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J. STRAND ET AL

PLASTER LATH BOARD

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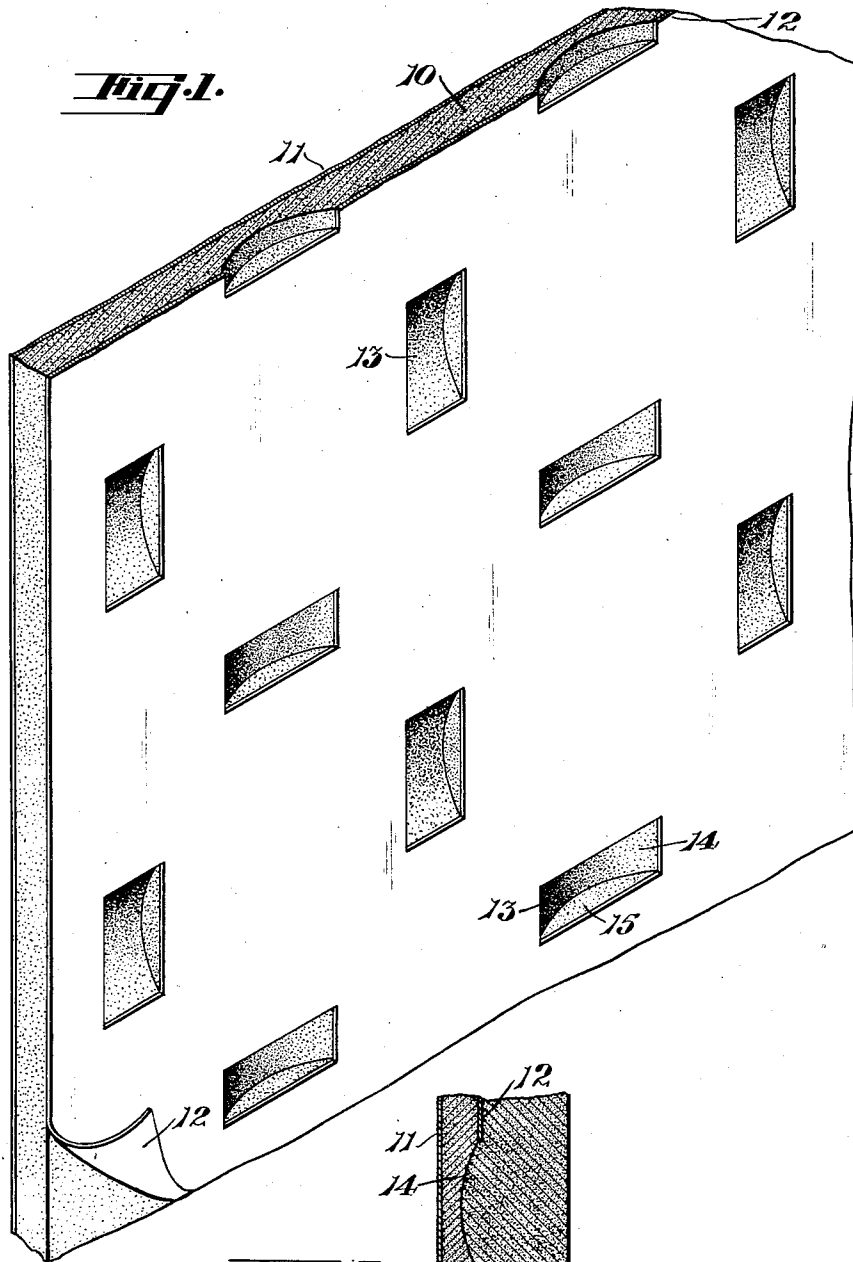
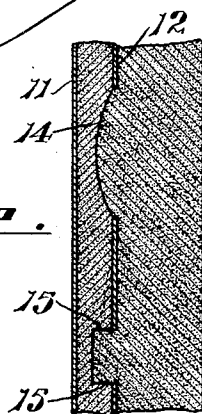


Fig. 2.



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UNITED STATES PATENT OFFICE.

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PLASTER LATH BOARD.

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To all whom it may concern:

Be it known that we, JOSEPH STRAND and EDWARD WESTBERG, citizens of the United States, residing at Los Angeles, county of Los Angeles, and State of California, have invented new and useful Improvements in Plaster Lath Board, of which the following is a specification.

This invention relates to building constructions, and particularly pertains to plaster lath board for use either as exterior or interior surfacing of building walls.

At the present time it is common practice in the construction of stucco buildings to surface the outside of the building with a plaster lath board, to which a suitable layer of stucco or plaster is afterwards applied. It is also common to dispense with the usual wooden lathing on the interior of the building, and also metal lathing, and to apply plaster lath board directly to the studding, after which the plaster is placed thereupon.

One of the problems incident to the application of plaster to wall boards has been a successful bonding of the plaster with the plaster lath boards. For this reason various mechanical expedients have been employed to create a mechanical attachment between the layer of plaster and the surface of the board. In some instances the chemical affinity of the composition board and the plaster has been utilized to form a bond. There have been certain objections to both of these methods, and it is the principal object of the present invention to provide a plaster lath board which is simple in its construction, may be inexpensively manufactured, and which will insure that both interior plaster and exterior stucco will adhere to the board, both for physical reasons; the clean plastic depressions cut into the board providing a suction, and by the matter of mechanical bonding between the surfaces of the board, a plaster key being formed therein.

The present invention contemplates the use of a plaster lath board formed with a body portion of cementitious material such as plaster, the outer faces of which have been surfaced with fibrous material such as paper and the like.

