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PROTECTIVE COATING FOR PENCIL CORES

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4 Claims. (Cl. 120—83)

This invention relates to methods of protecting pencil cores and more particularly to water-sensitive and unburnt cores to be embedded into the wooden parts of pencils, protection of said cores being effected against the influence of water or moisture by coating said cores with fats.

My novel method of protecting the pencil cores consists essentially therein that the cores are pushed through a bath of melted fat by using a known stripper surrounding the core all around. A further feature of my invention consists therein that I use fat having preferably a high melting point, for instance chloric paraffin with a melting point at from 120 to 130° C., and that I further add with advantage a resin, such as shellac in quantities amounting to from 10 to 50 percent with respect to the fat.

Pencil cores treated in accordance with my present invention are provided with a thin film of fat over the entire surface, this film providing an excellent coating that protects against intrusion of moisture which is inevitable when glueing the pencil cores into the wooden parts of pencils. Especially colored cores or copying pencil cores which are made up with water-sensitive binding agents such as tragacanth, will be subject to an appreciable and even measurable loss in mechanical strength during being glued in, said loss in mechanical strength being of greater or smaller effect depending upon the nature and composition of the core.

Owing to this drawback it had heretofore been necessary in the manufacture of colored or copying pencil cores to use cores which before being glued into the wooden encasement are of a degree of hardness greater than the intended hardness of the core in the completed pencil. This compensative procedure will be fully dispensed with by my invention, and the pencil cores may be made from the beginning with the degree of hardness desired in the completed pencil, the coating of fat provided on the cores in accordance with my invention affording a covering that will safely protect the cores against injurious effects of moisture.

It is known to coat individual pencil cores with vaseline or oil; this procedure, however, involves complications in the manufacture. Moreover, such a film or coating of vaseline or oil does not offer any mechanical resistance and, in addition, is liable to be injured or even removed during being pressed into the wooden part of the pencil, with the result that no closed and moisture repelling protective coating will be present on the pencil cores. A protective coating of this kind will likewise not be produced by the known procedure of immersing the pencil cores in bundled blocks into melted fat and to again remove the fat by a process of centrifuging or by causing the fat to trickle off the pencil cores. Although by this process the pencil cores are preparatorily treated a protective film of fat or exterior coating cannot be obtained on the pencil cores.

It has also been attempted to provide pencil cores that are liable to liquefy or deliquesce, prior to embedding the same into the wooden part of the pencil, with a coating of wax. This procedure, however, cannot be carried out in an economical way as the cores will soften in case of some longer duration of the immersion. In addition, the coatings obtained in this way on the cores will not be uniform and cause trouble in the further steps of manufacture. This procedure therefore, does not serve the purposes in view.

A thin and dense coating of fat that effectively protects the cores against moisture and avoids the drawbacks of the heretofore used processes can be provided on the cores by pushing the latter in accordance with this invention through a bath of melted fat, from which the cores are taken out through a stripper surrounding the core all around. My new method of coating the pencil cores serves to provide the surface of the cores with a coating of fat in a rapid and continuous working process, the mechanical action of the stripper serving to secure a dense coating of fat, that will actually afford protection against the effects of moisture and renders the cores practically insensitive.

In order to avoid misunderstandings, I desire to point out my new method of coating pencil cores with fat is not intended nor able to alter the character of the cores as a writing implement, but to solely provide a dense and moisture-repelling film or coating on the surface of the cores. Prepared as well as unprepared pencil cores may be treated with equal success according to the method forming part of my invention.

In case a coating of a fat of sufficiently high melting point is used the protective coating will congeal upon the cores immediately upon leaving the bath and the cores may at once be taken out of the bath without injuring the protective coating thereon and without endangering the quality of the cores by their sticking together, so that it will be possible to continuously operate the process of fattening the cores in great quantities and in rapid succession.

The mechanical properties of the coating of fat may be improved by adding some quantity of resin to the mass of fat, with the result of imparting a greater tenacity to the coating.

By using my new method of pushing the pencil cores through the melted mass of fat, there will be ensured a product of great uniformity throughout and of a permanently constant quality which is in no way impaired even after keeping the so prepared pencil cores for some longer time in storage, because the effects due to moisture of the air will also be reduced to a minimum.

I claim:

1. In a pencil of the character set forth, a water sensitive core having a relatively thin water proof film of a fatty substance applied thereto.

2. In a pencil of the character set forth, a water sensitive core having a relatively thin water proof film of a substance having a melting point higher than 60° C. applied thereto.

3. In a pencil of the character set forth, a water sensitive core having a relatively thin water proof film of a fatty substance having a melting point higher than ordinary paraffine applied thereto.

4. In a pencil of the character set forth, a water sensitive core having a relatively thin water proof film of a mixture of a fatty substance having a melting point higher than paraffine and a resin applied thereto.

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