J. REAKIRT.

PUTTING UP ALKALIES.

No. 79,599. Patented July 7, 1868.

Fig. 1.

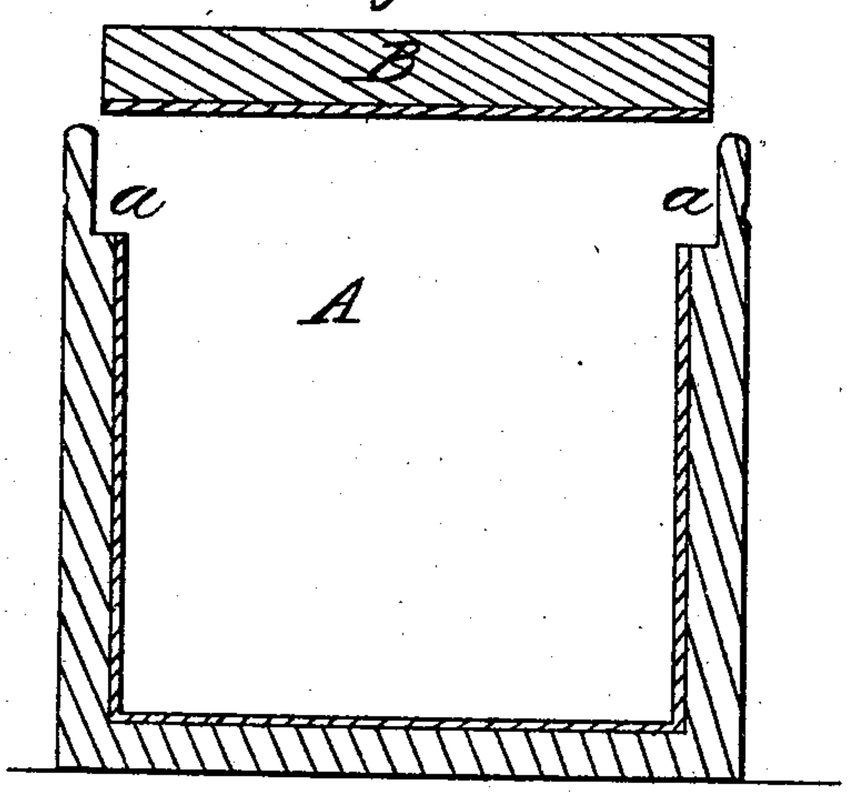


Fig. 2.

