

No. 765,049.

PATENTED JULY 12, 1904.

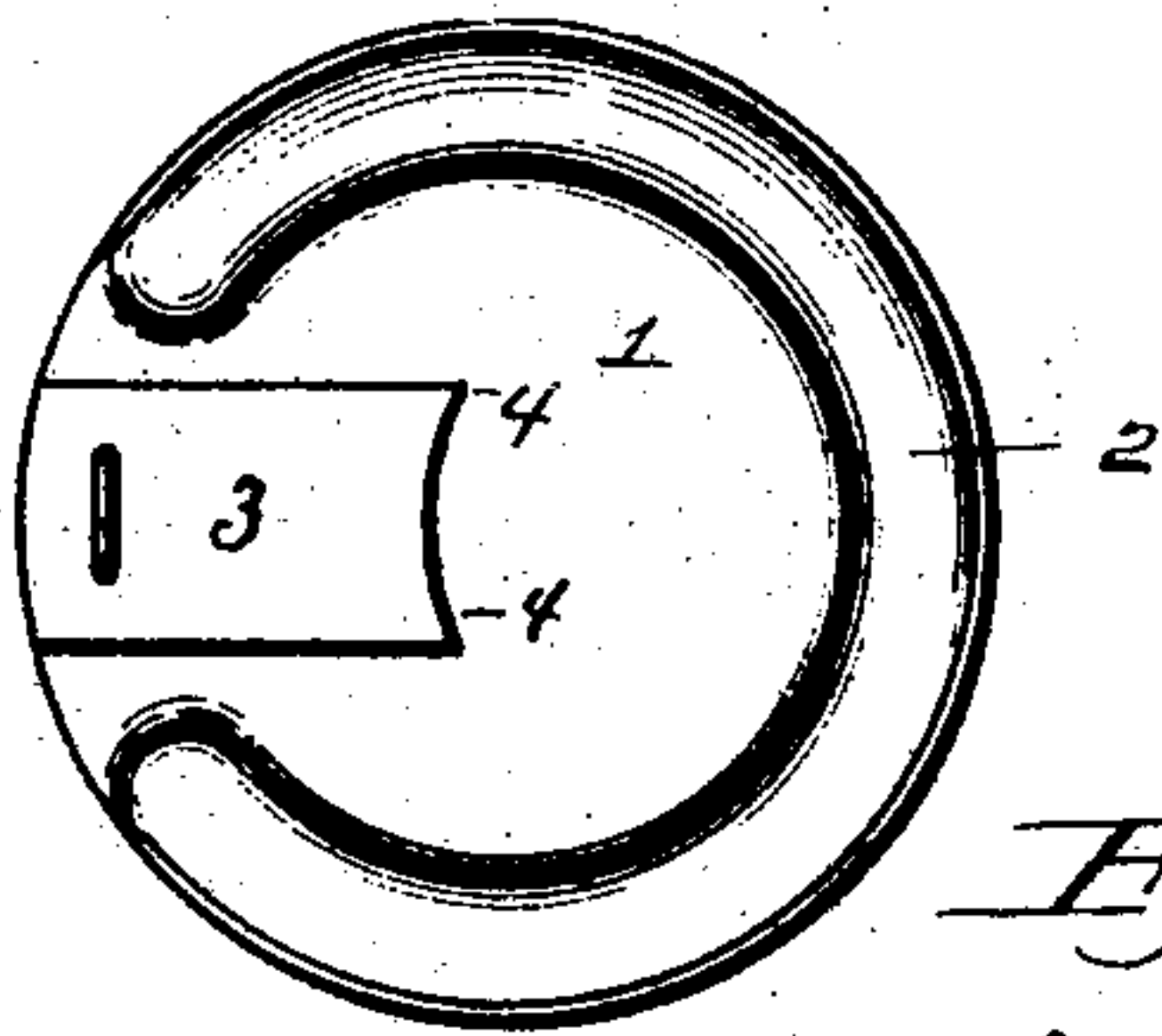
E. J. SMITH.

JAR CAP.

