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H. L. KINCAID

2,352,900

COMPOSITION BOARD

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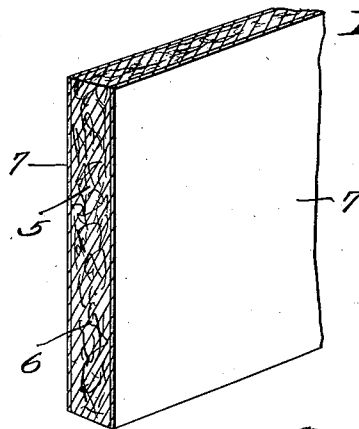


Fig. 1.

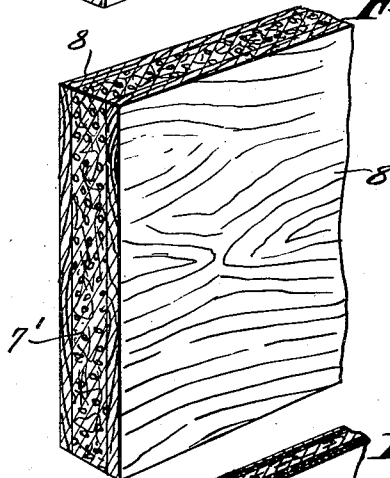


Fig. 2.

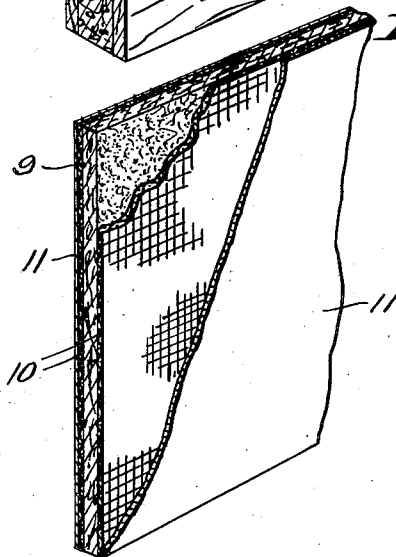


Fig. 3.

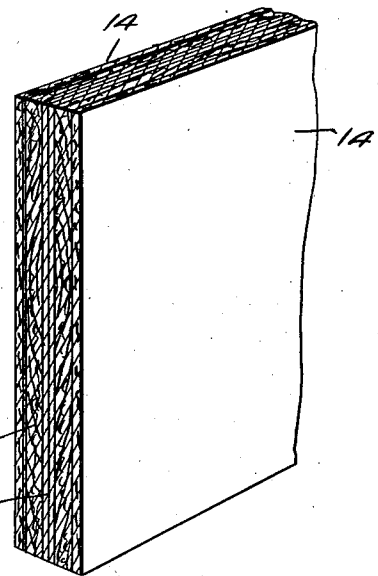


Fig. 4.

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2,352,900

COMPOSITION BOARD

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1 Claim. (Cl. 154—45.9)

This invention relates to composition board construction, the primary object of the invention being to provide a composition board being exceptionally wear-resisting, sound-proof, fire-proof and impervious to water.

Another object of the invention is to provide a board of this type which will be resilient, to prevent its breaking or cracking under severe blows directed thereto while the board is being worked, or while in use.

A further object of the invention is to provide a composition board structure wherein the body portion thereof is constructed of low grade raw cotton, known as motes, mill run or long staple cotton in roll or web form, containing a quantity of ground rock united by a binding medium, which, when properly cut and dried produces a substantially rigid structure.

Still another object of the invention is to provide a composition board structure wherein the body portion thereof is constructed of low grade raw cotton, known as motes, mill run or long staple cotton in roll or web form, containing a quantity of ground rock united by a binding medium, which, when properly cut and dried produces a substantially rigid structure.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein described, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawing:

Figure 1 is a fragmental perspective view illustrating one form of composition board, wherein the faces thereof embody thin sheets of heavy sheet paper material of the craft quality.

Figure 2 is a fragmental perspective view wherein the body of the composition board comprises cotton particles, ground rock and a binding material, the facings of the board being constructed of heavy paper and formed with a design for finishing purposes.