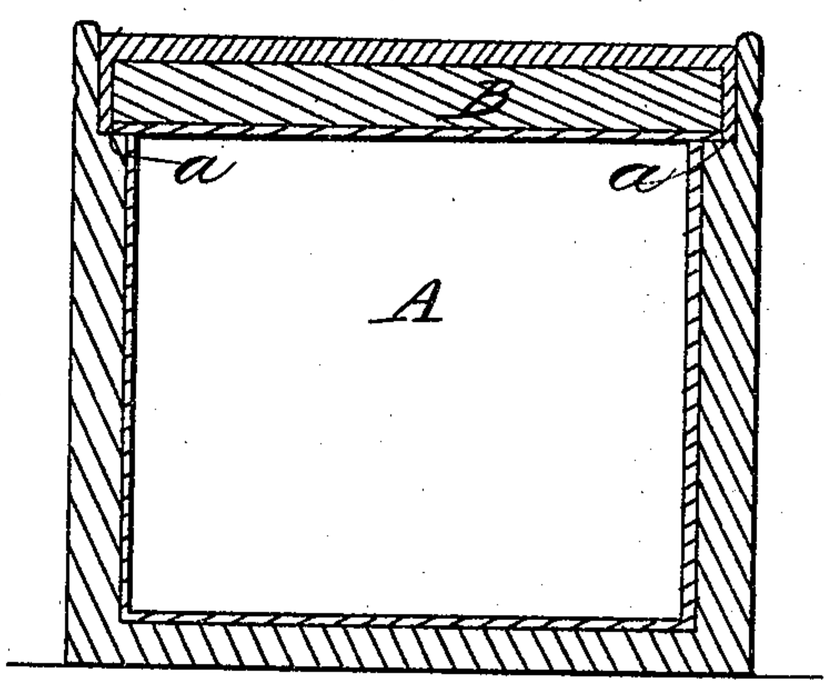
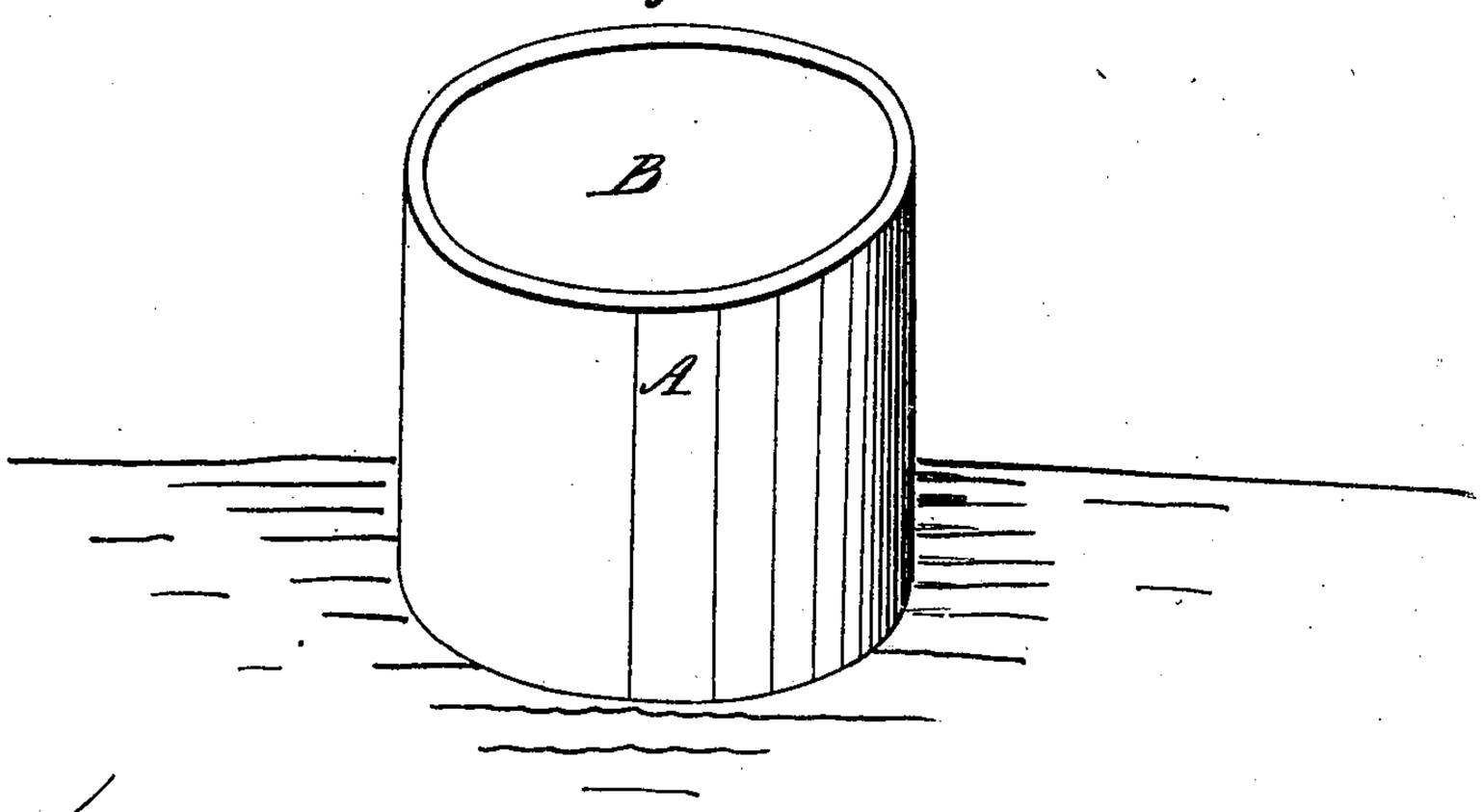


Fig. 3.



