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PROCESS FOR THE PRODUCTION OF BLEACHABLE STRAW HALF STUFFS AND STRAW PULPS

Kurt Hess and Max Ulmann, Berlin-Dahlem, Germany; vested in the Alien Property Custodian

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This invention relates to the production of bleachable straw half stuffs and straw pulps.

It is known that in the decomposition of short-fibred types of straw of high silicate content, it is not possible to replace the customary boiling lyes containing caustic soda by the cheaper lime lye, because the lime compounds of the non-cellulosic constituents of the straw are not sufficiently absorbed by the boiling lye, but remain in part in the stuff.

It has now been ascertained in accordance with the present invention that the lyes containing calcium hydroxide (milk of lime) it is possible to decompose the most diverse types of straw to form a high grade cellulose, if the action of the lye is followed by a thorough washing of the boiled material, accompanied by mechanical unravelling, for example in a grinding hollander or in an apparatus acting in a similar way to a grinding hollander (rod mill, edge mill, and the like).

During the boiling of the straw with milk of lime, pentosans and lignin-like constituents are mainly dissolved, while during the washing and unravelling those fibre constituents are washed away which were previously a hindrance to the further treatment of the products obtained by lime decomposition.

In the present process for the production of a high grade straw pulp two stages are thus involved, the first stage consisting of the preparatory treatment of the chopped straw with lime, and the second stage of the supplementary withdrawal of those straw constituents which were retained by the fibre, in consequence of insolubility in the boiling lye, during the lime treatment. During the unravelling by the mechanical treatment, these insoluble constituents are separated in a form particularly favourable to their separation from the fibre, since they are produced in the form of sludge, i. e. in extremely fine grains, which passes through the sieve during the rinsing in the grinding hollander, while the fibres are held back by the sieve, if the latter is suitably selected.

KURT HESS.
MAX ULMANN.