Sept. 30, 1924. 1,510,233

O. D. McFARLAND

PLASTER RECEIVING BOARD

Filed Dec. 21, 1921

Fig. 1.

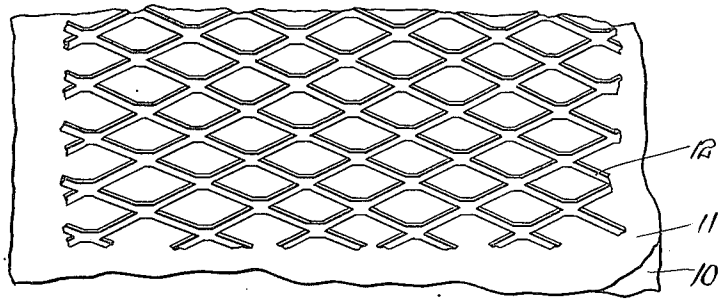


Fig. 2.

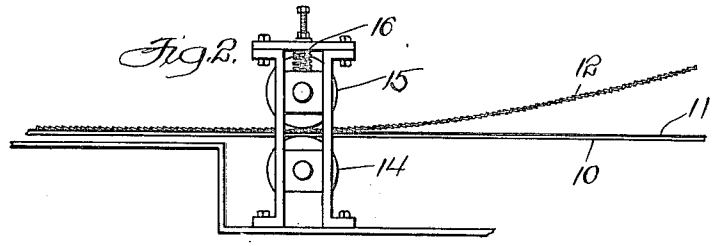


Fig. 3.

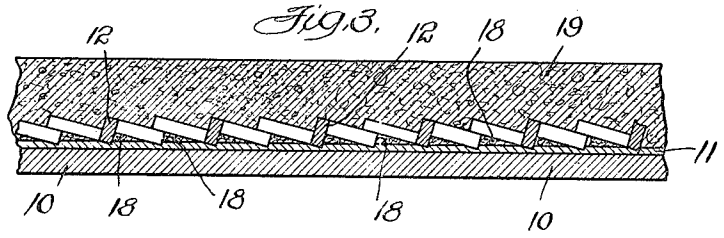
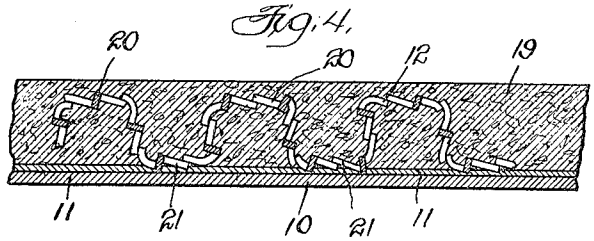


Fig. 4.



Inventor:
Owen D. McFarland
By Fonde Rann & Kinkle
Attys.

Patented Sept. 30, 1924. 1,510,233

UNITED STATES PATENT OFFICE.

OWEN D. McFARLAND, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO HARRY A. CUMFER, OF CHICAGO, ILLINOIS.

PLASTER-RECEIVING BOARD.

Application filed December 21, 1921. Serial No. 523,875.

To all whom it may concern:

Be it known that I, OWEN D. McFARLAND, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Plaster-Receiving Boards, of which the following is a specification.

The invention relates to improvements in plaster-receiving board.

One of the objects of the invention is to provide a plaster-receiving board reenforced by a metal fabric and in which the metal fabric is hermetically sealed from atmospheric influences after the plaster has been applied.

Another object is to provide an impervious waterproof backing for a plaster receiving reticulate metal fabric in which the fabric is primarily cemented to the backing before its application to a wall.

Another object is to provide a reticulate corrugated metal fabric and a saturated waterproof backing sheet to which the fabric is cemented by a suitable cementitious plastic, prior to application of plaster to prevent buckling or warping of the fabric and to protect it from rust.

A more specific object is to provide a reenforced plaster-receiving board in which parts of the mesh of an expanded metal sheet are embedded in a coating of plastic asphalt overlying a saturated waterproof foundation sheet, leaving plaster-receiving openings in the fabricated metal within which to receive and hold the subsequently applied plaster.

Another object is generally to improve structures of this character.

Other objects and advantages will hereinafter appear from a consideration of the following description when taken in conjunction with the drawings, wherein:—

Fig. 1 shows a plan view of a fragment of the plaster receiving board.

Fig. 2 is a side elevation of means for depressing the reticulate metal fabric into the thin coating of asphalt overlying the weatherproof foundation sheet.

Fig. 3 is a section thru a plastered wall showing the straight reenforcing metal fabric embedded in the plaster and plastic asphalt.

Fig. 4 shows a preferred form of structure in which the metal fabric is corrugated.

In all the views the same reference characters are employed to indicate similar parts.

The foundation sheet 10 may well be a sheet of roofing material consisting of felt impregnated with a mobile compound of an asphaltic nature to render the sheet impervious to moisture and substantially weatherproof. Overlying the sheet 10 is a relatively thin coating 11 of plastic asphalt into which is partially embedded a sheet of reticulate metal fabric 12. In Fig. 2 I have shown the reticulate metal fabric to be of the character known in trade as expanded metal. The sheet 12, of reticulate metal, may first be coated with a relatively thin solution of an asphaltic nature and, subsequently, part of the fabric is embedded in the coating 11 overlying the sheet 10. To produce this effect the two sheets are passed thru a pair of rolls 14 and 15 that may be resiliently held by springs 16, or by any other suitable means, for pressing the metal fabric into the underlying coating of limited thickness. The sheet 12 is impressed into the coating to an extent that will leave certain parts of the fabric open, as at 18, to form keys for the subsequently applied plaster 19.

Preferably, the metal fabric 12, wire cloth or expanded metal, may be corrugated, as more clearly shown in Fig. 4, as at 20, the intervening portions 21, of the corrugated sheet, being depressed into the underlying coating 11, until they are, preferably, substantially in contact with the sheet 10. By corrugating the metal sheet a series of ribs are thus formed which very greatly strengthens the article as a whole. When the plaster-receiving sheet is to be applied to studs or rafters of a building, the nails or staples are, preferably, passed thru the portions 21 of the corrugations into the supporting structure. In either form of the structure the metal fabric will be entirely and completely submerged in the plaster 19 and the plastic coating 11, so as to be substantially hermetically sealed and protected against moisture and atmospheric influences, thereby preventing rust. The backing sheet 10 also serves as a means for pre-

venting dampness, and cold air, from passing thru the plastered wall, and furthermore the structure described reenforces the plaster and prevents cracking to a large extent due to the settling of the building and adds considerable strength to the frame structure of the house. A plaster-receiving board of this character presents a maximum number of plaster-receiving keys, thereby holding the plaster firmly in place and prevents it from falling off in relatively large bodies from the plastered wall or ceiling.

The composite sheet, or article, may be made in definite lengths or a continuously long sheet may be coiled into suitable size rolls for shipment and storage.

Having described my invention what I claim as new and desire to secure by Letters Patent, is:—

1. An article of manufacture comprising a corrugated reticulate sheet of expanded metal; an asphalt saturated sheet of felt and a coating of plastic asphalt of uniform thickness between the sheets to hold the sheets together.

2. An article of manufacture comprising a sheet of expanded metal fabric; an asphalt saturated sheet and a coating of plastic asphalt of uniform thickness between the sheets in which parts of the metal sheet are embedded.

In testimony whereof I hereunto subscribe my name.

OWEN D. McFARLAND.