

# UNITED STATES PATENT OFFICE.

BENJAMIN T. BABBITT, OF NEW YORK, N. Y.

## IMPROVEMENT IN CAUSTIC-ALKALI PACKAGES.

Specification forming part of Letters Patent No. **150,508**, dated May 5, 1874; application filed April 17, 1874.

*To all whom it may concern:*

Be it known that I, BENJAMIN T. BABBITT, of New York, in the county and State of New York, have invented an Improved Caustic-Alkali Package, of which the following is a specification:

My invention relates to packages of caustic alkali which are put up in suitable quantities for family or other use, in such form that the alkali is effectually preserved from contact with the atmosphere, and is prevented from deliquescing; the object of my invention being to apply a coating of crude turpentine directly upon the ball, cake, or slab of alkali, which will not only protect the same against the action of the atmosphere, but which will saponify with the alkali when used, which result cannot be attained when the alkali is coated with paraffine or inclosed in, or protected by, metallic integuments or cups, or boxes formed of composition, which are hereby disclaimed. The invention consists in a ball, slab, or cake of caustic alkali, soda, or potash hermetically sealed, and perfectly protected from atmospheric influence by means of a coating or envelope of crude turpentine.

In carrying out my invention, I mold the alkali into balls, blocks, or cakes of suitable form and size for family or other use, and then cover them directly with the coating or envelope of crude turpentine, while said turpentine is in a liquid state.

The coating may be applied in the following manner: The crude turpentine is reduced to a liquid state by heat, and is placed in a suitable vessel, which is fitted with a cover which can be made air-tight when closed. The balls or blocks of alkali, which have been cast while in a fused state into the desired shape, are suspended from the cover of the vessel by thin wires, which are inserted in them when they are molded. When the cover is placed on the vessel the balls sink into the melted turpentine until entirely submerged therein. The cover fits the vessel with an air-tight joint, and after it is in place the air is exhausted from the vessel by means of an air-pump, or other suitable apparatus, and a vacuum is created between the surface of the composition and the under side of the cover. This exhausts the particles of air

from the liquid itself, and also from between it and the surfaces of the blocks, enabling the turpentine to be brought into positive and uniform contact with every portion of the surface of each block, filling all cavities or irregularities which may exist on such surfaces, so as to leave no air-spaces between the surface of a ball and the inner surface of its coating. When the alkali has remained a sufficient length of time in the turpentine the air is again admitted to the vessel, the cover removed, and the balls or blocks allowed to remain suspended by the wires until sufficiently hard and dry to allow of their being packed for transportation, or put away for use.

The process of applying the coating to the alkali is the subject of another application for patent.

By this mode of protecting the alkali, the coating or envelope may be applied to blocks or cakes of any size or any form, and the contact is positive and uniform, so that no particle of air can exist between the alkali and the coating, and deliquescence is rendered impossible.

The turpentine is capable of saponification, so that there is no waste of material when the alkali is used in making soap. Being hard and solid at ordinary atmospheric temperature, the turpentine will not become sticky or require any additional coating; but should such ever be requisite, I will coat the external surface of the ball, slab, or block, after it has been protected by the coating of crude or virgin turpentine, with a suitable glue, sperm, or bees-wax, or some other protecting substance, the object being to protect the coating of crude turpentine in hot climates, to render it free from stickiness, and also secure a coating of a water-proof nature.

What I claim as new, and desire to secure by Letters Patent, is—

A ball, slab, or block of caustic alkali hermetically sealed and protected from atmospheric influence by means of a coating or envelope of turpentine, substantially as shown and described.

B. T. BABBITT.

Witnesses:

JAMES L. NORRIS,  
JOHN L. BABBITT.