C. BRANWHITE.

Fruit Can.

No. 14,439. Patented Mar. 18, 1856.

Fig. 1.

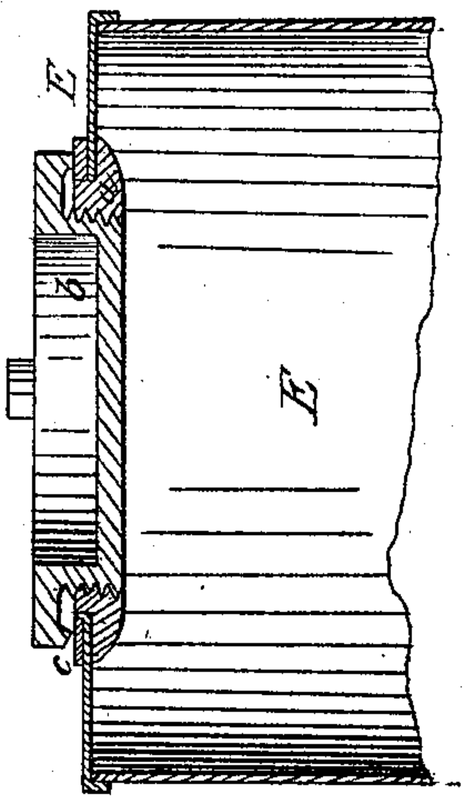
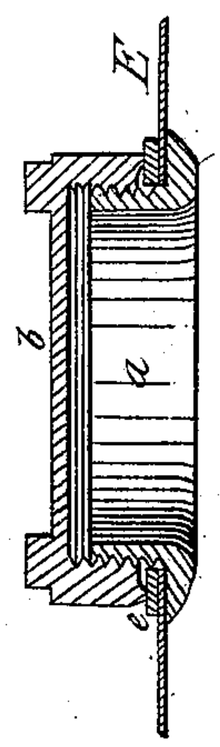


Fig. 2



UNITED STATES PATENT OFFICE.

CHARLES BRANWHITE, OF NEW YORK, N. Y.

IMPROVEMENT IN HERMETICALLY SEALING PRESERVE-CANS.

Specification forming part of Letters Patent No. **14,439**, dated March 18, 1856.

To all whom it may concern:

Be it known that I, CHARLES BRANWHITE, of the city, county, and State of New York, have invented a new and Improved Mode of Closing Cans Hermetically; and I do declare that the following is a full and exact description thereof, reference being had to the accompanying drawings.

This improvement relates to the closing of canisters hermetically, (for preserving fruits, &c.;) and its nature consists in confining the top of the can intermediate between bearing-surfaces, and to the peculiar form given to the bearing-surfaces of the cap on the upper side and flange on the under side of the top of the can.

Figures 1 and 2 are views in section, differing only in the position occupied by the screw-threads, the former being upon the internal part of the collar *a*, while the latter is external, the cap corresponding thereto.

The collar *a* is made to fit the aperture in the top of the can and project above a sufficient distance to receive the cap, a suitable screw being formed upon each. The under part of the collar has a rim or flange projecting outward therefrom, which takes a bearing upon the under side of the tin cover, and the latter is confined and held under pressure between this rim and the cap or nut aforesaid. That part of the flange in contact with the tin is made dishing or beveled inward, so that its outer edge only shall take bearing, for reasons hereinafter explained.

The cap *b*, in addition to the screw before mentioned, has a rim projecting outward and downward therefrom, that takes a bearing upon the center of the rubber gasket *c*. The lower margin of this rim is narrow or brought nearly to an edge to secure considerable indentation in the gasket and consequent closing of the rubber upon its sides. This expands the rubber inwardly as well as outwardly, and insures thereby a more perfect joint than where the whole surface is covered. The rubber being placed outside of the screw gives the still further advantage of protecting the contents of the can from injury by contact therewith. The flange of the collar *a* is greater in diameter than the lower margin of the cap; as this is concave, and the bearing of the cap within its extreme outer diameter, it follows that when the cap is screwed down the inner margin of the tin is pressed downward, and, consequently, any warps and unevenness of the tin surface are removed, thereby securing to the outer portion of the rim a much more perfect bearing than if its surface were level. The collar *a* is placed by the maker of the can within the top E before the different parts are soldered together, and is held from falling inward by solder at one or two points of its rim. The arrangements above described are important, as in this form the can becomes more simple, durable, and cheaper than in cases where a similar collar is soldered upon the top, as is commonly done. It is also less liable to injury by handling, secures a reliable tightness and perfect exclusion of the air, and can be understood and used by persons generally with little instruction and with the certainty that its contents will be well preserved. Another advantage from placing the rim of the collar A within the can in the manner described is derived from the fact that when a vacuum is formed within the top is depressed inward, and where a collar is soldered upon the can, as before mentioned, it occurs that the strain upon the joint in such cases causes it to part and leak. With this method no such difficulty can exist, as the top can yield sufficiently without in the slightest degree affecting the joint injuriously.

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

1. Confining the top of the can E between bearing-surfaces by means of the collar *a* and screw *b*, as described, thereby dispensing with solder or cements in forming a joint.

2. The peculiar form given to the internal and external bearing-surfaces of this attachment for closing a can when formed, combined, and used as set forth.

CHARLES BRANWHITE.

Witnesses:

H. C. BANKS,

JAMES DONAHUE.