

W. M. BROWNLEE.
FUSIBLE TABLET FOR SEALING RECEPTACLES.
APPLICATION FILED MAR. 6, 1908.

937,565.

Patented Oct. 19, 1909.

Fig. 1.

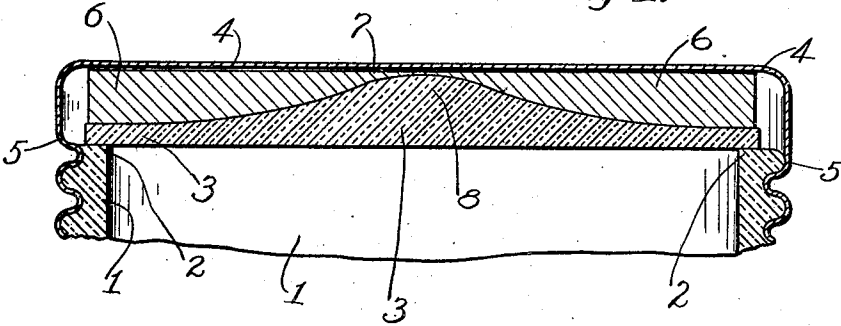


Fig. 2.

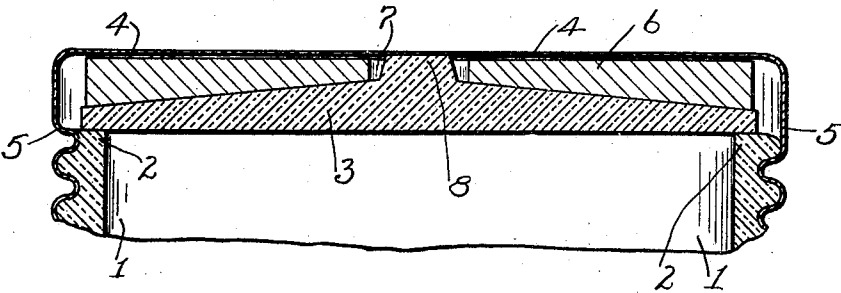
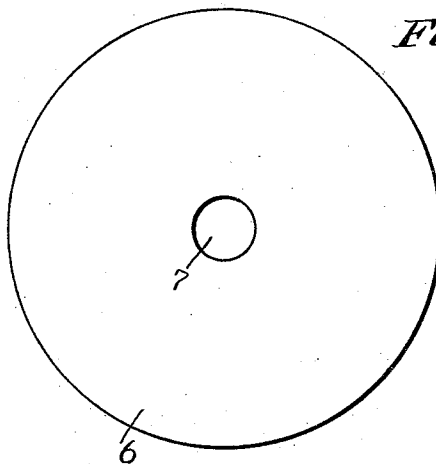


Fig. 3.



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FUSIBLE TABLET FOR SEALING RECEPTACLES.

937,565.

Specification of Letters Patent.

Patented Oct. 19, 1909.

Application filed March 6, 1908. Serial No. 419,559.

To all whom it may concern:

Be it known that I, WILLIAM M. BROWNLEE, a citizen of the United States, residing at Jefferson City, in the county of Jefferson and State of Tennessee, have invented a new and useful Improvement in Fusible Tablets for Sealing Receptacles, of which the following is a specification, reference being had to the accompanying drawing.

10 My improvement relates particularly to a fusible tablet for use in hermetically sealing receptacles for containing fruit, vegetables, and similar commodities, such vessels comprising a main body having at its
15 upper portion a mouth or opening and a flanged cap or cover resting over said mouth or opening in such manner as to prevent the passage of liquids or gases. The said fusible tablet is adapted to be combined with the
20 said cap and body in such manner as to melt under abnormal heat and allow the melted material of the tablet to flow into the joint or space between the flange of said cap and the adjacent face of the body of the receptacle and there solidify.

Such a receptacle is described in an application for Letters Patent, Serial No. 366,380, filed by me in the United States Patent Office, April 4, 1907; and the object
30 of the present improvement is to provide such fusible tablets in a form adapted to be used in sealing the preferred form of such receptacle. In the receptacle described by my said application, a plate rests upon the
35 upper edge of the neck of the receptacle within said cap, and the fusible material is placed between said plate and said cap. In the preferred form of said receptacle the said plate and cap are of peculiar relative
40 form, and the tablet made the subject matter of this application is adapted for use with such plate and cap, a new tablet being inserted for each filling of the receptacle.

