

D'HUART Emile

(1861 - 1918)

Mondorf-les-Bains

Patents (details)

1 - Process of and apparatus for purifying water

US patent	607361
Application date	12 August 1896
Co-inventors ¹	Michel GLAESNER ² Georges GLAESNER ³

The present method has for its object the softening of underground and spring water for industrial purposes, either for the feedwater of steam-boilers or for the washing of textile fiber and the like, or for any other purpose where the presence of calcium, magnesium, or other hardening matters in the water may be detrimental.

Our invention, in so far as the method is concerned, is based upon the following chemical reactions: First, oleic acid, as a by-product in the manufacture of stearin, forms with the caustic alkalies and also with the alkaline carbonates (in the latter case with separation of carbonic acid) soluble oleates either direct or with the application of a little heat; second, these alkaline oleates form, with soluble calcium magnesium and other salts found in the water, light compounds, which, being insoluble in water and having a less specific gravity, rise to the surface of the same as a doughy material and are easily separated therefrom; third, the alkaline-oleate compounds also form with aluminium sulfate, ferric sulfate, alum, ferric alum, and similar compounds insoluble oleates of light specific gravity, which are readily separated from the water, thus clarifying the water which has already been freed from the lime, magnesium, or other hardening substances. ...

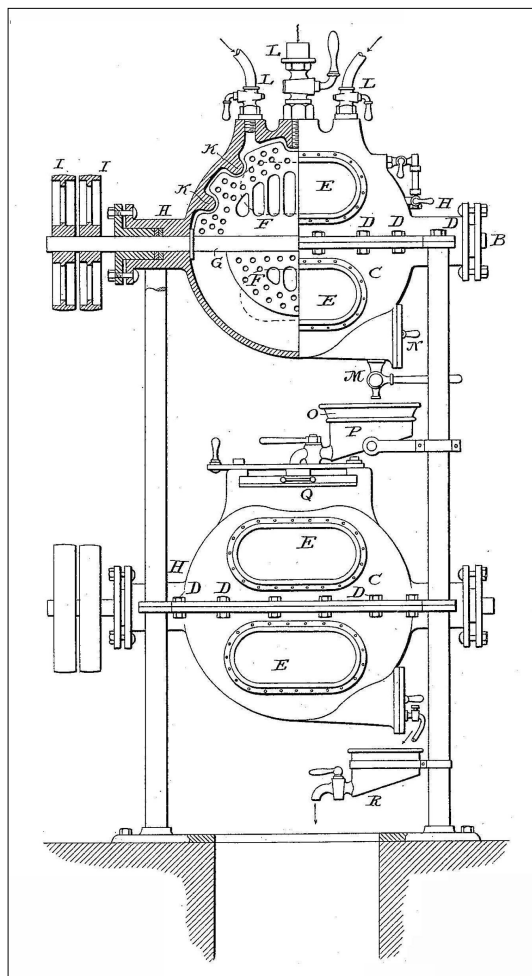
What we claim as new, and desire to secure by Letters Patent, is:

The method of softening water containing ingredients of a hardening nature, consisting in introducing into such water separately a fatty acid and an alkaline salt, agitating the water and first ingredient before the second ingredient is added, whereby insoluble earthy oleates are formed, and then mechanically separating said oleates from the water.

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Corresponding patents

LU, GB, FR, BE, DE, ES



¹ see Addendum

² [FamilySearch database](#) (GKBQ-NHT)

³ [FamilySearch database](#) (GXFP-ZH8)

2 - Preparing hides and skins for tanning processes

US patent	1170426
Application date	18 June 1914

This invention relates to a new process for bating skins or hides, applicable in a slightly modified form for grounding or bating tanned skins or hides.

By the invention hides or skins which have been unhaired are bated for the purpose of removing the depilatory, with the glycerol ester of phosphoric acid or an alkali salt or alkaline earth salt thereof. The invention is particularly applicable when barium hydrate or strontium hydrate is the depilatory, although it is also advantageous when lime has been used. It is convenient to retain the term "de-liming" for expressing the action of the bate whichever depilatory has been used. This ester forms with the hydrates of calcium, barium and strontium compounds of the alkaline earths which are easily soluble in water and is therefore able completely to separate the last traces of the alkaline earth hydrates from the hide. This is the more necessary because, as is known, even the smallest residual alkali earth hydrate in the hide imparts to the latter undesirable properties.

The bate may be prepared by dissolving in a suitable proportion of water either free glycerophosphoric acid or, according to the kind of skin under treatment, glycerophosphate of sodium, potassium, or ammonium, so that the skin under treatment may be subjected to the acid bate alone, or to the alkaline bate alone, or even as may be desirable, to the alkaline bate and the acid bate in succession.

(no drawing)

Corresponding patents

LU, GB, FR, AT, CA