying drawings in which:

Fig. 1 is a fragmentary perspective view of a plaster board unit with two facing sheets on opposite faces of the plaster board.

Fig. 2 is a fragmentary perspective view of a part of the plaster board unit after the tongue has been formed and the facing applied thereto.

Fig. 3 is a fragmentary cross sectional view through a portion of the plaster board, and

Fig. 4 is a like view of a slightly modified form.

In carrying out my invention I prefer to provide the plaster board 1 with two facing sheets 2 and 3. The facing sheets 2 and 3 have their longitudinal edges overlapping the longitudinal edges of the plaster board so that the edges of the sheets extend beyond the edges of the plaster board as shown in Fig. 1. While the plaster is still green, that is in a plastic state, a die-forming roller is run along each longitudinal edge of the plastic board section to upset or compress the material along the edges of the plaster board to form shoulders, rabbets or lap joint tongues 4 and 5. This is accomplished by compacting some of the material along each longitudinal edge of the board and up-setting it to the extent that a protruding tongue is formed approximately one-half the thickness of the plaster board unit. The roller will force the outer edges of the top sheet 2 into the rabbet or shouldered portion and on the inner face of the tongue so that the edge of the facing sheet will be bent in the form of a right angle in cross section lying close to the rabbeted edge of the plaster board and it will adhere to the plaster board due to the adhesive quality of the green material from which the board is made. At the same time that the rabbet is formed in the edge of the plaster board sheet the outer facing sheet will be turned inwardly to cover the exposed outer edges of the tongue 5 by a facing portion 6. The edge 6 of the facing sheet 3 practically abuts against the edge of the sheet 2 but it does not overlap, there being an edge to edge contact of the portions 6 and 7, 7 being the outer edge portion of the sheet 2. The plaster board unit is then allowed to dry. When it is in a marketable condition the plaster is protected against marring or chipping during shipment. The facing sheets 2 and 3 not only serve as protecting members for the filler 1 but they also serve as surface members which are adapted to be painted or decorated, after the board has been set up. The lap joints provide an inter-lapping uniformly smooth surface for the wall of which the plaster board consists and the lap joints can be faced for protection in a most convenient and inexpensive manner.

In Fig. 4, I have shown a slightly modified form in which the overlapping portions 6 are omitted, leaving the outer edge of the tongue 5 exposed but in other respects the facing members are applied and contributes to the efficiency of the wall board in substantially the same manner as previously described in connection with Figs. 1, 2 and 3 of the drawings.

Attention is called to the fact that the only possible point of exposure of the filler or main portion 1 of the unit is at the abutting edges of the members 1 and 3, as for example at 8 in Fig. 3 or the exposed edge 9 in Fig. 4, but when the units are put together as indicated in Fig. 3 the exposed edges will be entirely covered. Therefore when the units are together there will be no visible exposed edges or portions of the unit.

It will be apparent from the foregoing that a plaster board unit well constructed in accordance with my invention will possess certain inherent advantages over plaster board units of common construction. The two sheets 2 and 3 may entirely envelop the plaster board unit, or if the sheet 3 is of less width than the sheet 2, both sides of the plaster board and the rabbet portion will be faced but the edge of the tongue 5 will remain exposed during the manufacture of the plaster board, but when the plaster board units are lapped together the exposed end of one unit will abut against a facing portion of another unit so that when the wall board is in structural position there will be no raw or uncovered portions of the wall board visible.

What I claim and desire to secure by Letters-Patent is:—

As a new article of manufacture, a plaster board unit, comprising a relatively thick rigid sheet having lap tongues at its edges and relatively thin flexible facing sheets on the opposite faces of the first named sheet, one of the flexible sheets being bent inwardly and outwardly to face the lap tongue, the other flexible sheet having its edge lying against the outer edge of the lap tongue and substantially abutting against the edge of the first named flexible sheet.

In testimony whereof I affix my signature.

ROBERT J. JOHNSTON.