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(54) **Multi-layer absorbent lining for application inside coffins**

(57) The present invention refers to a lining for application inside coffins, capable of absorbent the organic liquids resulting from corpse decomposition; it being composed of an overlapped series of layers of synthetic

material, with impermeable lower layer, upper permeable layer and permeable intermediate layers covered on the upper side with super-absorbent powder capable of absorbent and holding back the organic liquids of decomposition.

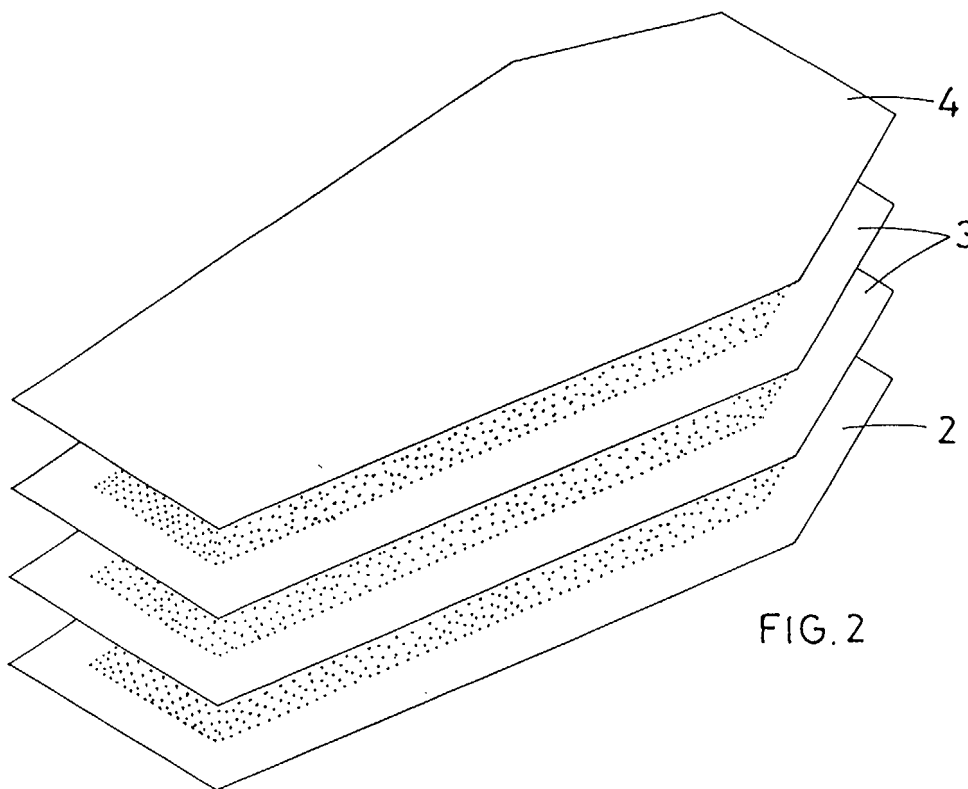


FIG. 2

Description

[0001] The present patent application refers to a multi-layer absorbent lining applied inside coffins to absorb and hold back the organic liquids produced during the decomposition of the corpse.

[0002] The manufacture of the invention has been devised in order to solve a problem that occurs during the decomposition of the corpse inside the coffin.

[0003] As it is known, coffins are normally made of wood and internally lined with suitably shaped welded zinc sheets.

[0004] The purpose of the galvanised lining is to contain the highly corrosive organic liquids that are produced during the decomposition of the corpse.

[0005] It has been shown that sometimes the galvanised lining cannot resist to the corrosive action of the decomposition liquids; in particular, it is more vulnerable in thinner and/or defibrated sections, such as for example folding lines.

[0006] In case of stagnation of organic liquids on the thinner and/or defibrated sections of the galvanised lining, the lining is very likely to be affected by corrosion that makes it permeable and produces undesired leakage of organic liquids towards the external wooden structure of the coffin.

[0007] The multi-layer lining of the invention is perfectly capable of preventing this risk. Once it has been placed on the bottom of the coffin, it absorbs and holds back the organic liquids that are gradually produced during the decomposition of the corpse, thus preventing them from reaching the horizontal bottom wall of the galvanised lining and, most of all, from stagnating on the corners of the bottom wall (that is the sections that are especially subject to thinning and defibration).

[0008] The positive result has been obtained by devising the lining of the invention as a multi-layer structure, composed of a completely impermeable bottom layer (in order to avoid leakage of organic liquids against the galvanised walls of the coffin) and of a series of permeable layers; it being provided that the layers are highly absorbent, being impregnated with a specific absorbent powder - defined as S.A.P. ("Super Assorbente in Polvere") by those experts of the art - capable of holding back large quantities of water-based liquids, up to 300 times its weight.

[0009] This substance can easily be found on the market, where it is distributed by the German company "STOCKHAUSEN" with the "Produkt 2 A029" trade name and by the French company "LA DEFENSE 10" with the "Aquakeep Lo 60" trade name.

