

1,063,736.

Patented June 3, 1913

Fig. 1.

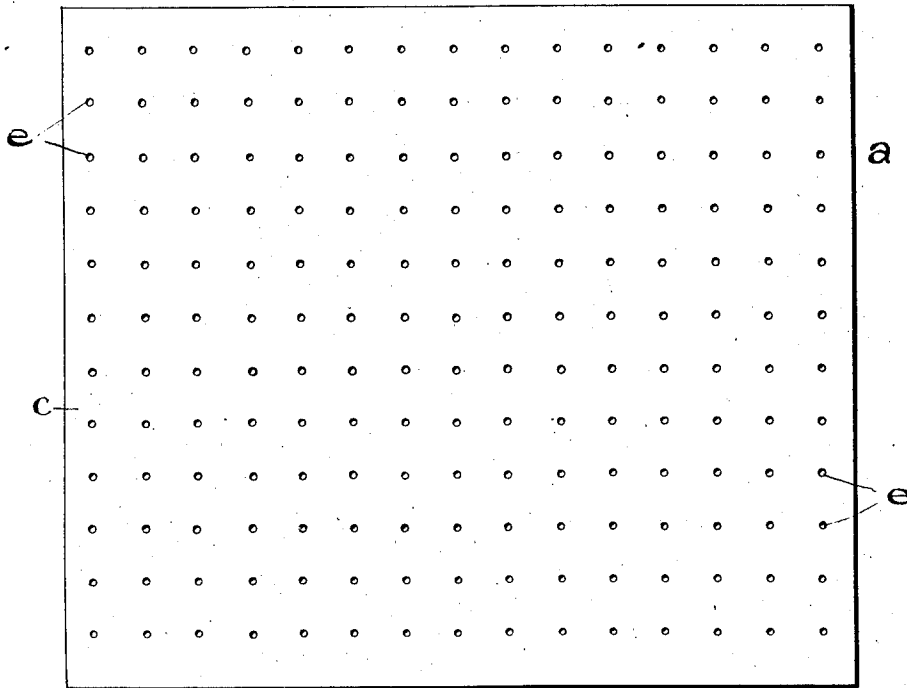


Fig. 2.



Fig. 3.

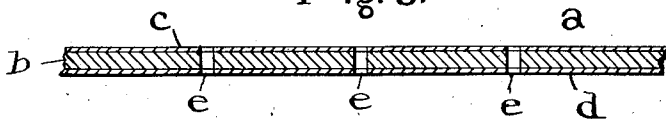
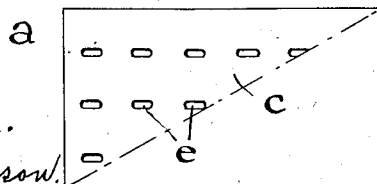


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

EDWARD C. ROBERTS, OF SALTVILLE, VIRGINIA.

COMPOSITE BOARD.

1,063,736.

Specification of Letters Patent.

Patented June 3, 1913.

Application filed March 5, 1910. Serial No. 547,538.

To all whom it may concern:

Be it known that I, EDWARD C. ROBERTS, a citizen of the United States, resident of Saltville, in the county of Smyth and State of Virginia, have made a certain new and useful Invention in Composite Boards; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a face view of the invention. Fig. 2 is an edge view of the same. Fig. 3 is a section through the perforations on a larger scale. Fig. 4 is a fragmentary view showing slots instead of circular perforations.

The invention relates to improvements in composite boards, designed for use in place of builders' laths in plastering the walls and ceilings of dwelling or other houses or wherever laths are used for plastering or cementing thereover, and it consists in the novel construction and combinations of parts, as hereinafter set forth.

In the accompanying drawings illustrating the invention, the letter *a* designates my composite board, which is made up of three layers of material of the same superficial area cemented solidly together, the middle layer *b*, being of pulp board or wood veneer preferably, and the outer layers *c* and *d* being preferably thin wood veneers, or parchementized paper may be substituted therefor. The middle or body layer is preferably about four times as thick as the outer layers the grain of the wood of the veneer strips preferably crossing at right angles. In cementing the three layers together, a water-proof cement is employed, as for instance coal tar heated to the boiling point, and one part in eight of calcium oxid added thereto, reducing the hydrogen of the coal tar, rendering the cement chemically neutral and causing it to set very hard, the cement being applied while boiling hot, and limpid

or thin, the cement permeating the layers and the three layers being placed under heavy pressure of suitable flat clamping surfaces (not shown). After the three layers of the board are suitably cemented together, I perforate the same in a regular manner throughout, as shown at *e*, *e*, the plaster, stucco, or other material used to finish the walls flowing through the perforations in application, and being bound or clenched in place. I then coat the board superficially with a thick tenacious water-proof chemically-neutral cement such as animal gelatin dissolved in water, with a proportion of potassium chromate added. While this superficial coating is yet soft and before it has set, a layer of clean sharp sand is sifted thereover and firmly pressed into the cement coating below the surface thereof between clamping rollers (not shown). When the cement is dry, the sand is a part of the board, which is now ready for nailing in place to the framework of the building or wall. The rough surface given the board by the sand coating enables the cement or stucco to better adhere thereto. I may use either of the water-proof cements described, or in fact any suitable water-proof cement for both cementing the layers together and superficially coating the same to bind the sand, instead of using two different cements.

My composite boards are very thin and may be edge lapped in application, whereby both nails and time are saved.

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

1. A composite board, consisting of wooden veneer layers having a hard waterproof homogeneous chemically-neutral cement connection between and permeating the same, and an exterior coating of thick hard homogeneous chemically-neutral waterproof cement, said coating having fine sand embedded below the surface thereof in a distributed manner.

2. A composite board, consisting of wooden veneer layers having a hard waterproof homogeneous chemically-neutral coal tar ce-

ment connection between and permeating the same, and an exterior coating of thick hard chemically-neutral waterproof gelatin cement having potassium chromate as
5 an ingredient, said coating having fine sand embedded below the surface thereof in a distributed manner.

In testimony whereof I affix my signature, in presence of two witnesses.

EDWARD C. ROBERTS.

Witnesses:

CHAS. A. WILEY,
R. M. SHANNON.