

# UNITED STATES PATENT OFFICE.

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## CARBONATED-FERRUGINOUS-BATH COMPOSITION.

No. 907,943.

Specification of Letters Patent.

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*To all whom it may concern:*

Be it known that I, ALFRED ZUCKER, a subject of the King of Bavaria, and resident of 63 Schnorr street, Dresden, in the Kingdom of Saxony, German Empire, have invented certain new and useful Improvements in Carbonated-Ferruginous-Bath Compositions.

This invention relates to a composition for carbonated ferruginous baths and to an improved method of producing the same. It has already been proposed to prepare such baths by adding an iron compound such as ferrous sulfate or iron chlorid. It has also been proposed to form a bath composition of this nature by adding sufficient acid to the water in order both to neutralize the bicarbonate and to dissolve an organic salt of iron.

The novelty of the present invention consists in dissolving an organic compound for instance albuminate of iron in the bath water. Such an organic compound is not decomposed even either by carbonic acid or by the bicarbonate of soda. The organic compound may be dissolved separately and the solution be added to the bath or the said organic compound of iron may be mixed with the acid used or with the bicarbonate and the substances then added to the bath. Convenient proportions to use are as follows:—potassium bicarbonate 600 parts, formic acid 350 parts, albuminate of iron 5 parts. The ferric albuminate is first dissolved in the water and

then the formic acid is added after which the potassium bicarbonate is inserted.

It will be understood that the quantity of the above mixture employed in an ordinary house bath may be varied within wide limits according to the strength of bath required. Thus for an ordinary house bath half filled with water the quantity employed may be from 1½ pounds upwards.

It will be understood that instead of potassium bicarbonate sodium bicarbonate may be employed in the above formula.

I claim:—

1. The hereindescribed process of forming a ferruginous carbonated bath-composition, consisting in forming an aqueous solution of albuminate of iron, mixing formic acid therewith and finally dissolving in the resulting solution a quantity of an alkaline bicarbonate, substantially as described.

2. The hereindescribed process of forming a ferruginous bath-composition consisting in forming an aqueous solution of an organic salt of iron, mixing an acid therewith and finally dissolving in the resulting solution a quantity of an alkaline bicarbonate, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

ALFRED ZUCKER.

Witnesses:

ULYSSES J. BYWATER,  
CLARE SIMON.