June 1, 1926.

1,586,829

A. MILLER

REFRIGERATOR CAN

Filed Dec. 5, 1921

FIG. 1

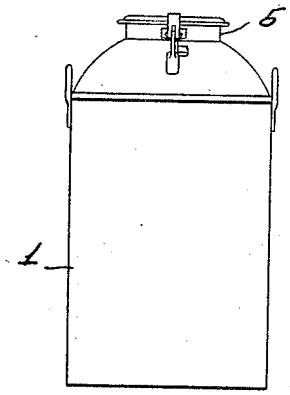


FIG. 2

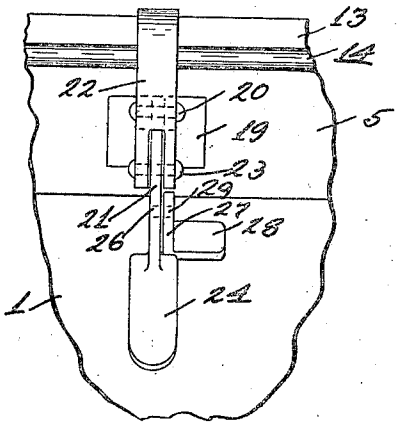
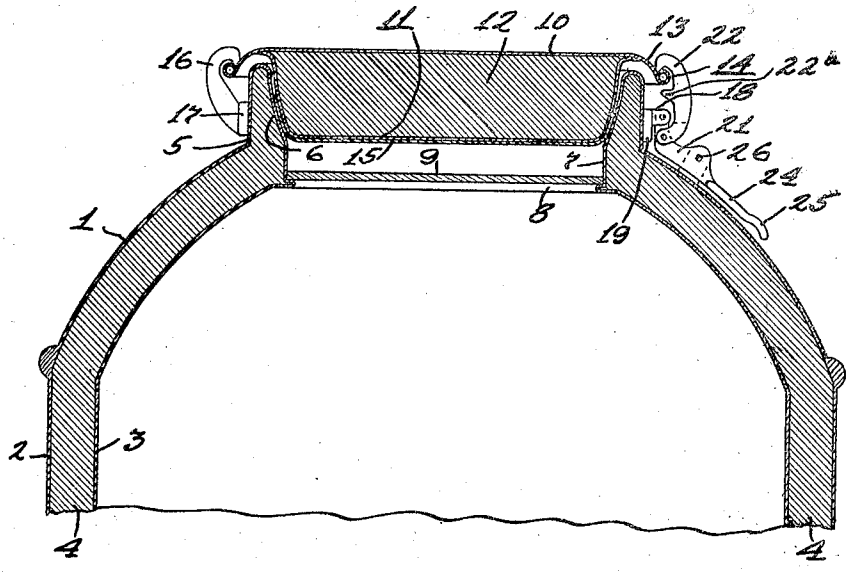


FIG. 3



Witnesses

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Patented June 1, 1926. 1,586,829

UNITED STATES PATENT OFFICE.

ARTHUR MILLER, OF CHICAGO, ILLINOIS, ASSIGNOR TO SOLAR-STURGES MFG. CO., A CORPORATION OF ILLINOIS.

REFRIGERATOR CAN.

Application filed December 5, 1921. Serial No. 520,047.

My invention relates to cans such as are frequently used for holding milk and are provided with heat insulating material between the walls.

It is an object of my invention to provide a fastening for securing a cover in place on such can which shall be quickly and readily operated to secure the cover and yet may be easily moved to releasing position to remove the cover.

It is a further object of my invention to provide a cover for such a can which shall form a tight closure and yet shall not be likely to stick in the can.

It is a further object of my invention to provide a fastening device for the cover which shall afford a means for attaching a lock when desired to prevent removal of the cover.

Other and further important objects of my invention will be apparent from the disclosures in the following specification and the accompanying drawings, in which I have described and illustrated my invention in a preferred form.

On the drawings:—

Figure 1 is a view of the can.

Figure 2 is an enlarged view of the fastening device for the cover.

Figure 3 is section through the can and cover.

