

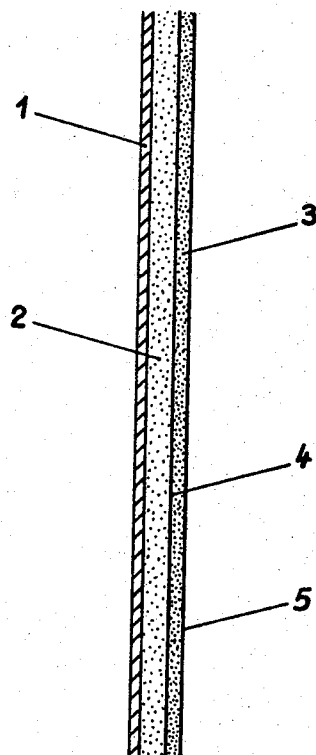
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IMPREGNATING BANDAGE FOR WOOD

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IMPREGNATING BANDAGE FOR WOOD

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The present invention relates to a bandage for impregnating wood, and especially wooden poles which are mounted in the ground.

Prior to this invention, such bandages which are employed for an impregnation or supplemental impregnation of wood and especially of the parts of wooden poles which are inserted into a ground are provided with a layer of water-soluble impregnating salts which is applied upon an impervious base. When affected by atmospheric moisture, these salts form an impregnating solution which penetrates into the wood.

It has lately been found that such salt mixtures alone are no longer sufficient for impregnating wood since a type of rot, the so-called mildew rot, now very frequently occurs which does not respond to the known salt mixtures. Although there are impregnating agents known which will effectively combat this mildew rot, these agents cannot be employed in the form of impregnating bandages in combination with the usual impregnating salts which become fixed in the wood since these agents and salts interfere with each other and render each other ineffective.

A very effective agent for protecting a wooden pole from mildew rot consists, for example, of sodium pentachlorophenol or copper sulphate. However, these two salts cannot be used in a mixture with the salts which become fixed in the wood since they would then precipitate in a water-insoluble form and would thereby lose their fungicidal effectiveness.

It is an object of the present invention to provide an impregnating bandage which is designed so that the salts which are especially effective against mildew rot and the fixing salts, for example, boron trifluoride bichromate compounds, will act successively. This may be attained according to the invention by providing the impregnating bandage with the first inner layer which is applied directly upon the salt carrier and contains the impregnating salts which become fixed in the wood, and with a second layer which is separated from the first layer by a semi-pervious membrane and contains the salts which are the first which will penetrate into the wood and will combat mildew rot. The semi-pervious membrane between the two layers of impregnating salts preferably consists of cellophane which prevents the two salt layers from combining with each other during the production and storage of the impregnating bandage.

When such a two-layer bandage is being applied upon a moist wooden pole, the impregnating solution which is then formed of the upper salt layer will first penetrate into the wood and protect it from mildew rot without preventing the impregnating solution of the following lower layer of fixing salts from thereafter penetrating into the wood.

The outer layer of impregnating salts protects the pole from the dangerous mildew rot, while the inner layer of impregnating salts protects the pole from the usual causes of decay.

The outer layer of impregnating salts on the bandage is preferably mixed with oil so as to form a paste in which the salt particles are surrounded by oil or a similar water-repellent substance which forms a barrier layer which separates these salts from the lower salt layer.

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This also prevents the two salt layers from combining with each other during storage of the bandage and it delays the penetration of atmospheric moisture into the lower salt layer when the bandage is being applied.

The outer side of the outer salt layer of the bandage is preferably also covered by a layer of cellophane in order to prevent the impregnating solution from flowing off without being used.

The features and advantages of the present invention will hereafter be further described with reference to the accompanying drawing which shows a cross section of an impregnating bandage according to the invention.

The two-stage bandage according to the invention may be either wound spirally around the pole which is to be protected or it may be of a considerable width and simply layed once around the pole.

The striplike or wide impregnating bandage consists of a salt carrier 1 in the form of a flexible water-impervious sheet material which carries the two salt layers 2 and 3. The inner salt layer 2 which lies directly on the carrier 1 consists of the usual fixing impregnating salts, for example, fluorides containing chromium, which act upon the wood in a known manner and impregnate the same.

The salt layer 2 is covered by a semi-pervious membrane 4, for example, a sheet of cellophane, and for combating mildew rot a second salt layer 3 of sodium pentachlorophenol or copper sulphate or a similar salt is applied upon the membrane 4. This second salt layer 3 is covered up toward the outside by a semi-pervious membrane 5 and it is preferably mixed with rosin oil or mineral oil to form a paste. The oil serves, however, not only as a paste former but also as a barrier against the inner salt layer 2.

If such a bandage is applied round a moist pole, at first the agent of the salt layer 3 which is active against mildew rot is dissolved and when this agent has penetrated into the wood, the second stage will occur in which the salt mixture 3 which due to its chromate contents has a fixing effect will penetrate into the wood.

Although my invention has been illustrated and described with reference to the preferred embodiment thereof, I wish to have it understood that it is in no way limited to the details of such embodiment but is capable of numerous modifications within the scope of the appended claims.

Having thus fully disclosed my invention, what I claim is:

1. A wood-impregnating bandage having a two-stage effect comprising a sheet forming a salt carrier, two impregnating salt layers on said carrier, and a semi-pervious membrane separating said salt layers from each other so that said salt layers will become active successively.

2. A wood-impregnating bandage as defined in claim 1, in which said carrier sheet is impervious to water and carries the first of said salt layers consisting of impregnating salts of a type known as such which become fixed in the wood, said semi-pervious membrane covering said first salt layer, the second of said salt layers covering said membrane and containing salts which are active especially against mildew rot, and another semi-pervious membrane covering the outer side of said second layer.

3. A wood-impregnating bandage as defined in claim 1, in which at least one of said salt layers contains an addition serving as a barrier for preventing the salt solutions of the two salt layers formed by the entry of moisture from mixing with each other.

4. A wood-impregnating bandage as defined in claim 3, in which said barrier addition consists of oil surrounding the salt particles of at least one of said salt layers.

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5. A wood-impregnating bandage comprising a sheet forming a salt carrier, two impregnating salt layers on said carrier, and a semi-pervious membrane separating said salt layers, in which said carrier sheet is impervious to water and carries the first of said salt layers containing a mixture of fluoride and bichromate salts, said semi-pervious membrane covering said first layer consisting of cellophane, said second salt layer covering said membrane consisting of a paste formed by a mixture of a material of the group consisting of sodium pentachlorophenol and copper sulphate with oil.

6. A wood-impregnating bandage comprising a sheet forming a salt carrier, two impregnating salt layers on said carrier, and a semi-pervious membrane separating said salt layers, in which said carrier sheet is impervious to water and carries the first of said salt layers containing a mixture of fluoride and bichromate salts, said semi-pervious membrane covering said first layer consisting of cellophane, said second salt layer covering said membrane

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consisting of a paste formed by a mixture of sodium pentachlorophenol with oil.

7. A wood-impregnating bandage comprising a sheet forming a salt carrier, two impregnating salt layers on said carrier, and a semi-pervious membrane separating said salt layers, in which said carrier sheet is impervious to water and carries the first of said salt layers containing a mixture of fluoride and bichromate salts, said semi-pervious membrane covering said first layer consisting of cellophane, said second salt layer covering said membrane consisting of a paste formed by a mixture of copper sulphate with oil.

No references cited.

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