

UNITED STATES PATENT OFFICE.

GEO. THOMPSON, OF EAST TARENTUM, PENNSYLVANIA.

IMPROVEMENT IN DEVICES FOR PUTTING UP CAUSTIC ALKALIES.

Specification forming part of Letters Patent No. **15,957**, dated October 21, 1856.

To all whom it may concern:

Be it known that I, GEORGE THOMPSON, of East Tarentum, in the county of Allegheny and State of Pennsylvania, have invented a new and useful mode of wrapping cakes of potash or caustic soda in air-tight wrappings, so as to preserve it from the action of the atmosphere; and I do hereby declare that the following is a full, clear, and exact description thereof.

Caustic soda and potash, being highly-concentrated alkalies well known and generally used in sundry manufactures, would be extremely useful for domestic purposes were it not that owing to the fact that they deliquesce speedily when exposed to the action of the atmosphere they cannot be kept on hand excepting in air-tight cases. When these air-tight cases are once opened the whole contents must be immediately used or it will deliquesce and not only become useless, but ruin anything with which it comes in contact. If, however, caustic soda or potash can be made in small cakes of uniform size, with a smooth external surface, and can be incased in a wrapper or other suitable covering, fitting closely to it and rendered impervious to the atmosphere and to moisture, these obstacles will be overcome and this useful article can thus be kept on hand ready for use in small quantities whenever required.

Having discovered a plan for making small cakes of caustic soda or potash with plane surfaces, I have also invented a mode of incasing them in a suitable covering, impervious alike to the atmosphere and moisture. I use muslin, paper, or other suitable material of any convenient kind, which I dip in a melted preparation of beeswax and rosin, or melted tar and rosin, which renders the paper or muslin impervious. The cakes of caustic soda or potash as soon as they are sufficiently solid are immediately wrapped in a piece of paper thus prepared, the sticky nature of the substance with which the paper is impregnated causing it to adhere together where the edges fold over each other, and excluding entirely the air and moisture from obtaining access to the potash or soda. For further protection of the cake of

soda, the whole package thus wrapped may be dipped in the melted preparation of rosin and wax or tar, which, when cold, gives it a uniform coat throughout. When thus wrapped an outside covering of common paper is added, for cleanliness and convenience in handling, and the packages are ready for sale. Thus protected these packages of caustic soda or potash may be kept for any length of time. When used for making soap the inner covering of prepared paper need not be removed, as the small quantity of rosin and wax will not injure the soap. It may be readily removed, however, if preferred.

Another mode of putting up cakes of caustic soda and potash which I find very efficient and is perhaps better adapted for transportation is to provide small canisters of thin sheet-iron, cemented with infusible cement at the joints, into which the caustic soda may be run when in a molten state, and while hot the lid fastened down so close to the upper surface of the melted contents of the box as to exclude all atmospheric air. When the lids are pressed down the heat hardens the cement, and the whole box may be coated with varnish as an additional security against the entrance of air. This plan differs in detail (but is the same in principle) from that previously described, both being designed to enable the manufacturer of these caustic alkalies to put them up in original packages of uniform size and weight, and such convenient size that when a package is opened the whole may be used at once in a family without loss.

Having thus described my improved mode of putting up caustic soda or potash, what I claim as my invention, and desire to secure by Letters Patent, is—

The mode hereinbefore described, or its equivalent, of protecting small packages of caustic soda or potash from the action of the atmosphere, in the manner and for the purposes hereinbefore described.

GEORGE THOMPSON.

Witnesses:

AND. M'MASTER,
WM. N. HOWARD.