2 Sheets--Sheet 1.

# JACOB H. SEIBERT.

## Improvement in Packages for Putting up Caustic, Alkalies, Acids, &c.

No. 128,176. Patented June 18, 1872.

*Fig. 1.*

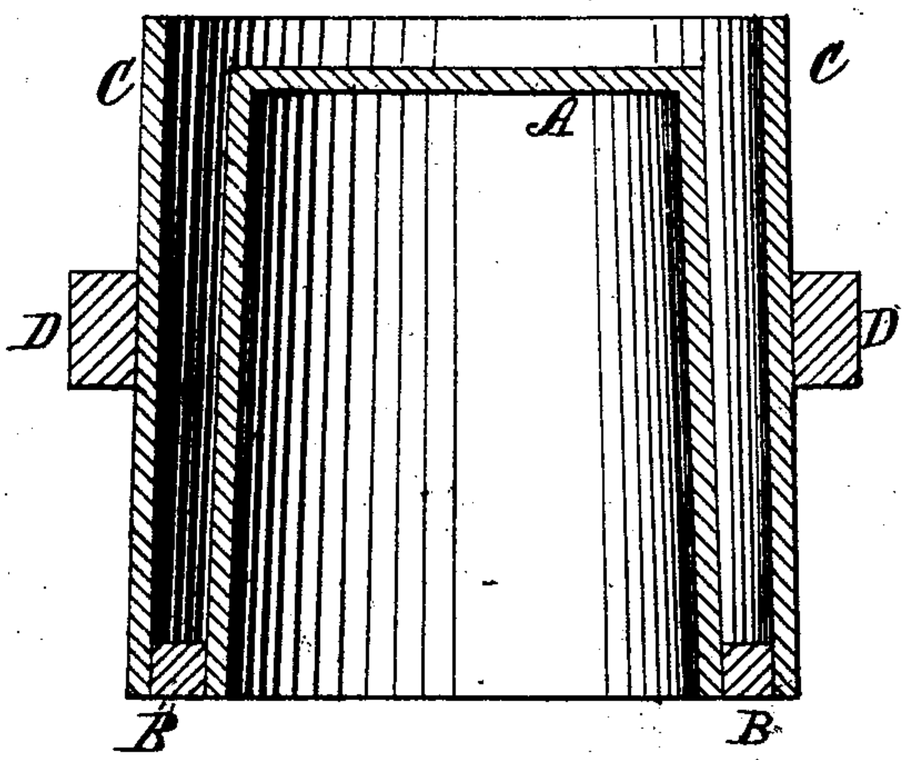



*Fig. 2.*

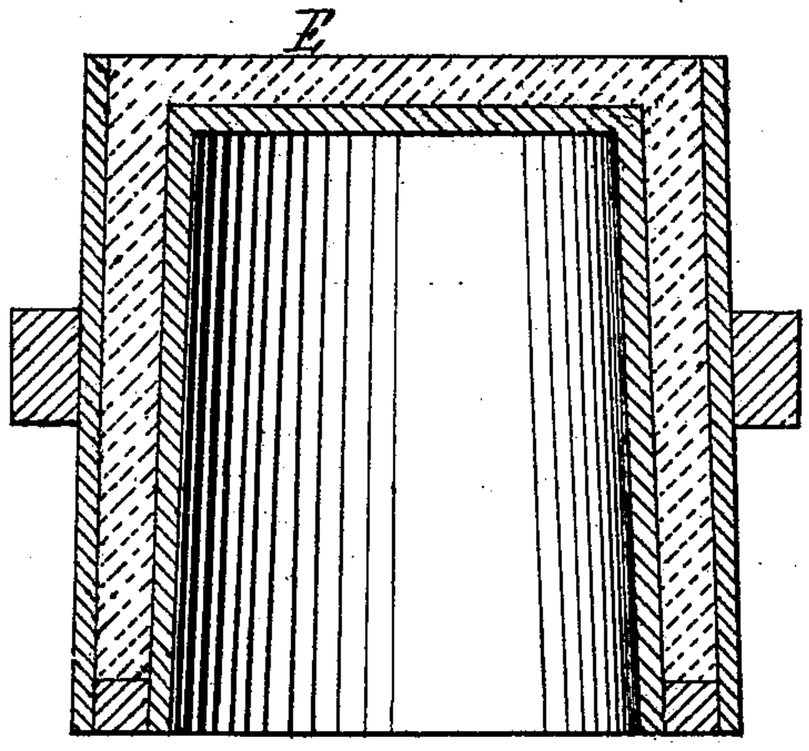



*Fig. 3.*

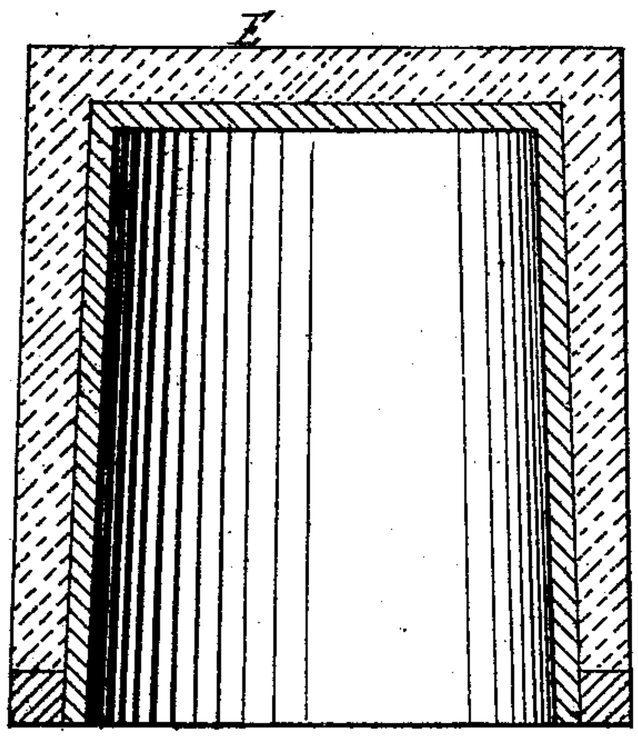
