

May 17, 1938.

O. METZGER

2,117,738

PACKING FOR PERISHABLE VICTUALS

Filed Nov. 21, 1935

Fig. 1

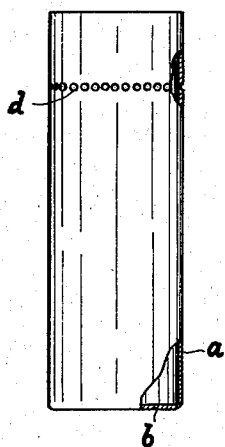


Fig. 2

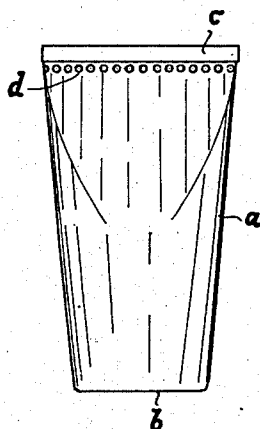


Fig. 3

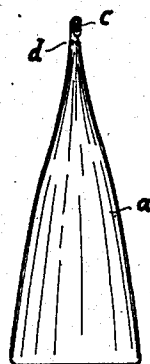


Fig. 6

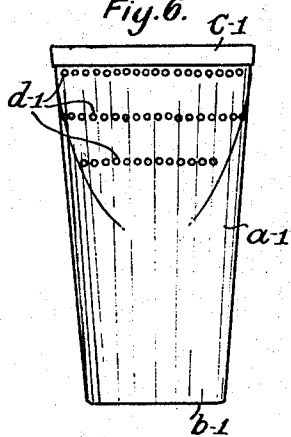


Fig. 4

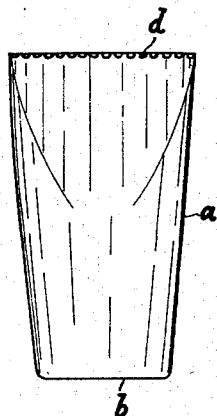


Fig. 5



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2,117,738

PACKING FOR PERISHABLE VICTUALS

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Application November 21, 1935, Serial No. 50,844
In Germany November 27, 1934

2 Claims. (Cl. 229—51)

Packings of the most different kinds have al-
ready been used to safely store perishable victu-
als in liquid as well as in solid state, for instance
milk, coffee, oil, and fat, nutritive powders, bis-
cuits, sugar and the like, to allow despatching or
sending victuals ready for use or taking them
along on travellings, walkings and similar occa-
sions. These durable packings are known as tins
made of tinned sheet-iron, containers of water-
proof material or metal tubes.

Tins as well as containers of water-proof ma-
terial have the disadvantage, that they may not
at all or imperfectly only be closed again after
having been opened, so that the contents still
remaining in the packing means cannot be taken
along any more, as they would discharge. More-
over, the great danger always exists, that in these
opened tins or other packings perishable victuals
quickly decay, so that the whole contents must
necessarily be consumed all at once.

Tins having soldered covers, particularly tins
of small dimensions, are relatively expensive and
the opening of such tins which is effected by cut-
ting off the cover is always rather troublesome.
As a rule, containers of water-proof material
do not allow safe storing of perishable victuals,
as sterilizing of the contents is not possible which,
in most cases, is desired and very often is abso-
lutely necessary. Such containers may, on tak-
ing along on travellings or walkings easily be
damaged by blows or pressures acting upon them
which result in discharge of the contents.

Metal tubes as a rule may be used to store
victuals in form of a paste only, as the cap of the
tube is not adapted to tightly close the tube and
to prevent escape of liquid victuals. Liquid victu-
als, therefore, must first be converted to a paste
by a method which makes this manner of storing
expensive. Moreover, on account of the end of
the tube being formed as a collar and neck for
the reception of a screw-cap or a push-on cap,
these metal tubes themselves are an expensive
packing.

Now, the subject matter of the invention con-
sists in a packing having, with regard to known
packings, the following properties and advan-
tages:

The novel packing is formed as a thin-walled
metal-bag, is of small form and has, in spite of
its low weight, sufficient stability to be easily and
safely carried along. The packing according to
the invention is equally suitable for the storing
of liquid as well as of solid perishable victuals.
The new metal bag, furthermore, allows inter-
mittent consumption of the contents and re-

peated air-tight closing of the packing, so that
even under these circumstances, a safe storing of
perishable victuals is warranted. As the packing
is formed as a metal bag, the contents may be
sterilized, the metal bag being able to withstand
the required pressures. The metal bag is very
easy to handle, is reliable and yet may be man-
ufactured on a quantity production scale at a low
price without sacrificing any of the advantages.