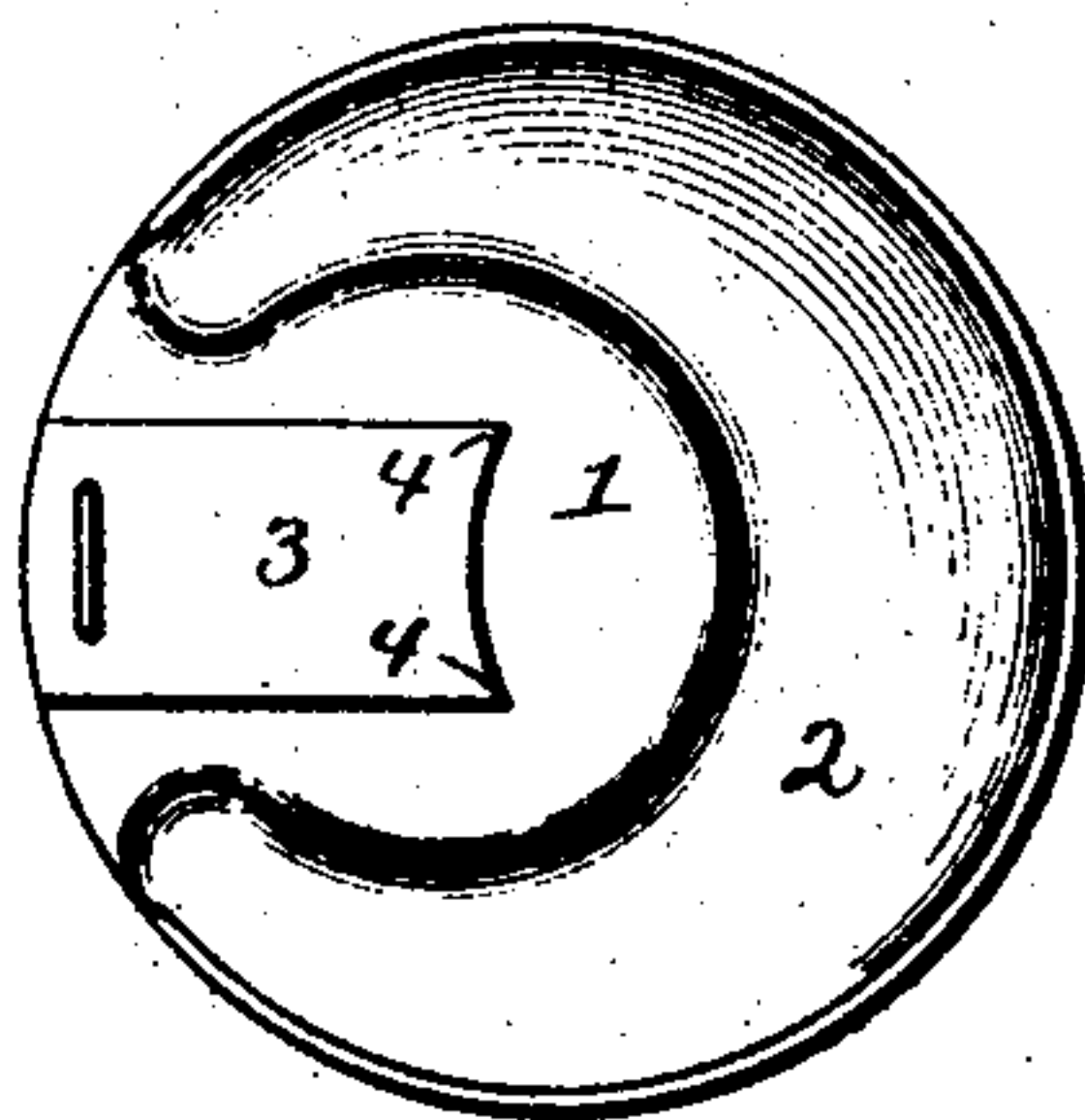
APPLICATION FILED OCT. 14, 1903.

NO MODEL.

