

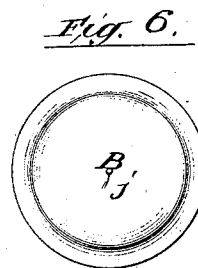
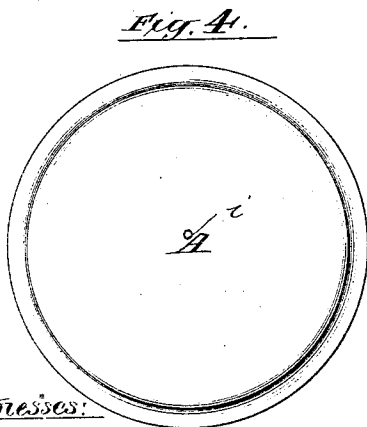
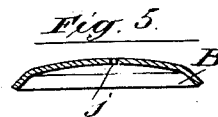
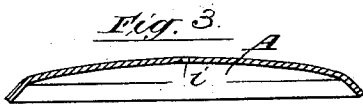
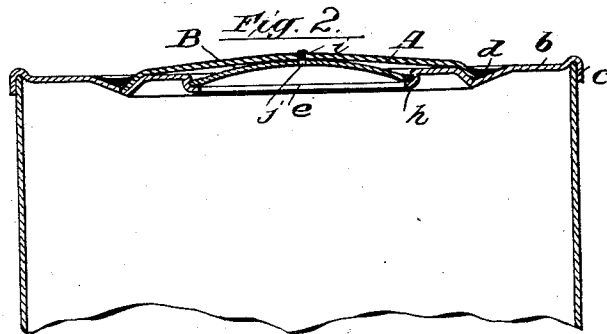
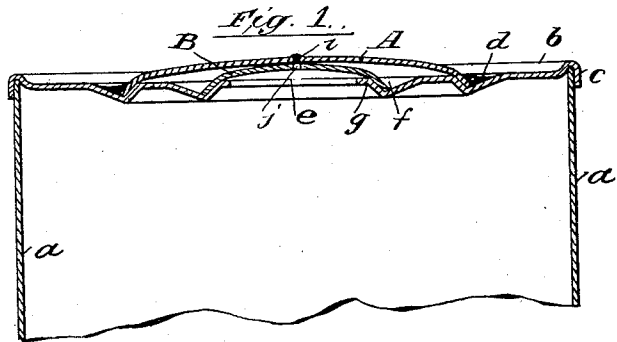
(No Model.)

E. C. HAZARD.

CAN.

No. 314,839.

Patented Mar. 31, 1885.



Witnesses:

Geo. H. Botts
Arthur C. Webb

Inventor:

Edward C. Hazard
By Ernest C. Webb
Attorney

UNITED STATES PATENT OFFICE.

EDWARD C. HAZARD, OF SHREWSBURY, NEW JERSEY, ASSIGNOR OF ONE-HALF TO FRANK GREEN, OF NEW YORK, N. Y.

CAN.

SPECIFICATION forming part of Letters Patent No. 314,839, dated March 31, 1885.

Application filed December 6, 1884. (No model.)

To all whom it may concern:

Be it known that I, EDWARD C. HAZARD, a citizen of the United States, residing at Shrewsbury, in the county of Monmouth and State of New Jersey, have invented certain new and useful Improvements in Cans, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in caps for cans, the particular object being to produce a can adapted to be hermetically sealed without contaminating the contents.

It is well known to canners of vegetables that during the process of soldering caps on cans the contents are apt to be more or less injuriously affected by contact with the vapors generated by the soldering operation. This is particularly true of canned corn, and many experiments have been made to obviate this difficulty. In my experience, which has extended over a period of twenty years, during which time I have prepared and sold many thousand cans of vegetables of different kinds, I have met with much inconvenience and loss from this cause alone; hence to prevent damage to the goods during the soldering process I have devised my present invention, which consists in a can provided with two caps, one above the other, so arranged that the lower cap to close the mouth of the can will be held in place by contact of the upper cap, which latter may be soldered, sweated, or otherwise secured to the can-top to hermetically seal the can without liability of injury to the goods, as hereinafter particularly set forth and claimed.

In the accompanying drawings, in the several figures of which like parts are designated by similar letters of reference, Figure 1 is a central vertical section through a portion of a can embodying my improvements. Fig. 2 is a similar view of a modified form. Figs. 3 and 4 are respectively a cross-section and a plan view of the outer cap, and Figs. 5 and 6 similar views of the inner cap.

a is the can, and *b* the can-top, united at *c* by a lapped and soldered joint in the usual manner. This can-top is provided with a depression or groove, *d*, a central opening or mouth, *e*, the metal at the edge of this open-

ing being "upset" so as to form a depression or groove, *f*, and a lip or flange, *g*.

A designates a cap adapted to fit in the groove *d*, and *B* a smaller cap adapted to fit in the groove *f*. These caps are both concavo-convex, with nearly flat edges or rims. As usually made, cans for these purposes are composed of all the parts enumerated excepting the cap *A* and depression or groove *d*. Such cans are sealed by soldering the cap *B* in the groove *f*, which, as usually done, consists in first wiping the joint with a suitable acid and then melting or flowing solder in the groove, and this is usually done while the contents of the can are hot and steaming. This steam from the can naturally raises the cap, and unless the workmen are very careful and hold the cap rigidly to its seat in the groove the vapors which are generated as the solder is melted on the metal previously wiped with acid will enter the can between the cap and the flange *g*, discoloring the contents of the can under the cap, and thus damaging the goods. To prevent this I employ the cap *A*, which, as shown, is made large enough to cover the cap *B* and fit in the groove *d*, and is united to the can-top to hermetically seal the can by being soldered or sweated to the same in said groove *d*.

As shown in Fig. 1 of the drawings, the cap *B* is held in place by the cap *A*, which bears against it.

In the modified construction shown in Fig. 2, the groove *f* and flange *g* are omitted, and the metal at this point is crimped, as shown at *h*, to form a recess into which the edge of the cap *B* must be forced by the follower or clamp of the can-soldering apparatus; but in both constructions the soldering is done a sufficient distance from the mouth of the can to preclude damage to the contents. Each cap will of course have a small opening, *i j*, in it to serve as a vent during the "processing," and the opening in the outer cap will be closed by solder in the usual manner after said cap has been soldered in place.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a can-top, of the outer sealed cap, *A*, and the inner cap, *B*, se-

100

cured in place over the mouth of the can by the outer cap, substantially as set forth.

2. A can for the purposes described having a top provided with a mouth and depressions
5 or grooves adjacent thereto, in combination with the vented caps A B, as set forth.

3. A can for the purposes described having the metal at its central opening or mouth crimped to form a recess, combined with an

inner cap to close said opening and an outer 10 cap soldered to the can-top, both caps having vents, substantially as specified.

In testimony whereof I have hereunto set my hand this 5th day of December, A. D. 1884.

EDWARD C. HAZARD.

Witnesses:

ARTHUR C. WEBB,
ERNEST C. WEBB.