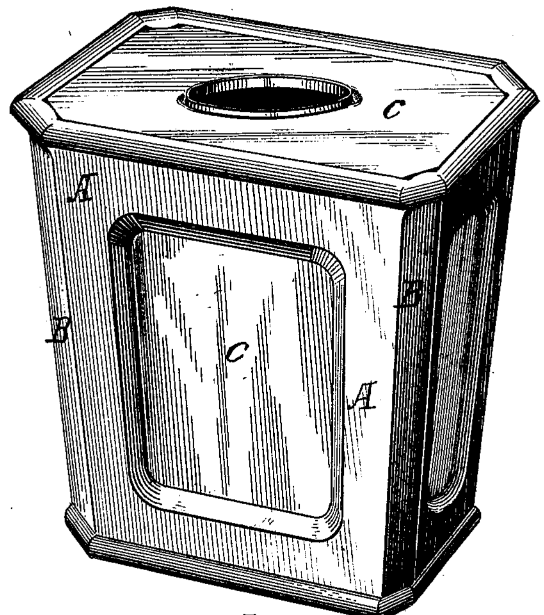
G. H. PERKINS & G. BROWNE.

Can-Guard or Jacket.

No. 218,398. Patented Aug 12, 1879.

Fig. 1



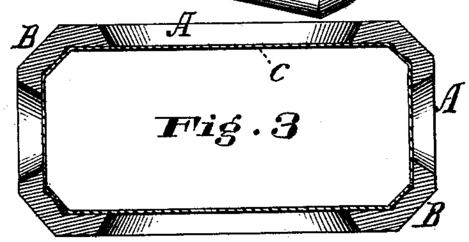
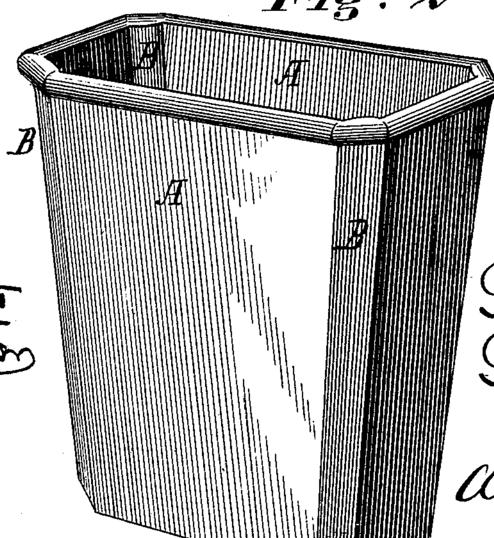


Fig. 3

Fig. 2



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UNITED STATES PATENT OFFICE.

GEORGE H. PERKINS AND GEORGE BROWNE, OF PHILADELPHIA, PA.

IMPROVEMENT IN CAN GUARDS OR JACKETS.

Specification forming part of Letters Patent No. **218,398**, dated August 12, 1879; application filed April 9, 1879.

To all whom it may concern:

Be it known that we, GEORGE H. PERKINS and GEORGE BROWNE, both of Philadelphia, Pennsylvania, have invented a new and useful Can Guard or Jacket, for use in processes of preserving meat and other perishable substances, of which the following is a full, clear, and true description, reference being had to the accompanying drawings, forming part hereof, in which—

Figure 1 is a view, in perspective, of one form of our improved jacket with a can inclosed; Fig. 2, a similar view of a modified form of jacket, no can being inclosed; and Fig. 3, a transverse section through Fig. 1, cutting both jacket and inclosed can.

Similar letters of reference indicate corresponding parts in all the figures.

This invention is an improvement upon that covered by Letters Patent No. 211,041, granted to us December 17, 1878; and it relates to a construction of single and separate jackets, made without either top or bottom.

In the employment of our patented invention referred to, it has been found that in many cases where the cans are made with heads of stronger and heavier tin than the "side body" it is neither necessary nor advisable to re-enforce the heads during the boiling process, but that a form of cell, jacket, or guard conforming to the corners of the side body and to the bounding portions of the sides contiguous to the heads and corners is sufficient.

To comprehend our improvement, it is to be borne in mind that the form of can mainly employed for preserved meat is the pyramidal, the corners of the side body being frequently flattened, and the seams of the side body occurring along said flattened corners; that light tin is best employed for the side body, and heavy for the two heads or ends, for the two-fold reason that light tin, being more pliable than heavy, collapses or buckles in more readily when the can is vented, and therefore insures more perfect compression of the contents; and that light tin is more easily cut through than heavy when it is desired to sever the larger head of the can to eject the contents.

It has, however, been found that the use of very thin metal rendered the can liable to burst or explode at its corner or other side-body seams at certain stages of the boiling process.

By our improvement the safe employment of very thin metal for the side body is rendered possible, and all chance of the bursting of the can is obviated.

Our invention consists of a rigid jacket, cell, case, guard, or the like, of such form as to closely embrace the can and support the side body thereof, and especially the corners of the side body and the side-body seams, but to be open at both ends, and adapted to support the side body and corners of the can against all internal pressures generated within the can during any boiling, cooking, or cooling process to which the can and contents are subjected, and thereby prevent bursting of or damage to the can.

The form of can most usually employed for meat-packing is the pyramidal, with flattened corners. We have, therefore, represented our jacket as made to incase such form, although it may be made to correspond to any desired configuration of can.

A is the jacket invented, a skeleton mold in Fig. 1, without side-body panels, a solid-sided mold in Fig. 2. C, Figs. 1 and 3, is the can.

The insides of the corners B of the jacket should correspond, as nearly as may be practicable, and to coincide with the outsides of the corners of the side body of the can, and support them and their seams, so that there is no possibility of their spreading out of shape or bursting.

Any metal—cast-iron, for instance—or other material of sufficient strength and rigidity to brace the can against its bursting-pressures, and be itself unaffected by such action, may be employed in the making of the jacket.

The form shown in Fig. 1, without panels, is a good form, permitting the free access of the cooking medium to the can, and the free collapse of the latter upon its contents, for the reason that when a solid-sided jacket of the form shown in Fig. 2 is employed, it sometimes results that suction or adhesion between the sides of the jacket and can tends to hin-

der the collapse. The jacket, however, is best so constructed as to closely embrace the seams of the side body wherever located.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

A canning-cell formed of rigid material, without top or bottom, and corresponding in shape to the side body and corners of the can to be contained therein, and adapted to support said can upon side body and corners against bursting-pressures, substantially as described.

In testimony whereof we have hereunto signed our names this 15th day of March, A. D. 1879.

GEORGE H. PERKINS.
GEORGE BROWNE.

In presence of—
J. BONSALL TAYLOR,
W. C. STRAWBRIDGE.