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METHOD AND COMPOSITION FOR PRESERVING AND CURING HIDES AND SKINS

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This invention relates to a method and a composition for preserving and curing green or raw hides or skins.

According to general practice of curing hides and skins it is customary to sprinkle them with a salt, for example chloride of soda immediately after they have been removed from the animals, and then the hides and skins are folded and laid or piled in a suitable storage place. The salt, for example chloride of soda is applied to the skins for the purpose of preserving them and is more or less satisfactory in preserving the hides or skins for short periods of time. However, if the skins are to be kept for longer periods than the usual time permitted by this treatment, they are taken up and either subjected to subsequent operations such as tanning, or further cured, or put into cold storage plants. The further curing or placing in cold storage of the hides or skins adds great expense to the preserving and handling of the hides or skins, and moreover, they must be kept under constant supervision to avoid spoiling or destruction thereof.

The preserving salt is usually technical sodium chloride which contains small percentages of hygroscopic substances which make the composition hygroscopic. This causes sweating of the hides or skins, and the composition is subject to changes with atmospheric conditions so that the skins are frequently stained or a cloudy grain is developed thereon.

The prime object of my invention is to provide a novel and improved method and composition for preserving and curing green hides and skins whereby the hides or skins may be preserved for indefinite periods of time and without the necessity of supervision or extra curing or storing in cold storage plants or the like after having once been treated according to my invention.

Other objects are to provide such a method and composition whereby the preserving and curing of hides and skins may be effected at a minimum cost, with a minimum of handling and without danger of injury to or destruction of the hides or skins over long periods of time; and to obtain other advantages and results which will be brought out by the following description.

In carrying out the preferred form of my invention, the hides or skins are treated with an aqueous solution of chloride of barium. The chloride of barium being substantially non-hygroscopic, I sometimes add to the solution of chloride of barium a small amount of glycerine to retain moisture in the hides or skins.

The composition may be applied to the skins

in various ways, for example, I may lay out the hides or skins in flat condition with the flesh side up and sprinkle them with my composition, or the composition may be brushed into the hides or skins, or the hides or skins may be immersed in the composition in a suitable vat or receptacle. Thereafter the hides or skins may be piled in a suitable storage place.

As a specific example of my invention, I may employ a composition consisting of an aqueous solution of barium chloride which may vary from a 5% solution to a saturated solution at a room temperature of about 50° to 60° F., although greater proportions of the barium chloride may be used without injury to the skins. The solution may or may not include one (1) to fifteen (15) per cent of glycerine depending upon the moisture conditions in the skins. The solution may be applied to the skins in either of the ways before mentioned, preferably at a room temperature of about 50 to 60° F. The time of treatment may vary from a few hours up to a period of time required to completely saturate the hides or skins with the composition. Generally a treatment of about 12 hours is sufficient.

After this treatment, the hides or skins may be piled in a suitable storage place, preferably cool, at a temperature of from 40 to 100° F. and with the humidity of the atmosphere in the storage place at from 76 to 100. As above indicated glycerine may be omitted where sufficient moisture may be retained in the skins without the glycerine.

I have found that hides or skins treated according to my invention can be stored indefinitely without any injury or deterioration of any kind. The natural fats and gelatinous matter of the hides or skins are maintained intact and in substantially the same normal state in which they were at the time when they were removed from the animal. Furthermore, the hides or skins may be left in storage after a single treatment as above described without any supervision or additional treatment or handling until it is desired to continue processing the skins in a tannery.

All of the ingredients employed in my composition are readily soluble in water and may be completely removed from the hides or skins by the regular method employed by all users of such hides or skins, i. e. by soaking or washing the hides or skins, and therefore the hides or skins may be returned to the normal state in which they were at the time they were removed from the animal, with no foreign substance or chemi-

cal which might interfere with subsequent processes such as liming or tanning.

As above indicated the proportions of the ingredients of the composition may be widely varied to suit different conditions, more or less or no glycerine being used according to the degree of moisture and flexibility desired in the hides or skins. The time of treatment and the amount of barium chloride and glycerine may also be varied according to the period during which it is desired to preserve the hides or skins.

From the foregoing, it will be seen that I have provided a simple and inexpensive method of and composition for preserving and curing hides for long periods of time so as to maintain the hides and skins in substantially the same condition as when they were removed from the animals, without attention or additional treatment during storage and without danger of injury to or deterioration or staining of the hides or skins.

While I have specifically mentioned barium chloride as a preservative, it should be understood that I contemplate the use of an alkaline earth, barium oxide, or any chemical equivalents of barium chloride suitable for the same purpose.

Also, suitable hygroscopic agents other than glycerine may be used. Therefore, the following claims should be construed accordingly.

Having thus described my invention, what I claim is:

1. A composition for preserving green hides and skins consisting of an aqueous solution of a soluble salt of barium and glycerine.
2. A composition for preserving green hides and skins consisting of an aqueous solution of barium chloride and glycerine.
3. The step in the method of preserving green hides and skins consisting in impregnating them with a water soluble salt of barium.
4. The step in the method of preserving green hides and skins consisting in impregnating them with a water soluble salt of barium and glycerine.
5. The step in the method of preserving green hides and skins consisting in impregnating them with chloride of barium.
6. The step in the method of preserving green hides and skins consisting in impregnating them with chloride of barium and glycerine.

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