The invention further contemplates that for certain particular purposes the facings may be of material having different prop-

erties, such as being waterproof, heat insulating, and the like.

The invention is illustrated by way of example in the accompanying drawings, in which:

Fig. 1 is a fragmentary view in perspective showing a portion of a plaster lath board constructed along the lines of the present invention.

Fig. 2 is an enlarged view in transverse section through a plaster lath board, showing the arrangement and contour of the surface of the board, and the depressions cut therein.

Referring more particularly to the drawing, 10 indicates the body layer of the plaster lath board, with which the present invention is concerned. This layer is preferably of cementitious material, such as plaster, or the like, and may be of any preferred thickness. The body portion of the board affords heat insulating and sound deadening properties to the board, and at the same time gives the board considerable stiffness, so that it may be easily handled, readily applied to studding, and will stand rigidly while spanning a considerable distance.

Applied to the back side of the board is a layer 11. This may be a facing of paper, or in fact any other desired material, although for most purposes common straw board has been found to be satisfactory. The front of the board is covered by a facing 12, which may be either of common straw board, paper, or the like, or may be of specially treated paper, such as tar paper, or other impregnated paper, which will be impervious to moisture.

Into the working surface of the plaster lath board, which is covered by the facing 12, is formed or cut a plurality of recesses 13. These recesses are arranged in rows, in which the recesses are staggered relative to each other, and are alternately disposed at right angles to each other. The recesses are substantially rectangular in formation, while having an arcuate bottom face 14, and parallel side walls 15. Attention is directed to the fact that rectangular openings are formed or cut through the facing 12, and that the arcuate recesses are formed or cut directly in the plastic material 10. This material is not covered by any of the facing, all of the facing covering

the opening having been removed, and thus presents an arcuate face and two flat side faces of plastic material which will form a physical bond between the plaster applied thereto and the body of the board. In addition to this bond, the arrangement of the recesses over the surface of the board tends to insure that the plaster will be rigidly held. In fact, practice has proven that a thicker coating of plaster may be held upon the surface of the plaster lath board with which the present invention is concerned than with any other plaster boards or laths now on the market.

In the manufacture of the board the body portion is first molded, and the facing sheets 11 and 12 applied thereto. The plaster lath boards are then put through dry kilns and thoroughly dried. After this has been done the flat boards are passed through a machine carrying a gang of rotary cutters. These are spaced a distance from each other, agreeing with the distance between the parallel recesses arranged in rows across the board. The board is moved against the cutters, and a row of recesses will be simultaneously cut, the bottom of the recesses being formed by the cutting edge of the cutters, and will, of course, be on a radius agreeing with that of the cutters. The width of the recesses will agree substantially with the width of the cutters, as will be readily understood. In this manner it is possible to quickly finish the working surface of the board and prepare it for use.

It will thus be seen that a simple and inexpensive plaster lath board is provided, which affords all the advantages of physical and mechanical bonding of the board with a coating of plastic material applied thereto.

While we have shown the preferred form of our invention, as now known to us, it will be understood that various changes might be made in the combination, construction, and arrangement of parts by those skilled in the art, without departing from the spirit of the invention as claimed.

Having thus described our invention, what we claim and desire to secure by Letters Patent is:

1. A plaster lath board having a plane working face, and rows of rectangular recesses formed or cut in said face, and arranged alternately at right angles to each other.

2. A plaster lath board having a plane working face, and rows of rectangular recesses formed or cut in said face, and arranged alternately at right angles to each other, the obtrusions of one row being staggered relative to recesses of adjacent rows.

3. A plaster lath board comprising a body

portion of plastic material, a facing sheet covering said material, perforations formed or cut through said sheet, and recesses in the face of the body portion in register with the perforations, the sheet being cut entirely around and adjacent the edges of the recesses whereby the plastic material is exposed on the bottoms and sides of the recesses.

4. A plaster lath board comprising a body sheet of plastic material, recesses formed or cut in the working face thereof, a facing sheet covering said working face and formed with perforations registering with the recesses, the facing sheet being cut entirely around and adjacent to the edges of the recesses, whereby the plastic material is exposed on the bottoms and sides of the recesses in a manner permitting the plastic surface of the recesses to be directly covered with the plaster of a wall to be formed.

5. A plaster lath board comprising a rigid body portion of plastic material having a plane working face, a sheet of facing material covering said face, rectangular perforations formed or cut through the facing material, and recesses in the working face of the board in register with said perforations, said recesses presenting an arcuate plastic bottom surface and substantially parallel plastic side walls, the sheet being cut entirely around and adjacent the edges of the recesses, whereby the plastic material is exposed on the bottoms and sides of the recesses.

6. A plaster lath board comprising a rigid body portion of plastic material having a plane working face, a sheet of facing material covering said face, rectangular perforations formed or cut through the facing material, and recesses in the working face of the board in register with said perforations, said recesses presenting an arcuate plastic bottom surface and substantially parallel plastic side walls, the recesses and perforations being arranged in rows with the adjacent recesses staggered relative to each other and disposed at an angle to each other.

7. A plaster lath board comprising a body portion of plastic material, a facing sheet covering said material, oblong registering perforations and recesses respectively formed through the sheet and in the plastic material, the sheet being cut entirely around and adjacent the edges of the recesses whereby the plastic material is exposed on the bottoms and sides of the recesses, and certain of the perforations and recesses being arranged at right angles to other of the perforations and recesses.

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