In the accompanying drawings, Figure 1
45 is an upright central sectional view of the upper end of a receptacle in which my improved tablet is in place ready for melting; Fig. 2 is a similar section in which the tablet is of another form; Fig. 3 is a plan of the
50 tablet shown in Fig. 2.

Referring to said drawings, 1 is the neck of a glass jar having an upper edge, 2. Said neck is exteriorly screw-threaded in the well known manner. Upon said neck rests the
55 plate or member, 3, which is firm, non-

fusible, and preferably impervious to the said fusible material when the latter is fused. A cap or cover, 4, having a screw-threaded, downward-directed flange, 5, is located above the plate, 3, and has said
60 flange extended downward around said neck in engagement with the screw threads on the exterior of said neck.

Between the plate, 3, and the horizontal portion of the cap, 4, is located my fusible
65 tablet, 6. Said tablet is of disk form and is composed of paraffin or other wax or similar normally solid sealing material which is fusible at a moderate temperature above the normal temperature of the at-
70 mosphere—a temperature approximately the same as or somewhat less than the temperature of boiling water. Such material must be suitable for sealing fruit jars in the manner described, and materials having chem-
75 ical or physical properties rendering them injurious to the fruit or other products to be protected within the jar would, of course, not serve my purpose.

The lower face of the disk-form tablet is
80 concave as to its general area and the central portion, 7, is recessed to such extent as to nearly or quite form a central aperture through said disk. In this form, said tablet is adapted to fit between the cap, 4, and the
85 plate, 3, said cap being approximately flat and the upper portion of said plate being generally convex and having a somewhat abruptly raised central portion, 8. This form of said cap is desirable for the pur-
90 pose of giving it maximum strength and to insure the flow of the melted material of the tablet outward over the edges of said plate, and to form a support for the middle por-
95 tion of the cap, 4, when the latter is depressed by atmospheric pressure due to a partial vacuum created within the jar. By making the tablet in the form described, it may readily be centered in proper position
100 upon the plate, 3, and it will at the same time supply the maximum of fusible material within the space between the plate and the cap.

In the form shown in Figs. 2 and 3, the
105 tablet is concaved on its lower side and the recess, 7, extends entirely through the tablet to form an aperture.

The operation of the apparatus having my tablet combined therewith as above described is as follows: The jar is filled with
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the fruit or other material which is to be preserved. Then the plate, 3, the tablet, 6, and the cap, 4, are put into position on the neck of the jar, the cap being screwed down 5 as far as it will go. If the contents of the jar are at approximately boiling heat, the paraffin or other fusible material of which the tablet, 6, is composed will soon become heated by conduction and melt and in the 10 liquid form flow outward over the edge of the plate, 3, and downward between the outer face of the neck, 2, and the inner face of the flange, 5, and completely fill the space between said neck and said flange. If said 15 neck and said flange are so hot as to make it probable that said fused material will escape at the lower edge of said flange, a cloth or other suitable device or material may be placed around the lower edge of said flange 20 and the base of said neck to constitute a barrier or dam to hold said fused material until it cools sufficiently to partially solidify. If the contents of the jar are not hot or not 25 sufficiently hot to fuse the tablet, 6, said tablet may be melted by applying heat to the

exterior of the cap, 4, as by placing a hot iron upon said cap.

I claim as my invention:

1. As an article of manufacture, a tablet of normally solid, fusible sealing material, 30 said tablet being disk-form and having one side concave, substantially as described.

2. As an article of manufacture, a tablet of normally solid, fusible sealing material, said tablet being disk-form and having one 35 side concave and centrally hollowed, substantially as described.

3. As an article of manufacture, a tablet of normally solid, fusible sealing material, said tablet being disk-form and centrally 40 hollowed, substantially as described.

In testimony whereof I have signed my name, in presence of two witnesses, this fourth day of March, in the year one thousand nine hundred and eight.

WILLIAM M. BROWNLEE.

Witnesses:

N. L. FRAZIER,
Ed. LOCKETT.