G. LAWRENCE.

BUTTER COOLER.

APPLICATION FILED JAN. 31, 1919.

1,375,397.

Patented Apr. 19, 1921.

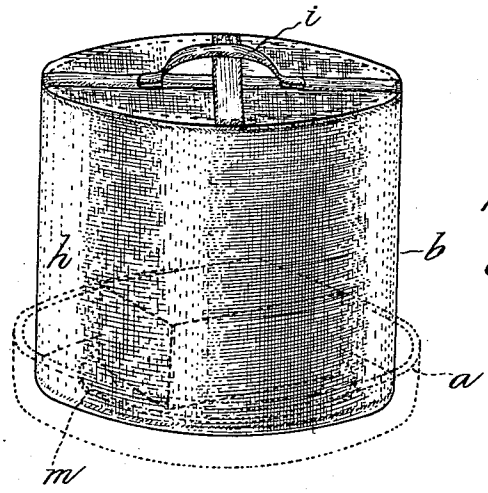


Fig. 1.

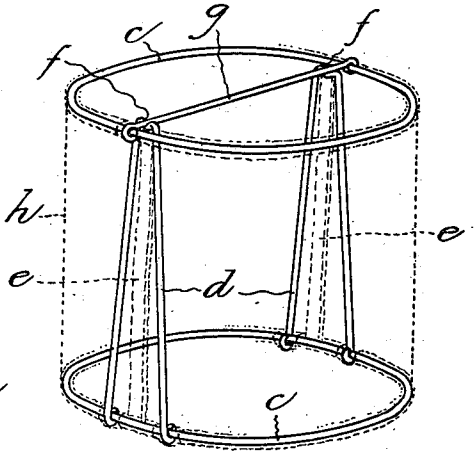


Fig. 2.

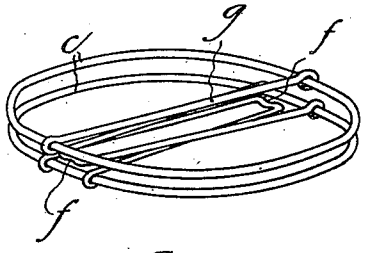


Fig. 3.

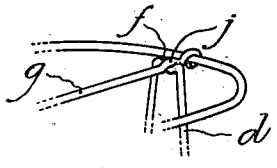


Fig. 4.

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UNITED STATES PATENT OFFICE.

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BUTTER-COOLER.

1,375,397. Specification of Letters Patent. Patented Apr. 19, 1921.

Application filed January 31, 1919. Serial No. 274,233.

To all whom it may concern:

Be it known that I, GEORGE LAWRENCE, subject of the King of Great Britain, residing at 233a Henley Beach Road, Torrensville, Adelaide, State of South Australia, Commonwealth of Australia, have invented certain new and useful Improvements in Butter-Coolers, of which the following is a specification.

This invention relates to improvements in butter coolers and refers especially to that class of cooler having a covering of fabric which is kept moistened by water drawn by capillary attraction or absorption from a container in which it is partially immersed.

The object of this invention is to provide a butter cooler of extremely simple design which will fold up neatly into a small space when not required for immediate use and when opened out or extended will be sufficiently rigid to withstand moderately rough usage without collapsing. A butter cooler constructed in accordance with the invention is economical in construction and thoroughly efficient in operation and when not required for use it can be folded up into a very small compass thereby permitting it to be packed neatly and sent by post or rail over long distances without fear of injury and at a very small cost.

I accomplish the abovementioned object by providing a butter cooler comprising a tray of earthenware or other suitable material for containing water, a collapsible cover formed of a pair of rings or hoops or a ring and a disk having vertical connecting members, two or more pivoted members for forcing the rings apart and placing a tension on the connecting members, and a covering of absorbent fabric fitting over and around the frame constructed and arranged whereby when the cover is extended and the lower part is stood in the tray the interior thereof will be kept cool by the continual absorption of the water by the fabric due to capillary attraction and the evaporation of the moisture therefrom.

In order that the invention may be readily understood reference will now be had to the accompanying sheet of explanatory drawings, wherein—

Figure 1 is a view in perspective of a butter cooler constructed in accordance with the present invention, the tray being shown in dotted lines.

Fig. 2 is a view in perspective showing the frame of the cover in full lines in its extended position with the connecting members, and the absorbent fabric in dotted lines thereon.

