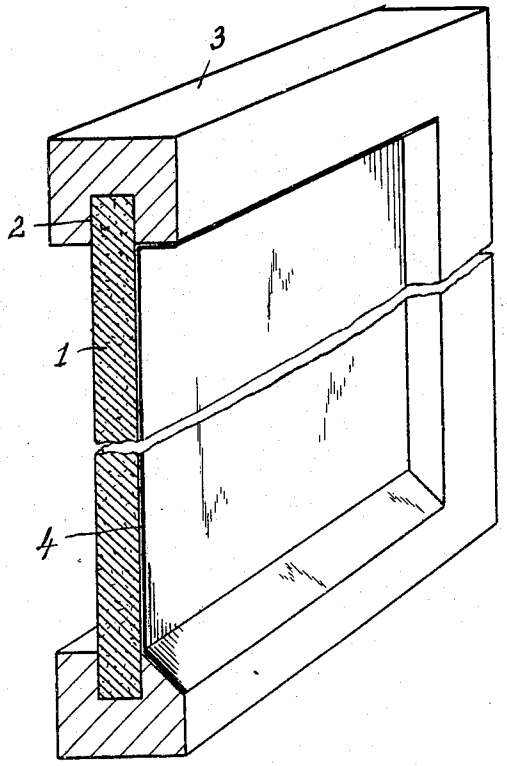
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BUILDING ELEMENT

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BUILDING ELEMENT

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3 Claims. (Cl. 20—91)

My invention relates to building elements for dwelling houses, barrack-houses, and the like.

The object of the invention is to enable buildings and structures to be produced by mass production methods in the factory, leaving only the labour of assembling and erecting on the site.

A more particular object of the invention is to provide a building element for the aforesaid purpose which is simple in construction and inexpensive to manufacture, and which combines a good heat insulating quality with indifference to moisture and to rapid temperature changes.

The invention consists in a building element comprising a wooden frame having a recess extending from its inner surface, and a panel consisting of impregnated fibrous material inserted with its periphery into said recess and glued to the walls of said recess by means of waterproof glue.

The invention also consists in a building element comprising a wooden frame and a panel as above described, and a metal foil covering said panel and a part of said frame on one side or on both sides of the element.

The foregoing and other objects of the invention will be more fully understood from the following detailed description taken in conjunction with the accompanying drawing showing a preferred embodiment of the invention by way of example.

In the drawing 1 is a panel consisting of any impregnated fibrous material. I have found that panels made by pressing chemically disintegrated straw fibers are particularly adapted for the purpose of my invention because of their high mechanical strength and light weight. Moreover, such panels can easily be impregnated so as to become nearly fully waterproof. They can be easily sawed or otherwise shaped, and they are very cheap.

The building element according to the invention is completed by a wooden frame 3 having a recess 2 extending from its inner surface. The above mentioned panel is inserted with its periphery into the said recess, and is glued to the walls of said recess, preferably by means of a waterproof glue, such as casein-glue containing sodium salicylate. Although the structure thus obtained is rather waterproof, it is advantageous to apply to at least one side of the structure, preferably to that side which will be turned toward the weather in the practical use of the structure, a metal foil 4 covering the panel and also the inner face of the frame 3. This foil prevents moisture from reaching the panel, and moreover it lends to the panel a smooth surface which can easily be colored by spraying.

I have found that it is advantageous to glue the metal foil to the panel by means of oxidized boiled linseed-oil as this glue seems to be the only one which adheres firmly to the foil as well as to the panel, and which dries even under the metal foil in a satisfactory manner.

The building element according to the invention has such a light weight that pieces of 9 by 12 feet can easily be handled by two men, it has further a very good heat-insulating capacity and a comparatively high strength, and is completely waterproof. A further advantage consists in that the structure is absolutely indifferent to changes in temperature, as the strength of the connection of the panel with the frame is even higher than that of the panel itself, so that the panel will never be loosened in the frame by rapid temperature changes.

The building elements as above described can conveniently be assembled on the site by means of screws, it being understood that the frame of the elements will be provided with corresponding screw holes or recesses.

What I claim is:

1. In a building unit composed of an insulating panel adhesively united to a wooden frame, and a layer of metal foil adhesively united to said panel and frame, the adhesive uniting said panel and frame consisting of a casein-glue containing sodium salicylate, and the adhesive uniting said metal foil to said panel and frame consisting of oxidized boiled linseed-oil.

2. A building unit comprising a frame having a groove in the inner periphery thereof, a panel of insulating material contained within said groove of said frame, said panel being spaced from the side faces of said frame, and a layer of moisture impervious metal foil secured to at least one face of said panel and to the inner peripheral surface of said frame, whereby the joint between said panel and said frame is rendered moisture proof.

3. A building unit comprising a frame having a groove in the inner periphery thereof, a panel of insulating material contained within said groove and spaced from the side faces of said frame, said panel being sealed in said groove by a casein glue containing sodium salicylate, and a layer of moisture impervious metal foil secured to at least one face of said panel and to the inner peripheral surface of said frame by an oxidized boiled linseed-oil adhesive, whereby the joint between said panel and said frame is rendered moisture proof.

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