

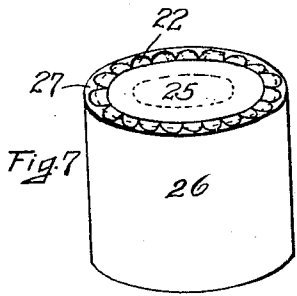
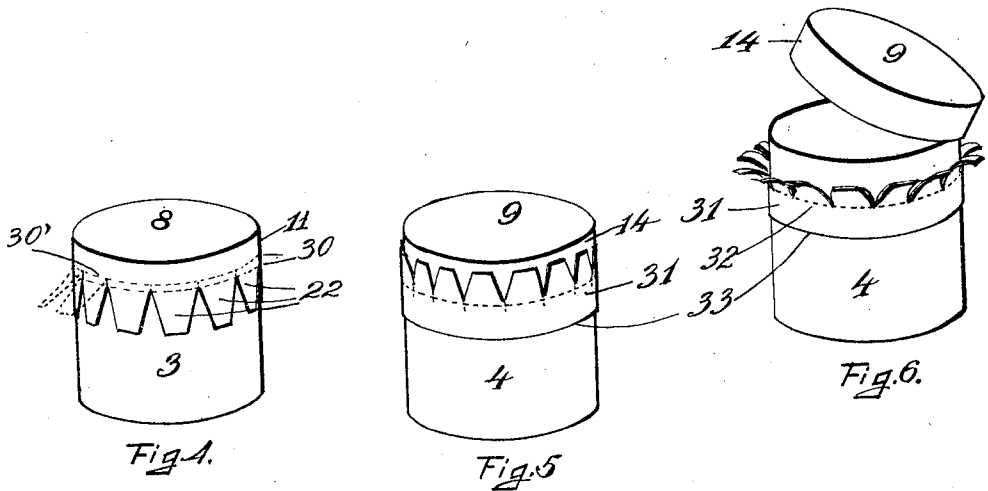
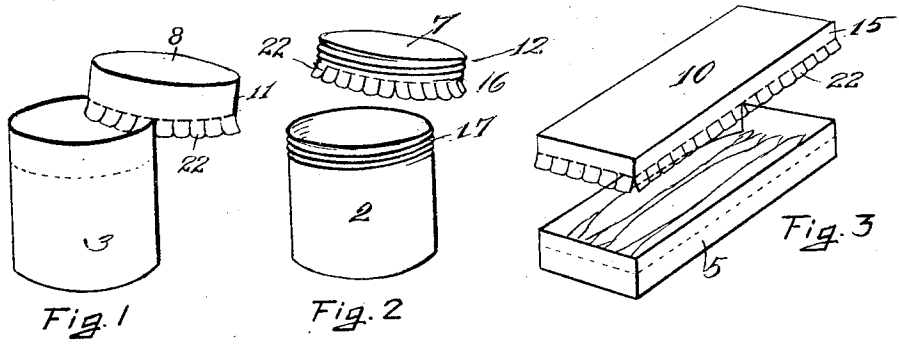
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SANITARY PRESERVING FOOD CONTAINER SUCH AS CANS OR BOXES OF ANY SHAPE

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SANITARY PRESERVING FOOD CONTAINER SUCH AS CANS OR BOXES OF ANY SHAPE.

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The great danger that threatens the health of the consumer of the eatables contained in preserving cans or boxes made of metal which must be opened with a can-opener 5 or other instrument whereby the metal must be cut or torn off, is caused by small particles of the metal that fall into the eatables when the can or box is being opened. These small metal particles cause injuries 10 to the intestinal organs when swallowed with the food into which they fell.

The main object of the present invention is therefore to create such preserving cans and preserving boxes which can be opened 15 in such a way that no small metal particles will fall into the eatables contained in said cans or boxes.

Another advantage is that there is no can-opener or other instrument necessary for 20 opening the food-container.

A further advantage is the employment of relatively few parts, which simplifies the manufacture and therefore lessens the cost of this kind of container.