[0010] For major clarity the description of the invention continues with reference to the enclosed drawings, which are intended for purposes of illustration and not in a limiting sense, whereby:

- fig. 1 is an axonometric view of an open coffin that is internally provided with the absorbent lining of the

invention,

- fig. 2 is an axonometric exploded view of the multi-layer structure of the same absorbent lining;
- fig. 3 is the same as fig. 2, with the difference that it shows the compact structure ready for use.

[0011] With reference to the enclosed figures, the lining (1) is composed of a series of welded thin layers, with the first layer - starting from the bottom - represented by an impermeable plastic sheet (2), preferably polyethylene, on which some permeable sheets (3) are placed.

[0012] The permeable sheets (3) can be obtained using polypropylene, disposable fabric, cellulose pulp, micro perforated polyethylene or polypropylene, polyester, cotton or wool yarn.

[0013] Both the impermeable bottom sheet (2) and the permeable sheets (3) - with the exception of the upper layer (4) which completes the structure of the invention - are highly absorbent thanks to the application of "veils" of "S.A.P." absorbent powder on their upper side.

[0014] Being the powder extremely fine and volatile, it is necessary to make sure that it rests on the layers (2, 3) on which it is applied, in order to maintain its function.

[0015] If the layers (2, 3) are made with cellulose pulp, i.e. "vaporous" material with cotton wool, no additional operations are necessary, since the absorbent powder remains permanently "impregnated" between the large fibres.

[0016] If the layers (2, 3) are made with polypropylene, disposable fabric or micro perforated polyethylene - that is materials with extremely smooth compact surface on which the powder can slip away easily - it is necessary to cover them with a layer of glue in order to make the absorbent powder adhere.

[0017] To better understand the manufacture of the invention it must be said that the same must be placed on the bottom of the coffin before laying the corpse.

[0018] When they start leaking from the corpse because of gravity, the organic liquids of decomposition fall on the lining (1) penetrating into it through the upper permeable layer (4) that is not covered with absorbent powder.

[0019] However, once they have penetrated the new lining, the liquids tend to pass through the permeable layers (3), but they are progressively absorbed and held back by the absorbent powder that impregnates them.

[0020] The presence of the bottom impermeable layer (2) guarantees the perfect tightness of the lining (1), also in case of residual organic liquids that leak under the last layer of the permeable intermediate layers (3) and impregnate the veil of absorbent powder applied on the bottom impermeable layer (2).

[0021] The lining of the invention can be realised with different constructive shapes within the protection scope of the invention, the most reliable being the shape shown in fig. 1.

[0022] In this embodiment of the invention the surface of the multi-layer absorbent structure (1) is larger than the bottom wall of the coffin; in this way a large perimeter band (1a) can be advantageously folded at 90° upwards, in order to cover a first part of the lateral walls of the coffin. 5

[0023] Alternatively, the lining (1) of the invention can be realised in another version with shape and surface exactly equal to the bottom wall of the coffin, but without the raised perimeter border. 10

[0024] In another simpler and cheaper constructive version the lining has a rectilinear shape that covers only the central longitudinal "lane" of the coffin on which most of the corpse is laid from head to chest and legs. 15

7, **characterised by** the fact that the impermeable bottom layer (2) and the permeable intermediate layers (3) are covered with suitable glue on the upper side in order to make the absorbent powder adhere on each layer.

Claims

1. Multi-layer absorbent lining for application inside coffins, **characterised by** the fact that it is composed of an impermeable bottom layer (2) permanently covered on top with a veil of "S.A.P." absorbent powder and of an upper permeable layer (4). 20
2. Multi-layer absorbent lining according to claim 1, **characterised by** the fact that permeable layers (3) covered with "S.A.P." absorbent powder are placed in intermediate position between the bottom layer (2) and the upper layer (4). 25 30
3. Multi-layer absorbent lining according to the previous claims, **characterised by** the fact that the impermeable bottom layer (2) is made of polyethylene. 35
4. Multi-layer absorbent lining according to claims 1 and 2, **characterised by** the fact that the permeable layers (3, 4) are made of polypropylene. 40
5. Multi-layer absorbent lining according to claims 1 and 2, **characterised by** the fact that the permeable layers (3, 4) are made of disposable fabric. 45
6. Multi-layer absorbent lining according to claims 1 and 2, **characterised by** the fact that the permeable layers (3, 4) are made of micro perforated polyethylene. 50
7. Multi-layer absorbent lining according to claims 1 and 2, **characterised by** the fact that the permeable layers (3, 4) are made of polypropylene, polyester, cotton or wool yarn. 55
8. Multi-layer absorbent lining according to claims 1 and 2, **characterised by** the fact that the permeable layers (3, 4) are made of cellulose pulp.
9. Multi-layer absorbent lining according to claims 1 to