Figure 3 is a fragmental perspective view illustrating a modified form of the invention, wherein the sides of the composition board embody fabric material covered with thin sheets of craft paper.

Figure 4 is a fragmental perspective view illustrating a still further modified form of the

invention, wherein sheets of craft paper are embedded centrally of the body portion.

In the construction of the composition board according to the present invention, a body portion indicated at 5 is provided, the body portion or core comprising particles of cotton indicated at 6 of a low grade known as mote, mill run or the like, and formed into a mat or web. To the cotton thus formed, is added, a binding medium, having adhesive qualities, the binding medium being of a consistency and qualities of glue. The composition or plastic material thus formed, is molded or pressed into board formation and the sides thereof are covered with layers of heavy paper or sheets of fibrous material 7 which form the faces of the board, the paper sheets adhering to the body portion due to the action of the adhesive qualities of the binder.

In the form of the invention as shown by Figure 2 of the drawing, the core, which is indicated by the reference character 7, comprises ground cotton or particles of raw cotton of the mote or mill run grade, in web or mat form to which is added a quantity of ground rock, the ground rock rendering the composition of material or body of the board, exceptionally fire-resistant and at the same time adds weight to the board, thereby adapting the finished material for various uses.

The facings of the board shown by Figure 2 of the drawing, and which are indicated by the reference character 8, are also formed of heavy paper material of the craft variety, the paper adhering to the body portion or core, due to the action of the binding medium.

As shown by Figure 3 of the drawing, the core of the composition board, which is indicated by the reference character 9, is constructed of particles of cotton of an inferior grade, in mat or web form to the surfaces of which is added a binding medium having the qualities and consistency of glue.

The sides of the plastic board in this form of the invention, are constructed of fabric material indicated at 10, the fabric material being pressed into the sides of the body portion or core so that the plastic material of which the body portion or core is formed, will embed itself in the mesh of the fabric material. In connection with this type of composition board, it may be stated that it is desirable to use a fabric material of coarse mesh, such as burlap or the like.

Secured to the surfaces of the fabric material 10, are sheets of paper 11, which are held in

place by the adhesive qualities of the binding medium used in the making of the plastic composition of which the body portion or core is formed. These paper facings may of course be plain, or provided with figures or designs, to the end that the board may be effectively used in the construction of a finished wall surface.

As shown by Figure 4 of the drawing, the body portion or core which is indicated at 12, and which is constructed of fine particles of cotton material of an inferior and low priced grade, is provided with sheets 13 of paper material, which extend through the central portion thereof, lending exceptional strength to the finished board, due consideration having been given to the flexible qualities of the board.

The facings of the board, which are indicated by the reference character 14, are formed of heavy paper, of the craft variety which has been selected because of its toughness and low cost.

In constructing the composition board, the fine cotton particles are worked into web or mat form, and the cotton web or mat is moved over a flat table. During the passage of the cotton web or mat over the flat table, the surfaces thereof are sprayed with a liquid binder, in the form of glue. As the cotton web moves through the machine, the ground rock is deposited in desired quantities in the surface of the cotton web which has been impregnated with the binder. As a final step, the surfaces of the material are covered with

layers of heavy paper, which becomes united with the mass, by the action of the binder.

It might be further stated that after the composition board has been formed, it may be treated in a dry kiln for curing purposes.

From the foregoing it will be seen that due to the construction shown and described, I have provided a composition board constructed of a low grade of cotton material, which may be bought at an exceptionally low price, the composition board being fireproof, impervious to water, and possessing certain resilient qualities to insure against the composition board breaking, when subjected to severe shocks or blows.

15 What is claimed is:

A composition board embodying a core comprising a mat formed of ground raw cotton, a fire-proof binding medium being thoroughly incorporated in the ground raw cotton, finely ground rock material covering the side surfaces of the mat, the finely ground rock material being pressed into the mat and held in place on the surface of the mat by the binding medium, flexible fabric facing strips covering the surfaces of finely ground rock and being held in place by the binding medium being thoroughly incorporated in the mesh of the fabric material, and layers of substantially heavy paper positioned against the fabric facing strips and being held in position by the binding medium.

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