Other advantages will appear as the specification progresses.

In the accompanying drawings Fig. 1 shows a can of cylindrical shape and cover therefor that shows one embodiment of the 30 invention; (the dotted line shows the place where the can is to be hermetically closed, that is, soldered).

Fig. 2 shows a can of cylindrical shape similar to that of Fig. 1 and cover therefor that shows also the improvement of Figure 1, 35 which cover however is provided with a screw-winding which fits to the screw winding provided on the corresponding part of the container.

Fig. 3 shows a rectangular box with cover, such as might be used for canning sardines; 40 this box having also the improvements of Figures 1 and 2.

Fig. 4 shows the modification of the invention as illustrated also with Figures 1, 45 2 and 3; in Figure 4 the can is shown as being closed.

Figs. 5 and 6 show another modification of the invention. Fig. 5 shows the can 50 closed, while in Fig. 6 the can is opened.

Fig. 7 shows other modifications of the invention whereby the container is hermetically closed and soldered on top instead of 55 on the sides as shown in Figs. 1 to 6.

To best suit this invention, the cans 2, 3 or 4, etc., or boxes 5 etc., must be of the

kind which are provided with such covers 7, 8, 9, or 10 respectively, that have turned down borders 11, 12, 14 or 15 respectively. When the can is of a cylindrical shape such 60 as shown in Fig. 2 the downwardly turned border may be provided with a screw-winding 16 which must fit the screw-winding 17 that is provided on the corresponding part of the container 2. It is however not an 65 absolute necessity that the borders of the cover be downwardly bent, and the cover may be of a smaller diameter, circumference respectively, than that of the container, such as a can or box (see for instance Fig. 7). 70

One of the novel features resides in the manner of hermetically closing and soldering the can or box at the part where the border (or lower edge of the turned down 75 border) is situated when the cover is put on the can or box; and consists also in means whereby no can-opener or any other instrument is necessary for opening the can or box, and by that this invention shows another advantage over other hermetically 80 closed and soldered preserving food containers such as cans or boxes which can be opened only by means of can-openers or like instruments.

According to the modification of Figs. 1, 85 2, 3 and 4, the novelty consists of a cover 7, 8 or 10 which on its downward bent border 11 or 12 or 15, respectively, is provided with downward flaring metal-flaps 22 which simply stay close to the sides of the container without, however, gripping or exerting 90 pressure to any part of the container. The soft solder is applied between the containers 2, 3 or 5 respectively, and the downward bent borders 11, 12 or 15, respectively, 95 at the place which corresponds in height to the part that outside is indicated by the dotted lines 30 shown in Figure 4. The solder or other binder must extend as far upward as indicated by the dotted line 30' 100 so that no leak will be formed by the slit ends that reach as far as indicated by the dotted line 30. By turning up each flap 22 with the fingers or by means of a suitable instrument such as pincers so far that their 105 bending point is situated at 30' (see Figure 4), the part 11 will be loosened from the solder and the cover is then so far separated from the container 3 that it can be removed completely without causing small 110 metal particles to fall into the eatables.

By lifting the flaps 22, that do not serve

for gripping the container, as far that the bending point is at 30' it is obvious that the slits or incisions that separate these flaps from each other will be forcibly elongated, that is, the sheet metal of the part 11 somewhat above the upper end of the slot (which end is at 30) will be ruptured to a certain extent so as to be completely freed from the can to which this part is soldered.

In order to permit the tearing up of the metal when the flaps are to be lifted with the fingers, it is necessary to use a soft metal such as tin or lead etc., or an alloy of such metals for part 11 and the flaps 22 thereof. The metal used for these parts can be soft because these flaps do not need to be flexible, as is necessary with spring lips or the like that have to grip. The characteristics of the can of Figure 4 and the method of sealing it applies also to the cans, boxes, respectively, illustrated in Figures 2 and 3.

There is also a certain advantage by rupturing the metal at the inner slit ends when the can is to be opened because it will be readily seen by the purchaser of such cans or boxes that the same had been opened already if the metal is ruptured.