As shown on the drawings:—

The can 1 has interior and exterior walls of metal 2—3, with a layer 4 of heat insulating material between them. The wall of the can is prolonged upward, as shown at 5, to make the mouth of the can. The interior surface of this mouth is curved, as shown at 6, to afford a curved seat of substantially spherical surface for the cover. From the curved portion of the interior of the mouth, the inner wall goes vertically for a short distance 7 and then is provided with a rib 8, and from this rib it merges with the interior wall 3 of the can. The rib 8 serves as a ledge to support a piece of paraffined paper 9, which serves to protect the contents of the can from dirt when the cover is removed or while it is being inserted.

The cover consists of an upper piece of sheet metal 10 and a dish-shaped piece of sheet metal 11, which between them enclose a body of heat insulating material 12. The two pieces of sheet metal 10 and 11 are united in any desired manner, and the upper one is continued outward to form a rim 13, which goes over the edge of the mouth of the cover and extends beyond the same and below it. The edge of this extended part is rounded as shown at 14, to afford a bead by which the fastening devices clasp the cover. As this bead extends completely around the cover, it is not necessary to select any definite position for the cover when inserting it, but it may be put in just as the workman picks it up. Between the cover and the can there is placed a piece of soft paper 15. This paper is of sufficient thickness so that the compressibility of it will compensate for any irregularities in the fit between the cover and the can so that a tight joint is obtained even if such irregularities exist. At one side of the mouth of the can a hook 16 is provided which has a foot 17 secured to the outer wall 5 of the mouth by spot welding or in any other desired way. At the opposite side of the mouth of the can is a lug 18 secured by a similar foot 19. A pivot pin 20 goes through the lug 18 and serves to secure a lever 21 thereto. A hook 22 is pivoted to the lever by a pin 23. The free end of the lever is broadened out into a handle 24, the end of which, as shown at 25, is curved for the ready insertion of the finger or a tool thereunder. At an intermediate point the lever 21 is supplied with a hole 26 and there is a lug 27 secured to the can by a foot 28 which is supplied with a similar hole 29, which, when the device is in securing position, is in line with the hole 26.

Easy opening of the can is also insured by the provision of a lug 22^a which is formed on the hook 22 beneath the head 14. Said lug acts, when the outer end of the lever 21 is lifted, to force the cover upwardly, while the hook 22, which is maintained in position over the upper side of the bead 14, prevents the cover from being blown off by the pressure of gases which may have accumulated inside the can.

In the operation of the device, the cover has the paper 15 placed over the surface 11 and the cover and paper are inserted into the mouth of the can, one edge of the cover being placed under the hook 16. The hook 22 is then placed over the opposite edge of the cover and the lever 21 pressed toward the can. As the lever moves to-

ward the can, it will draw the hook down and force the cover into the mouth. Any irregularities in the shape of the cover or the mouth will cause the paper to become pressed where the cover and mouth fit closer than they do at other points. Where the cover and can do not fit so closely the thickness of the uncompressed paper will cause the joint to be tight. Thus the closure of the can is effective even when the cover or the mouth are not in correct shape. The insertion of the paper prevents a metal contact between the can and cover thus minimizing the transference of heat units and maintaining a desired low temperature.

When the lever has been moved all the way to the illustrated position in Figure 3, it will stay in that position because it has been moved beyond the dead center, and the pull of the cover upon the hook 22, instead of tending to move the lever away from the illustrated position, tends to move it toward the can.

If it is desired to prevent tampering with the contents of the can, the lever may be locked into place. This may be done by putting a pin through the holes 26 and 29 and securing the pin by a padlock, or it may be done by putting the hasp of the padlock through these holes. With either arrangement, only the persons supplied with a key to the padlock can open the can.

I am aware that various changes may be made in the details of the construction without departing from the principles of my invention, and I therefore do not purpose limiting the patent granted otherwise than necessitated by the prior art.

I claim as my invention:—

A can having a mouth, a cover approximately fitting said mouth, a lever pivoted to the can adjacent the mouth, a link connected to said lever, and projections on said link adapted to engage the upper and under side of the cover respectively, whereby when the lever is moved in one direction the cover is forced into the mouth of the can and when the lever is moved in the other direction the cover is forced out of the mouth of the can.

In testimony whereof I have hereunto subscribed my name.

ARTHUR MILLER