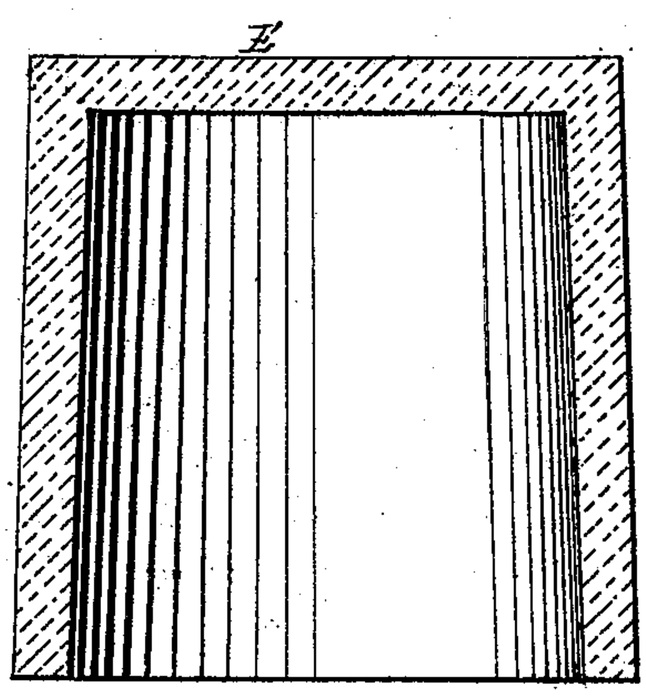



*Fig. 4.*




*Witnesses:*

T. C. Brecht.

W. J. Peyton.

*Inventor:*

Jacob H. Seibert.

By James L. Norris.

Atty.

2 Sheets--Sheet 2.

# JACOB H. SEIBERT.

## Improvement in Packages for Putting up Caustic, Alkalies, Acids, &c.

No. 128,176. Patented June 18, 1872.