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United States Patent Office.

JOHN REAKIRT, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF. DANIEL PHREANER, AND TRYON REAKIRT, OF SAME PLACE.

Letters Patent No. 79,599, *dated July* 7, 1868.

IMPROVEMENT IN PUTTING UP ALKALIES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN REAKIRT, of Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented certain new and useful Improvements in Putting up Caustic Alkalies; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, and the letters of reference marked thereon, making part of this specification, in which—

Figure 1 is a sectional view of the jar, with the disk removed.

Figure 2 is a sectional view of the jar with the disk in place, and cemented. The stone or earthenware is shown in brown, the glazing in blue, the disk in yellow, and the cement in red.

Figure 3 is a view of the jar or case packed and ready for market.

The nature of my invention consists in so glazing the inner surface of an earthenware or stone jar or case, having near its opening a shoulder or flange, so arranged as to form a support for a disk or plate, that when the jar or case is united together, through the agency of the cement hereinafter alluded to, a cheap, safe, and secure vessel is formed, that will enable the manufacturer of caustic alkalies to put them up in small and convenient packages for family purposes. Practical experience has fully demonstrated the fact that the caustic alkalies packed in jars or cases similar to mine, and securely sealed with the cement used by me, can be preserved in all their original purity for any given length of time. The inner glazing of the jar or case, and the under surface of the disk or plate, I have found to be indispensably necessary, in order to render the vessel entirely impervious to the action of the alkalies, and at the same time entirely guard the same from the deleterious effects of atmospheric contact.

I have also, in my various experiments, discovered that great care has to be taken in the selection of the cement used. The one that I have found admirably adapted to the purpose is composed of the following ingredients: Bees-wax, rosin, powdered brick, and pure German Burgundy pitch. The last is far superior to the ordinary pitch found in the market, and the well-known product of the southern States, as it possesses a degree of elasticity, a feature most desirable in the present use, not met with in the American pitch.

To enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

A is a jar or case, made of stone or earthenware, and provided with a shoulder or flange, *a*. This jar or case A may be circular or square in form.

B is a disk or plate, of the same material, and rests on the shoulders or flange *a*. The diameter of the disk B is a little less than that of the mouth of the jar or case A, and its thickness about one-sixteenth ($\frac{1}{16}$) of an inch less than is the distance between the shoulder or flange *a* and the upper surface of the jar or case A. The spaces left between the surface of the case and the rim of the disk, and also between the upper face of the disk and the top or ridge of the case, are most essentially necessary to the success of my invention, for when the alkalies are placed within the vessel, and the disk B properly adjusted on the shoulders *a*, the cement, being poured on in a soft or plastic state, will run down between the jar and disk, firmly securing the same together, and at the same time, without projecting at all above the upper surface of the vessel, entirely coat the face of the disk, thus literally embedding the same in the cement.

The entire inner surface of the jar and under face of the disk are glazed by any of the well-known processes now used by potters and other manufacturers, as clearly shown in blue in figs. 1 and 2.

I fill the vessel A with the alkalies, in a melted state, if preferred, or, before being placed in the vessel, the alkalies may be poured into moulds, and allowed to cool, and then, being formed in suitable blocks, placed in the jar or case. The disk B is then placed on the shoulders *a*, and a cement, in a plastic state, composed of bees-wax, rosin, German Burgundy pitch, and powdered brick, is poured on the disk B, until the spaces between the disk and the vessel are all filled, and the face of the disk coated with the solution to a depth equal to the distance between the same and the upper surface of the jar, when the cement is allowed to cool, and the alkali

is ready for market, in packages similar to that shown in fig. 3. The manner in which the cement surrounds the top and sides of the disk is clearly shown in red in fig. 2.

Having thus fully described my invention, what I claim therein as new, and desire to secure by Letters Patent of the United States, is—

Packing caustic alkalies in a glazed jar or case, A, having a shoulder or flange, *a*, to support the disk or plate B, when the whole is hermetically sealed with the cement herein named, substantially as described, and for the purpose specified.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN REAKIRT.

Witnesses:

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J. E. F. HOLMEAD.