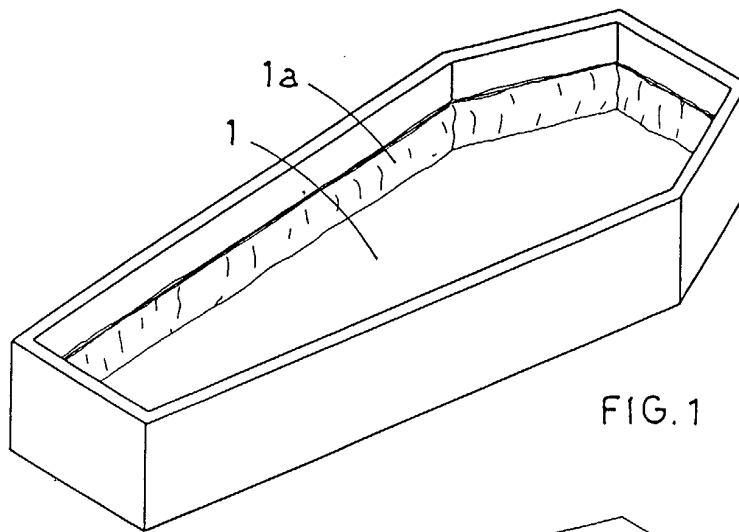


FIG. 1

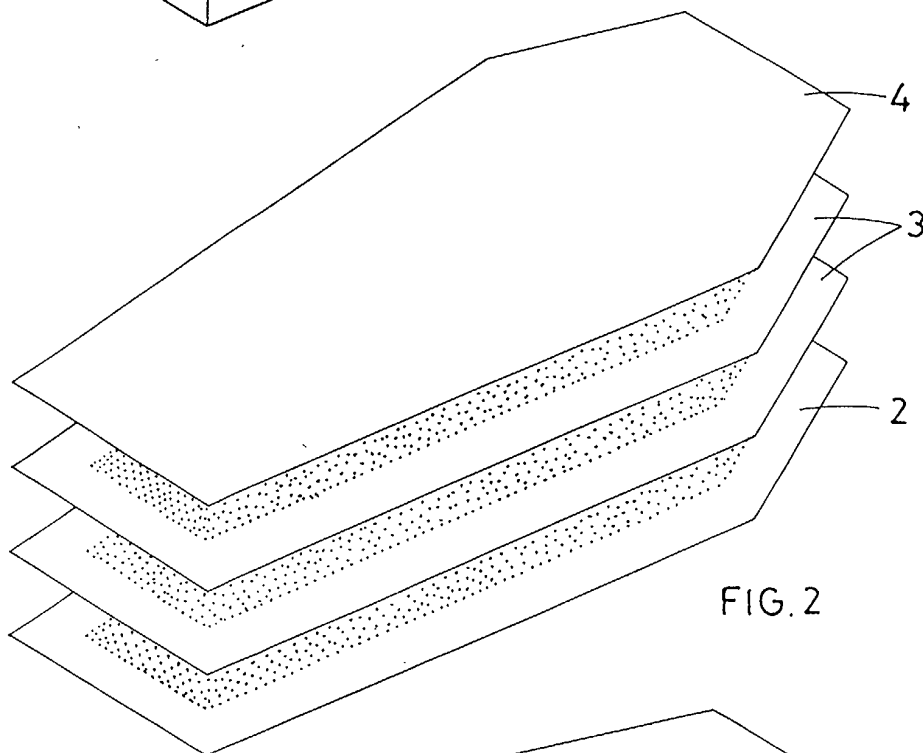


FIG. 2

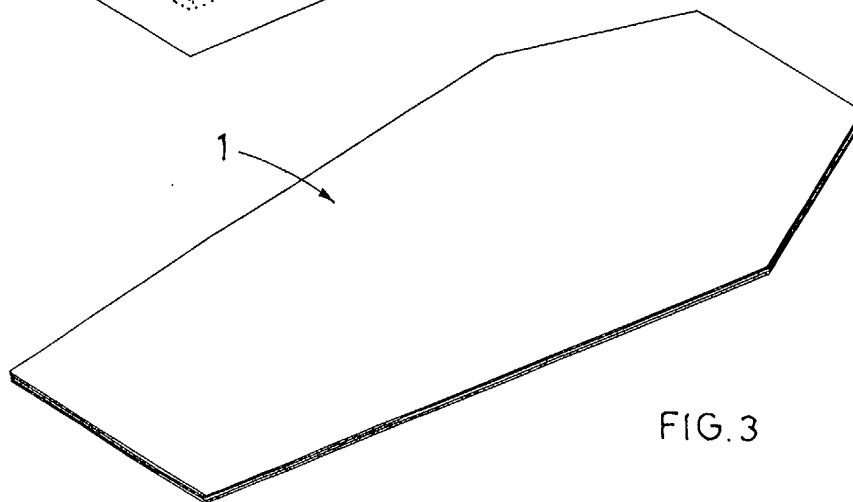


FIG. 3