*Fig. 5.*

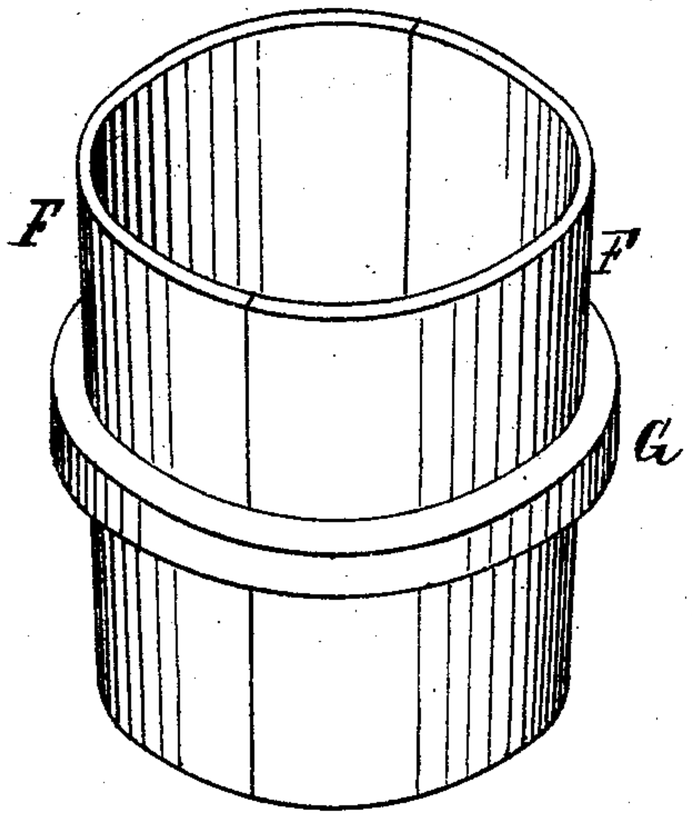



*Fig. 6.*

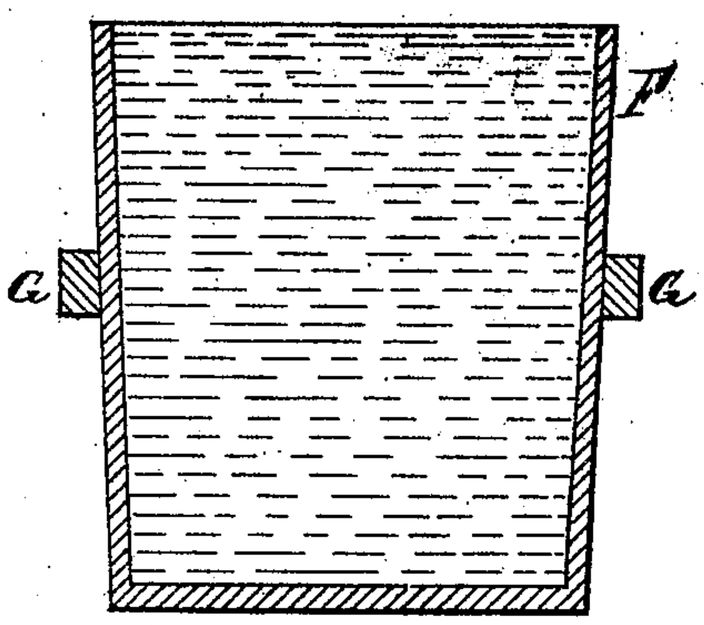



*Fig. 7.*

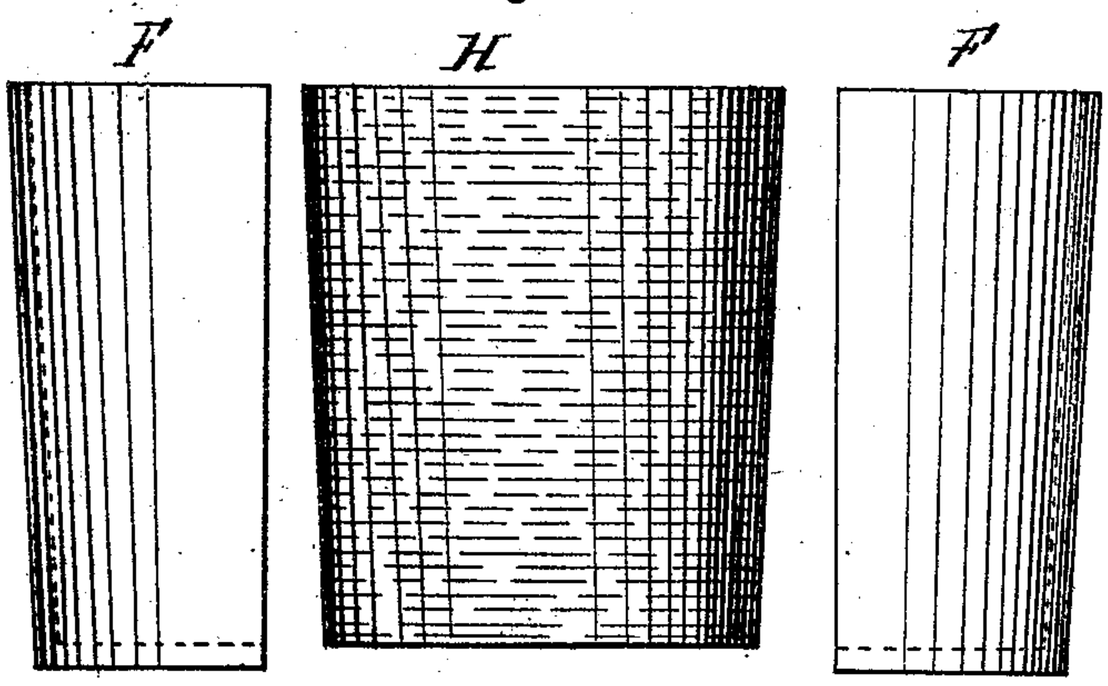
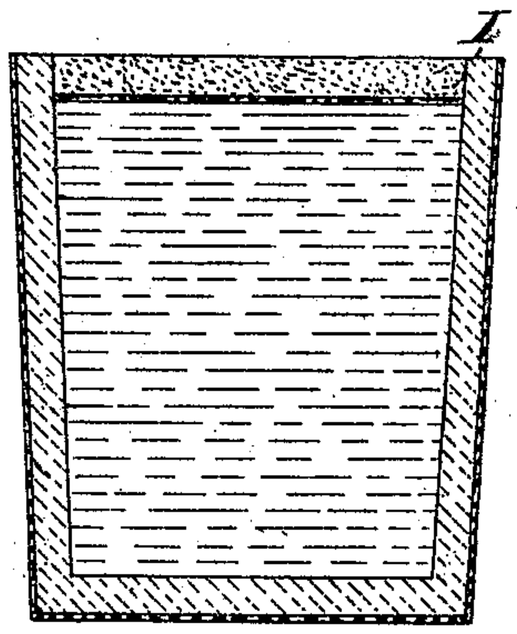



