T. C. TAYLOR.

Putting up Alkalies.

No. 52,910. Patented Feb. 27, 1866.

Fig. 1.

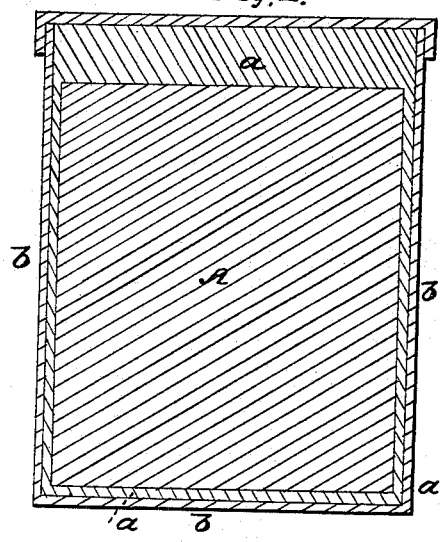
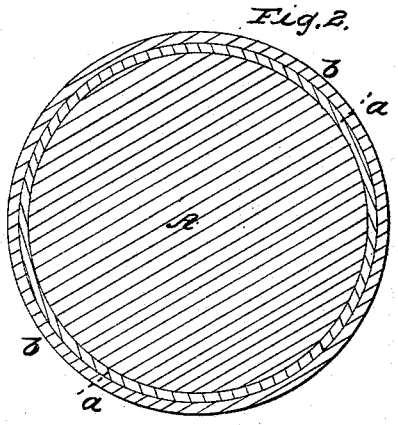


Fig. 2.



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UNITED STATES PATENT OFFICE.

T. CHALKLEY TAYLOR, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVED METHOD OF PUTTING UP CAUSTIC ALKALI.

Specification forming part of Letters Patent No. **52,910**, dated February 27, 1866.

To all whom it may concern:

Be it known that I, T. CHALKLEY TAYLOR, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Method of Putting Up Caustic Potassa or Soda in such a manner that it may be conveniently and safely handled and effectually preserved; and I do hereby declare the following to be a full, clear, and exact description of my invention, which will be better understood by referring to the drawings filed in the case, in which—

Figure 1 represents a longitudinal, and Fig. 2 a cross, section of the case in which the alkali is contained.

These alkalies while in a caustic state should be carefully kept excluded from air or moisture. Various methods of effecting this object have been contrived, in order especially that it may be safely kept in small quantities and conveniently handled. The method now proposed by me for this purpose is essentially different from any previously in use. It is founded upon the well-ascertained fact that caustic soda or potassa when in a dry state will not act chemically upon oil, rosin, grease, or their equivalents without the presence of air or water.

The drawings show the manner in which a single block of the caustic alkali may be preserved; but my invention relates more especially to the application of this method to the preservation of large quantities of such blocks of alkali in such a manner that they may be readily retailed without risk or injury. For this purpose I first cast the blocks into the proper sizes and shapes. I prefer the form of prisms with triangular squares or hexagonal bases, as they can be more closely packed, as there is less waste space between them. Thus prepared they can be packed in vessels of wood or other suitable material, after which the petroleum or other material may be poured in so as to fill all the interstices. If any substance is used for this purpose which is not sufficiently fluid at the ordinary temperature of the atmosphere it should first be heated to the proper degree. This should be poured into the vessel until it is entirely filled. The substance used for this purpose may be oil, petroleum, grease, rosin, or other equivalent substance. When rosin is used for this purpose it may be advantageously combined with oil or grease in order to render it more soft and pliable.

I do not claim to have been the first inventor who has ever made a practical application of the principle that caustic alkali will not act upon grease or its equivalent without the presence of water, as I am aware that George Thompson, in his reissued patent of February 1, 1859, proposes to envelope his caustic alkali in a wrapper of paper or linen which is saturated with substances which will saponify with diluted alkalies; but my purpose is to provide a more convenient and useful method of applying the same principle to practical use; nor do I now claim the application of this principle to boxes containing but one single block of alkali; but

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

Putting up caustic potassa or soda in suitable casks or vessels, each of which is capable of containing more than one block of the alkali, and protecting the same by oil or its equivalent in such a way that a portion of the alkali may be removed for use or sale without exposing the remainder to injury in consequence of such removal.

T. CHALKLEY TAYLOR.

Witnesses:

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