Fig. 3 is a view in perspective of the frame showing it in its folded position.

Fig. 4 is a view in perspective of a detail in the construction of the frame.

In these drawings the reference letter *a* indicates a tray of earthenware or other suitable material which for convenience of illustration is shown in dotted lines, see Fig. 1 of the drawings.

The tray is adapted to contain water and fitting into the said tray is the lower part of a collapsible cover *b*, designed to fit over a dish containing the article to be kept cool.

The cover is formed of a collapsible frame comprising a pair of rings or hoops *c* and a pair of hinged or pivoted members *d* which are adapted to force the two rings apart against the tension placed upon two flexible connecting members *e*.

The hinged or pivoted members *d* may be formed of U shaped pieces of wire having their ends folded around the bottom ring and their looped ends provided with slight depressions *f*.

The top ring is provided with a diagonally disposed bar *g* and when the hinged members are swung into an upright position the depressions *f* on their outer or free ends are brought into engagement with the said diagonal bar and thereby force the two rings apart and apply a sufficient tension to the connecting members *e* to insure a desired amount of rigidity to the construction.

The connecting members *e* can be made of articulated links of metal, straps of leather, fabric or like material that will permit of the frame folding up conveniently and coact with the hinged or pivoted members *d* to exert opposing strains on the two rings.

A covering *h* of loosely woven absorbent fabric as flannellet, toweling or the like is secured around the sides and to the top of the frame by sewing or in any other approved way. The top of the covering *h* is provided with a handle *i* or the like for convenience in lifting the cover and if preferred the said handle can be secured to the diagonal bar *g*.

The diagonal bar can be formed with a downwardly or upwardly curved portion *j* near each end and when the hinged members *d* are turned upwardly the depressions *f* in the looped ends thereof are sprung past or into the curved portions *j* and are thereby prevented from falling or being accidentally turned downward, see Fig. 4 of the drawings.

The connecting members *e* are made just sufficiently long to insure a tension being applied thereto when the hinged members are swung upwardly and this tension insures the hinged members remaining correctly in position.

It will be obvious that the flexible connecting members *e* can be dispensed with when the absorbent covering *h* is secured to the frame in such a way that a tension will be placed thereon when the frame is extended or when the hinged members are designed to keep the ends of the frame apart and more or less rigidly supported one above the other.

In the drawings the frame is shown made of wire but it will be readily understood that it can be made of stamped or cast metal or be made of wood or other approved material and given shapes other than circular to suit different tastes or requirements. The collapsible frame is shown with two hinged members but it will be obvious that more than two hinged members can be used when the frame is large and the diagonal bars can be arranged to suit this alteration.

In use the tray is partly filled with water and the butter or any other article of food is placed in the center thereof in a dish or the like *m* (see dotted lines in Fig. 1) to keep it clear of the water and the cover which has been previously thoroughly wetted is then placed thereover with its bottom edge immersed in the water.

The water in the tray is drawn up the absorbent covering by capillary attraction and aided by the evaporation of the moisture on the sides and top thereof produces a very cool atmosphere around the butter or other article therein.

The absorbent covering *h* can be easily removed and replaced by a fresh one at a very low cost when it becomes worn or is otherwise rendered inefficient or useless for effecting the purpose for which it has been devised.

Should the covering *h* become soiled it may be washed from time to time by dipping it into boiling water thereby obviating the removal of the said covering from the frame.

I claim—

1. In a butter cooler of the character described, a collapsible cover comprising a frame having rigid top and bottom rings, a diagonal bar carried by the top ring, members swingably connected to opposite points on the bottom ring and adapted to fold up and bear against the diagonal bar, a covering of absorbent material secured to the top and bottom rings of the frame and across the top ring, and a handle positioned exteriorly of the top of the covering.

2. In a butter cooler of the character described a collapsible cover comprising top and bottom rings, a diagonal bar carried by the top ring, inverted U-shaped members swingably connected at opposite points on the bottom ring and having their medial portions formed with depressions adapted to engage and bear against the diagonal bar, when the members are swung upwardly so as to maintain the frame in an extended position, flexible connecting members between the rings and a covering of absorbent material secured to the rings and forming the sides and top of the cover.

In testimony whereof I have affixed my signature in the presence of two witnesses.

GEORGE LAWRENCE.

Witnesses:

E. J. CATCHLOVE,

U. E. LEISHMAN.