*Fig. 8.*




Witnesses:

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By James L. Norris.

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# UNITED STATES PATENT OFFICE.

JACOB H. SEIBERT, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN PACKAGES FOR PUTTING UP CAUSTIC ALKALIES, ACIDS, &c.

Specification forming part of Letters Patent No. 128,176, dated June 18, 1872.

*To all whom it may concern:*

Be it known that I, JACOB H. SEIBERT, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Packages for Putting Up Caustic Alkalies, Acids, Salts, and similar articles, of which the following is a specification:

My invention relates to packages for putting up caustic alkalies, acids, salts, and similar articles which are corrosive or deliquescent in their nature, and which require a case, carrier, integument, or receptacle that will protect them from the effects of dampness, fire, and atmospheric influences; and it consists, first, in a carrier of tapering or other suitable form cast from a plastic material around a central core, and within an outer case or mold, so that the sides and bottom of the carrier are formed from one and the same material at one operation, uniform, and graduated in size, and without the use of an outer protecting-wrapper; said receptacle, carrier, or integument to be finally finished, if desired, by coating with a resinous, tarry, or asphaltic wash or coating, or with a wrapping of suitable paper, and in any of the well-known ways; second, in a central core, around which the plastic mass is cast, provided with a base-ring, which determines the thickness of the walls of the carrier, in combination with an outer shield or mold, which is made in two or more pieces, and of form corresponding to the core, said pieces being held in place by a binding-ring or clamp, which devices, taken together, constitute the mold or device for forming the case, carrier, integument, or receptacle; and third, in a condenser or congealer for molding and cooling or congealing the caustic alkali, salts, or other material previous to its introduction into the carrier or integument, said condenser being of form and size to correspond with the carrier, and composed of two or more parts, which are held together by a ring, clamp, or other suitable device, the removal of the ring or clamp allowing the parts forming the condenser to separate so as to facilitate the removal of the congealed mass.

Most if not all of the packages of caustic alkali and similar corrosive substances heretofore put upon the market have been inclosed within metallic cases. These cases, while meeting the wants of the manufacturer and user to a certain extent, in enabling the article to be stored and transported in packages of from one pound up, so as to meet the wants of families and small dealers, are yet highly objectionable in many respects—first, for the reason that the action of the alkali upon the metal forms a rust, which injures the article itself both in color and quality; second, by reason of the difficulty with which the alkali is removed from the metallic case, often necessitating the introduction of the can into water and the removal of the alkali by boiling, in which case the iron-rust discolors the solution; and third, in the cost of the metallic case or carrier, which is so high as to materially lessen the profits of manufacture and increase the cost to the consumer. My object is to produce a carrier, integument, or receptacle devoid of these objections at a cost less than one-fourth that of the present carrier, and one which fully meets the wants of the trade.

