

F. P. McCOLL & W. W. WILLISON.
METHOD OF CANNING AND CAN.
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1,302,189.

Patented Apr. 29, 1919.

Fig. 1.

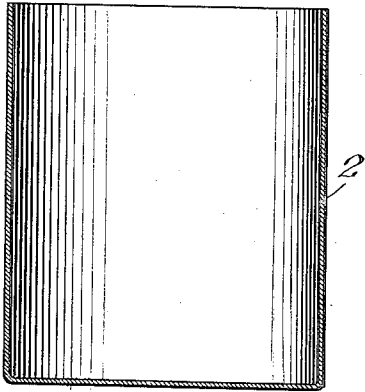


Fig. 2.

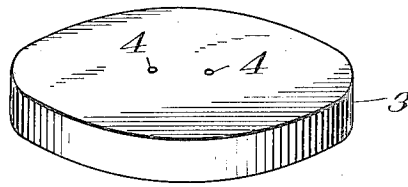


Fig. 3.



Fig. 4.

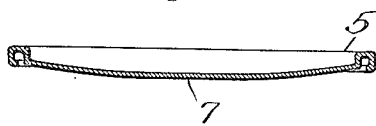
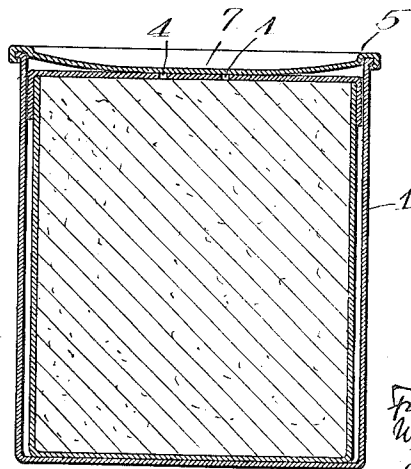


Fig. 5.



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METHOD OF CANNING AND CAN.

1,302,189.

Specification of Letters Patent.

Patented Apr. 29, 1919.

Original application filed September 1, 1917, Serial No. 189,292. Divided and this application filed November 28, 1917. Serial No. 204,323.

To all whom it may concern:

Be it known that we, FRANCIS P. McCOLL, a citizen of Canada, and a resident of Ridgewood, in the county of Bergen and State of New Jersey, and WALTER WILLIAM WILLISON, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have jointly invented a certain new and useful Method of Canning and Can, of which the following is a specification.

This application is a division of our co-pending application Ser. No. 189,292.

Our invention relates to a method of preparing food, by what is commonly called canning, and, also to a can used in our method.

Our invention further relates to certain details of the process, and to certain details of the can which will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawing the same reference numerals refer to similar parts in the several figures:—

Figure 1 is a vertical sectional view of the inner container.

Fig. 2 is a perspective view of the cap or cover to be used with the inner container shown in Fig. 1.

Fig. 3 is a sectional view of the metal cap to be used with the outer container showing it before it has been dished.

Fig. 4 is a vertical section of the outer cap, similar to Fig. 3, showing the cap detached from the outer container and dished.

Fig. 5 is a vertical section through our complete can showing the inner and outer containers, and the openings in the inner container sealed by the dishing of the metal cap which also prevents relative movement between the inner and outer containers.

In canning many articles it is desirable to keep them from coming in contact with the outer container which is usually a tin can. When the article canned does, in the method of canning now generally in use, come in contact with the tin can it often results in the discoloration of the canned article, and a tinny or metallic taste being given to the article which has a tendency to deteriorate due to chemical reaction.

By our invention we prevent the article canned from coming into direct contact with

the outer tin can. This insures that the canned article will retain its original delicacy of flavor and its own color, and will not be chemically acted upon by the metal of the outer can.

In carrying our invention into practice we use two containers, an outer metallic container 1, which is an ordinary tin can, and an inner non-metallic container 2 which is usually paper.

The article to be canned 3 is placed in the inner container 2 and the non-metallic cap 3, having very small openings, as pin holes 4, 4, is then placed over the inner container 2. The entire inner container 2 is then placed within the outer metallic container 1 Fig. 5.

This outer metallic container or tin can has a metal cap 5 which has a portion which is normally convex as shown at 6 Fig. 3.

Our invention is particularly applicable to the vacuum canning process in which the air is exhausted from the can before it is sealed. The cap 5 is sealed on the tin can 1 in the ordinary vacuum canning machine (not shown), now well known in the art.

To insure that all the air will be exhausted from the interior of the inner container 2, as well as from the metallic container 1, we provide one or more minute apertures or holes 4, 4 usually in the form of pin holes. When the cap 5 is sealed on the can 1 in the vacuum canning machine, that machine will exhaust the air from the outer can 1 and also from the interior of the non-metallic inner container 2, the air passing out through the apertures 4, 4.

Immediately after the sealing of this cap 5 the vacuum in the canning machine, so far as this can is concerned, is broken. The moment that this occurs, in the passage of the can through the machine, the ordinary atmospheric pressure will dish the cap 5 and making it concave as shown at 7 in Figs. 4 and 5. This will automatically close the apertures 4, 4 and prevent any of the contents of the inner receptacle 2 working out of the inner container, into the space between the inner and outer containers. At the same time, it will exert considerable pressure upon the inner container 2 and prevent any relative movement between the inner container 2 and the outer can 1.

We have described our invention in con-

nection with an embodiment thereof to which we do not desire to be limited, for what is claimed as new and what is desired to secure by Letters Patent is set forth in the appended claims.

What we claim as our invention and desire to secure by Letters Patent is:—

1. The method of canning consisting in placing the alimentary substance to be canned in an inner container, placing said inner container in an outer container, placing a cap on outer container and creating a vacuum within said container whereby when exposed to atmospheric pressure the cap will dish so as to bear on the inner container to prevent movement of said inner container within the outer container.

2. The method of canning consisting in placing the alimentary substance to be canned in an inner container having one or more openings, placing said inner container in an outer container, placing a cap on outer container and creating a vacuum within said container whereby when exposed to atmospheric pressure the cap will dish so as to bear on the inner container and seal said openings and prevent movement of said inner container within the outer container.

3. The method of canning consisting in

placing the alimentary substance to be canned in an inner non metallic container, placing said inner non metallic container in an outer metal container, placing a cap on outer metal container and creating a vacuum within said metal container whereby when exposed to atmospheric pressure the metal cap will dish so as to bear on the inner non metallic container to prevent movement of said non metallic inner container within the outer metal container.

4. The method of canning consisting in placing the alimentary substance to be canned in an inner non metallic container provided with one or more holes, placing said inner non metallic container in an outer metal container, placing a cap on the outer metal container and creating a vacuum within said metal container whereby when exposed to atmospheric pressure the cap will dish so as to bear on the inner non metallic container and seal said openings and prevent movement of said inner container within the outer metal container.

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WALTER WILLIAM WILLISON.

Witnesses:

CHRISTINE GLASER,

JAMES F. KELLY.