The same principal is applied to the device shown in Fig. 5. Compared with the devices of Figs. 1, 2, 3 and 4, the difference consists simply in that there is a strip 31 which on its upper part is dentated or which forms flaps while the lower border may be straight. As shown in Fig. 6, the part 31 is united with the can-body 4 and the soft solder is applied between the lower part of the flaps and the downward bent border 14 of the cover 9. By turning down the flaps as far as to have the bending point at 32 whereby part of the strip 31 will be ruptured in a similar way as has been explained in connection with the part 11 of Fig. 4, the cover will be separated from the part 31 to which it was soldered and can be removed from the can without causing small metal-particles to fall into the eatables. The part 31 is preferably soldered first to the downward bent border 14 and when the eatables are in the can (or box) the cover is put on the can (or box) and the part 31 is soldered at 33 to the can 4 (or box).

Referring more particularly to Fig. 7 in which another modification of the invention is shown, the cover 25 of the can (or box) has a smaller diameter than the container 26. It is therefore apparent that the soldering (or hermetically closing) must be made on the top of the container, and the cover must therefore receive the incisions on its circumference. It is necessary therefore to have the cover still lying on a top-portion 27 of the container. The opening left by said top-portion of the container therefore will be still smaller than the cover. The edge of the top-portion of the container may be rounded.

For taking off the cover it is simply necessary to lift the flaps 22 outwardly with the fingers or with a tool similarly to the modifications illustrated in Figs. 1 to 6 inclusive and thereby break the solder or any other kind of binder that is employed. Also by using this modification of the invention no metal particles will fall into the eatables contained in said can (or box).

The flaps 22 of the can shown in Fig. 7 being of the same character as those of the cans or boxes shown in Figs. 1 to 6 inclusive permit also the tearing in of the metal of the cover to a certain extent.

It is obvious that this invention can also be employed on cans or boxes having shapes that are different from those shown in the drawings in which only the simplest and therefore most common shapes are shown. It is also obvious that other binders may be employed than solders of metal.

Having described preferable forms of the invention I reserve the right to claim all those modifications that might be fairly embodied in the spirit and scope of the invention.

I claim:

1. In a container including a cover, a part made of sheet metal and serving for uniting said cover with said container and for hermetically closing the container by means of a binder, and being positioned more or less remote from the opening of the container, said part having incisions which are made so that there is always a flap left between two of said incisions, these so formed flaps placed close to the container when it is closed but so that they do not grip or exert pressure whatsoever thereupon or to said cover, the binder applied at the inner side of said part in such manner that said flaps are left free from binder, said flaps adapted to be pulled outwardly to such an extent with the fingers or with some tool that the portion of said part to which the binder is applied will be pulled away from the container and thereby ruptured and said binder broken or separated therefrom thus permitting the removal of the cover from the container without causing particles of the sheet metal or particles of the binder to fall into the contents of the container.

2. In a food container with a cover, the cover having a part made of soft sheet metal arranged remotely from the opening of the container and the border of said part formed by flaps, said flaps held close to the container without, however, exerting pressure thereupon, said part united with the container by means of a binding material so as to hermetically close the container but leaving the flaps free from said binding material, the flaps adapted to be pulled outwardly with the fingers to such an extent that the sheet metal of said part will be torn

in and the portion of said part to which the binding material is applied pulled away from the container thus breaking the binding material and thereby permitting the removal of the cover from the container without causing particles of the sheet metal or of the binding material to fall into the contents of the container.

3. In a container with a cover, a part of sheet metal soldered to the container thus hermetically closing the container, said part having incisions made in a manner that flaps are formed, said flaps held close to the con-

tainer but not exerting pressure thereupon, said flaps left free from solder and adapted to be bent outwardly to such an extent with the fingers or by means of a suitable tool that the soldered portion of said part will be pulled away from the container and thereby ruptured, breaking the solder and permitting thereby the removal of the cover from the container without causing particles of the sheet metal or of the solder to fall into the contents of the container.

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