July 2, 1929. J. SCHUMACHER 1,719,200

PLASTER BOARD

Filed Dec. 4, 1926 2 Sheets-Sheet 1

Fig. 1

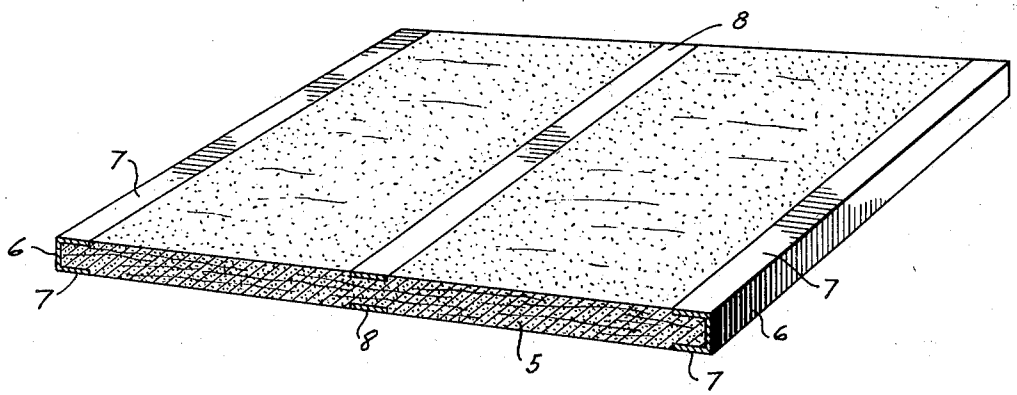


Fig. 2

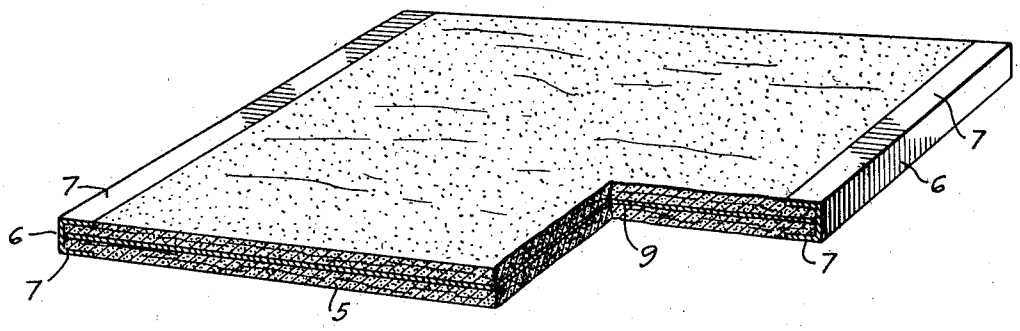
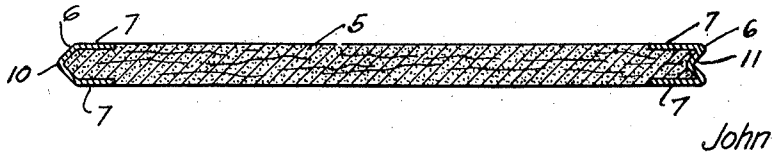


Fig. 3



INVENTOR.
John Schumacher
BY Westall and Wallace
ATTORNEYS.

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Fig. 4

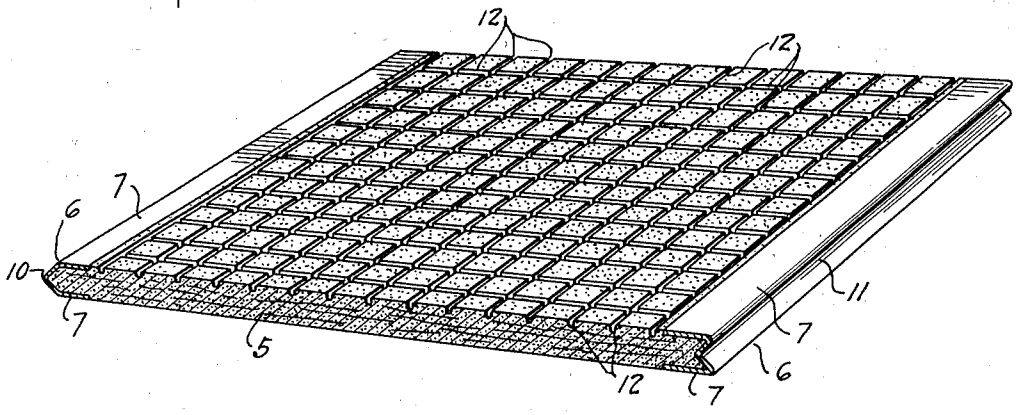
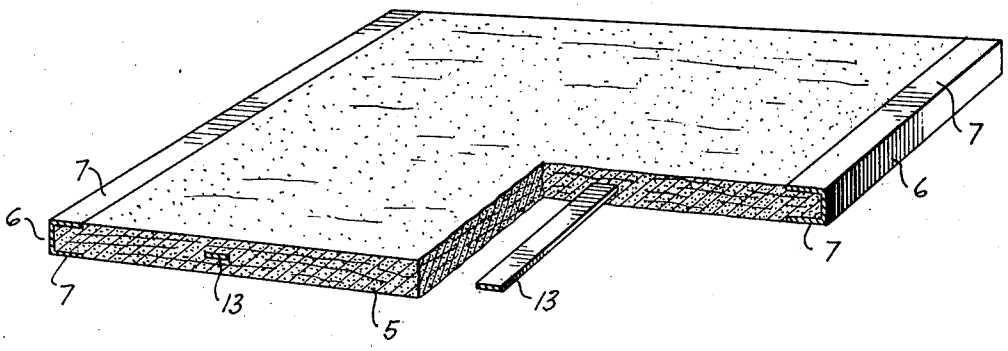