The novel packing bag according to the inven-
tion is characterized by the fact, that it consists
of a thin-walled hollow metal body the side
wall of which is made in one piece with the bot-
tom and the upper opening of which, serving to
fill the bag, may air-tightly be closed by pressing
flat and folding the flattened metal at the edge,
said bag being, below the folded portion, provided
with indentations not piercing the material
which serve to open the bag by tearing off the
folded portion. The indentations not piercing
the material may, after filling and folding the
bag, be obtained by means of pincers, may, how-
ever, also be made before filling the bag in which
case this operation may be performed simultane-
ously with the machining of the edge of the bag.

In the accompanying drawing one embodiment
of the subject matter of the invention is shown
by way of example.

In this drawing:

Fig. 1 is a front elevation partly in section of
a metal bag according to the invention ready for
being filled before closing.

Figs. 2 and 3 are views of the closed metal bag
seen from the broad side and the narrow side
respectively.

Figs. 4 and 5 are views of the opened metal bag
seen from the broad side and the narrow side re-
spectively, and

Fig. 6 illustrates a front elevational view of a
modified embodiment of the invention.

As shown in Fig. 1, the bag is made in one piece
as a cylindrical hollow metal body, consisting for
instance of aluminium or another metal. The
bag comprises the cylindrical side wall *a* the
lower end of which is continued by the bottom
b. The latter is plane or smooth and serves as
stand bottom for the metal bag. The upper
opening of the bag, serving as filling opening, is,
as shown in Figs. 2 and 3, air-tightly closed by
pressing flat the edge *c* of the metal bag and fold-
ing or rolling the flat pressed material, so that a
special closing member is not required.

The cylindrical side wall *a* is, as shown in Fig.
1, provided with a row of notches or indenta-
tions *d* which do not completely pierce the wall

of the metal bag, but weaken it only. The row of notches or indentations *d* is so arranged as to lie below the fold *c* after the edge of the metal bag has been folded.

5 If the contents of the packing bag are to be consumed, the folded portion *c* is torn off at the row of notches or indentations *d*, whereupon the bag may, as shown in Figs. 4 and 5, completely be opened by separating its juxtapositioned walls from each other. The contents which may be 10 in a solid or liquid state may then be taken out or poured out respectively.

The side wall of the packing bag may also be provided with a plurality of rows of notches or indentations which are then arranged one below 15 the other in a distance to allow repeated folding and closing of the already opened metal bag. In this manner, the bag, holding the rest of the contents, may be closed again in an air-tight and spill-proof manner in case it has not been 20 completely emptied. A packing bag of this character is shown in Fig. 6 in which reference character *a*1 denotes the side walls, *b*1 the bottom wall and *c*1 the folded portion of the container, and 25 reference character *d*1 denotes a plurality of rows of indentations.

As the metal bag according to the invention does not require a special closing member and as it is, moreover, of very simple form, it may be 30 manufactured at extremely low cost and, therefore, may be sold at a substantially lower price than tins, tubes or other packing means used hitherto.

The victuals to be stored in the metal bag may 35 remain in their original form in which they are used, so that expensive intermediate processes are not required. By means of the new packing it is for the first time possible to take along on travellings, walkings, a great number of different 40 victuals, so that the field of use of these victuals is very substantially enlarged.

The particular feature, characterizing the metal bag according to the invention, is that it is 45 for the first time possible to intermittently consume the contents of the container without

any danger of spoiling and discharging the contents during further storing.

What I claim is:

1. A packing bag for the preservation and storage of perishable victuals in liquid and solid 5 state comprising an integrally formed thin-walled metal container capable of resisting to sterilizing temperatures and pressures and having side walls of substantially cylindrical form prior to the filling and sealing thereof, a flat bottom 10 wall integral with said side walls, a filling opening defined by the upper edge of said side walls, the upper terminal portions of said side walls being flattened out and pressed together in juxtaposed relation after the filling operation, a fold 15 locking said flattened terminal portions and air-tightly sealing said container, and a row of indentations in said terminal portions and in proximity of said fold for weakening said portions without perforating the same whereby tearing off 20 of said fold and opening of said container are facilitated.

2. A packing bag for the preservation and storage of perishable victuals in liquid and solid 25 state comprising a thin-walled metal container capable of resisting to sterilizing temperatures and pressures and having side walls of substantially cylindrical form prior to the filling and sealing thereof, a flat bottom wall integral with 30 said side walls, a filling opening defined by the upper edge of said side walls, the upper terminal portions of said side walls being flattened out and pressed together in juxtaposed relation after the filling operation, a fold locking said 35 flattened terminal portions and air-tightly sealing said container, and a plurality of rows of indentations in said terminal portions in parallel spaced relationship with each other and with said fold for weakening said portion along said rows 40 without perforating the same whereby said container may be closed several times by folding the extremity of said terminal portions and may be opened by tearing off the fold along one of the rows of said indentations.

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