

(No Model.)

H. W. MOWRY.
COMPO-BOARD.

No. 513,710.

Patented Jan. 30, 1894.

Fig. 1.

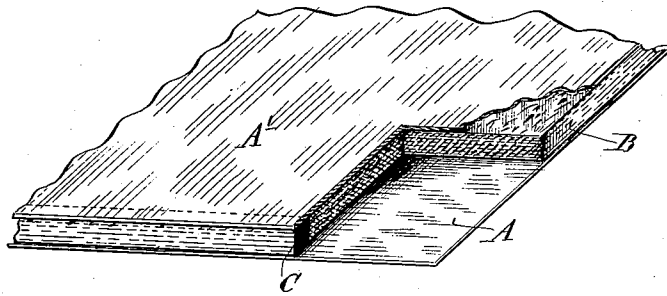


Fig. 3.

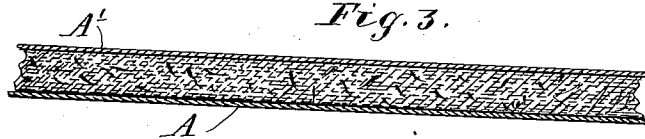


Fig. 4.

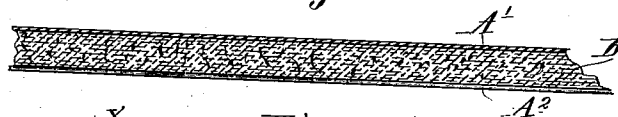
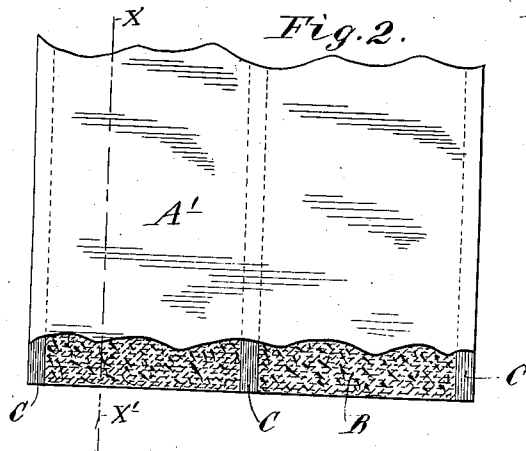


Fig. 2.



Witnesses.

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By his Attorney

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UNITED STATES PATENT OFFICE.

HARLEY W. MOWRY, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR TO
WILLIAM H. COOPER, OF SAME PLACE.

COMPO BOARD.

SPECIFICATION forming part of Letters Patent No. 513,710, dated January 30, 1894.

Application filed March 7, 1893. Serial No. 464,991. (No specimens.)

To all whom it may concern:

Be it known that I, HARLEY W. MOWRY, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Compo Boards; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to that class of building material which has recently become known to the trade, under the name of compo-board; and has for its object to provide an improved article of this class.

To this end, the invention consists of the construction hereinafter fully described and particularly defined in the claim.

The invention is illustrated in the accompanying drawings, wherein, like letters referring to like parts—

Figure 1 is a perspective view of a piece of my compo-board, with some parts removed or broken away. Fig. 2 is a plan view of a piece of the compo-board, with some parts broken away. Fig. 3 is a section on the line X X' of Fig. 2. Fig. 4 is a view similar to Fig. 3, in which asbestos paper is substituted for the straw-board, shown in the other views, for one of the facings.

Referring to Figs. 1, 2 and 3, A A' are paper-board facings, composed of straw or wood pulp-board, embracing a conglomerate body B, inlaid with longitudinal flat strips C of wood. The conglomerate body B, is composed of commingled cement and finely divided wood. The finely divided wood, may be either in the form of excelsior, common shavings, such as come from wood working establishments, or saw-dust, or a mixture of any two or more of the said elements. In other words, with the cement may be commingled either excelsior, shavings or saw-dust alone, or any desired mixture of excelsior and shavings, excelsior and saw-dust, or shavings and saw-dust, or excelsior, shavings and saw-dust. The term "finely divided wood" is herein used as a generic term, to include any and all of the said mixtures, as an element combining with the cement, to make up the conglomerate body B. The cement is

preferably composed of glue and whiting, with or without the addition of wood ashes. The wood ashes are only added when it is desired to have a cement or make up a conglomerate which will set and dry out extremely hard.

In the manufacture of the above described compo-board, the finely divided wood, whether consisting of excelsior, short shavings or saw-dust, or any two or more of the said elements, is commingled with the liquid cement in a mixing tank, the mixing action being maintained until the elements are uniformly distributed. The lower facing A is then laid out on a flat surface, such as a table, or in a suitable form; and the longitudinal wooden strips C are placed in position thereon. The facings A A' are preferably made of about thirty-two inches in width, and of any desired length; and the wooden strips C are placed with reference chiefly for convenience in use as nailing strips and the marginal members for making close joints. If the facings be thirty-two inches wide, one of the strips C is placed at each longitudinal margin, and another in the center of the compo-board. After the said strips have thus been placed in position, on the lower facing A, the conglomerate B, while in a plastic condition, is applied to the said lower facing and filled in between the said wooden strips C to the level of the top surfaces of the same. The top facing A' is then applied, care being first taken to spread some of the liquid cement, composed of glue and whiting, or similar material, over the top surfaces of the strips C. The whole composition is then subjected to light pressure, in any suitable way, until the conglomerate has become thoroughly set and dried out. The adhesive character, given to the conglomerate by the cement, will bind the facings and the wooden strips to the said conglomerate into an integral and solid board. The compo-board thus formed, is rigid, strong, durable and water-proof. The conglomerate body made up as described of the cement and finely divided wood, is extremely hard, rigid and tough. The excelsior and shavings are the preferred ingredients for the reason of the long fiber thereby afforded; and a better conglomerate is afforded, when

the excelsior and shavings are used, without the sawdust; but the saw-dust alone may be employed, and a good conglomerate may be obtained by the use of either the excelsior or shavings, or both, with a considerable quantity of saw-dust.

The compo-board thus made, is capable of general use, as a substitute for lath and plaster, inside and outside walls, for roofing with the use of battens over the joints, and generally, wherever it is desired to have a strong, durable, air-tight and smooth wall, or other surface.

In applying the same to interiors, it is preferable to run the same up and down, and the nailing and binding strips C would be arranged, so as to coincide with the studding, thereby giving a good nailing surface, for securing the compo-board in position.

In case it be desired to make the material fire-proof, or more or less fire-proof, asbestos paper may be substituted for either one or both of the straw-board or wood-pulp board facings A A', as shown at A², in Fig. 4.

In case asbestos paper should thus be used for both facings the material or compo-board

as an entirety, will be almost completely fire-proof, as the large quantity of cement commingled with the finely divided wood, to form the conglomerate, renders the same very difficult to burn.

It is obvious that the above described compo-board utilizes a class of material, which would otherwise go to waste; and for this reason, the same can be made at comparatively low cost.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

A compo-board, comprising a conglomerate body, composed of finely divided wood commingled with cement, longitudinal wooden strips for nailing and binding purposes set therein, and paper board facings embracing said conglomerate body and wooden strips, and secured thereto by adhesion of the said cement, substantially as described.

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

HARLEY W. MOWRY.

Witnesses:

JAS. F. WILLIAMSON,
EMMA F. ELMORE.