Fig. 5



INVENTOR.
John Schumacher
BY Westall and Wallace
ATTORNEYS.

Patented July 2, 1929. 1,719,200

UNITED STATES PATENT OFFICE.

JOHN SCHUMACHER, OF LOS ANGELES, CALIFORNIA.

PLASTER BOARD.

Application filed December 4, 1926. Serial No. 152,676.

This invention relates to a plaster board, or the like, formed of a cementitious core, but without the usual cover sheets of paper or other pliable material.

The plastic composition commonly used for the core in the manufacture of plaster board is hard and brittle and possesses little tensile strength, but if hair, flax, fibre-like material, or other reinforcing is added to the core the tensile strength is sufficiently increased so that cover sheets may be dispensed with. Cover sheets as at present used are of a thick, specially treated paper. They materially increase the weight and cost of a plaster board as compared to one of equal thickness and size in which they are omitted. An object of this invention is accordingly to provide a plaster board without cover sheets. While the actual strength of the cementitious composition is greatly increased by the addition of fibre-like material, the hardness and brittleness are but little changed and a board without cover sheets even of this composition would be subject to severe chipping and cracking along the edges due to handling and possibly at other places as well in the operations incident to erection. Cover sheets also hold the core so that nailing may be performed without detrimental chipping. It is accordingly another object of this invention to provide a plaster board without cover sheets but with reenforcement at the edges and at other desired places. It is thus seen that the broad object of this invention is to provide a plaster board which is of increased lightness and cheapness and of equal, or superior, strength and durability.

These objects together with other objects and corresponding accomplishments are obtained by means of the embodiment of my invention shown in the accompanying drawing in which:

Fig. 1 is a perspective view of a portion of plaster board formed in accordance with my invention; Fig. 2 is a similar view, the plaster board having additional reenforcement; Fig. 3 is a cross section of plaster board such as shown in Fig. 1 having edges adapted to be interlocked; Fig. 4 is a perspective view of a portion of plaster board similar to that shown in Fig. 3, one surface being roughened; and Fig. 5 is a view similar to Fig. 2, the plaster board in this case having another form of additional reenforcement.

Referring more particularly to Fig. 1 of the drawing, a cementitious body, preferably formed of a gypsum plaster mixture to which hair or flax has been added is indicated by 5. The edges of this are bound or reenforced by strips 6, or paper or other pliable material, which are formed into channel-like sections covering the edge and projecting a short distance on the upper and lower faces of the board as indicated by 7. This material increases its strength in a transverse direction, as well as preventing damage to the edges in shipping and handling. The portions 7 on the faces of the board provide a place for driving nails through into studding or other supporting members and effectually prevent any chipping or cracking incident to this operation. Strips 8 may be provided at intermediate positions on the faces of the board for the same purpose. It will be noted that strips 7 and 8 are imbedded in the plaster, leaving the surface of the board smooth and unbroken.

In Fig. 2, a similar plaster board is shown, in which I have provided reenforcement 9 in the body of the board. This may be a pliable sheet of some material such as paper, or burlap.

In Fig. 3, a plaster board similar to that of Fig. 1 is again shown, but in this case I have formed strip 6 with a projection 10 on one edge and a corresponding groove 11 on the other. Thus when the boards or sheets are placed adjacent to one another, projections 10 will fit grooves 11 on adjoining boards, locking the sheets together and insuring smooth joints.

In Fig. 4, a plaster board with edges adapted to be interlocked is again shown. In this case however, I have formed one face of the board with grooves or depressions 12, so that if a coating of plaster is applied to this surface, the plaster will enter these and form anchors and thus be firmly secured to the board. A rough surface to anchor plaster could be formed in other ways also, as for example, by making a series of small holes, or pockets.

In Fig. 5, a plaster board is shown, with reenforcement in the core in the form of strips 13, of some pliable material such as paper or burlap.

What I claim is:

1. A plaster board consisting of a slab of cementitious material with protecting strips

of paper solely embracing the edges thereof and overlapping both of the slab faces at the margins so as to expose the major portions of the faces thereof, said strips and slab being bonded throughout their entire contiguous faces.

2. A plaster board consisting of a slab of cementitious material with protecting strips of paper solely embracing the edges thereof and overlapping both of the slab faces at the margins and inset so as to be flush therewith thereby exposing the major portions of the faces of said slab, said strips and slab being bonded throughout their entire contiguous faces.

In witness that I claim the foregoing I have hereunto subscribed my name this 22nd day of November, 1926.

JOHN SCHUMACHER.