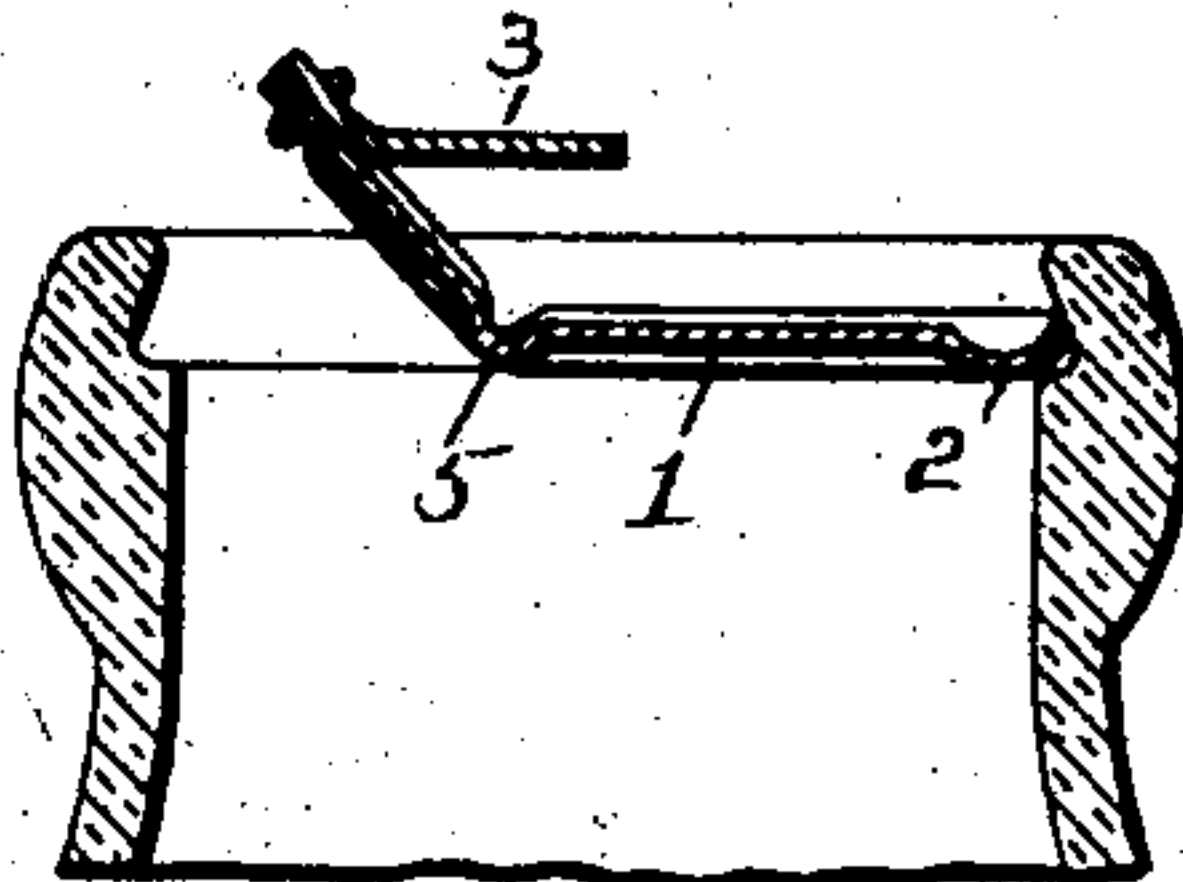
*Fig. 1.*



*Fig. 3.*



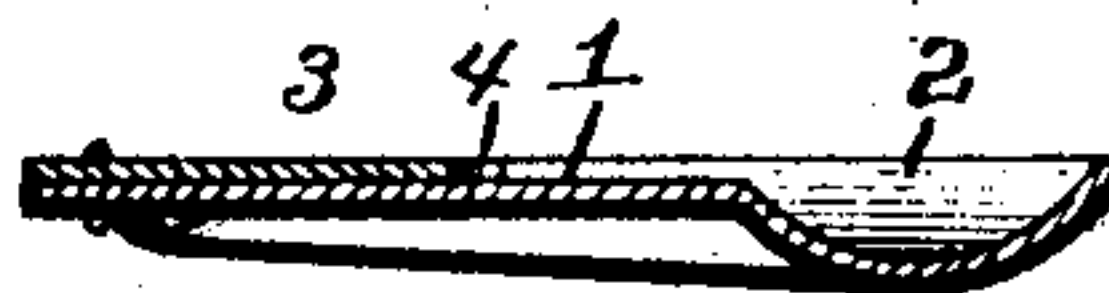
*Fig. 7.*



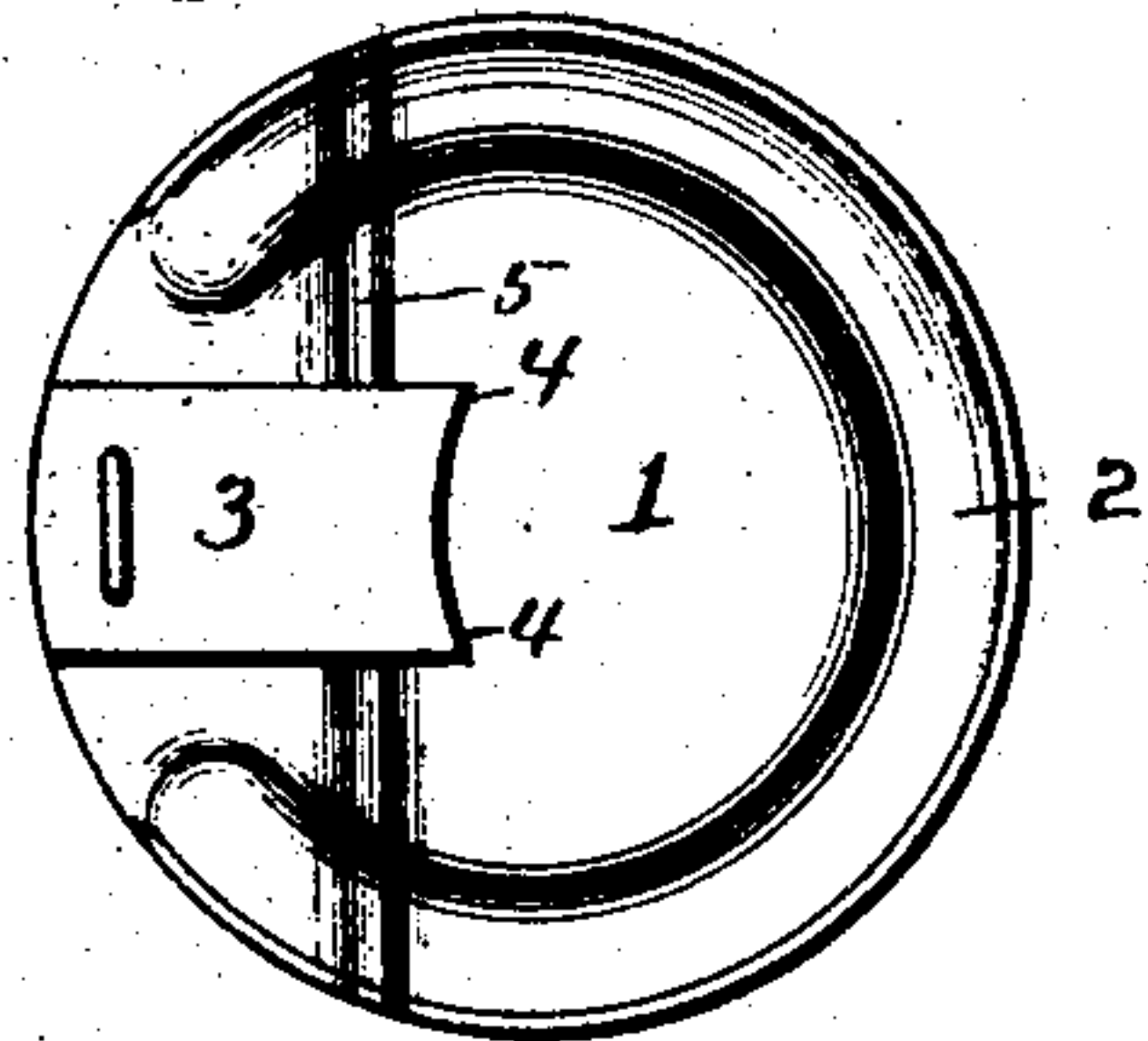
*Fig. 2.*



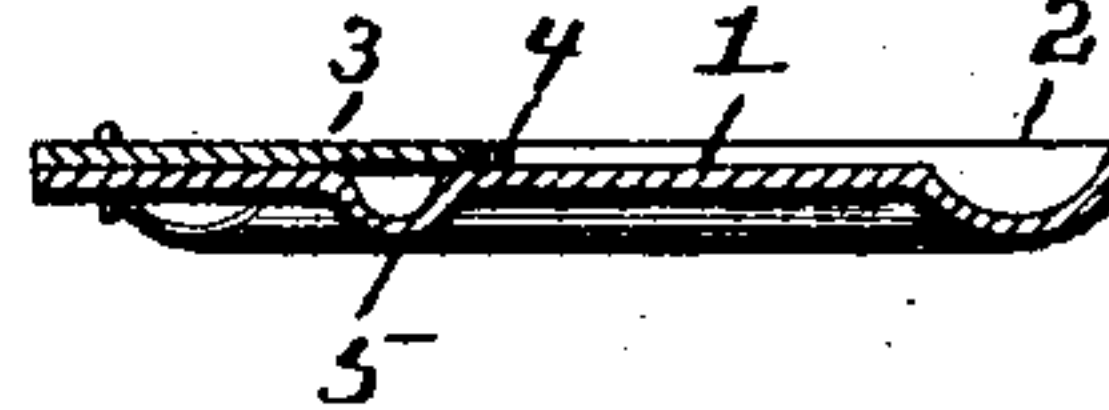
*Fig. 4.*



*Fig. 5.*



*Fig. 6.*



Witnesses

*C. M. Walker*  
*A. Kaufman*

Inventor

*Eldridge J. Smith*

By

*A. E. Glascock*

Attorney

# UNITED STATES PATENT OFFICE.

ELDRIDGE J. SMITH, OF WASHINGTON, DISTRICT OF COLUMBIA.

## JAR-CAP.

SPECIFICATION forming part of Letters Patent No. 765,049, dated July 12, 1904.

Application filed October 14, 1903. Serial No. 176,999. (No model.)

REISSUED

To all whom it may concern:

Be it known that I, ELDRIDGE J. SMITH, a citizen of the United States, residing at Washington, in the District of Columbia, have invented new and useful Improvements in Jar-Caps, of which the following is a specification.

This invention has relation to jar-caps; and it consists in the novel construction and arrangement of its parts, as hereinafter described.

The object of the invention is to provide a jar-cap especially designed to be used on milk jars or bottles, the cap being so constructed that it may be easily removed without having to use a fork or other sharp instrument, or it may be opened by swinging back a section, which section may be closed while the cap is in place in the throat of the jar.

The essential features of the cap are a disk having a crescent-shaped or interrupted corrugation located at its edge with a handle attached to the disk in the space interrupting the ends of the corrugation, said handle adapted to lie flat upon