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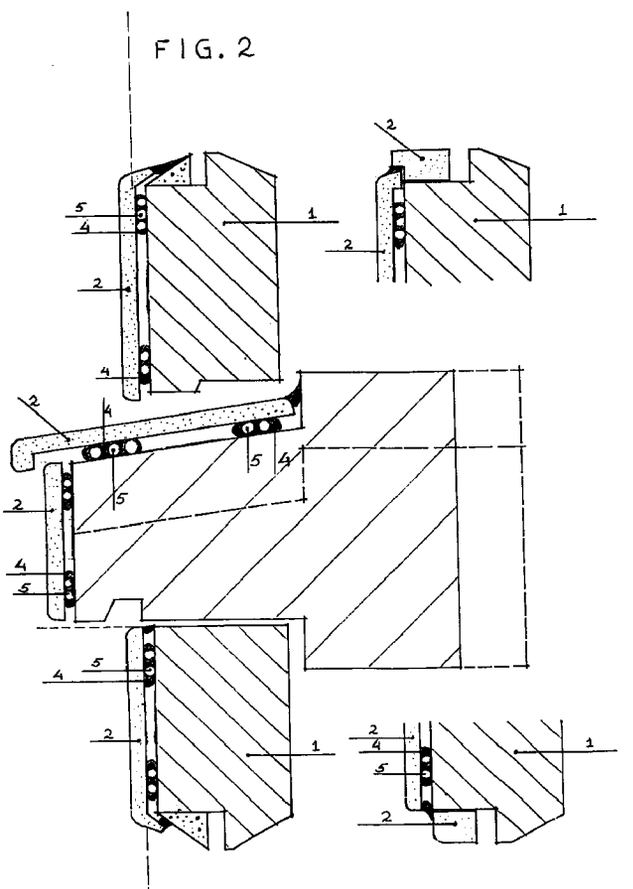
(54) Building

(57) The invention relates to a building comprising wooden structural members (1) which are exposed to the environmental atmosphere. The wooden structural members (1) are provided with vapour-permeable mineral wool elements (2) to protect the wooden structural members (1) from the environmental atmosphere. The wooden structural members (1) are at least partially free of paint work and the mineral wool elements (2) are applied directly onto the untreated wooden structural members (1).

FIG. 2



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Description

[0001] The invention relates to a building comprising wooden structural members which are exposed to the environmental atmosphere.

[0002] Such a building is generally known. As a rule the known building is constructed from a combination of concrete, stone and wood, the wood usually being used for the casings or portions of the facade. The advantage of using wood is that it is a good insulator. However the disadvantage of wood in buildings is that measures have to be taken for the protection of the wood in order to prevent rotting. To this end the wood is usually provided with one or more layers of paint. However, with regard to building physics this poses a problem because paint has a sealing effect, thereby furthering the composting process and consequently wood rot. Thus, there is always a certain need for ventilation, which is being obstructed by the layers of paint.

[0003] It is the object of the invention to provide a solution to this problem, optimally providing for the ventilation needs of the wooden structural members, while at the same time affording optimal protection against the effects of the weather. It is therefore the object of the invention to make optimal use of the advantages of wood as structural element, while avoiding the inherent drawbacks.

[0004] To this end the building according to the invention is characterized in that the wooden structural members are provided with vapour-permeable mineral wool elements to protect the wooden structural members from the environmental atmosphere. Advantageously such mineral wool elements are composed of compressed mineral fibres providing said elements with pores to afford the desired vapour permeability. This vapour permeability equals the vapour permeability of untreated wood. In addition, the mineral wool elements afford an adequate protection against the effects of the weather.

[0005] Preferably the wooden structural members are at least partially free of paint work and that the mineral wool elements are applied directly onto the untreated wooden structural members. In this embodiment the invention is particularly well suited for use with new wooden structural members which have not yet been provided with a layer of paint. The mineral wool elements and the wooden structural members are preferably bonded by means of gluing.

[0006] However, the invention may also be applied to wooden structural members that have already been provided with one or more layers of paint. In that embodiment it is preferred that a space be maintained between the wooden structural members and the mineral wool elements when the same are applied to the wooden structural members. To secure the space between the mineral wool elements and the painted wooden structural members it is, for instance, possible to use spacers, affording the opportunity for adequate ventilation and drainage. Preferably the mineral wool elements and the structural members are then bonded by means of a cement. The above-mentioned spacers may be incorporated in this cement bonding, for instance, as small balls.

[0007] The invention will now be further elucidated with reference to the drawings, in which

Fig. 1 shows cross-sectional views of several wooden structural members to which mineral wool elements have been applied in accordance with the invention; and

Fig. 2 shows several more structural members which have been provided with a layer of paint and to which mineral wool elements have been applied in accordance with the invention.

[0008] Figs. 1 and 2 show cross sections of wooden structural members indicated with reference number 1. Fig. 1 shows that to said wooden structural members 1 mineral wool elements 2 have been applied, which protect the wooden structural members 1 from the environmental atmosphere. The wooden structural members of Fig. 1 are free from paint work so that the mineral wool elements 2 have been applied directly to the untreated wooden structural members 1. In the case illustrated, this has been effectuated by means of glue bonding.

