106. COMPOSITIONS,
COATING OR PLASTIC.

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Examiner

Nov. 6, 1923. 1,473,445

J. SCHUMACHER

PLASTER BOARD LATH

Filed Nov. 14, 1921

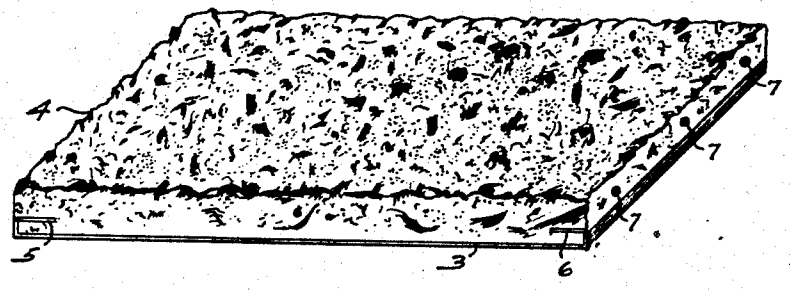


Fig. 1.

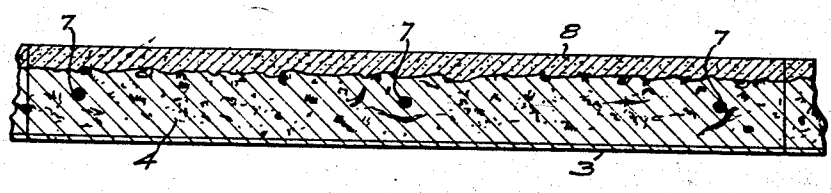


Fig. 2.

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Examiner

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UNITED STATES PATENT OFFICE.

JOHN SCHUMACHER, OF LOS ANGELES, CALIFORNIA.

PLASTER-BOARD LATH.

Application filed November 14, 1921. Serial No. 514,915.

To all whom it may concern:

Be it known that I, JOHN SCHUMACHER, a citizen of the United States, and resident of Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Plaster-Board Laths, of which the following is a specification.

This invention relates to an article of manufacture for use in building constructions as a substitute for metallic or wooden lath. It comprises a board to the face of which plaster may be applied to produce the finished wall surface. It is an object of this invention to provide a board which is fire-proof, strong, durable and will permit nailing without cracking or injuring the board. It is a further object of this invention to provide a board which has a surface of such character as to offer an effective grip to the plaster applied thereto, whereby the plaster when set is firmly anchored to the board so as to produce in effect a single body.

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

Fig. 1 is a perspective view of a section of plaster board lath; and Fig. 2 is a section through the board with a finish coat of plaster applied thereto, the view showing a fragment of the board on an enlarged scale.

Referring more particularly to the drawing, the board comprises a backing of paper 3 with a cementitious body 4 thereon. The paper and cementitious body are of such character that they adhere to one another. The edges of the board may be reinforced by turning back the paper and embedding it in the body as indicated by 5 and 6. Another expedient which may be resorted to is the placing of reinforcement, such as wire or netting, indicated by 7.

I prefer to form the body of the board of a mixture of Portland cement and wooden shavings. As is well known Portland cement will not bind or adhere to wood which is untreated. For this reason I first treat the wood shavings by placing them in quicklime to which water has been added in the usual manner so that the lime slakes. The shavings are allowed to remain while the lime slakes, and then they are mixed with the Portland cement. The lime water may be used with the Portland cement as water to cause the same to set. With this treatment it is found that the cement is bound to the shavings when solid. The shavings are mixed through the cement, producing a body which is porous so that nails can be driven through the cement without cracking the board. Furthermore, the shavings by producing a porous body offer spaces in which the plaster may enter and grip the board. The face of the board uncovered by paper is rough with depressions and elevations, producing in effect a scratch coat upon which the plaster may be placed. In Fig. 2 the plaster applied to the board is indicated by 8.

The board may be made continuously by supplying the cement to two advancing sheets of paper in the manner that plaster board made of gypsum plaster as a core and coverings of paper is ordinarily made. After the board in its green state has emerged from the machine and partially set, the upper sheet of paper may be pulled from the board, exposing the cement face. While the cement is moist, the paper and cement are not bound together and the paper is easily removed.

It is obvious that I have provided a board which is fire-proof by reason of being formed of cement. It has solidity that is not present in a gypsum plaster, and will not absorb moisture and soften as will gypsum board. The board is not so hard but that it may be nailed, and the weight is not excessive. It is obvious that a very efficient scratch surface is provided for plaster, which is used as the finishing coat.

The shavings are treated with lime to remove the pitch and other ingredients from the pores of the cells. The ingredients present in the pores of the untreated wood prevent the cement from forming a bond with the wood. The lime treatment increases the porosity of the wood and cement may enter therein.

What I claim is:

1. A composition for use in plaster board comprising a body formed of cement and wood shavings treated to increase their porosity.

2. The process of compounding a composition of matter comprising a mixture of ce-

ment and wood shavings which consists in treating wood shavings to increase their porosity mixing the treated shavings with cement, and allowing the mixture to set.

3. The process of compounding a composition of matter comprising cement and wood shavings, which consists in treating wood shavings with slaking lime, mixing the treated shavings with cement, and allowing the mixture to set.

In witness that I claim the foregoing I have hereunto subscribed my name this 8th day of November, 1921.

JOHN SCHUMACHER.