In the drawing, Figure 1 is a vertical central section of the mold, its ring or clamp, the core, and the intermediate ring lying between the mold and the core, all being in their relative positions as used in casting the carrier; Fig. 2, a section similar to Fig. 1, showing the carrier cast and within the mold. Fig. 3 is a vertical central section of the core, ring, and carrier, the outer mold or shield having been removed. Fig. 4 is a carrier removed from the mold. Fig. 5 is a perspective view of the condenser or congealer. Fig. 6 is a vertical central section of the condenser or congealer filled with caustic alkali. Fig. 7 is a perspective view of the two parts of condenser or congealer separated from and on either side of the block of alkali. Fig. 8 is a vertical section of the completed package, showing the covering or closing disk, &c.

Like letters refer to like parts in the several figures.

A is the central core or former. It may be of any desired shape, provided, always, that it taper slightly from base to top. B is a collar, ring, or surrounding frame, which will be of such breadth as is required to give the desired thickness of walls in the cast. C is the outer shield or mold, which corresponds in form and taper with the core A. This mold is formed of two or more pieces, made to fit

closely at their joints, and held in position by a ring or clamp, D. D is the ring or clamp, which, sliding down upon the taper of the mold C, wedges or clamps the pieces thereof firmly together. The mold may be made of metal, clay, or other suitable material, and according as the base thereof is square, oblong, or cylindrical, so will be the shape of the parts B and D. The projection or collar B may be cast upon the core A or upon the mold C, or it may be a separate ring, as herein represented.

To construct a package the core A is placed upon a suitable bed or table with the collar B at its base, outside of which, and forming a close joint therewith, are the several parts forming shield or mold C, held in position by ring D or its equivalent fastening, all occupying the relative positions shown in Fig. 1. The plastic mass, which may be a cement, plaster Paris, a composition of glycerine, wax, and paper pulp, or any of the well-known compositions which "set" to form a firm cast, is then introduced into the mold in such quantities as to fill the sides thereof and cover in the top of the core to the desired depth. As soon as the mass has set the ring D is removed and the pieces forming mold C fall apart, leaving the cast or carrier E upon the core A, as represented in Fig. 3. Upon removing the carrier from core A I have a simple cast like that shown in Fig. 4. This cast may then be further finished, if deemed desirable, by coating it with a wash or coating of resinous, tarry, or asphaltic matter, sealing-wax, &c., or it may have a wrapper of paper or other fabric attached to it in any of the well-known ways. This completes the carrier, which is formed, by means of the mold, without either an inner lining or an outer wrapper of paper or other fabric.

F F, Fig. 5, represent the halves of the condenser or congealer, which are held together by the ring G or an equivalent fastening device. The condenser or congealer may be made of cast-iron or other suitable material. I have here represented it as made in two parts, but it can be made in as many parts as may suit the convenience of the user, provided the united parts fit accurately and form a mold corresponding in size and shape to the carrier which is used. The parts forming the condenser are held by the clamp or ring G, which, sliding down upon the taper of the condenser, wedges the several parts together. The condenser, while in the position shown in Fig. 5, is filled with hot caustic alkali or other material, which is allowed to congeal or solidify therein. When it is desired to remove the block of alkali from the condenser a slight tap upon ring G loosens it, causing it to fall off, so that the pieces forming the condenser may be separated, as shown in Fig. 7 of the accompanying drawing. To complete the package the carrier, formed as hereinbefore described and shown in Fig. 4, is inserted and placed over the block of caustic alkali H, Fig. 7. Upon tilting up the carrier the block of alkali will fit snugly and retain its place therein. The disk I, Fig. 8, which can be of the the same material as the rest of the carrier, or of other suitable material, is then placed in the top of the package, resting upon the alkali, and hermetically sealed with clay, sealing-wax, resin, or any suitable material for forming a lid and air-tight integument. This completes the package, which will correspond in cross-section, to Fig. 8 of the drawing.

Having thus described my invention, I claim—

1. The package, carrier, or integument for caustic alkalis, acids, salts, and other chemicals, cast from plastic materials at one operation, and coated with a resinous or other protecting coating, as herein described.

2. The mold for forming a package or carrier, consisting of core A, ring B, shield or mold C, and clamp or other suitable device D, as herein set forth.

3. A condenser or congealer for congealing or solidifying, for the purpose of transferring into any other carrier, caustic alkali, salts, or other chemicals, composed of two or more parts held together by a ring, clamp, or other suitable device, substantially as described.

In testimony that I claim the foregoing I have hereunto signed my name this 29th day of May, 1872.

JACOB H. SEIBERT.

Witnesses:

SAML. CALLAN,

EDWARD BISHOP.