the plane surface embraced by the corrugation and having pointed corners at its free edge, so that a person may readily slip the finger-nail under the handle to elevate the said edge to gain a grip upon the handle. In removing the cap the handle is pulled at an oblique to the diameter of the disk, which brings the strain upon the middle of the corrugation thereof, which slightly suppresses and permits the opposite edge of the disk to be lifted out of the groove of the jar-neck, which permits the cap to be removed.

The cap is further provided with a transverse crease which serves as a hinge, thereby enabling one section of the cap to be swung back, and through the opening thus formed the entire contents of the jar may be permitted to run out, after which the said section may be swung back into position in the throat of the jar, when the contents thereof, if any, will be confined.

In the accompanying drawings, Figure 1 is a top plan view of a preferred form of a cap.

Fig. 2 is a transverse sectional view of the same. Fig. 3 is a top plan view of a modified form of the cap. Fig. 4 is a transverse sectional view of the same. Fig. 5 is a top plan view of still another modified form of the cap. Fig. 6 is a transverse sectional view of the same; and Fig. 7 is a transverse sectional view of the top of a jar, showing the form of cap as shown in Fig. 5 in position therein with its swinging section open.

In the form of the invention as shown in Figs. 1 and 2 the cap 1 is provided at its edge with the crescent-shaped or interrupted corrugation 2, the inner edge of which is concentric with relation to the center of the said cap. The outer edge of the said corrugation extends upwardly and outwardly, while the portion of the cap embraced within corrugation 2 is plane and on a level with the space separating the ends of the corrugation. The handle 3 is secured to the cap at a point between the ends of the corrugation 2, and the inner or free end of the said handle 3 is provided with the pointed corners 4, whereby the person may readily slip the nail under the edge of the cap to elevate the free end and secure a grip thereon. In moving the cap from the jar the handle 3 is given a pull at an oblique to the diameter of the cap. The strain thereof causes the middle of the corrugation to contract slightly, thus permitting the edge of the cap at the point where the handle 3 is attached thereto to escape the groove in the throat of the jar, whereby the said cap is easily removed.

In the form of the invention as shown in Figs. 3 and 4 the construction of the cap is the same as that shown and described in Figs. 1 and 2, with the exception that the inner edge of the corrugation 2 is located eccentric with relation to the center of the cap 1, and the said corrugation is consequently broadened at its middle, which construction permits the said corrugation to contract more easily.

The advantage of the corrugation in either form of the invention is that the cap may be



made of lighter material than the ordinary flat cap, and it will possess the same amount of rigidity against axial strain, but is more susceptible to contraction when subjected to lateral or diametrical strain.

