

# ALIEN PROPERTY CUSTODIAN

## PROCESS FOR THE MANUFACTURE OF CIGARETTE PAPER

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This invention relates to the treatment of flax and hemp refuses for the manufacture of cigarette papers. More particularly, it relates to the removal incrustations of the refuses.

As raw material for the manufacture of cigarette papers flax and hemp refuses from the spinning mills are often used. These fibres, however, contain considerable quantities of strongly colored incrustations. These incrustations are very objectionable as the cigarette papers require a uniform whiteness. Furthermore, these strongly lignified incrustations influence the qualities and appearance of the cigarette papers in a very unfavorable sense.

In order to remove the incrustations the flax and hemp refuses are boiled with alkalis or earth alkalis, then washed and ground. As the linen and hemp fibres are attacked by the alkaline boiling process, the conditions of this process must be very carefully selected. On the other hand this careful treatment involves that at least one part of the incrustations will remain unchanged. The further removal of the incrustations which are yet present after the alkaline boiling has proved to be very difficult. Numerous experiments were carried out in order to remove these incrustations by multiple chlorination and alkalisation steps.

It was even possible to succeed with this procedure; the last residues, however, could thereby not be removed. These residues remain always as brown lignified particles in the pure white fibre materials, even after repeated strong and extensive hypochlorite bleaching treatments. As already mentioned above these lignified parts are very undesirable in the manufacture of cigarette papers as they tend to give brown spots in the final paper.

Now I have found that if the fibrous material is treated with oxygen evolving substances such as, for instance, hydrogen peroxide, sodium peroxide, sodium perborate, perpyrophosphate or the like the incrustations may easily be removed without causing any damage with respect to the solidity of the material.

In carrying out my invention the flax and hemp refuses are boiled as usual with alkalis and then subjected to rinsing and grinding. After the chlorination process the treatment with oxygen is carried out either during the alkalisation or thereafter. Should the material possess considerable amounts of incrustations a second chlorination and alkalisation may be inserted just before the treatment with oxygen. This is not necessary if the impurities of the fibrous material are only insignificant. In the latter case the treatment with oxygen is inserted before or during the bleaching process. The temperature is expediently maintained at 30 to 50°C during the treatment with oxygen evolving substances. Small quantities of peroxygen compounds, such as for instance, 0.5 to 1.5% are sufficient to obtain a perfect removal of the incrustations after a time of about 2 to 4 hours.

The working up of the material is carried out in a known way, first bleaching with hypochlorite. Thereby I have made the surprising observation that owing to the preliminary treatment of the linen and hemp refuses with oxygen evolving substances only one third of the otherwise used quantity of chlorine is sufficient to obtain an excellent grade of whiteness. After the subsequent washing the good is ground in special devices and brought to the required fineness. Afterwards the necessary filling materials are added and the fibrous pulp carried into the paper mill for the manufacture of cigarette paper. The cigarette papers, manufactured according to my invention are uniformly white without any brown spots. Furthermore, my invention has the advantage to preserve the linen and hemp fibres whereby undesired losses of strength in the final process are avoided, a fact which is very important for the thin consistence of the cigarette papers. That chlorine is also saved may only be just mentioned.

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