

J. L. MASON.
Fruit-Jar Covers.

No. 137,462.

Patented April 1, 1873.

Fig. 1.

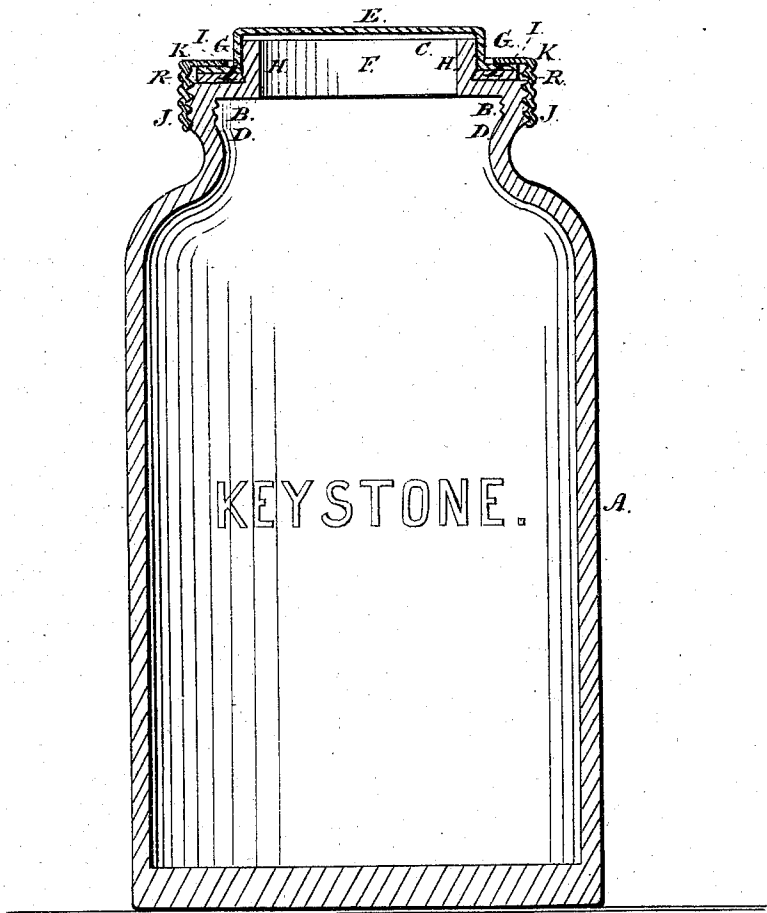
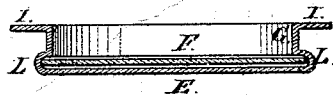


Fig. 2.



Witnesses.
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IMPROVEMENT IN FRUIT-JAR COVERS.

Specification forming part of Letters Patent No. **137,462**, dated April 1, 1873; application filed February 14, 1870.

To all whom it may concern:

Be it known that I, JOHN L. MASON, of the city, county, and State of New York, have invented a new and useful Improvement in Fruit-Jars; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a central vertical section of my improvement. Fig. 2 shows a modification in the form of the cover.

Similar letters indicate corresponding parts.

The letter A designates a glass jar, having a flat shoulder, B, below its mouth C, and a screw-thread, D, around its neck below the shoulder. E is a cover, composed of sheet metal, spun or stamped out into the required shape, and coated on its under side, where it comes in contact with the mouth of the jar, with the enamel or glass F. In this example the whole of the under surface of the cover is coated, including the part or flange which rests on the shoulder B; but it is only necessary to coat that part of the surface which is exposed to contact with the contents of the jar, which, in the form here shown, is the upper part, which forms a joint with the mouth C, on whose top or horizontal edge it rests. The top of the cover E rests on the mouth C, and its sides G extend thence downward, corresponding with the lip H of the jar, and then expand about in a horizontal direction, so as to form a bearing-flange, I, which rests on the shoulder B, an India-rubber gasket, R, being placed on the shoulder to form a tight joint. The cover is secured to the jar by a continuous screw-ring, J, which has a horizontal inner top flange, K, so arranged as to close down upon the flange I of the cover, and press it upon the shoulder B of the jar.

I am aware that cast-iron jars have been coated with enamel, and I do not claim, broadly, coating metal with enamel. But in my invention I combine with a glass jar an elastic sheet-metal cover, which can be spun up or punched and stamped into the required size and shape, and coated with enamel or

glass, as herein mentioned, as I have found that such a coating can be combined with an elastic and yielding cover without breaking or cracking when the cover is bent in screwing it down upon the jar.

I apply and combine a coating of glass or vitreous substance to the cover in the following manner: Having placed the cover in an inverted position, I lay upon that part of its exposed inside surface which is to be coated a lump of glass, F, of proper size, heated red hot, or to such a condition as to be plastic, so that it will expand under pressure without breaking, and apply thereon a powerful pressure by means of a die, using, if necessary, such counter die or surface beneath the cover as will prevent it from losing its proper shape. The coating and cover become thereby securely united to each other, and no other fastening is required. The metal, being thin, becomes heated by the glass, and in cooling both materials shrink about in unison, so that their union is not impaired. The lump of glass becomes flattened under the pressure, and spreads out in all directions under the die, so as to cover the surface that is required to be coated.

Fig. 2 shows, inverted, a modified form of cover where I have made provision for the excess, if any, of the glass which is forced out around from under the edges of the die, by forming a hollow circular flange, L, between the top of the cover and its sides, which serves as a receptacle for any glass or coating material which is forced out from under the edges of the die, and so that the glass will not come in contact with the vertical sides F of the cover, and the interior diameter of the cover be thereby lessened.

What I claim as new, and desire to secure by Letters Patent, is—

The mode herein described of uniting glass or enamel with a sheet-metal cover, the same consisting in applying the former in a hot and plastic state to the latter, and pressing them together, substantially as described.

JOHN L. MASON.

Witnesses:

C. WAHLERS,
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