In the form of the invention as shown in Figs. 5, 6, and 7 the cap is provided with a transverse crease 5, which is preferably located to the one side of the center of the said cap. This crease serves as a hinge upon which one of the sections of the cap may be swung up without removing the cap entirely from the throat of the jar. Through the opening all or a part of the contents of the jar may be poured out, and then the said swinging section may be closed back into its original position, when the contents of the jar, if any, will be confined, and the jar may with safety be placed upon the ice, as the contents thereof cannot run out should the jar capsize. The advantage of placing the said crease to one side of the center of the cap is that the section of the cap which remains in permanent contact with the throat of the jar has greater frictional contact-surface, and thus is held more firmly in contact with the jar than the swinging section.

The cap being made, preferably, of absorbent material, such as paper, slightly swells when it absorbs the dampness from the contents of the jar, and consequently the edge of the cap is forced into hard contact with the throat of the bottle.

By interrupting the corrugation 2 and securing the handle 3 to the cap in such interruption the said handle may be permitted to lie flat against the plane surface of the cap, and when the handle is once lifted a crease is produced therein at the point of juncture with the cap, which indicates that the contents of the jar may have been tampered with. The further advantage of so locating the handle is that in exerting the lateral or oblique pull to remove the cap a greater leverage is gained, and consequently the cap may be more readily removed than if the said handle were attached at a point nearer to the center.

By cutting the edge of the handle 3 on the same arc as that of the edge of the disk the points 4 are formed at the corners of the said handle, and the handle-stock is economized, for the said stock may be fed in strips to the cap and cut off at the time that it is secured to the cap. The same incision which conforms to the edge of the cap also produces the points on the next handle above referred to.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A jar-cap consisting of a disk having a corrugation with its ends located within the edge of the disk.

2. A jar-cap consisting of a disk having a corrugation with its ends located within the

edge of the disk, the edge of said corrugation being in alinement with that of the cap.

3. A jar-cap consisting of a disk having a corrugation with its ends located within the edge of the disk, said corrugation having an upwardly and outwardly extending edge adapted to come in contact with the jar.

4. A jar-cap consisting of a disk having a corrugation with its ends located within the edge of the disk, a handle secured to the cap in the space between the ends of the corrugation.

5. A jar-cap consisting of a disk having a corrugation embracing a plain surface and having its ends located within the edge of the disk, a handle secured to the cap in the space between the ends of the corrugation and adapted to lie flat upon said plain surface.

6. A jar-cap consisting of a disk, a handle attached to said disk and having its corners formed by edges extending at acute angles to each other.

7. A jar-cap consisting of a disk, a handle attached to said disk and having its free edge cut on the same arc as the edge of the cap whereby projecting points are formed at the corners of the handle.

8. A jar-cap consisting of a disk having a corrugation the inner edge of which is eccentric with the disk.

9. A jar-cap consisting of a disk having a corrugation with its ends located within the edges of the disk the inner edge of said corrugation being eccentric with the disk.

10. A jar-cap consisting of a disk having a corrugation with its ends located within the edge of the disk, the outer edge of which is concentric with the disk and the inner edge eccentric therewith.

11. A jar-cap consisting of a disk having a corrugation, the outer edge of which is concentric with the disk and the inner edge eccentric therewith.

12. A jar-cap consisting of a disk having a corrugation with its ends located within the edge of the disk, the outer edge of the corrugation being in alinement with the edge of the disk and the inner edge eccentric therewith.

13. A jar-cap consisting of a disk having a curved corrugation and a transverse crease.

14. A jar-cap consisting of a disk having a peripheral corrugation and a transverse crease.

15. A jar-cap consisting of a disk having a curved peripheral corrugation and a transverse crease.

16. A jar-cap consisting of a disk having a curved corrugation and a transverse crease entering said corrugation.

17. A jar-cap consisting of a disk having a corrugation with its ends located within the edge of the disk and a transverse crease.

18. A jar-cap consisting of a disk having a

corrugation with its ends located within the edge of the disk and a transverse crease located on one side of the center of the disk.

19. A jar-cap consisting of a disk having a  
5 curved corrugation and a transverse crease and a handle attached to the disk.

20. A jar-cap consisting of a disk having a  
10 corrugation with its ends located within the edge of the disk and a transverse crease, and a handle attached to the disk.

21. A jar-cap consisting of a disk having a curved corrugation the ends of which are spaced apart.

In testimony whereof I have signed my name to this specification in the presence of two sub-  
scribing witnesses. 15

ELDRIDGE J. SMITH.

Witnesses:

NATHANIEL CARUSI,  
A. E. GLASCOCK.