[0009] Fig. 2 shows the situation where the wooden structural members 1 have already been provided with paint work. This is a situation relating to an existing building, to which the invention can still be applied by maintaining a space 3 between the mineral wool elements 2 and the wooden structural members 1. In the embodiment shown in Fig. 2 the mineral wool elements 2 are applied to the wooden structural members 1 by means of cement bonding 4. The cement bondings 4 are preferably provided with round spacers 5 in order to maintain the space 3 between the structural members 1 and the mineral wool elements 2 at the desired distance.

[0010] Some of the advantages of the mineral wool elements as used to cover the wooden structural members are that said mineral wool elements are easy to use and to modify, that pre-drilling is not necessary, and that the mineral wool elements are impervious to damp and also to heat and cold. Another important advantage is that the mineral wool elements retain their shape under diverse climatological conditions, and that they can be produced in any choice of colour.

Claims

1. A building comprising wooden structural members which are exposed to the environmental atmosphere, **characterized** in that the wooden structural members are provided with vapour-permeable mineral wool elements to protect the wooden structural members from the environmental atmosphere.

2. A building according to claim 1, **characterized** in that the wooden structural members are at least partially free of paint work and that the mineral wool elements are applied directly onto the untreated wooden structural members.

3. A building according to claim 2, **characterized** in that the mineral wool elements are applied to the wooden structural members by means of gluing.

4. A building according to claim 1, in which the wooden structural members are provided with at least one layer of paint, **characterized** in that a space is maintained between the wooden structural members and the mineral wool elements when the same are applied to the wooden structural members.

5. A building according to claim 4, **characterized** in that the mineral wool elements and the structural members are bonded by means of a cement.

6. A building according to claim 3 or 4, **characterized** in that the cement bonding between the mineral wool elements and the structural members incorporates spacers.

7. A building according to one of the claims 1-6, **characterized** in that the mineral wool elements are composed of compressed mineral fibres.

FIG. 1

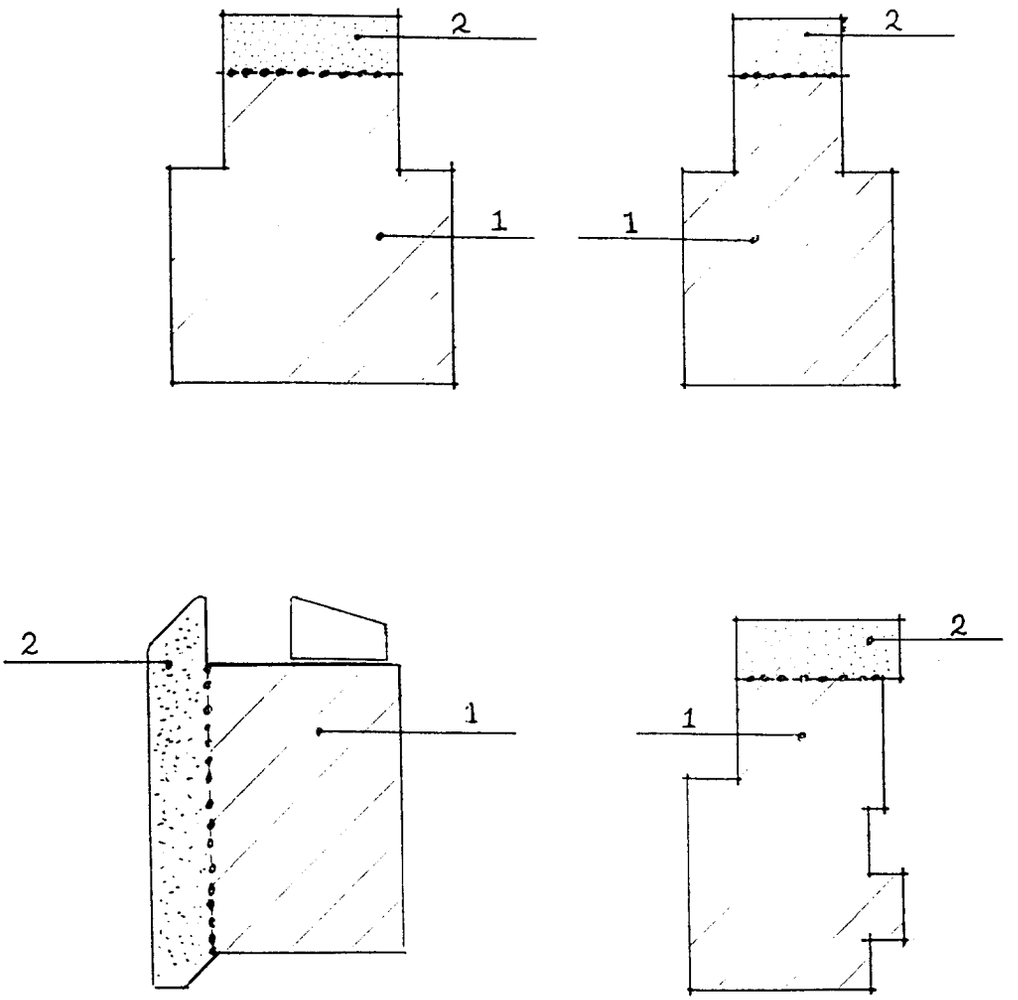

FIG. 2