

UNITED STATES PATENT OFFICE

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PROCESS OF BATING HIDES AND SKINS

No Drawing.

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This invention is based on the fact discovered at the utilization of waste material from the tanyard, that the waste pieces of animal hides, as used in large quantities for producing glue stuff, need not be submitted to the gluing process but, submitted in their natural state to a kind of automatic digestion (autolyzed) and then added to the bathing liquor, produce an excellent effect for the obtaining of the pelts previous to the dressing.

For the production of the self digestion, which is carried out best at about 20 to 30° C., no addition of any ferment, commonly used for bathing, is necessary, this self digestion having to be limited to the hide waste, in order to preserve its proper characteristic at the steeping and liming or bathing; it must further be interrupted before the formation of ammonia and examined as regards its effect, in order that no portion of the hides and pelts be damaged. It has been ascertained that those ferments and bacteria, which split up the glue stuff, might damage in the lime-pit and bathing process the hides and the pelts. These ferments and bacteria in the glue stuff must consequently be previously rendered harmless, which is effected by commonly used preserving and drying methods, for instance by absorption in wood dust. The albuminous products from splitting obtained in this manner and tested as regards their effect are added to the lime-pit or to the bathing in measured quantities alone or together with hydrolytic products of other albuminous substances, for instance the albumin, or also of hydrocarbons.

The production of the extracts from the hydrolysis is effected at the self digestion by taking hide-wastes as obtained and letting them stand with 2 to 3 times the quantity of water at 20 to 30° C. and adding suitable anorganic salts, e. g. sulfates and chlorides of the alkalis. After a few days the hide wastes have hydrolyzed, so that it can be

easily separated from the hair. The self digestion and the extremely rich bacteria activity are interrupted, and after preserving with toluol or by drying for instance with wood dust, the bacteria are separated in the usual manner from their ferments, the required bathing strength is adjusted and before the utilization tested as regards its effort.

Example 1

Animal hides wastes (pieces) in natural condition or from salted hides and skins, after softening same, are autolyzed at figures 20-30° C. as described above. A preserved or dry extract obtained from about 10 kilos pieces of hides is added to 3 litres of water in the tan-vat. The usual quantity of ready cleaned pelts is then put into this ready bathing liquor.

Example 2

Extract produced from about 3 kilos self-digested glue-stuff and tested as to the desired bathing strength is added to about 600 litres of bathing water together with the usual quantity of deliming material such as ammonia salts or organic acids. The ready pelts are then put into this bathing liquor.

Example 3

Example 2 is followed but to the albuminous substances or hydrocarbons in required quantities of about 6% of the bathing liquor either natural or hydrolyzed or bacteriolyzed should be added.

I claim:

1. The process of bathing hides and skins which comprises subjecting the hides and skins to the action of a bathing liquor containing sterile self-digested hide wastes and other albuminous substances.
2. The process of bathing hides and skins which comprises subjecting the hides and skins to the action of a bathing liquor con-

taining sterile self-digested hide wastes and other deliming materials.

3. The process of bathing hides and skins which comprises subjecting the hides and skins to the action of a bathing liquor having sterile self-digested hide wastes added thereto in a dry condition and other albuminous substances in natural condition.

4. The process of bathing hides and skins which comprises subjecting the hides and skins to the action of a bathing liquor containing sterile self-digested hide wastes and other hydrocarbons in natural condition.

In testimony whereof I affix my signature.

KARL HERMANN GÖLLER.

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